# POSTCOLONIALISM AND EARLY CHILDHOOD EDUCATION IN SMALL ISLAND STATES: INTERNATIONAL INSIGHTS

## Anna Baldacchino
University of Malta

**Abstract** Inspired by postcolonial theory, islands studies, and small state studies, this paper reviews some of the impacts of colonialism on early childhood education in small island states. Its arguments are fleshed out from the analysis of responses to an online questionnaire sent out in 2016 and to which replies from 64 respondents were received, with at least one respondent from each of the world's 27 small island states (with populations of one million or less).

The research findings are suggestive of a colonial lingering in early childhood education in these jurisdictions. Manifestations of this include: the use of standard English as the language of instruction; a top-down pedagogy that obliges an early start to schooling; a strong focus on literacy and numeracy in the early years; and restrictions in play-based learning.

Being a small island state has its challenges. Findings from this study suggest that: role multiplicity, lack of expertise and training; and scarce resources are impacting on the pedagogy and practices of early childhood education in such countries. Recommendations include: the provision of adequate funding and training; support and mentoring when implementing new early years polices; stronger recognition for both local and global

languages; and having early childhood education within the purview of the Ministry responsible for Education to enhance standardisation in this sector.

**Sommarju** Imnebbaħ minn tejoriji postkolonjali, mill-istudju tal-gżejjer u mill-istudju tal-istati żgħar, dan l-artiklu jeżamina kif il-kolonjaliżmu ħalla l-impatt tiegħu fuq l-edukazzjoni tas-snin bikrin fi stati żgħar li huma ukoll gżejjer. L-argumenti f'dan l-artiklu oriġinaw minn analiżi li saret fuq it-twegibiet għall-kwestjonarju li sar *online,* mibgħut lil madwar mitt persuna mis-27 stati żgħar li huma ukoll gżejjer madwar id-dinja (b'popolazzjoni ta' miljun ċittadin jew inqas). Erba' u sittin persuna wieġbu dan il-kwestjonarju, b'tal-inqas persuna waħda minn kull stat żgħir li huwa wkoll gżira jew arċipelagu.

Ir-riżultati ta' din ir-riċerka jissuġerixxu legat kolonjali fuq l-edukazzjoni tas-snin bikrin f'dawn il-pajjiżi. Dan id-dell tqil jidher b'mod speċjali: fl-użu tal-Ingliż bħala lingwa tat-tagħlim; f'l-istil ta' tagħlim impost minn fuq li jobbliga li tfal minn eta' żgħira jiġu mħejjija għall-iskola; f'emfasi qawwija fuq il-qari u n-numri fis-snin bikrin; u fi xkiel u ostakli fejn jidħol it-tagħmil permezz tal-logħob.

Li tkun stat żgħir u gżira jġib miegħu diversi sfidi. Dan l-istudju jagħraf kif: ċittadini jkollhom jilbsu iktar minn kappell wieħed fuq il-post tax-xogħol; hemm nuqqas ta' esperti u taħriġ fil-qasam tas-snin bikrin; u hemm nuqqas ta' riżorsi meħtieġa li qed iħallu impatt hazin fuq il-pedagoġija u l-prattiċi tal-edukazzjoni tas-snin bikrin f'dawn il-pajjiżi.

Rakkomandazzjonijiet li ħargu minn dan l-istudju jinkuldu: proviżjoni ta' fondi adekwati għat-taħriġ, appoġġ u moniteraġġ tal-għalliema meta jkunu ser jiġu mwettqa politiki ġodda; li sew il-lingwa lokali kif ukoll dik globali tiġi rrispettata u użata fl-anbjenti edukattivi; u li l-edukazzjoni tas-snin bikrin tkun taħt l-awspisju tal-Ministeru responsabbli għall-Edukazzjoni (u mhux, per eżempju, tas-servizzi soċjali) biex b'hekk ikun hemm iktar standardizzar fis-settur.

**Kliem importanti:** kolonjaliżmu, edukazzjoni fis-snin bikrin, bilingwaliżmu; postkolonjaliżmu, stati żgħar li huma ukoll gżejjer.

## Introduction

This paper offers a rare comparative (albeit indicative) glimpse of the situation of early childhood education (ECE) in the world's 27 small island states (SIS). In particular, it examines the extent to which colonialism may have impacted the pedagogy practised in kindergarten and early years settings located in SIS. It hopes to contribute new knowledge to address a gap in postcolonial literature with regards to ECE in SIS (Baldacchino, A., 2019). The impact of colonialism is demonstrably manifest at the primary, secondary and tertiary levels of education (e.g. Crossley and Tikly, 2004; Hickling-Hudson, 2006; Jules, 2012; Sultana, 2006). Colonialism, and its legacy, would also have impacted ECE in SIS (Nieuwenhuys, 2013; Viruru, 2005b); however, there is scant literature to document this practice.

The doctoral study on which this paper is based, is inspired by postcolonial theory, island studies and small state studies. It sought to answer the following research questions: (1) What elements influence the pedagogy and practice of early childhood education (2 to 5-year-olds) in small island states? (2) What impact, if any, has

colonialism had on early childhood education in small island states, and how is that impact manifested in the current postcolonial epoch?

Data was collected from in-depth case studies of ECE settings: 2 in Malta and 2 in Granada. The author resides in Malta and chose Granada due to particular similarities with Malta in terms of land area and their common histories as British Colonies. The methodology used to collect such data included a mixed method approach consisting of: (1) twelve interviews with educators; (2) four focus groups with parents; (3) fieldnotes and observations; (4) a research journal; and (5) an online questionnaire.
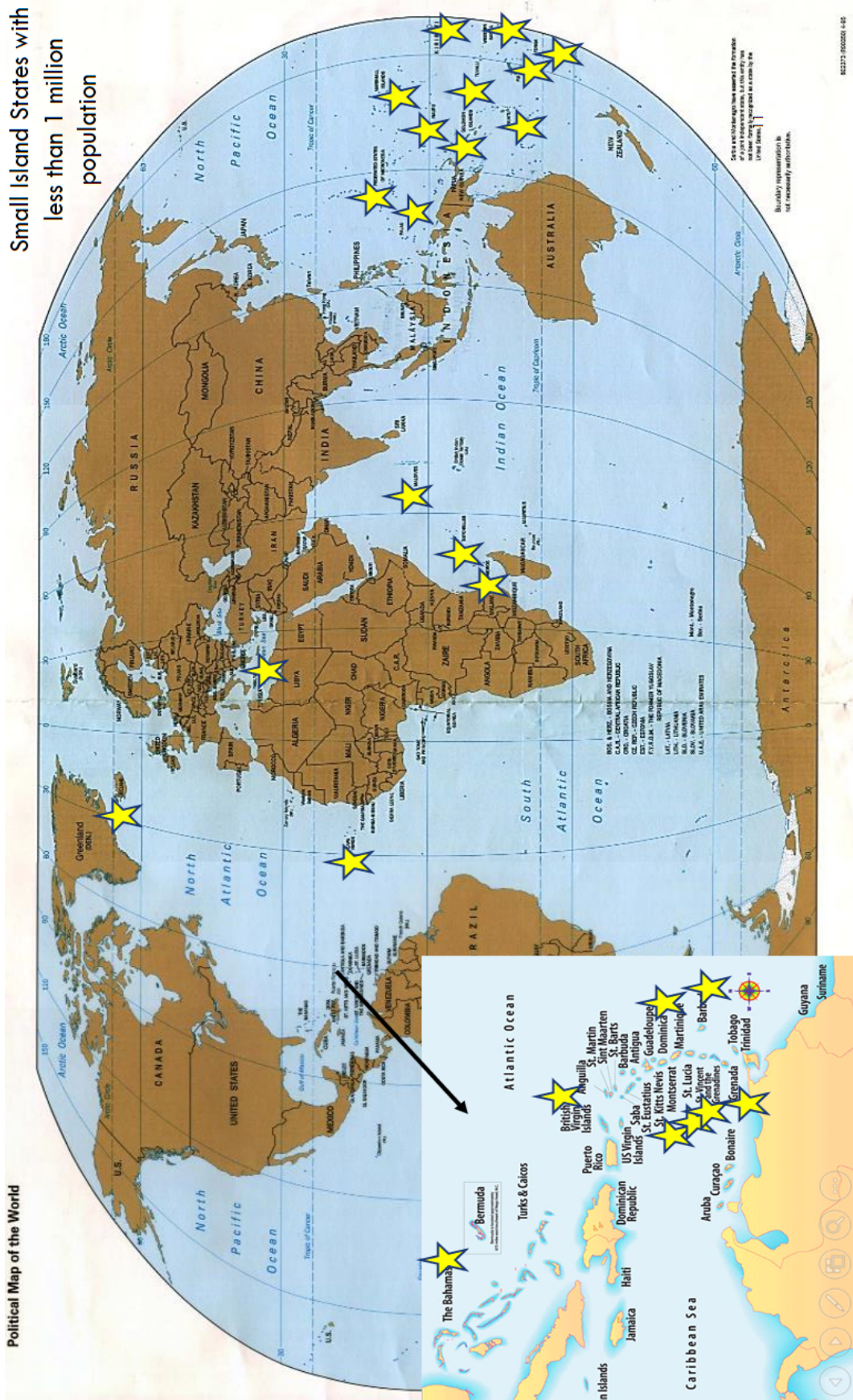
This paper focuses on the replies to this fifth component: an online questionnaire which was sent out to 100 persons residing in the 27 SIS around the world, defined as countries with a resident population of up to one million (Atchoarena, et al., 2008) (see Table 1 & Map 1). Sixty-four individuals responded to the questionnaire. This included at least one individual from each of the 27 countries in the reckoning. This is by no means a representative study; but it is possibly the first of its kind and the ensuing data and its critical analysis hopefully offers a glimpse as to how ECE in SIS is shaped, also because of the colonial legacy that remains ingrained in the cultures and protocols of such small island states.

| Caribbean Sea | Pacific Ocean | Indian Ocean | Atlantic Ocean and |
|---|---|---|---|

| | | | **Mediterranean Sea** |
|---|---|---|---|
| Antigua & Barbuda (UK) | Federated States of Micronesia (US) | Comoros (F) | Cape Verde (P) |
| Bahamas (UK) | Fiji Islands (UK) | Maldives (UK) | Cyprus (UK) |
| Barbados (UK) | Kiribati (UK) | Seychelles (UK) | Iceland (D) |
| Dominica (UK) | Marshall Islands (US) | | Malta (UK) |
| Grenada (UK) | Nauru (UK) | | São Tomé & Príncipe (P) |
| St Kitts – Nevis (UK) | Palau (US) | | |
| St Lucia (UK) | Samoa (UK) | | |
| St Vincent & the Grenadines (UK) | Solomon Islands (UK) | | |
| | Tonga (UK) | | |
| | Tuvalu (UK) | | |
| | Vanuatu (UK/F) | | |

Table 1: Small island states with a resident population of less than a million

Note: The former colonial power/s is/are in brackets: UK – United Kingdom; P – Portugal; F – France; US – United States; D – Denmark

**Small Island States with less than 1 million population**

**Political Map of the World**

**Postcolonialism and small island states**

*Map 1* – **Political Map of the World (2000) using Robertson Projection, with locations of 27 small island states added in by author.**

Postcolonial theory suggests that colonial impacts may linger in a country long after it secures its political independence. In spite of how sovereignty provides a clear political break with the past, one cannot separate the 'past' so easily from the 'present' (Bhabha, 1994): the impact on cultural, economic, political and educational issues can persist, long after the demise of colonial rule (Baldacchino, 2010). Thus, 'postcolonialism' is being used here to account for processes of domination that have their origins in European (and subsequently US) colonisation, but which "extend beyond the period of direct colonisation to take on new forms, notably those of neo-colonialism, dependency and the intensification of globalisation" (Hickling-Hudson & Mayo, 2012, p. 2).

SIS loom large as locales that have borne the brunt of colonisation. They are "products of a European maritime culture of the last five centuries" which have also, amongst all colonies, "retained colonial links longer" (Caldwell, Harrison and Quiggin, 1980, pp. 954, 960). These states are amongst the earliest European colonies; and among the last of these to gain independence.

This colonial impact has left its mark on early childhood education (Baldacchino, A., 2019). Colonial education systems have effectively dispensed a particular form of education, along with its accompanying disciplinary framework (Burton, 2012;). Baldacchino, A. and Baldacchino, G. (2017, p. 3) argue that: "it is the formal, post-16 educational sector in small island states that continues to steal the research limelight", even though current research emphasises the importance of the early years as pivotal in the formation and development of later learning (Howard-Jones, et al. 2016).

## Impacts of Colonialism on Education

The implications of the impact of colonialism on education in SIS are various. And yet, Tarc (2009, p. 195) warns us that: "Postcolonial studies are slow to come to education, in part because postcolonial studies threaten to undo education, to unravel the passionately held-onto thought and knowledge of the modern Western-educated student and scholar". We are dealing with a sensitive topic here.

SIS exist in a co-dependent world, and most function within the influence and shadow of a long colonial past. Their governments struggle with limited human resources and the challenges of scale, while continuing to aspire to higher standards of living, themselves often based on Western canons of 'development' (Bray, 1991) which, in themselves, often seek to produce moral citizens suitable for the maintenance of bourgeois democracy (Burman, 2016, Chapter 14). The "education systems [in SIS] are structured according to familiar patterns, with pre-primary education at the base and higher education at the apex" (*ibid.*, p. 16) adopted from their colonisers' educational models. SIS are also usually heavily dependent on foreign trade. This may in turn influence the structure of the education system, in that people may be required to learn foreign languages, sometimes to the detriment of local ones. In fact, many small countries continue to impose the language of the erstwhile coloniser within education systems. The long impact of colonialism in SIS has included the steady mainstreaming of the colonial language among the local population, particularly those interested in social and occupational mobility and in finding work with the colonial administration (Talib, 2002).

Research offers some glimpses into the impact of colonialism on very young children in developing countries (Omar, 2012). Gupta's (2015) research in postcolonial urban India shows how "philosophical and pedagogical

boundaries that are defined by diverse cultures and ideologies might be navigated in the practical implementation of an early childhood curriculum" (p. 260). Her research highlights a "complex and multifaceted curriculum" (p. 261), influenced by various cultural, historical and social elements. These include: a curriculum based on ancient Indian beliefs mixed with elements adopted from Euro-American education; and "a highly structured academic curriculum mandated by the government and historically rooted in the educational policies of the British colonial administration" (*ibid.*, p. 261).

Another study analyses the bicultural early childhood curriculum framework in New Zealand known as Te Whāriki and how this seeks a balance between Indigenous culture, neo-liberalism and neo-colonialism in ECE (Tesar, 2015). The author proposes Te Whāriki as an example of how local *and* global economic and market pointers can shape national ECE policy.

Narrowing the search specifically to SIS, two scholarly articles stand out. Viruru (2005a, p. 8) discusses how, in spite of the influential nature of the idea that mediated postcolonialism has significant consequences on young children's lives, the literature only talks about a "slight if any impact on the field of early childhood as an academic discipline and even less on the daily practices of early childhood educators". She suggests that the idea of colonialism has been mainly modelled on specific authoritative and oppressive models of child rearing. Some prevailing principles of how children allegedly grow, learn and develop have become "another of colonialism's truths that permit no questioning, and that are imposed unhesitatingly upon people around the world [allegedly] for their own good" (*ibid.*, p. 16).

Nieuwenhuys (2013) contends that the backbone of the drive to colonise was formed by the idea that Caucasians were the chosen ones, pre-ordained to subjugate darker skinned people in faraway countries. The ongoing belief was that of a "civilising mission" (*ibid.,* p. 4): the colonised needed to be rescued and educated about and from their "alleged abuses, such as child marriages and infanticide, that primitive or oriental men would visit upon children (and women)" (*ibid.*). No wonder that Christian missionaries were an integral component of this initiative; and that schooling in small island colonies was often "... knowledge production that was entirely under the control of missionaries" (Campbell, 2006, p. 195). Nieuwenhuys adds that "colonialism and childhood are inseparably harnessed together for interpreting human life as a trajectory leading towards increasing and endless perfectibility" (p. 5). It was only when both the child and the colonised could be seen as "vulnerable, passive and irrational" beings that the educated colonisers could justify the implementation of their noble cause (Nieuwenhuys, 2013, p. 5).

Clearly, the impacts of colonialism, tangible and intangible, run deep in formerly colonised countries. They may run even deeper in SIS.

## Methodology

As mentioned previously, one method of data collection used for this study was an online questionnaire, aimed at collecting a wider view about the elements that might influence ECE in SIS. Online questionnaires have a number of advantages over structured interviews. These include: "cost, speed, appearance, flexibility, functionality and usability" (Lumsden, 2005, p. 1; Murthy, 2008). The questionnaire in this study, set up with Google Sheets, was intended to reach individuals residing in the 27

countries that fit the SIS definition. Bryman, Teevan and Bell (2009, p. 71) contend that: "…[a] questionnaire is especially advantageous if a sample is geographically dispersed". Murthy (2008) agrees that online questionnaires can reach global respondents when it would not otherwise be practical, timely or affordable to reach such respondents via conventional snail mail.

The questionnaire consisted of three open-ended and 13 close-ended questions. This instrument was included in the research design to secure a broader picture of what residents in SIS thought about ECE, particularly from respondents who would be directly involved in the education sector.

After securing ethics clearance, the questionnaire was made available between August and December 2016, through the list-serve of the International Small Islands Studies Association (ISISA) - of which the author of this paper is a (text withheld) - to various individuals who reside and/or work in these 27 SIS. An email together with the link to the questionnaire was sent to those who welcomed the invitation. The survey tool was prefaced with a letter of informed consent. Answers were received during the same period.

## Data Analysis

Since the questionnaires consisted of both close and open-ended questions; different methods of analysis were used. Microsoft Excel ©® graphs helped analyse the results of the close-ended questions. NVivo 11 ©® software was used to help code the responses to the three open-ended questions. Following a formalised computer procedure enhanced the trustworthiness and quality of the findings (Sinkovics, Penz and Ghauri, 2008).

Sixty-four individuals from all 27 small island states replied to the online questionnaire. The largest cohort was aged 41-55 (43%); followed by the 25-40 (36%) and the 55-and-over (21%). No participants were less than 24 years of age.

The occupations of respondents were varied but tended to deal mostly with education. These included: teachers, lecturers, early childhood educators and kindergarten assistants; school principals and private early childhood settings' directors; social workers, a communication officer, education officers, and consultants. This diversity served to reach a broader circle of individuals; while some of the respondents were not educators, they were nevertheless likely to have an awareness of the ECE sector in their country, given their background and their willingness to answer the questionnaire.

## Findings

### *Ministry responsible for early childhood education*

In some countries, ECE, especially for the 0-3 years age bracket, does not form part of the portfolio of the Ministry responsible for Education. Being placed within the remit of a ministry responsible for social policy or social services, suggests that childcare (and in some cases even kindergarten) is seen as a social benefit or service, rather than mainly having an educational value: this was a conclusion reached from a review of ECE in twenty countries (Felfe and Lalive, 2018).

Respondents to the online questionnaire were asked which Ministry in their country was responsible for ECE in the two age brackets of 0-3 and 3-5-year-old children respectively. Participants from all 27 SIS responded to both questions (Figures 1 and 2):
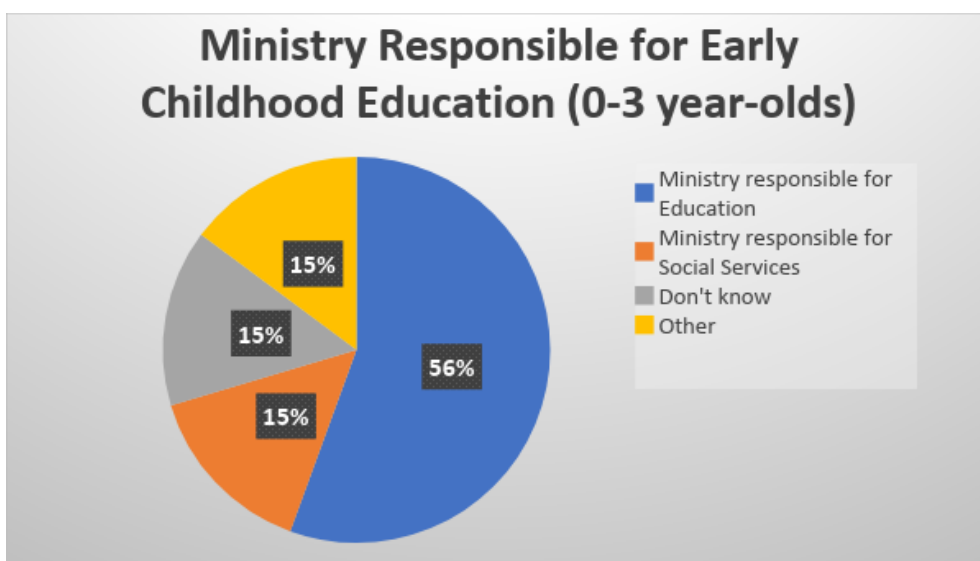
**Figure 1** – Ministry responsible for Early Childhood Education (0-3-year-olds). N = 27 SIS.
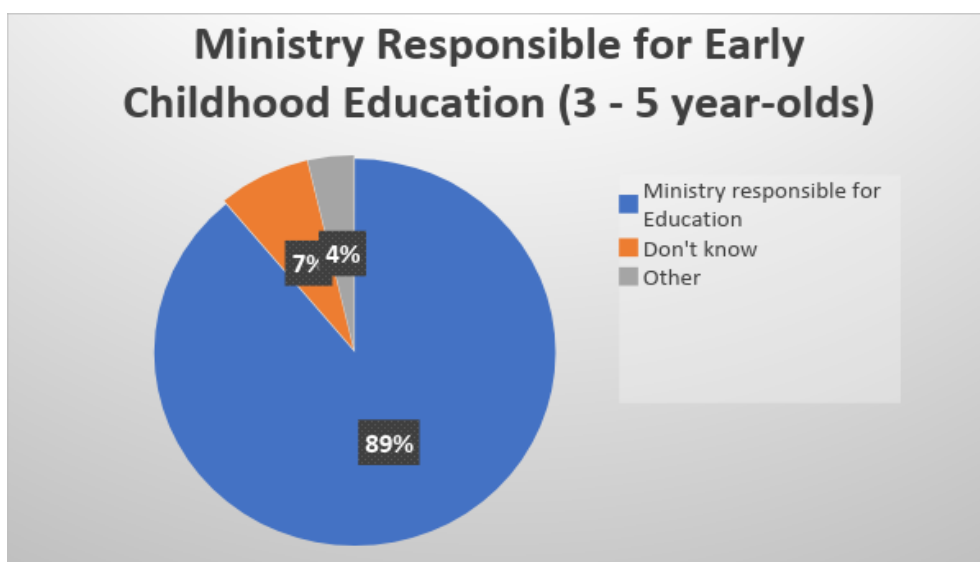


**Figure 2** – Ministry responsible for Early Childhood Education (3-5-year-olds). N = 27 SIS

Just over half the respondents stated that responsibility for ECE for children under 3 years of age falls under the Ministry responsible for education (55%). However, there are still some small states where the Ministry for Social Services, or other ministries apart from education, is responsible (30%). The respondents from the Marshall Islands said that ECE for 0-3-year-olds is the responsibility of the family or babysitters; respondents from Palau said that ECE falls under the responsibility of

the Community Action Agency; the respondents from St Vincent and the Grenadines said that ECE falls within the purview of the Ministry for Health; while in the Federated States of Micronesia it is a joint responsibility between the Ministry for Education and the Ministry for Social Services.

Looking at the findings in Figure 2, participants report that government responsibility for ECE for the 3-5 age bracket now mostly falls under the remit of the Ministry for Education in almost all SIS (89%). This time, none of the respondents chose the Ministry for Social Services as their answer. This suggests that many more SIS governments acknowledge that the 3-5 age bracket deserves educational attention and ECE for such children should be seen as essentially a learning opportunity rather than a form of child care. Being under the particular education ministry also helps with the standardisation of programmes, regulation and quality of childcare provided and "is less likely to account for variations in child development" (Felfe and Lalive, 2018, p. 3); and thereby strengthening the process of social and political acculturation.

### *Importance of ECE Provision*

The issue of the importance of ECE provision was put forward to respondents of the online questionnaire. They were presented with a multiple-choice question and asked to choose which of the following three statements was most relevant to them: (1) The provision of licensed early childhood education and kindergarten enables parents of young children to participate actively and more fully in the labour force; (2) Licensed early childhood education and kindergarten encourages children to socialise, interact and learn with and from other children; (3) Licensed early

childhood education and kindergarten is a waste of time and money: children of a young age should stay at home.
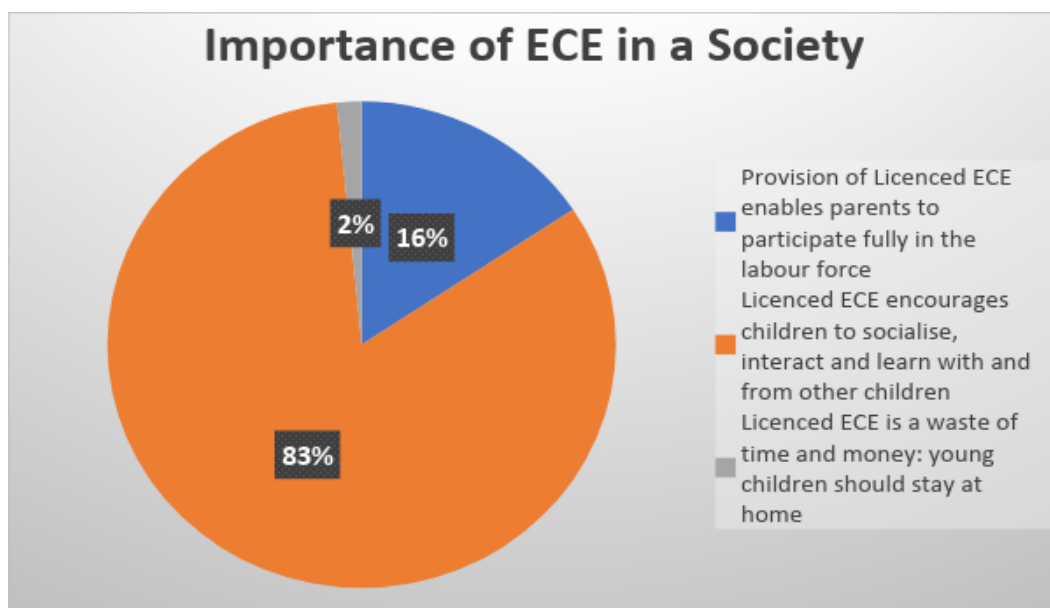


**Figure 3** – Importance of ECE in society. N = 64 participants.

Figure 3 tabulates the results to this question. Fifty-three out of 64 respondents (83%) chose the second statement and agreed that licensed early childhood and kindergarten are mainly intended to encourage children to socialise, interact and learn with and from each other. Ten respondents chose the first statement, that the provision of ECE would mainly enable parents to participate actively and more fully in the workforce (16%). Only one individual agreed with statement number three: that ECE was a waste of time and money. The notion of ECE as essentially meant to 'park' one's young children in child care to liberate parents, especially mothers, to engage in gainful employment, still has its adherents.

## *Good Quality Early Childhood Education*

There are various definitions of what good/high quality ECE means. Payler and Davis (2017, p. 12) argue that "the term quality is itself contested by policy makers and those in practice". According to the OECD (2017), a good quality

ECE is based on process elements such as the programme and priorities for learning, as well as structural aspects such as staff-child ratios, physical environment, and trained staff.

Payler and Davis (2017) argue that having qualified staff in early years settings helps ensure a high-quality service. A longitudinal study which followed 3,000 children from age 3 into primary and secondary school (Siraj Blatchford, Traggart, Sylva, Sammons and Melhuish, 2008) found a significant positive relationship between good-quality early childhood provision and children's achievements and development throughout primary school. Dalli, White, Rockel, Duhn, Buchanan, Davidson, Ganly, Kus and Wang (2011, p. 1) argue that: "evidence demonstrates that quality early childhood education at this very early age has lasting benefits for infants and their families". Good quality education has positive benefits and impacts on children's achievement in later life (OECD, 2012; Shonkoff, 2010).

Online questionnaire respondents were given a set of six statements from which they were asked to choose those conditions that they deemed relevant to quality early childhood education: (1) Providing worksheets to children; (2) Creating opportunities for free play; (3) Assuring school preparedness among children; (4) Developing a stimulating environment; (5) Teaching children the numbers and the alphabet; (6) Committing time and resources to water and sand play.

The findings presented in Figure 4 show that the respondents valued most: developing a stimulating environment (30%) and creating opportunities for free play (27%) much more than the other four statements, three of which (#1, 3 and 5) reflected views which conceptualised ECE as preparation for primary school and formal learning. The least selected options by respondents were

the statements about providing worksheets to children (5%) and teaching the children the numbers and the alphabet (6%).
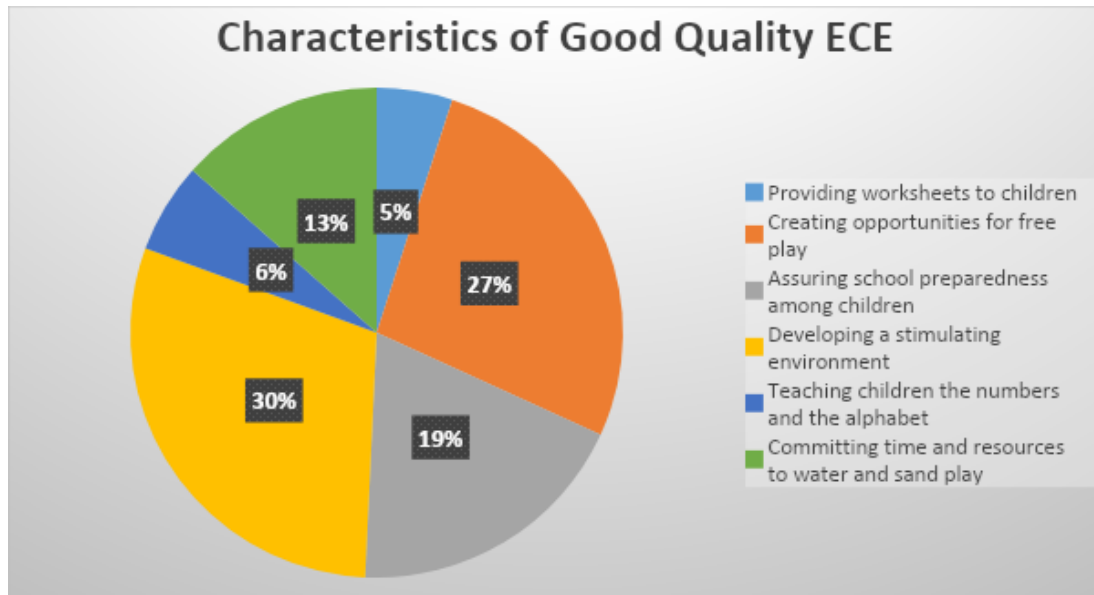


**Figure 4** - Characteristics of good quality early childhood education. N = 64 participants.

Of course, the choices tabulated in Figure 4 might depict the respondents' ideal view of a good quality education, and not necessarily what is being actually implemented in the settings of their respective countries.

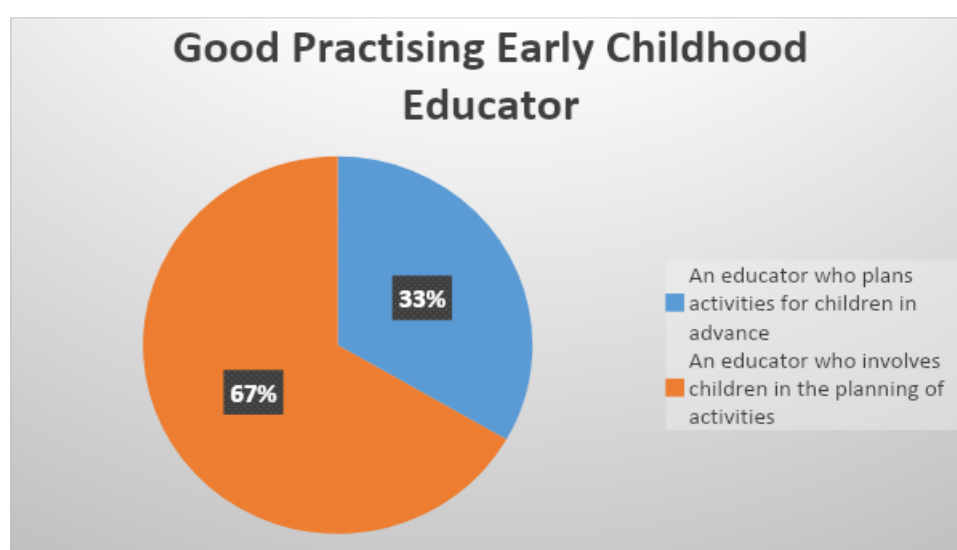## *Qualities of Good-Practising Early Childhood Educators*

Various studies have reviewed the good qualities of an early childhood educator (Adams and Pierce 2004; Glenn 2001; Usher 2003). These often include such characteristics as enthusiasm and a positive attitude to life. Good-practising educators have long been recognised as needing to be: qualified and trained in ECE; have a personal interest in each child; are able to establish a warm and caring environment; and show enthusiasm with children (Johnson, 1982).

Taylor and Wash (2003) identified ten characteristics of an effective educator: being passionate, flexible, an

effective communicator, a lifelong learner, being knowledgeable, accepting of others, patient, organised, hard working and caring. Working with 43 kindergarten teachers, Colker (2008) reported similar characteristics, including: passion; perseverance, pragmatism, patience, flexibility, lifelong learning, a sense of humour, and care and respect for children. A more recent study lists five similar characteristics of an effective early childhood educator: enthusiasm and passion for children; patience and humour; communication skills; respect for differences; creativity and flexibility (Bean-Mellinger, 2017).

Respondents to the online questionnaire were presented with the following three statements to choose from with regards to what, in their opinion, would constitute a good-practising early childhood educator: (1) An educator who plans activities for children in advance; (2) An educator who involves children in the planning of activities; (3) An educator who does no planning and allows children freedom to do as they please.

Figure 5 offers a graphic view of the responses to this question:
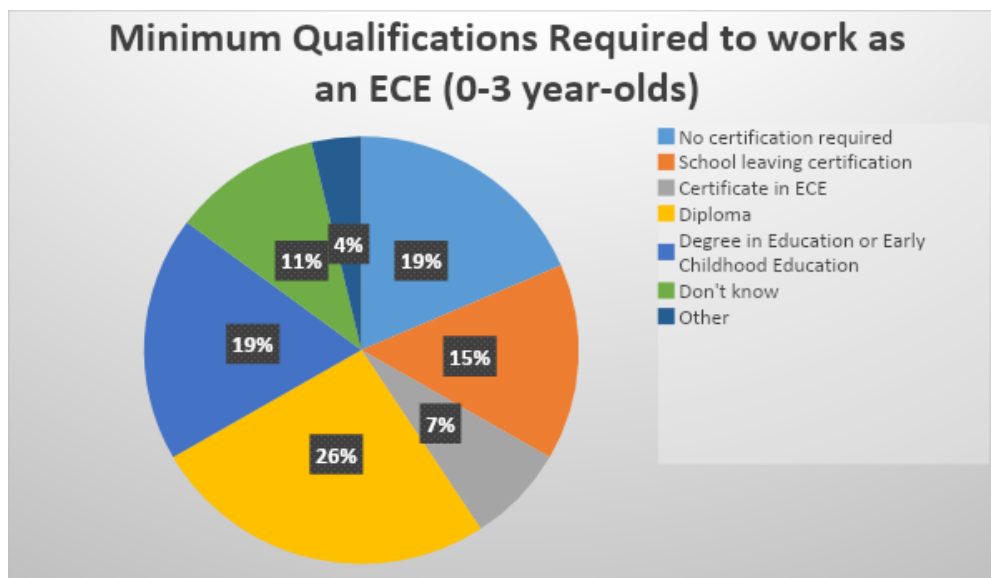


**Figure 5** - Good practising early childhood educator. N = 64.

Two-thirds of respondents (67%) chose statement number two: an educator who involves children in the planning of activities. There has been a surge in encouraging the adoption and implementation of a child-centred approach where focus and agency are transferred from the educator to the child (Chesworth, 2016; O'Neill and McMahon, 2005). The educators see the child as a competent and capable human being (Fraser and Gestwicki, 2002; Gandini, 1993). The planning of activities revolves around the interests of the child and therefore involves their own participation in the planning through mind-maps and other relevant methods. Having said this, a third of respondents (33%) said that a good-practising educator is one who plans activities for children in advance. This betrays a view whereby educators are expected and preferred to come prepared with activities to the setting. Thus, while the respondents may value a child-centred approach, they may still expect the educator to plan ahead anyway. None of the 64 respondents was keen on educators who grant children complete discretion to determine what to do by and for themselves while under their care.

## *Qualified Early Childhood Educators*

Respondents to the online questionnaire were asked to choose what, in their opinion, were the minimum qualifications required for an individual to work as an early childhood educator, dealing with children in the 0-3 years and 3-5 years age brackets in their respective country. Figure 6 graphically presents the respondents' answers in percentages:

**Minimum Qualifications Required to work as an ECE (0-3 year-olds)**

- No certification required
- School leaving certification
- Certificate in ECE
- Diploma
- Degree in Education or Early Childhood Education
- Don't know
- Other

**Figure 6** - Minimum qualifications required to work as an ECE (0-3-year-olds). N = 27 SIS.

Answers ranged from no certification at all (five countries – 19%) to a degree in education or early childhood education (five countries – 19%). The most common answer was that the minimum qualification required is a diploma (seven countries – 26%). Respondents from nine countries reported either no certification or a school leaving certificate as a requirement: individuals who work with very young children are often looked upon as babysitters and not educators who need to be knowledgeable about the development of the children in their care. The general public's perception of early childhood practitioners may still be that of a substitute mother and not an educator (Moss, 2007); a "poorly qualified 'mum's army'" (Payler and Georgeson, 2013b, p. 382), and with staff that is both "poorly educated" and "poorly paid" (Moss, 2014, p. 254). A lack of standardisation and regulation leads to uneven professionalism in this sector (Payler and Davis, 2017).
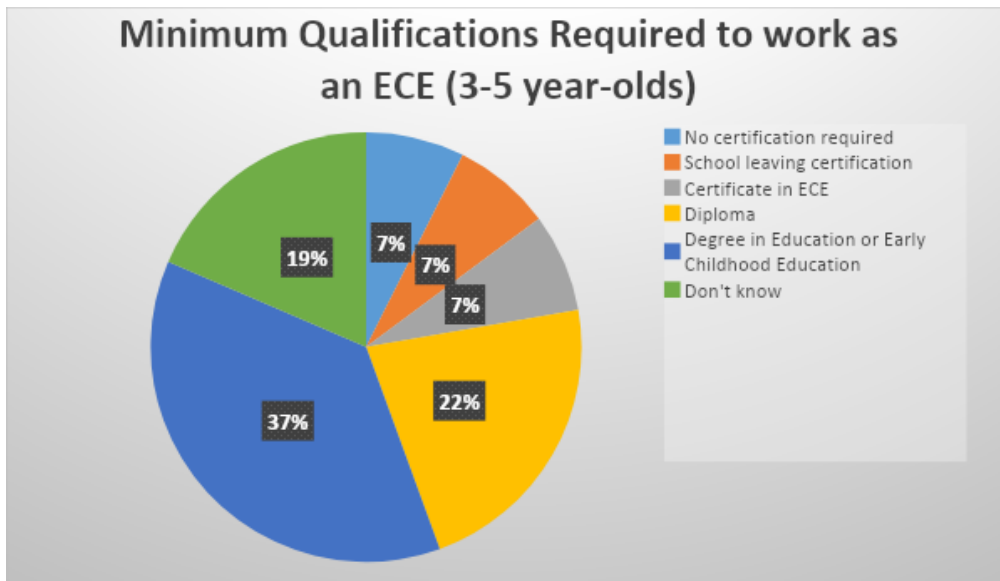
**Figure 7 -** Minimum qualifications required to work as an ECE (3-5-year-olds). N = 27 SIS

Figure 7 shows responses to the same question, but applied to dealing with 3-5-year olds. The number of countries whose respondents now opine that the minimum qualification for an ECE is a degree in education or early childhood education has increased from four to nine (37%). This might be due to the fact that children would now be enrolled in kindergartens that might form part of the school system, so a higher qualification level may be necessary. For six countries (22%), a diploma remains the minimum qualification required.

The more qualified and well-trained early childhood educators are, the more favourable the expected outcomes in early childhood settings and beyond (OECD, 2006; Payler and Davis, 2017). "There is a general consensus, supported by research, that well educated, well-trained professionals are the key factor in providing high-quality ECEC with the most favourable cognitive and social outcomes for children" (Taguma, Litjens, and Makowiecki, 2012, p. 1). Such results suggest that more educators need to be offered and exposed to more training in most of the world's small island states so that they might provide

high quality early childhood education to the children in their care.
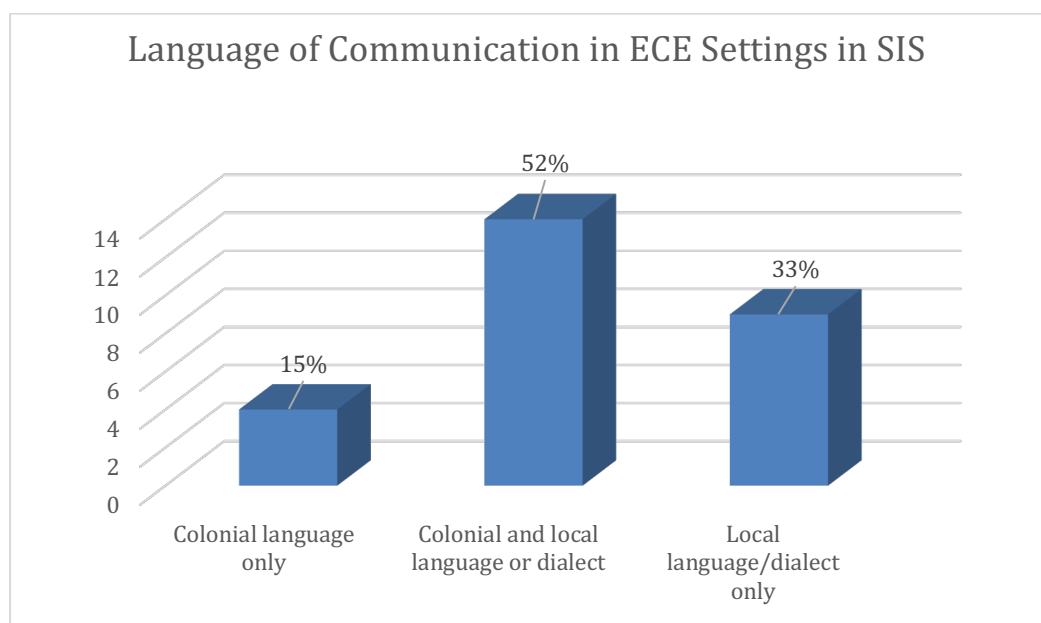
## Colonial Language Legacy

Respondents to the online questionnaire were asked to indicate the language of instruction used in ECE and the language practised and/or encouraged at home in their own country. Responses are displayed in Figure 8.
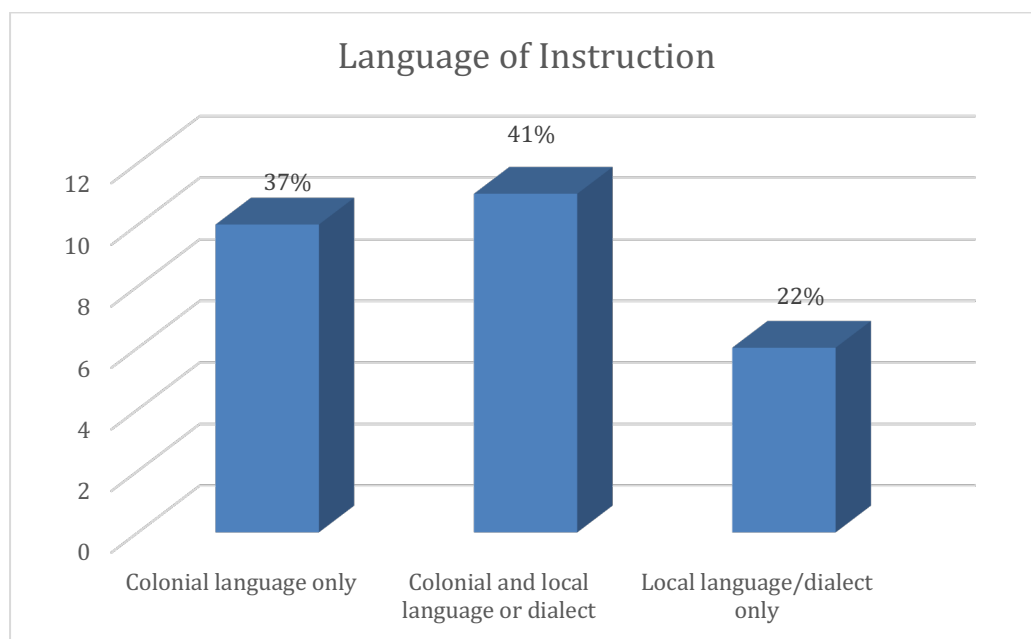


**Figure 8** – Language of Instruction. N = 27 SIS

Respondents from 10 countries reported that their colonial language is the only language of teaching and learning in their country (37%). Nauru claimed that both English and local Nauruan are used for teaching purposes. Respondents from 11 other countries, including those that were colonised by France and Portugal, use a mix of colonial languages (English, French or Portuguese) together with the local language for teaching and learning in the early years (41%). In the six other remaining SIS (22%), the language of instruction is uniquely local. In Samoa, Solomon Islands, Kiribati and Tuvalu, Melanesian and Polynesian languages are the media of instruction.

These are Pacific island states where the duration of the colonial experience has not been as deep and lengthy as in the Caribbean. Colonial infiltration in Iceland, colonised by Denmark, has also not been so thorough: Icelandic, a local language, is used throughout; Danish used to be the second language, now supplanted by English. Cyprus, although under British rule, managed to keep its local languages alive: Greek, serving as a national focal point for nationalism and resistance; and Turkish, the language of the minority community in Cyprus. These two European small island states are the world's only SIS where the language of instruction *and* communication is not a colonial language. This observation confirms the depth of the colonial experience in SIS outside Europe.



**Figure 9** - Language of Communication. N = 27 SIS.

Figure 9 refers to the language of communication used at home in these small island states. The resort to a mix of colonial and local languages or dialects (52%) in this context is more predominant than that for instruction (41%). The proportion of SIS using the colonial language *only* as a means of communication is now much less (15%) than the percentage of those using the colonial language

only for instruction (37%). Indeed, the local language/dialect is the preferred medium for communication now (33%), as opposed to 22% for instruction. This was also evident in the data collected through interviews with parents together with observations in childcare settings conducted as part of the author's doctoral dissertation (Baldacchino, A., 2020). The colonial language was used for instruction while the local language/dialect was preferred for communication purposes. Hence, the home environment comes across as more attuned to local culture in these SIS; while educational institutions in SIS are likely to promote colonial languages, even when the preferred language of communication is a different one.

## Qualitative Findings from the Open-Ended Questions

### *ECE Policies, Curricula and/or Frameworks*

Policies, curricula and/or frameworks are meant to help in the advancement of early childhood development, reduce social inequality, and "provide a social protection floor below which no human being can fall into extreme poverty and deprivation" (Bachelet, 2012, p. 2).

Respondents were asked if there was an official early years policy, curriculum and/or framework in their country. Respondents from 26 countries concurred. Respondents from the Comoros stated that they did not have such a policy.

> *In the Comoros, children start going to the Koranic school from the same age as kids in the West, that is to say 5 years. There is no national policy for this sector (Comoros, 42).*

> *Here, ECE from 0-3 is the responsibility of the Ministry for Health and Early Childhood and*

*from 3-5 it falls within the remit of the Ministry for Education. There is a programme, but it is not standardised. No national policy (Comoros, 44).*

## Challenges of ECE in SIS

Some of the general challenges relating to education in small island states include: the relative lack of funding for education; a relative lack of human resources, which necessitates a multiplicity of roles in the workforce; and a lack of material resources (Sultana, 2006). Bacchus (1993) argues that the lack of human resources frequently leads to individuals becoming 'experts' without, however, having the requisite qualifications. As one respondent states:

> *Most kindergartens are provided by communities where the teacher is usually a relative of an influential person in the community. Regardless of their educational background, teachers are identified and selected based on who they know or are related to, and not on how qualified one is (Vanuatu 25).*

Respondents were asked to discuss their thoughts about whether challenges, if any, facing early childhood education in their country were impacted by its relatively small size and island geography. In the case of the online questionnaire, 54 out of the 64 participants responded to this question, covering 24 of the 27 small island states. Twenty-five respondents agreed that there are challenges pertaining to ECE on SIS, suggesting a broad consensus. These challenges, the respondents suggest, include: a lack of funding in the ECE sector which then leads to a lack of adequate resources in the settings; a lack of skilled human resources which often lead to under-trained and/or unqualified early childhood educators; and a degree of

inevitable multifunctionality in the workforce. The situation can be exacerbated in archipelago states. A respondent from Cape Verde sums this up by saying:

> *Cape Verde is a country with nine islands / nine 'sub cultures', nine dialects, etc. Being an island is a challenge: imagine being nine (Cape Verde 49).*

Meanwhile, 29 respondents felt that small size and islandness had little or no impact on early childhood education in their country:

> *No, except in so far as the smallness impacts on the economy and the level of poverty of parents and their ability to get their young children to school, whereas the older ones can venture out on their own (Dominica 2).*

Such results should not be surprising: the challenges of small size and island geography tend to be less visible except to those who have the benefit and privilege of a comparative perspective. It is only by having experiences of, or ideas about, other (including larger and continental) states that the specific circumstances and effects of smallness and islandness are teased out and brought to focus (Baldacchino, 2008; Hey, 2003; Thorhallsson 2012).

What follows are some challenges that the respondents attributed to ECE because of the relatively small size of their island state.

## *Early Childhood Education is not a priority*

Twenty-four respondents felt that early childhood education was not deemed to be a high priority on the government's agenda:

*Political will is missing, which is essential to make ECE a priority on the agenda. Research proves that ECE is a wise investment affecting all facets of a country's well being. (Federated States of Micronesia 29).*

*Early childhood education has yet a long way to go; but it also requires more attention by the government as opposed to primary or secondary education (Samoa 39).*

*Improving quality education in the age group of 0-3 years, including professional staff, should be given more importance by the government (Malta 10).*

This is a pity and a lost opportunity: young children's brains from birth to age five "rapidly develop foundational capabilities on which subsequent development builds" (Shonkoff, & Levitt, 2010).

## Quality and Adequate Training

Ten respondents also shared the view that obstacles to the achievement of quality ECE provision included: the island mentality; cultural norms; lack of funding for adequate staff training; and a general lack of resources. Here are some of their views:

*I believe there are challenges that we face as a small island, mainly that culturally we are still inclined towards a more prescriptive approach... Foreign literature keeps us in line with other countries, yes, but at the same time some concepts in such literature remain foreign to us because of our island mentality. (Malta 10).*

*Yes, the geographical distance between islands makes it costly and challenging to train*

*kindergarten teachers, especially when the qualified teachers do not want to move to the rural areas to teach. (Vanuatu 25).*

*Yes, the challenge is that we do not have many opportunities for training and sharing of good practice [in early childhood education] (Cyprus 65).*

*A challenge we are facing is looking for qualified teachers who have ECE degrees and/or with an Associate Degree with an Early Childhood Certificate which is mandatory. Because we are a small populated island state, we have very little chances of finding anyone with expertise. (Palau 52).*

I can concur and sympathise with the respondent from Palau: in the case of Malta, after obtaining their degree in education with a focus on the early years, most university students are placed in the primary sector instead of in kindergarten, either because there is a lack of staff in those levels, or because it would cost the government a lot more in salaries to employ individuals with a degree rather than with a diploma at kindergarten level. Indeed, at present, individuals with an NQF level 4 (a diploma in ECE) certification are being recruited to teach in Maltese kindergartens. The practice is a far cry from a previous policy document that had recommended that, by 2015, all kindergarten educators should be in possession of a bachelor's degree and a teacher's warrant (MEDE, 2010).

## *Funding and Material Resources*

Lack of funding in early childhood education was another stated concern. The general feeling was that governments did not invest enough in ECE also because presumably it

is not a priority policy, as discussed above. Some respondents declared a sense of frustration: they feel that they either lack funds or lack trained staff to sustain quality ECE programmes in their respective countries:

> *More often than not, the already small budgetary allocations for ECE are the ones cut when disaster strikes (Marshall Islands 22).*

> *There is uncertainty of how long the funding from the US Aid for preschool will continue to support the programme for the children and parents in Palau and the unexpected could happen…with no more funds to operate the programme. (Palau 52).*

> *The major challenge of our programmes resides in our ability to financially sustain the ECE programmes (Federated States of Micronesia 29).*

> *Early childhood education is underfunded, and the staff overworked. Some [educators] are not even trained properly because of the lack of funds (Maldives 8).*

## *Human Resources and Multifunctionality*

Respondents were asked to consider if living in a small island state incentivised the resort to multifunctionality amongst the country's labour force. Bray and Fergus (1986) contend that, in some small island states, the economy needs personnel to take on available jobs; but there may not be enough skilled persons around to fill up these positions, so a resort to less qualified employees may follow. Multifunctionality: "…is a direct result of the nature of labour markets in small states, where some of the sectors have to perform the whole range of tasks that their counterparts do in larger states" (Sultana, 2006, p.

32; Sultana, 2008). Human resources may be too scarce and valuable to be wasted, nor may there be a sufficient and regular demand for certain task or skills to warrant all year-round employment (Jules, 2012) As one respondent put it:

> *Yes, being small and being an island are two facts that pressure you to be multi-tasked and creative…it's a survival attitude (Cape Verde 49).*

Responses to this question were obtained from 53 out of the 64 responses to the online questionnaire, covering 23 out of the 27 SIS. Forty of the 53 responses to this question agreed that the experience of multifunctionality is a feature of their country's workforce.

Various respondents opined that preschool educators had to 'wear many hats' in their line of work:

> *We take on more tasks within the pre-school than we would in Australia [my home country]. We teach the children and also manage finances, training local teachers, registration, etc. In Australia, this would be split into different roles, e.g. teacher, director, accountant (Vanuatu 41).*

> *The teachers not only teach in the classrooms, but they perform other tasks and responsibilities too inside and outside the classroom. They also become parents and judges, pastors, cooks, cleaners and councillors. (Tonga 16).*

> *This is a feature of small states. There are insufficient resources and capacity to permit specialisation. Thus, persons in various productive sectors have to be multi-skilled. The result can be a loss of efficiency or quality of output (Iceland 31).*

> *I greatly feel the pressure to multi-task because I know that this island does not have the other*

*types of experts and I feel that I have to answer for them – as I am the "best educated person" around (Federated States of Micronesia 9).*

Lack of sufficient funding compounds the issue:

*When the country has limited resources for development, people's wages are limited, … When you are employed to do a job, you may have to do all the related activities that produce the desired outcomes, because the state or other employers cannot afford to employ the support workers (Dominica 2).*

*There are constraints of high labour costs which largely affect small privately-run early childhood providers which in turn leads to multi-tasking (Barbados 32).*

*Limited financial and human resources demand well-coordinated teamwork and multitasking. (St Lucia 37).*

## Discussion

The unique dataset behind this study lends credence to the hypothesis that early childhood education in small island states is a site where postcolonialism and its influences are visibly rampant, and often unquestioned. Across the world, we come across situations in small island states where early childhood educators operate in a sector that is not high on the domestic policy agenda; may confront geographical fragmentation, difficulties of access and logistic challenges; may be poorly paid; and may lack suitable training, funding, teaching materials and expertise, while working flexibly with curricula and pedagogic practices that are premissed in a tacit morality that either supports child-minding (shorn of educational intent) or rewards preparation for (formal) schooling. Apart

from the Pacific region - where the colonial epoch has been the shortest, and where the "fatal impact" led to a decimation, but not extinction, of local populations (Moorehead, 2000) - already in early childhood settings, the language of instruction and communication is typically not a local one. Even where Indigenous languages are present and privileged, there remains scope for a decolonisation of both curriculum and pedagogy.

The reflections of this paper also constitute a postcolonial critique. As Parry (1994, p. 172) argues, such is "... designated as deconstructing and displacing Eurocentric [and, as in this case, USA-centric] premises of a discursive apparatus which constructed the Third World not only for the West but also for the cultures so represented". An anti-colonial discursive approach recognizes the central role played by culturally sensitive and locally-constructed knowledge, inclusive of oral stories, reclamation of native languages and dialects, "cultural histories and daily human experiences and social interactions" (Dei, 2000, p. 117).

Using early childhood education as its frame of reference, this study does not merely confirm such a stance amongst SIS; it also suggests that SIS may be amongst the best exponents of this construction. At the same time, securing a "decolonial linking" (Mignolo, 2011) - which is a presumed solution to such a state of mind and practice - is fraught with epistemological challenges; and indeed, may spell "institutional suicide", as one particular study of the Marshall Islands, a SIS, soberly warns (Kupferman, 2013, p. 349).

## Conclusion

"Little research has been influenced by postcolonial analysis of educational issues in specific island-state

systems" (Stewart, 2015, p. 25). This paper has set out to offer a rare comparative (albeit indicative) glimpse of the situation of early childhood education in the world's 27 small island states. Respondents have largely agreed in describing the sector as underfunded, underequipped, understaffed and underappreciated, challenged by pressures to: broaden expertise; and to teach in non-local languages or dialects. In a minority of cases, and most so in the 0-3-year bracket, the sector is excluded from the purview of the Ministry of Education; which suggests that the state does not consider this sector as essentially an educational concern.

Early childhood education has often been the last frontier in education to embrace the professionalisation of its staff. This development has accompanied the sector's gradual mainstreaming as a critical and essential piece of the educational puzzle, even in the world's smallest countries. Concurrently, we cannot fail to observe that various practices that unfold within this sector across the world are not sufficiently home-grown and locally inspired; and regulating the early childhood education sector ironically tends to further reduce any privilege accorded to indigenous traditions and mores.

## References

Adams, C. M., and Pierce, R. L. (2004). *Characteristics of effective teaching.* [online] Available at: http://www. bsu.edu/gradschool/media/pdf/chapter12.pdf

Atchoaréna, D., Da Graça, P. D. and Marquez, J. M. (2008). Strategies for post-primary education in small island developing states (SIDS): Lessons from Cape Verde. *Comparative Education, 44*(2), 167-185.

Bacchus, K. (1993). Some problems and challenges faced in decentralising education in small states. In: Lillis, K. M. (Ed.), *Policy, planning and management of education in small states.* Paris, France: International Institute for Educational Planning (pp. 76-93).

Bachelet, M. (2012). *Importance of early childhood development: Policy challenges.* Keynote speech delivered at Models of Early Childhood Services International Conference (Vol. 6). June. Available at: https://childcarecanada.org/resources/events/12/06/international-conference-models-early-childhood-services

Baldacchino, A., & Baldacchino, G. (2017) Conceptualizing early childhood education in small states: focus on Malta and Barbados. In: T.D. Jules and P. Ressler (Eds.), *Re-reading education policy and practice in small states: Issues of size and scale in the emerging 'intelligent society and economy'.* (pp. 97-109). Frankfurt: Peter Lang.

Baldacchino, A. (2019). Early Childhood Education on Small Island States: A Very British Story (unpublished doctoral thesis). The University of Sheffield, UK.

Baldacchino, A. (2020). Global or Local. Languages and Colonialism in Small Island States. In J. Jimenez-Salcedo, C. Helot & A. Camilleri Grima (eds). *Small is Multilingual.* Berlin: Peter Lang (pp. 25-46). ISBN: 978-3-631-83341-4

Baldacchino, G. (2008). Studying islands: on whose terms? Some epistemological and methodological challenges to the pursuit of island studies. *Island Studies Journal, 3*(1), 37-56.

Baldacchino, G. (2010). *Island enclaves: Offshore strategies, creative governance and subnational island jurisdictions.* Montreal, QC: McGill-Queen's University Press.

Bean-Mellinger, B. (2017). *Qualities of a good teacher in early childhood development.* [online] Available at: http://work.chron.com/qualities-good-teacher-early-childhood-development-8694.html

Bhabha, H.K. (1994). *The location of culture.* New York: Routledge.

Bray, M. (1991). *Making small practical: The organisation and management of ministries of education in small states.* London, UK: Commonwealth Secretariat.

Bray, M., and Fergus, H. (1986). The implications of size for educational development in small countries: Montserrat, a Caribbean case study. *Compare 16*(1), 91-102.

Bryman, A., Teevan, J., and Bell, E. (2009). *Social research methods.* (2nd Canadian edn.). Toronto, ON: Oxford University Press.

Burman, E. (2016). *Deconstructing developmental psychology* (3rd edn.). New York: Routledge.

Burton, L. J. (2012). Building on living traditions: Early childhood education and culture in Solomon Islands. *Current Issues in Comparative Education, 15*(1), 157-175.

Caldwell, J. C., Harrison, G. E., and Quiggin, P. (1980). The demography of micro-states. *World Development, 8*(12), 953-962.

Campbell, M. (2006). Indigenous knowledge in Jamaica: A tool of ideology in a neo-colonial context. In G. Dei & A. Kempf (eds.), Anti-*colonialism and education: The politics of resistance.* Rotterdam: Sense Publishers (pp. 193-210).

Chesworth, L. (2016). A funds of knowledge approach to examining play interests: Listening to children's and parents' perspectives. *International Journal of Early Years Education, 24*(3), 294-308.

Colker, L. J. (2008). *Twelve characteristics of early childhood teachers.* Beyond the journal. Young children on the Web. [online] Available at: http://www.fbcherndon.org/weekday/docs/article_ BTJ_Colker.pdf

Crossley, M., and Tikly, L. (2004). Postcolonial perspectives and comparative and international research in education: A critical introduction. *Comparative Education, 40*(2), 147-156.

Dalli, C., White, E. J., Rockel, J., Duhn, I., Buchanan, E., Davidson, S., Ganly, S., Kus, L. and Wang, B. (2011). *Quality early childhood education for under-two-year-olds: What should it look like? A literature review.* Ministry of Education: New Zealand. [online] Available at: http://www. educationcounts. govt. nz/__data/assets/pdf_file/0009/89532/965_Qualit yECE_We b-22032011. pdf

Dei, G. (2000). Rethinking the role of indigenous knowledges in the academy. *Journal of Inclusive Education, 4*(2), 111-132.

Felfe, C., and Lalive, R. (2018). *The levelling effects of good quality early childcare.* [online] Available at: https://voxeu.org/article/levelling-effects-good-quality-early-childcare

Fraser, S., and Gestwicki, C. (2002). *Authentic childhood: Exploring Reggio Emilia in the classroom.* Albany NY: Delmar Thomson Learning.

Gandini, L. (1993). Fundamentals of the Reggio Emilia approach to early childhood education. *Young Children, 49*(1), 4-8.

Glenn, R.E. 2001. *Admirable teaching traits. Teaching for excellence.* [online] Available at: https://www.education-world.com/a_curr/curr387.shtml

Gupta, A. (2015). Pedagogy of third space: A multidimensional early childhood curriculum. *Policy Futures in Education, 13*(2), 260–272.

Hey, J.A.K. (Ed.) (2003) *Small states in world politics: Explaining foreign policy behaviour.* Boulder CO: Lynne Rienner.

Hickling-Hudson, A. (2006). Cultural complexity, post-colonialism and educational change: Challenges for comparative educators. *Review of Education, 52*(1), 201-218.

Hickling-Hudson, A., & Mayo, P. (2012). Furthering the discourse in postcolonial education. *Postcolonial Directions in Education, 1*(1), 1-8. Available at: https://www.um.edu.mt/library/oar//handle/123456789/19604

Howard-Jones, P. A., Varma, S., Ansari, D., Butterworth, B., De Smedt, B., Goswami, U., Laurillard, D., & Thomas, M. S. C. (2016). The principles and practices of educational neuroscience: Comment on Bowers (2016). *Psychological Review, 123*(5), 620-627.

Johnson, M. (1982). *Effective teaching as perceived by teachers and principals in selected Indiana school corporations.* Ball State University doctoral dissertations. [online] Available from: https://elibrary.ru/item.asp?id=7329310

Kupferman, D. W. (2013). Does Marshallese studies exist? Towards the uncomfortable institutionalization of difference. *Postcolonial Directions in Education, 2*(2), 314-354.

Lumsden, J. (2005). *Guidelines for the design of online questionnaires.* Technical Report NRC 48231, National Research Council (of Canada).

MEDE, Ministry of Education and Employment (2010). *Agreement between the Government and the Malta Union of Teachers.* MEDE Floriana: Malta.

Mignolo, W. D. (2011). *The darker side of western modernity: Global futures, decolonial options.* Durham NC: Duke University Press.

Moorehead, A. (2000). *The fatal impact: Captain Cook's exploration of the South Pacific; Its high adventure and disastrous effects.* New York: Barnes & Noble.

Moss, P. (2007). Bringing politics into the nursery: Early childhood education as a democratic practice. *European Early Childhood Education Research Journal, 15*(1), pp. 5-20.

Moss, P. (2014). Early childhood policy in England 1997-2013: Anatomy of a missed opportunity. *International Journal of Early Years Education, 22*(4), 346-358.

Murthy, D. (2008). Digital ethnography: An examination of the use of new technologies for social research. *Sociology, 42*(5), 837-855.

Mustard, J. F. (2010). Early brain development and human development. In *The encyclopaedia of early childhood development.* [online] Available at: http://www.child-encyclopedia.com/Pages/PDF/MustardANGxp.pdf

Nieuwenhuys, O. (2013). Theorizing childhood(s): Why we need postcolonial perspectives. *Childhood, 20*(1), 3-8.

O'Neill, G., and McMahon, T. (2005). *Student-centred learning: What does it mean for students and lecturers.* AISHE Readings, Dublin University College. [online] Available at: https://www.aishe.org/readings/2005-1/oneill-mcmahon-Tues_19th_Oct_SCL.html

OECD (2006). *Starting strong II: Early childhood education and care.* Paris: OECD.

OECD (2012). *Encouraging quality in early childhood education and care (ECEC).* Paris: OECD.

OECD (2017). *Starting strong 2017: Key OECD indicators on early childhood education and care.* Paris: OECD.

Omar, S. M. (2012). Rethinking development from a postcolonial perspective. *Journal of Conflictology, 3*(1), 42-49.

Parry, B. (1994). Resistance theory/Theorising resistance, or two cheers for nativism. In F. Barker, F. Hulme & M. Iversen (eds.), *Colonial discourse/Postcolonial theory* (pp. 172-196). Manchester: Manchester University Press.

Payler, J., and Davis, G. (2017). Professionalism: Early years as a career. In: *British Educational Research Association Early Childhood Special Interest Group and TACTYC: Association for Professional Development in Early Years*. BERA-TACTYC: Early childhood review 2003-2017 (pp. 9-19).

Payler, J., and Georgeson, J. (2013). Multi-agency working in the early years: confidence, competence and context. *Early Years, 33*(4), 380-397.

Shonkoff, J. P. (2010). Building a new bio developmental framework to guide the future of early childhood policy. *Child Development, 81*(1), 357-367.

Shonkoff, J. P., & Levitt, P. (2010). Neuroscience and the future of early childhood policy: Moving from why to what and how. *Neuron, 67*(5), 689-691.

Sinkovics, R. R., Penz, E., and Ghauri, P. N. (2008). Enhancing the trustworthiness of qualitative research in international business. *Management International Review, 48*(6), 689-714.

Siraj-Blatchford, I, Taggart, B., Sylva, K., Sammons, P. and Melhuish, E. (2008). Towards the transformation of practice in early childhood education: the effective provision of pre-school education (EPPE) project. *Cambridge Journal of Education, 38*(1), 23-36.

Stewart, S. (2015). Schooling and coloniality: conditions underlying 'extra lessons' in Jamaica. *Postcolonial Directions in Education, 4*(1), 25-52.

Sultana, R. G. (2006). *Challenges for career guidance in small states.* Tarxien, Malta: Gutenberg Press.

Sultana, R. G. (2008). Looking back before moving forward: Building on 15 years of comparative educational research in the Mediterranean. *Mediterranean Journal of Educational Studies, 13*(2), 9-25.

Taguma, M., Litjens, I., and Makowiecki, K. (2012). *Quality matters in early childhood education and care: Slovak Republic.* Paris: OECD.

Talib, I.S. (2002). *The language of post-colonial literatures: An introduction.* New York: Routledge.

Tarc, A. M. (2009). Post-colonial studies as re-education: Learning from J. M. Coetzee's disgrace. In: Coloma, R. S. (ed.), *Post-colonial challenges in education.* NY: Peter Lang, (pp. 195-214).

Taylor, B., and Wash, P. (2003). *3,000 educators respond to preferred dispositions.* Paper presented at the Second Annual Symposium on Educator Dispositions, November 20–21, in Richmond, Kentucky.

Tesar, M. (2015). Te Whāriki in Aotearoa New Zealand: Witnessing and revisiting neo-liberal discourses. In: Pacini-Ketchabaw, V., and Taylor, A. (eds.) *Unsettling the colonial places and spaces of early childhood education.* (pp 98 - 113). London: Routledge.

Thorhallsson, B. (2012). Small states in the UN Security Council: means of influence? *The Hague Journal of Diplomacy, 7*(2), 135-160.

Usher, D. (2003). *Arthur Combs' five dimensions of helper belief reformulated as five dispositions of teacher effectiveness.* Paper presented at the Second Annual Symposium on Educator Dispositions, November 20–21. Richmond, Kentucky, USA. Available at: https://silo.tips/download/2-nd-national-symposium-on-educator-dispositions

Viruru, R. (2005a). The impact of postcolonial theory on early childhood education. *Journal of Education 35*(1), 7-29.

Viruru, R. (2005b). Postcolonial theory and the practice of teacher education. In: Ryan, S., and Grieshaber, S. (eds.), *Practical transformations and transformational practices: Globalization, postmodernism and early childhood education.* London, UK: Emerald Group (pp. 139-160).