A systematic review of conceptual models and methods used in research on educational leadership and management in Arab societies

Waheed Hammad & Philip Hallinger

Published online: 17 Aug 2017.

Submit your article to this journal ⤤

View related articles ⤤

View Crossmark data ⤤

Routledge
Taylor & Francis Group

REVIEW

Check for updates

A systematic review of conceptual models and methods used in research on educational leadership and management in Arab societies

Waheed Hammad[a,b] and Philip Hallinger[c,d]

[a]Faculty of Education, Sultan Qaboos University, Al-Khodh, Oman; [b]Faculty of Education, Damietta University, Damietta, Egypt; [c]College of Management, Mahidol University, Bangkok, Thailand; [d]Department of Educational Leadership and Management, University of Johannesburg, Johannesburg, South Africa

ABSTRACT

This review of research analyzed topics, conceptual models and research methods employed in 62 EDLM studies from Arab societies published between 2000 and 2016. Systematic review methods were used to identify relevant studies published in nine core international EDLM journals. Quantitative analyses identified patterns within this set of Arab studies and benchmarked them against trends in the broader EDLM literature. The review characterised these Arab studies as an 'emerging literature', largely of recent vintage. Consistent with other literatures from developing societies, topical coverage was diffuse, disconnected and lacking in programmatic inquiry. Recommendations are offered for strengthening future EDLM research in Arab societies.

[I]n the micro domains of management there still may be more interest in the replication in developing countries of Western theory and practice than there is resistance to it … However, as recognition grows of the centrality to development of well managed public and private organizations so too is it likely that the prescriptiveness and, in many cases, dysfunctionality of Western views when applied uncritically in developing countries will become more evident. (Blunt and Jones 1997, 6–7)

Blunt and Jones' (1997) assertions concerning the limitations of 'Western' theories of leadership anticipated one of the most significant trends in research on educational leadership and management (EDLM) to emerge over the past 25 years. This lies in the growth of research that has sought to describe and analyze educational leadership and management practices in developing societies (see also Bajunid 1996; Cheng 1995; Hallinger and Leithwood 1996; Oplatka 2004; Walker and Dimmock 2002). Much of this emerging research has been grounded in the assumption that the nature of 'effective leadership

CONTACT Philip Hallinger ✉ hallinger@gmail.com

and management practices' can only be understood fully when examined within the socio-cultural, political, and economic context of the society (Clarke and O'Donoghue 2017; Hallinger 2016; Mertkan et al. 2017; Oplatka 2004). This perspective has challenged EDLM scholars in developing societies not only to produce 'more scholarship' but also to examine practices and processes in light of normative values and institutional structures (Clarke and O'Donoghue 2017; Hallinger 2016; Mertkan et al. 2017; Oplatka 2004).

Recent reviews of EDLM research confirm that the volume of EDLM research generated in developing societies has risen dramatically over the past 10 years (Hallinger 2017; Hallinger and Bryant 2013; Hallinger and Chen 2015; Oplatka and Arar 2017). This suggests that, perhaps for the first time, a critical mass of scholars has begun to study the diversity of EDLM practices outside of traditional Anglo-American centres of management scholarship. These efforts include scholarship aimed at examining the contextualised application of 'Western models' in developing societies as well as the generation of 'indigenous models' of leadership and management (Akkary 2014; Truong and Hallinger 2017).

These trends are also evident in recent studies of educational leadership and management conducted in the Arab world. The rising volume of EDLM research in Arab societies reflects both the maturation of Arab education systems and the increased importance attached to management practices in determining the quality of education (Algarni and Male 2014; Al-Taneiji and McLeod 2008; Elmelegy 2015; Gaad, Arif, and Scott 2006; Hammad 2013; Hammad and Norris 2009). The purpose of this systematic review of research was to explore the nature of the knowledge base in educational leadership and management in Arab societies (Mertkan et al. 2017; Oplatka 2004; Oplatka and Arar 2016). More specifically, we synthesised trends that emerged from 62 EDLM studies conducted in Arab societies. Three research questions guided the review.

(1) What research topics represent the focus of scholars studying EDLM in Arab societies?
(2) How are these research foci organised in terms of the conceptual models that have guided EDLM studies in Arab societies?
(3) What is the distribution of research methods used by scholars studying EDLM in Arab societies?

The authors employed 'systematic review methods' (Gough 2007; Hallinger 2013) to guide this research synthesis. We identified articles from Arab societies that had been published in nine 'core' international EDLM journals between 2000 and 2016. Relevant data were extracted from the articles and analyzed quantitatively. The results for Arab societies were then benchmarked against findings reported in published reviews of EDLM research from other developing societies (Hallinger 2017; Hallinger and Bryant 2013; Hallinger and Chen 2015; Oplatka and Arar 2017).

Conceptual framework

We believe that it is useful to conceptualise a review of research within a 'lineage' of prior reviews. By doing so, we are able to extend knowledge accumulation in more meaningful ways (e.g. Hallinger 2017). With this in mind, we employed a conceptual framework whose DNA can be found in prior reviews of EDLM research dating back to the 1960s (Bossert et al. 1982; Bridges 1982; Erickson 1967; Hallinger 2017; Hallinger and Chen 2015; Leithwood, Begley, and Cousins 1990). Our conceptual framework, drawn from Hallinger (2017), organises studies in terms of four broad dimensions: context and personal antecedents (labelled 'A'), leadership/management roles and actions ('B'), features of the school organisation ('C'), and school performance outcomes ('D').

The first domain (i.e. 'A') refers to 'antecedent' features of the individual leader and school environment that are conceptualised to shape leadership behaviour (see Figure 1). Context antecedents refer to cultural, political, economic and institutional features of the education context (see Belchetz and Leithwood 2007; Clarke and O'Donoghue 2017; Hallinger 2016). Personal antecedents refer to characteristics of leaders/managers such as gender, administrative experience, and self-efficacy (Bridges 1982; Erickson 1967; Hallinger 2017; Leithwood, Begley, and Cousins 1990).

Leadership and management practices comprise the second domain ('B') in the framework. We defined leadership as a process through which persons
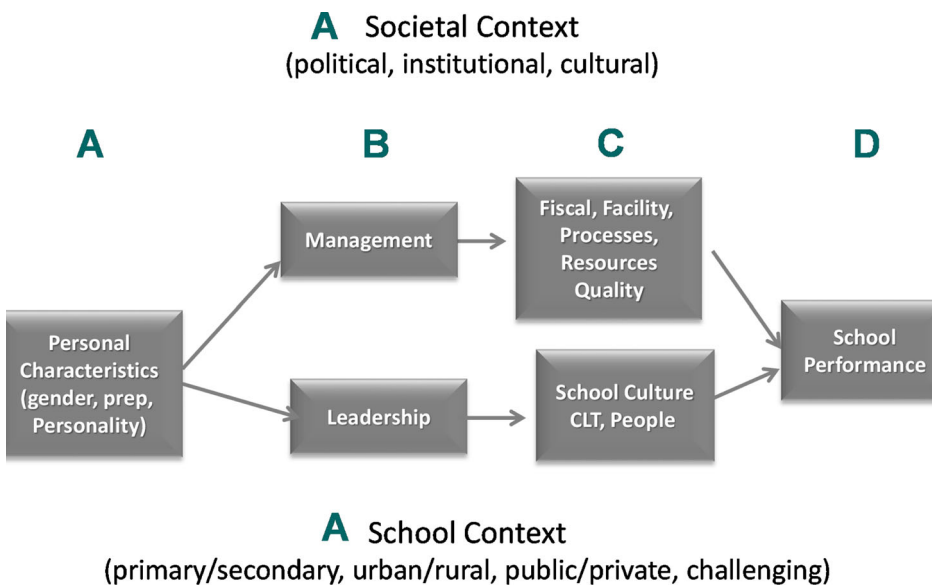

Figure 1. Conceptual Framework (from Hallinger 2017, 3). **A** refers to personal and context antecedents of leadership. **B** refers to leadership and management variables. **C** refers to variables that mediate leadership/management effects on school performance. **D** refers to variables measuring school performance.

seek to bring about change and/or improvement in the organisation by influencing other people or organisational processes (Bossert et al. 1982; Bridges 1982). Leaders can occupy formal managements roles (e.g. principal, vice principal), or not. We defined management as processes undertaken by persons holding 'formal administrative roles' through which they undertake activities aimed at planning, organising and controlling organisational structures, policies, and operations. In practice, some studies employ overlapping definitions of leadership/management (e.g. studies of teacher evaluation).

The effects of leadership and management can be conceptualised in terms of impact on the organisation (e.g. organisational structures, facility, teacher attitudes and capacity, school climate, school culture) as well as the school's performance (e.g. student achievement, school improvement, school effectiveness). These categories are distinguished in this framework by the assignment of designators 'C' and 'D' respectively (see Hallinger 2017). This conceptual framework was used to assist in organising studies in terms of their underlying conceptual models.

Method

Our method of review followed guidelines for conducting 'systematic reviews of research' (Gough 2007; Hallinger 2013). However, instead of focusing on synthesising 'substantive results', we sought to illuminate patterns in the evolution of research models and methods (Bridges 1982; Hallinger 2017; Hallinger and Chen 2015). This section of the paper describes our methods of source identification, data extraction, and data analysis.

Identification of sources

This review took as its starting point findings reported in recent reviews of Asian and African research in educational leadership and management (Hallinger 2017; Hallinger and Chen 2015). Although these reviews had included studies from Arab societies located in Asia and North Africa, analyses had not highlighted features of the subset of Arab societies. Thus, we were interested to train a focused lens on the Arab literature in EDLM in the current review.

In order to maintain the 'comparative power' of our review lens, we decided to focus on a similar set of EDLM journals as were contained in the earlier Asia and Africa reviews. This constituted a systematic search of nine 'core international EDLM journals'[1]: *Educational Administration Quarterly (EAQ), Journal of Educational Administration (JEA), School Effectiveness and School Improvement (SESI), Educational Management Administration and Leadership (EMAL), School Leadership & Management (SLAM), International Journal of Leadership in Education (IJLE), International Journal of Educational Management (IJEM), Leadership and Policy in Schools (LPS), and International Studies in Educational Administration (ISEA).* While these journals do not, of course, capture all Arab-related EDLM articles in the global literature,

they provide a broad international representation of moderate to high quality theoretical and empirical knowledge within the field (Cherkowski, Currie, and Hilton 2012; Hallinger and Bryant 2013).[2] The *h-index* (Harzing 2007)[3] for these journals ranged from a low of 29 for *ISEA,* to a high of 152 for *EAQ.*[4]

Since prior reviews had found relatively little EDLM research activity in Asian and African societies prior to 2000, we decided to seek literature published between 2000 and the end of 2016.[5] The geographical scope of the review included all Arab societies in North Africa (Morocco, Libya, Tunisia, Mauritania, Western Sahara, Egypt, Sudan, Somalia, South Sudan) and West Asia (Lebanon, Palestine, Iraq, Lebanon, Syria, Bahrain, UAE, Qatar, Oman, Saudi Arabia, Yemen). During the search we also came across numerous studies that had focused explicitly on leadership and management issues within the Arab education sector in Israel (e.g. Arar 2014, 2016; Mizel 2009; Nasra and Heilbrunn 2016; Shapira, Arar, and Azaiza 2010, 2011). Since the purpose of the review was to highlight trends in the study of 'Arab school leadership and management', we decided to include these studies.

Our search began with reading the abstracts of all articles published in these nine journals between 2000 and 2016. When an article fit our search criteria, we downloaded the pdf file as well as its citation. Thus, we were confident that the resulting 'database' of 62 studies comprised the full corpus of EDLM articles from Arab societies published in these journals over the 17 year period.

Data extraction

Next, we scanned each article with the goal of extracting relevant information (i.e. topic, data collection method, school level, data analysis method etc.). Data extracted from the articles were entered into a MS Excel spreadsheet. In order to facilitate the analysis of trends across studies, we coded the data where appropriate. For example, each form of data collection used in the studies was assigned a code (e.g. survey = 1, interview = 2, observation = 3, document analysis = 4). The resulting spreadsheet, therefore, represented the 'dataset' analyzed in this review.

Data analysis

Although data analysis relied primarily on quantitative methods, data interpretation and synthesis was grounded in our understanding of the broader EDLM literature. First, we employed descriptive statistics to generate tables and graphs designed to highlight modal trends, as well as variability across the studies. In order to place the results in perspective, we compared our findings with trends identified in reviews of EDLM research conducted in North America (e.g. Bridges 1982; Leithwood, Begley, and Cousins 1990), Asia (e.g. Hallinger and Chen 2015), and Africa (Hallinger 2017).

Results

This section of the paper presents our results with respect to topics, conceptual models, and research methods employed in scholarship on EDLM in Arab societies. Before proceeding to address these questions, however, we wish to highlight some of the 'topographical features' of this literature that were identified in a related though separate set of analyses (see Hallinger and Hammad 2017). The corpus of 62 Arab-focused studies is aptly characterised as an 'emerging literature' (Oplatka and Arar 2017). Still small in size, 90% of the studies had been published since 2005, and 60% since 2010. While research on 13 Arab societies was represented in these EDLM journals, 38% of the full set of Arab societies were conspicuous by their absence (e.g. Somalia, Sudan, Yemen, Mauritania, Algeria, Western Sahara, Tunisia, South Sudan). None of the societies had produced a sufficient number of publications to warrant distinction as a 'center of excellence' in EDLM research (See Hallinger and Hammad 2017). These broad topographical findings highlight how little we currently know about educational leadership and management practices in the Arab world (see also Oplatka and Arar 2017).

Research topics in the EDLM literature from Arab societies

Our first research question focused on identifying the range and concentration of research foci included in the Arab corpus. The first analysis examined the 'level of schooling' studied in the articles. We found that 56% of the papers focused on K-12 schools, 32% on higher education, and 10% on education systems (see Figure 2). In contrast with the African and Asian literatures, more of the Arab EDLM studies of K-12 schools collected data from 'multiple levels' rather than from primary, middle or high schools. Arab scholars also evinced greater interest in studying higher education than have scholars in Asia more broadly (Hallinger and Chen 2015). This interest in studying leadership and management in Arab higher education corresponds with the rapid growth of this sector in recent years.
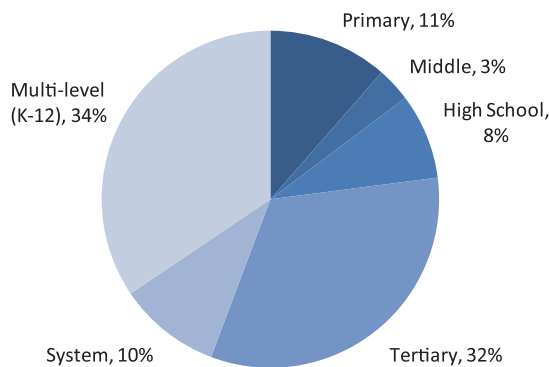

Figure 2. Distribution of school level comprising the focus of the studies.

Table 1. Distribution of topics in EDLM literature from Arab societies, 2000–2016.

Code	Topic	Total	%
8	Leadership	21	34
1	Cultural Contexts	18	29
9	Principals	16	26
5	Human Resources: training, selection, development & career	15	24
17	Change, School Performance & Improvement	12	19
2	Organisational Behaviour, Climate and Culture	9	15
6	Governance: SBM, decentralisation	9	15
13	Decision-making	9	15
12	Gender	7	11
16	Emotions: commitment motivation, satisfaction	7	11
4	Marketing and Services	4	6
22	Superintendents, District & System	4	6
23	Quality	4	6
10	Middle Level Leadership	2	3
18	Parents and community	2	3
21	Entrepreneurship	2	3
3	Values, Ethics & Social Justice	1	2
11	Curriculum and Teaching	1	2
14	ICT	1	2
24	Teacher evaluation	1	2
15	Theory	0	0
19	Finance and Economics of Education	0	0
20	Other	0	0

Next, we classified topics in the Arab literature following a typology employed by Hallinger and Chen (2015). Data presented in Table 1 show that the five most frequently studied topics in this literature concerned Leadership (34%), Cultural Contexts (29%), Principals (26%), Human Resources (24%), and Change, School Performance and Improvement (19%). Analysis of topics by year of publication indicated that interest in these topics had grown considerably during the past five years. Notably, a number of frequently studied topics in the broader Asian and African reviews of EDLM research were quite scarce in this literature. These included studies of Teacher Evaluation, ICT, Values, Ethics and Social Justice, Parents and Community, Finance and Middle Level Leadership.

Conceptual models

Next, the topics studied in the 62 journal articles were classified according to the conceptual framework presented earlier in Figure 1 (see Table 1). Assignment of studies to categories was not mutually exclusive. For example, Taleb's (2010) study of gender and leadership styles in academic institutions in Saudi Arabia was assigned to both the leadership/management and context/personal antecedent categories. Our analysis of the conceptual models also included categorisation of the studies based on the relationships among variables in the domains that were studied. This type of conceptual analysis has a long-standing lineage in reviews of research in EDLM (e.g. Bridges 1982; Hallinger 2017; Leithwood, Begley, and Cousins 1990). Its purpose is to assess approaches to modelling relationships among variables across the four domains shown earlier in Figure 1.

The following three-level holistic rubric was used to classify the studies.

- Univariate studies of leadership/management;
- Bivariate studies of antecedent (A) effects on leadership/management (B) or leadership/management (B) effects on a second organisational (C) factor or school performance (D);
- Multivariate studies of antecedent (A) effects on leadership/management (B) and a third variable (C or D), or leadership/management (B) effects on organisational (C) and school performance (D) variables. By the definition, multivariate studies contained three or more variables.

In general, scholars have noted a tendency for emergent literatures to be characterised by a high proportion of univariate and bivariate studies (e.g. Bridges 1982; Hallinger 2017; Hallinger and Chen 2015; Leithwood, Begley, and Cousins 1990). This was also the case in the Arab literature. Our analysis revealed that almost half of the quantitative and mixed methods studies (n = 15) employed bivariate conceptual models. The most frequent combination of domains within this category was B-C, which was used in six studies (Al-Husseini and Elbeltagi 2017; Al-Mahdy, Al-Harthi, and Salah El-Din 2016; Al Nuaimi et al. 2015; Khalifa and Ayoubi 2015; Khasawneh, Al-Omari, and Abu-Tineh 2012; Nasra and Heilbrunn 2016). The second most frequent combination, A-B, was used in five studies. These studies examined how leadership and management practices/activities were shaped by contextual and personal factors (e.g. Abu-Tineh 2013; Akkary 2014; Alameen, Male, and Palaiologou 2015; Al-Taneiji and McLeod 2008; Arar 2014; Arar et al. 2016; Elmeski 2015; Litz and Scott 2016). Taken together, studies addressing more than one domain represented 55% of the quantitative and mixed methods studies. It was also noted that domains A and B were the most frequently observed domains as they were studied in 14 and 15 studies respectively. This signals an emphasis in Arab EDLM studies on context and personal antecedents as factors impacting leadership and management practices.

The second most frequent conceptual model guiding studies in this literature was represented by univariate studies (n = 14) of leadership/management. Only two of the studies were classified as employing multivariate models (Badri and Mohaidat 2014; Kremer-Hayon, Faraj, and Wubbels 2002). Moreover, it was noted that none of the multivariate studies employed more than three variables. This conceptual analysis suggests that Arab scholars have yet to address the challenge of modelling the complex multi-variate relationships that both shape and are shaped by school leaders.

Context antecedents

A relatively large number of these studies sought to place leadership and management in the cultural, institutional, social and organisational contexts of

schooling in Arab societies. For example, there was a concentration of studies focusing on how leadership and management practices were shaped in the Arab sector of education in Israel (e.g. Abu-Rabia Quader and Oplatka 2008; Arar 2014; Arar and Abu-Asbah 2013; Arar and Abu-Romi 2016; Jabr and Cahan 2015). Variations in social cultures of Arab societies also attracted the interest of these scholars with studies in conservative Arab societies such as Saudi Arabia (Alameen, Male, and Palaiologou 2015; Algarni and Male 2014; Taleb 2010), as well as more open societies such as Lebanon (Nabhani, Busher, and Bahous 2012), UAE (e.g. Litz and Scott 2016; Macpherson, Kachelhoffer, and El Nemr 2007), and Kuwait (Alsaeedi and Male 2013).

The interaction between cultural and institutional contexts of education also received considerable attention in this literature. Thus, we found a number of studies that explored tensions arising from efforts to decentralise leadership/ management in education systems located in hierarchically-oriented distance societies. This included studies of system-wide decentralisation (Algarni and Male 2014; Al-Taneiji and McLeod 2008; Arar and Abu-Asbah 2013; Thorne 2011), school-based management (Arar and Abu-Romi 2016; Elmelegy 2015; Hammad 2013), and educational accountability (Mizel 2009).

A few articles addressed the influence of the 'social context of education' on school leadership and management. These studies examined the impact of gender and race on school leadership/management practices (e.g. Abu-Rabia Quader and Oplatka 2008; Abu-Tineh 2013; Arar 2016; Arar and Oplatka 2013; Shapira, Arar, and Azaiza 2010). A smaller number of studies sought to understand how leadership and management practices were shaped by more narrowly construed 'organizational contexts'. These included investigations of leadership in 'single sex institutions' (Taleb 2010), 'Bedouin schools' (Mizel 2009) and schools in 'challenging contexts' (Elmeski 2015; Nabhani, Busher, and Bahous 2012).

Personal antecedents

Though less numerous than has been reported in the Western literature (e.g. Bridges 1982; Hallinger 2011; Leithwood, Begley, and Cousins 1990), scholars addressing EDLM in Arab societies have also shown a limited interest in studying the personal antecedents of educational leaders. The most frequently studied leader antecedent in this literature was the gender of educational administrators. These gender studies generally fell into one of two types. One kind examined female approaches to leadership/management in Arab societies (Abu-Tineh 2013; Arar 2016; Arar and Oplatka 2013; Shapira, Arar, and Azaiza 2010; Taleb 2010). A second kind explored female leaders' experiences/ perceptions of leadership (Abu-Rabia Quader and Oplatka 2008; Shapira, Arar, and Azaiza 2011). It was observed that these gender studies have relied almost exclusively on qualitative methods.

Scholars also showed some interested in leadership preparation and development. (Kanan and Baker 2006; Romanowski and Romanowski 2017; Wafa 2015) and professional development (Hourani and Stringer 2015; Kanan 2005). The literature also included studies of human resources development (Khasawneh 2011a, 2011b, 2011c) and school principals' roles and career (Arar 2014, 2016; Abu-Rabia Quader and Oplatka 2008; Stringer and Hourani 2016).

Leadership and management

The Arab EDLM literature is comprised of a significant proportion (not tabled) of both leadership (34%) and management studies (32%). Leadership studies adopted a wide range of models including transformational leadership (e.g. Alsaeedi and Male 2013; Mattar 2016), instructional leadership (Mattar 2012), shared leadership (Khasawneh 2011c), teacher leadership (Emira 2010), pedagogical leadership (Alameen, Male, and Palaiologou 2015), servant leadership (Al-Mahdy, Al-Harthi, and Salah El-Din 2016), ethical leadership (Arar et al. 2016), and middle level leadership (Arar 2014; Al-Hamdan and Al-Yacoub 2005). Notably, no single leadership style or model had attracted attention from a critical mass of scholars, thereby limiting the potential for knowledge accumulation.

Management studies tended to focus on topics of global interest related to educational organisation and accountability. These included studies focusing on school principals (e.g. Akkary 2014; Al-Omari and Wuzynani 2013; Elmeski 2015; Hourani and Stringer 2015), school decision-making (e.g. Al Nuaimi et al. 2015; Arar et al. 2016; Emira 2010; Hammad and Norris 2009), accountability and educational quality (Badri et al. 2016; Mizel 2009), and marketing and services (e.g. Abou-Warda 2015; Khalifa 2009; Sohail and Shaikh 2004).

The school organization

This category of studies examined the relationship between leadership styles and organisational behaviour. For example, studies investigated the relationship between transformational leadership and knowledge sharing (i.e. Al-Husseini and Elbeltagi 2017), organisational commitment (Khasawneh, Al-Omari, and Abu-Tineh 2012), and organisational citizenship (i.e. Nasra and Heilbrunn 2016). The relationship between shared leadership and organisational citizenship was also addressed by one study (i.e. Khasawneh 2011c). Other studies addressed teacher and principal attitudes such as job satisfaction (Al-Mahdy, Al-Harthi, and Salah El-Din 2016; Al Nuaimi et al. 2015), emotional expression (Arar 2016), and burnout (Kremer-Hayon, Faraj, and Wubbels 2002). Other features of school organisation such as organisational learning (Abu-Tineh 2011) and engagement culture (Nabhani, Busher, and Bahous 2012) were also addressed. Again, however, there was no concentration of studies on any particular research foci (e.g. teacher commitment or job satisfaction).

School outcomes

A number of studies examined school performance (e.g. Al-Ani and Ismail 2015; Badri and Abdulla 2004) and school quality (e.g. Badri et al. 2016; Sohail and Shaikh 2004; Al-Turki and Duffuaa 2003). Badri and colleagues' studies (i.e. Badri and Abdulla 2004; Badri and Mohaidat 2014; Badri et al. 2016) sought to develop models to evaluate/enhance school performance/quality in UAE. Two studies (i.e. Arar and Abu-Asbah 2013; Jabr and Cahan 2015) addressed the performance of the Arab education system in Israel. Nabhani, Busher, and Bahous (2012) study explored how a culture of engagement in learning improved the performance of students in a small sample of Lebanese schools facing challenges.

Change has also been the focus of several Arab EDLM studies. For example, Hammad (2013) and Hammad and Norris (2009) explored the existing gap between the policy and implementation of decentralisation and school-based management in Egypt's schools. Thorne (2011) and Stringer and Hourani (2016) investigated the impact of current education reforms in UAE on the roles and performance of school principals.

In sum, the topics of interest to Arab scholars echo interests evidenced in the global literature in EDLM. Nonetheless, the most notable features of the literature is the diffuseness of educational management topics.

Research methods in Arab studies of EDLM

We noted that 53 of the 62 EDLM articles reported the results of empirical studies. Analysis of this subset of the literature revealed reasonably a balanced distribution of studies by research method (see Figure 3). Notably, the use of quantitative methods has increased dramatically over the past five years; 79% of the quantitative studies were published since 2011. This suggests the possibility of recent changes in the capacity of EDLM scholars in these societies. Although some variation in methodological preferences were noted across the various societies, the sample sizes were too small to make the patterns meaningful.
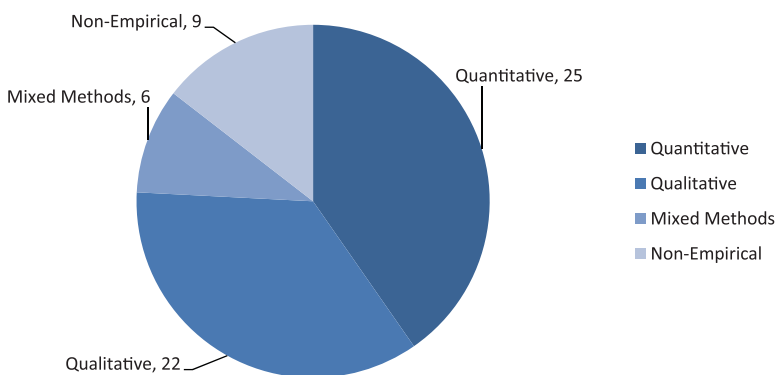

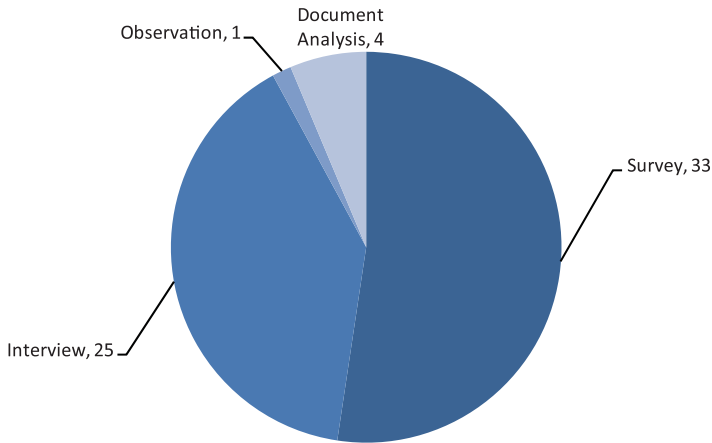**Figure 3.** Distribution of research method employed in the articles.

Figure 4. Distribution of methods of data collection employed in the articles.

Next, we analyzed the empirical articles according to their methods of data collection (see Figure 4). Consistent with the prevalence of quantitative studies, surveys were employed in 63% of the empirical studies. This heavy reliance on surveys is consistent with EDLM research dating back to the 1960s (Briner and Campbell 1964; Bridges 1982; Campbell 1979; Campbell and Faber 1961; Erickson 1967; Haller 1979).

As noted above, qualitative and mixed methods studies research comprised about half of the empirical studies in our database. Here interviews were the method of choice for the qualitative component in 25 studies. Document analysis and observation were seldom used by scholars in this literature (see Figure 4). Overall, we observed that the pattern of data collection employed in these qualitative and mixed methods studies only occasionally achieved the depth of rich description that is the hallmark of qualitative research.

The last focus for analysis concerned the approach to data analysis used in the quantitative and mixed methods studies. Here we employed Bridges (1982) rubric for assessing the statistical tests used in quantitative EDLM research. Since this rubric had been used in several other reviews of EDLM research conducted over the ensuing decades (e.g. Bridges 1982; Hallinger 2011, 2017; Hallinger and Chen 2015). It would enable us to benchmark our results for Arab scholarship in EDLM with patterns of scholarship in other societies.

Bridges (1982) four-level holistic rubric was designed to classify the use of statistical tests in quantitative research.

(1) Level 1 statistics: Descriptive statistics (e.g. mean, standard deviation),
(2) Level 2 statistics: Single Causal Factor/Correlational statistics (e.g. t-test, Pearson's correlation),
(3) Level 3 statistics: Single Causal Factor/Correlational with Controls (e.g. one-way analysis of variance) ,

(4) Level 4 statistics: Multiple Factor and Advanced Modelling (e.g. discriminant analysis, MANOVA, multiple regression, structural equation modelling, factor analysis).

We employed this rubric to assess the use of statistical tests in the 32 quantitative and mixed methods studies in our dataset. Analysis revealed that Level 3 (9%) and Level 4 (53%) statistics were employed in a majority (62%) of the studies (see Figure 5). This result was somewhat surprising given our earlier characterisation of the Arab studies as an 'emerging literature'. We had expected to find the trend leaning heavily towards Level 1 and Level 2 statistics.

For example, reviews of the first generation of American literature in EDLM reported a heavy reliance on the use of descriptive and simple correlational statistical tests (Bridges 1982; Haller 1979). Bridges (1982) asserted this as a weakness in the research capacity of the field, noting that descriptive and simple correlational tests (e.g. t-tests) are unable 'to rule out plausible rival explanations' (16). This limits their power in explaining relationships among influential factors in educational leadership and management.

Subsequent reviews of EDLM research published over the ensuing 35 years have used this as one criterion for assessing change in the research capacity of EDLM scholarship. For example, Hallinger's (2011) review of research largely comprised of American EDLM studies reported progress on this criterion in recent years. Therefore, if we benchmark our findings on this dimension against the evolution of the early American EDLM literature, it suggests a higher degree of latent research capacity than we might have expected.

We were also able to benchmark the use of statistical tests in the Arab literature against results reported in recent reviews of the African and Asian literatures (Hallinger 2017; Hallinger and Chen 2015). As indicated in Figure 6, the results from these Arab societies were quite similar to those reported for Asia (Hallinger and Chen 2015), but stronger than those reported for Africa as a whole.
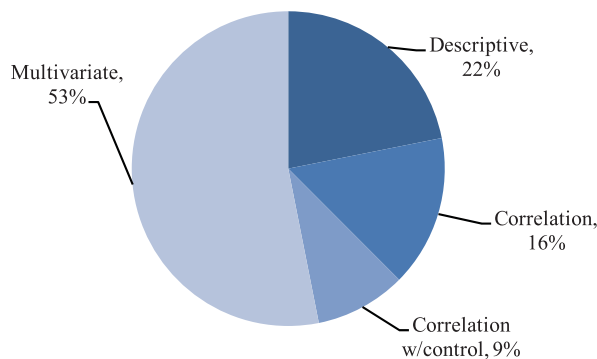

Figure 5. Distribution of methods of statistical analysis employed in the quantitative and mixed methods studies.
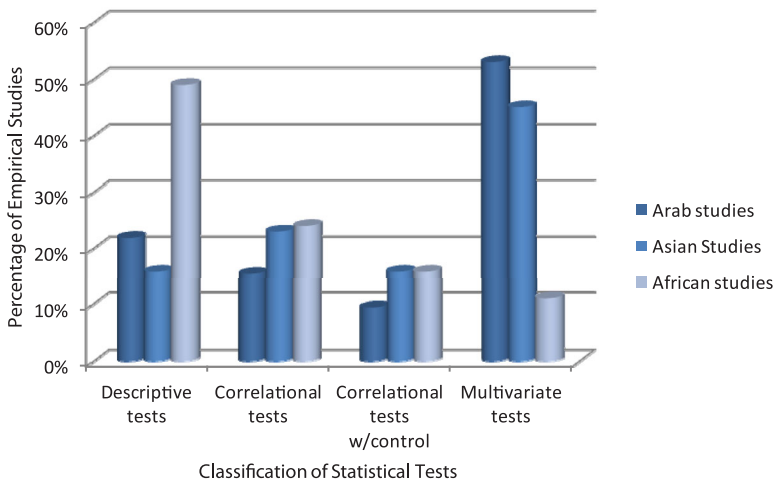
Figure 6. Comparison of Arab, Asian and African literatures on use of statistical tests.

Discussion

Why is it important to inquire into the nature of national, regional, or cultural subsets of the knowledge base in educational leadership and management? We assert that scholarship in educational leadership and management is undergoing a sea change that has elevated the urgency, legitimacy and value of understanding the diversity of school leadership and management practices across the world. Whereas just 20 years ago articles from outside of the USA, Canada, Australia or the Netherlands were rarities in our core international EDLM journals (see Mertkan et al. 2017), today they comprise a growing segment of the global EDLM literature. Indeed, recent reviews of research on EDLM in Asian (Hallinger and Chen 2015), African (Hallinger 2017), and now Arab societies (see also Hallinger and Hammad 2017; Oplatka and Arar 2017), have established that 90% of the published literature from these developing societies has emerged since 2005. This review sought to examine EDLM scholarship from Arab societies with the aim of understanding current trends with respect to topics, conceptual models and research methods.

Limitations

This review was limited to a specific set of international refereed EDLM journals published in English. This delimitation ignores the potential contributions of conference papers, books, book chapters, domestic journals, graduate theses, and even other journals. It also ignores the EDLM literature published in Arabic language publications. Therefore, despite the validity of our own selection criteria, findings from this review await replication based on a broader database of sources.

Another limitation concerns the delimitation of focus on 'Arab societies'. As noted earlier, the economic diversity of Arab societies creates very different

contexts for education from Libya and the Sudan to the UAE and Qatar. None-theless, we assert that Arab culture represents an important influence on edu-cation in all of these societies, which also happen to share a common religion in Islam (see Oplatka and Arar 2017). Indeed, using Arab culture as the criterion for conceptualising a relevant literature seems no less valid than examining man-agement practices in 'Confucian cultures' (Cheng and Wong 1996; Walker and Dimmock 2002).

Another limitation concerns our decision to focus on *research topics, concep-tual models and methods* rather than *substantive results of studies*. We chose this purpose for the review for two reasons. First, Oplatka and Arar (2017) recently published a review of research from Arab societies that synthesised 'themes' from within this literature. Second, in our opinion, the current Arab literature lacks the critical mass of empirical studies on common topics required for a sys-tematic review or meta-analytic review of research findings. Finally, as elaborated earlier, reviews of research that analyze the tools of knowledge production (e.g. research problems, conceptual models, research methods) play a complemen-tary and necessary role to substantive reviews (Bridges 1982; Campbell 1979; Haller 1979; Hallinger 2013; Leithwood 2005; Ogawa, Goldring, and Conley 2000; Oplatka 2004).

Interpretation of the findings

Our review found that the Arab literature published in this set of core EDLM jour-nals is relatively small in volume and of very recent vintage. In terms of compo-sition, the literature is dominated by empirical studies with a surprisingly small number of conceptual, commentary and review papers (see Hallinger and Hammad 2017; Oplatka and Arar 2017). These features led us to refer to these EDLM studies from Arab societies as an 'emerging literature'.

Topical coverage within the literature was highly diffuse with no evidence of programmatic research on any research problem or topic. For example, even the subset of 20 'leadership' studies were mostly 'singletons' bearing little relation-ship to one another. While this feature has previously been reported in emerging literatures (e.g. Briner and Campbell 1964; Bridges 1982; Campbell 1979; Hallinger and Chen 2015), it puts a brake on knowledge accumulation and impedes progress on important questions of concern to scholars, policymakers and practitioners (Hallinger 2011; Leithwood 2005; Ogawa, Goldring, and Conley 2000). This situation must change if there is to be progress in developing an 'Arab literature' that is identified by linkages to common heritage and societal norms rather than simply by society of origin.

This diffuseness of topical selection was compounded by a lack of 'connected-ness' among the studies. This was evident in the limited cross-referencing of other Arab EDLM studies within the corpus. Indeed, we found that authors were far more likely to cite scholarship from Western societies than research

conducted in other Arab societies. Given the imbalance of the global EDLM knowledge base and norms of academic legitimacy, this is perhaps understandable (Blunt and Jones 1997; Mertkan et al. 2017). Nonetheless, it limits efforts to build a 'coherent literature' that contributes to our understanding the distinctive features of leading and managing educational organisations in Arab societies. We hope that publication of this review will highlight both the emergence of an 'Arab literature in EDLM' and the need to draw on 'Arab perspectives' and findings from that literature as scholars move forward.

Diffuseness and lack of connection were further exacerbated by the absence of papers whose purpose was to conceptualise how the social-cultural-political context of Arab societies shapes EDLM practices. Although some empirical papers did contextualise leadership and management processes (e.g. Akkary 2014; Alsaeedi and Male 2013; Macpherson, Kachelhoffer, and El Nemr 2007; Mattar 2012), Arab scholars were just as likely to purposely 'decontextualize' their research. For example, there were numerous cases in which the title and/ or the abstract of the article omitted any reference to the society in which the study was conducted (Al-Turki and Duffuaa 2003; Badri et al. 2016). This is a serious mistake. Development of an Arab literature, as well as a more diverse global literature in EDLM, depend upon 'contextualizing' the practice of EDLM within particular societies (see Clarke and O'Donoghue 2017; Hallinger 2016). Only in this way can we begin to determine boundaries on the universality of knowledge in our field.

With this in mind, we wish to call attention to 'contextualized studies' that inquired into how leadership and management processes unfold in the socio-cultural context of Arab societies (e.g. Abu-Abu-Rabia Quader and Oplatka 2008; Akkary 2014; Alsaeedi and Male 2013; Elmelegy 2015; Hammad 2013; Macpherson, Kachelhoffer, and El Nemr 2007). If scholars build explicitly upon findings from this sub-set of the literature, there is potential for contributing not only to educational leadership and management in the Arab region but also to the global literature. Indeed, these studies go to the heart of understanding how leading and managing schools in these societies differs (or does not) from descriptions in the Western literature (Bajunid 1996; Clarke and O'Donoghue 2017; Hallinger 2016; Oplatka 2004; Oplatka and Arar 2017).

Finally, the review sought to provide insights into the current status of conceptual and methodological development in the Arab EDLM literature. Here we found a mixed picture. On the positive front, the proportion of qualitative and quantitative studies was reasonably balanced and there was surprising evidence of capacity for using multivariate statistical analysis. However, we also found a heavy reliance on univariate and bivariate conceptual models that suffer severe limitations in addressing important questions in EDLM research (Bridges 1982; Hallinger 2011; Leithwood 2005). This particular combination of conceptual and methodological characteristics of the Arab EDLM literature may also explain why so few studies from these Arab societies were published

in EAQ and SESI. It is the authors' observation that these journals apply a more consistent expectation that quantitative articles will employ multivariate conceptual models in concert with advanced statistical analysis (i.e. Level 4). We conclude that until Arab scholars address this nexus between conceptual and methodological designs in their research, substantive advances about EDLM in Arab societies will remain out of sync with the global literature.

Implications

The first implication concerns the diffuse nature of the Arab EDLM literature. While we expect that diversity in the selection of research topics by scholars will continue to reign, more rapid knowledge accumulation on EDLM in Arab societies will only be achieved if there is some coordination of research efforts. This suggests a need for prioritising a research agenda that addresses a common set of EDLM issues and problems across Arab societies. As we have found elsewhere in the world, knowledge accumulation requires sustained focus on a set of issues by multiple scholars working in different contexts over time (Bridges 1982; Campbell 1979; Hallinger 2011; Leithwood 2005; Murphy, Vriesenga, and Storey 2007; Ogawa, Goldring, and Conley 2000). It is hoped that this review will stimulate scholars working in Arab societies towards greater cooperation and collaboration.

Bridges (1982) argued that the correct selection and application of research methods is critical for intellectual progress. Here we have two methodological recommendations. First, as noted earlier, scholars using quantitative methods should strive towards adopting more comprehensive conceptual models in their studies. Second, scholars using qualitative methods should complement their singular reliance on interviews with in-depth observation and document analysis in order to achieve 'richer descriptions' of leadership and related processes.

Our final recommendation concerns the need for high quality reviews of the local, largely Arabic language, literatures across Arab societies in the region. We believe that there are many more EDLM research studies written in Arabic whose results deserve unveiling to the wider field. Surfacing these 'hidden' studies will further our understanding of EDLM practices in Arab societies and contribute to the shared goal of building a global knowledge base. Models for such reviews can be found in similar efforts undertaken in recent years in East Asia (e.g. Hallinger, Walker, and Gian 2015; Walker, Hu, and Qian 2012). Native Arab scholars will have a crucial role to play in this mission since they are best equipped to unearth this literature and present it to the wider audience of scholars and practitioners in our field.

Notes

1. Note that we characterised these as "eight core international research journals" rather than "the eight core international research journals … ." Although any selection of "the

core journals" is disputable, we assert that this set is a reasonably comprehensive yet focused list of educational leadership journals.

2. We considered two other well known journals: *Leading and Managing* and the *Journal of School Leadership*. However, the former had an *h-index* below 25, and the latter failed to meet our criterion of having a mission of including international research.

3. The *h-index* was proposed by J.E. Hirsch in his paper "An index to quantify an individual's scientific research output", arXiv:physics/0508025 v5 29 Sep 2005. It is defined as follows: A scientist has index h if h of his/her Np papers have at least h citations each, and the other (Np-h) papers have no more than h citations each.

4. This is based on analysis using the *Publish or Perish* tool on March 30, 2017.

5. Thus, it should be noted that the actual search was conducted during February and March 2017.

Disclosure statement

No potential conflict of interest was reported by the authors.

References

Abou-Warda, S. H. 2015. "Entrepreneurial Orientation in Business Schools: A Comparative Study of Higher Education Systems in Egypt." *International Journal of Educational Management* 29 (2): 192–212.

Abu-Rabia Quader, S., and I. Oplatka. 2008. "The Power of Femininity: Exploring the Gender and Ethnic Experiences of Muslim Women Who Accessed Supervisory Roles in a Bedouin Society." *Journal of Educational Administration* 46 (3): 396–415.

Abu-Tineh, A. M. 2011. "Exploring the Relationship between Organizational Learning and Career Resilience among Faculty Members at Qatar University." *International Journal of Educational Management* 25 (6): 635–650.

Abu-Tineh, A. 2013. "Leadership Effectiveness in Jordanian Educational Institutions: A Comparison of Jordanian Female and Male Leaders." *Educational Management Administration & Leadership* 41 (1): 79–94.

Akkary, R. K. 2014. "The Role and Role Context of the Lebanese School Principal: Toward a Culturally Grounded Understanding of the Principalship." *Educational Management Administration & Leadership* 42 (5): 718–742.

Alameen, L., T. Male, and I. Palaiologou. 2015. "Exploring Pedagogical Leadership in Early Years Education in Saudi Arabia." *School Leadership & Management* 35 (2): 121–139.

Al-Ani, W. T., and O. H. Ismail. 2015. "Can Mission Predict School Performance? The Case of Basic Education in Oman." *School Leadership & Management* 35 (5): 459–476.

Algarni, F., and T. Male. 2014. "Leadership in Saudi Arabian Public Schools: Time for Devolution." *International Studies in Educational Administration* 42 (3): 19–33.

Al-Hamdan, J. M., and A. M. Al-Yacoub. 2005. "Evaluation of Section Heads' Performance at Kuwait Secondary Schools." *International Journal of Educational Management* 19 (3): 233–245.

Al-Husseini, S., and I. Elbeltagi. 2017. "Evaluating the Effect of Transformational Leadership on Knowledge Sharing Using Structural Equation Modelling: The Case of Iraqi Higher Education." *International Journal of Leadership in Education* 5: 1–12.

Al-Mahdy, Y. F., A. S. Al-Harthi, and N. S. Salah El-Din. 2016. "Perceptions of School Principals' Servant Leadership and their Teachers' Job Satisfaction in Oman." *Leadership and Policy in Schools* 15 (4): 543–566.

Al Nuaimi, S., H. Chowdhury, K. Eleftheriou, and M. I. Katsioloudes. 2015. "Participative Decision-making and Job Satisfaction for Teachers in the UAE." *International Journal of Educational Management* 29 (5): 645–665.

Al-Omari, A. A., and M. M. Wuzynani. 2013. "Factors Influencing Jordanian and Saudi Arabian Teacher Decisions to Pursue the Principalship: A Comparative Study." *School Leadership & Management* 33 (5): 473–485.

Al-Taneiji, S., and L. McLeod. 2008. "Towards Decentralized Management in United Arab Emirate (UAE) Schools." *School Effectiveness and School Improvement* 19 (3): 275–291.

Al-Turki, U., and S. Duffuaa. 2003. "Performance Measures for Academic Departments." *International Journal of Educational Management* 17 (7): 330–338.

Alsaeedi, F., and T. Male. 2013. "Transformational Leadership and Globalization: Attitudes of School Principals in Kuwait." *Educational Management Administration & Leadership* 41 (5): 640–657.

Arar, K. 2014. "Deputy-principals in Arab Schools in Israel: An Era of Reform." *International Journal of Educational Management* 28 (1): 96–113.

Arar, K. 2016. "Emotional Expression at Different Managerial Career Stages Female Principals in Arab Schools in Israel." *Educational Management Administration & Leadership*. doi:10.1177/1741143216636114.

Arar, K., and K. Abu-Asbah. 2013. "'Not Just Location': Attitudes and Perceptions of Education System Administrators in Local Arab Governments in Israel." *International Journal of Educational Management* 27 (1): 54–73.

Arar, K., and A. Abu-Romi. 2016. "School-based Management: Arab Education System in Israel." *Journal of Educational Administration* 54 (2): 191–208.

Arar, K., K. Arar, I. Haj, I. Haj, R. Abramovitz, R. Abramovitz, and I. Oplatka. 2016. "Ethical Leadership in Education and its Relation to Ethical Decision-making: The Case of Arab School Leaders in Israel." *Journal of Educational Administration* 54 (6): 647–660.

Arar, K., and I. Oplatka. 2013. "Gender Debate and Teachers' Constructions of Masculinity vs. Femininity of School Principals: The Case of Muslim Teachers in Israel." *School Leadership & Management* 33 (1): 97–112.

Badri, M. A., and M. H. Abdulla. 2004. "Awards of Excellence in Institutions of Higher Education: An AHP Approach." *International Journal of Educational Management* 18 (4): 224–242.

Badri, M., A. Al Qubaisi, J. Mohaidat, H. Al Dhaheri, G. Yang, A. Al Rashedi, and K. Greer. 2016. "An Analytic Hierarchy Process for School Quality and Inspection: Model Development and Application." *International Journal of Educational Management* 30 (3): 437–459.

Badri, M., and J. Mohaidat. 2014. "Antecedents of Parent-based School Reputation and Loyalty: An International Application." *International Journal of Educational Management* 28 (6): 635–654.

Bajunid, I. A. 1996. "Preliminary Explorations of Indigenous Perspectives of Educational Management: The Evolving Malaysian Experience." *Journal of Educational Administration* 34 (5): 50–73.

Belchetz, D., and K. Leithwood. 2007. "Successful Leadership: Does Context Matter and If So, How?" In *Successful Principal Leadership in Times of Change: An International Perspective*, edited by C. Day, and K. Leithwood, 117–137. Dordrecht, The Netherlands: Springer.

Blunt, P., and M. L. Jones. 1997. "Exploring the Limits of Western Leadership Theory in East Asia and Africa." *Personnel Review* 26 (1/2): 6–23.

Bossert, S. T., D. C. Dwyer, B. Rowan, and G. V. Lee. 1982. "The Instructional Management Role of the Principal." *Educational Administration Quarterly* 18 (3): 34–64.

Bridges, E. 1982. "Research on the School Administrator: The State of the Art, 1967–19801." *Educational Administration Quarterly* 18 (3): 12–33.

Briner, C., and R. F. Campbell. 1964. "The Science of Administration." *Review of Educational Research* 34 (4): 485–492.

Campbell, R. F. 1979. "A Critique of the Educational Administration Quarterly." *Educational Administration Quarterly* 15 (3): 1–19.

Campbell, R. F., and C. Faber. 1961. "Administrative Behavior: Theory and Research." *Review of Educational Research* 31 (4): 353–367.

Cheng, K. M. 1995. "The Neglected Dimension: Cultural Comparison in Educational Administration." In *Educational Leadership and Change*, edited by K. C. Wong, and K. M. Cheng, 87–102. Hong Kong: Hong Kong University Press.

Cheng, K. M., and K. C. Wong. 1996. "School Effectiveness in East Asia: Concepts, Origins and Implications." *Journal of Educational Administration* 34 (5): 32–49.

Cherkowski, S., R. Currie, and S. Hilton. 2012. "Who Should Rank Our Journals … and Based on What?" *Journal of Educational Administration* 50 (2): 206–230.

Clarke, S., and T. O'Donoghue. 2017. "Educational Leadership and Context: A Rendering of an Inseparable Relationship." *British Journal of Educational Studies* 65 (2): 167–182.

Elmelegy, R. I. 2015. "School-based Management: an Approach to Decision-making Quality in Egyptian General Secondary Schools." *School Leadership & Management* 35 (1): 79–96.

Elmeski, M. 2015. "Principals as Leaders of School and Community Revitalization: A Phenomenological Study of Three Urban Schools in Morocco." *International Journal of Leadership in Education* 18 (1): 1–18.

Emira, M. 2010. "Leading to Decide or Deciding to Lead? Understanding the Relationship between Teacher Leadership and Decision Making." *Educational Management Administration & Leadership* 38 (5): 591–612.

Erickson, D. 1967. "The School Administrator." *Review of Educational Research* 37 (4): 417–432.

Gaad, E., M. Arif, and F. Scott. 2006. "Systems Analysis of the UAE Education System." *International Journal of Educational Management* 20 (4): 291–303.

Gough, D. 2007. "Weight of Evidence: A Framework for the Appraisal of the Quality and Relevance of Evidence." *Research Papers in Education* 22 (2): 213–228.

Haller, E. J. 1979. "Questionnaires and the Dissertation in Educational Administration." *Educational Administration Quarterly* 15 (1): 47–66.

Hallinger, P. 2011. "A Review of Three Decades of Doctoral Studies Using the Principal Instructional Management Rating Scale: A Lens on Methodological Progress in Educational Leadership." *Educational Administration Quarterly* 47 (2): 271–306.

Hallinger, P. 2013. "A Conceptual Framework for Systematic Reviews of Research in Educational Leadership and Management." *Journal of Educational Administration* 51 (2): 126–149.

Hallinger, P. 2016. "Bringing Context Out of the Shadows of Leadership." *Educational Management Administration & Leadership*. doi:10.1177/1741143216670652.

Hallinger, P. 2017. "Revealing a Hidden Literature: Systematic Research on Educational Leadership and Management in Africa." *Educational Management Administration & Leadership*. doi:10.1177/1741143217694895.

Hallinger, P., and D. Bryant. 2013. "Mapping the Terrain of Educational Leadership and Management in East Asia." *Journal of Educational Administration* 51 (5): 618–637.

Hallinger, P., and J. Chen. 2015. "Review of Research on Educational Leadership and Management in Asia: A Comparative Analysis of Research Topics and Methods, 1995–2012." *Educational Management Administration & Leadership* 43 (1): 5–27.

Hallinger, P., and W. Hammad. 2017. "Knowledge Production on Educational Leadership and Management in Arab Societies: A Systematic Review of Research." *Educational Management Administration and Leadership*. doi:10.1177/1741143217717280.

Hallinger, P., and K. Leithwood. 1996. "Culture and Educational Administration: A Case of Finding Out What you Don't Know You Don't Know." *Journal of Educational Administration* 34 (5): 98–116.

Hallinger, P., A. Walker, and T. T. Gian. 2015. "Making Sense of Images of Fact and Fiction: A Critical Review of Research on Educational Leadership and Management in Vietnam." *Journal of Educational Administration* 53 (4): 445–466.

Hammad, W. 2013. "The Rhetoric and Reality of Decentralisation Reforms: The Case of School-based Management in Egypt." *International Studies in Educational Administration* 41 (2): 33–47.

Hammad, W., and N. Norris. 2009. "Centralised Control: A Barrier to Shared Decision-making in Egyptian Secondary Schools." *International Studies in Educational Administration* 37 (2): 60–73.

Harzing, A. W. 2007. *Publish or Perish*. Accessed March 12, 2017. https://harzing.com/resources/publish-or-perish.

Hourani, R. B., and P. Stringer. 2015. "Professional Development: Perceptions of Benefits for Principals." *International Journal of Leadership in Education* 18 (3): 305–339.

Jabr, D., and S. Cahan. 2015. "Between-context Variability of the Effect of Schooling on Cognitive Development: Evidence from the Middle East." *School Effectiveness and School Improvement* 26 (3): 441–466.

Kanan, H. M. 2005. "Assessing the Roles and Training Needs of Educational Superintendents in Palestine." *Journal of Educational Administration* 43 (2): 154–169.

Kanan, H. M., and A. M. Baker. 2006. "Student Satisfaction with an Educational Administration Preparation Program: A Comparative Perspective." *Journal of Educational Administration* 44 (2): 159–169.

Khalifa, A. S. 2009. "Drawing on Students' Evaluation to Draw a Strategy Canvas for a Business School." *International Journal of Educational Management* 23 (6): 467–483.

Khalifa, B., and R. M. Ayoubi. 2015. "Leadership Styles at Syrian Higher Education: What Matters for Organizational Learning at Public and Private Universities?" *International Journal of Educational Management* 29 (4): 477–491.

Khasawneh, S. 2011a. "Cutting-edge Panacea of the Twenty-first Century: Workplace Spirituality for Higher Education Human Resources." *International Journal of Educational Management* 25 (7): 687–700.

Khasawneh, S. 2011b. "Human Capital Planning in Higher Education Institutions: A Strategic Human Resource Development Initiative in Jordan." *International Journal of Educational Management* 25 (6): 534–544.

Khasawneh, S. 2011c. "Shared Leadership and Organizational Citizenship Behaviour in Jordanian Public Universities: Developing a Global Workforce for the 21st Century." *Educational Management Administration & Leadership* 39 (5): 621–634.

Khasawneh, S., A. Al-Omari, and A. M. Abu-Tineh. 2012. "The Relationship between Transformational Leadership and Organizational Commitment: The Case for Vocational Teachers in Jordan." *Educational Management Administration & Leadership* 40 (4): 494–508.

Kremer-Hayon, L., H. Faraj, and T. Wubbels. 2002. "Burn-out among Israeli Arab School Principals as a Function of Professional Identity and Interpersonal Relationships with Teachers." *International Journal of Leadership in Education* 5 (2): 149–162.

Leithwood, K. 2005. "Understanding Successful Principal Leadership: Progress on a Broken Front." *Journal of Educational Administration* 43 (6): 619–629.

Leithwood, K. A., P. T. Begley, and J. B. Cousins. 1990. "The Nature, Causes and Consequences of Principals' Practices: An Agenda for Future Research." *Journal of Educational Administration* 28 (4): 5–31.

Litz, D., and S. Scott. 2016. "Transformational Leadership in the Educational System of the United Arab Emirates." *Educational Management Administration & Leadership*. doi:10.1177/1741143216636112.

Macpherson, R., P. Kachelhoffer, and M. El Nemr. 2007. "The Radical Modernization of School and Education System Leadership in the United Arab Emirates: Towards Indigenized and Educative Leadership." *International Studies in Educational Administration* 35 (1): 60–77.

Mattar, D. 2012. "Instructional Leadership in Lebanese Public Schools." *Educational Management Administration & Leadership* 40 (4): 509–531.

Mattar, D. M. 2016. "Lebanese Cherishing a Transformational Educational Leader." *International Journal of Educational Management* 30 (6): 1045–1071.

Mertkan, S., N. Arsan, G. Inal Cavlan, and G. Onurkan Aliusta. 2017. "Diversity and Equality in Academic Publishing: The Case of Educational Leadership." *Compare: A Journal of Comparative and International Education* 47 (1): 46–61.

Mizel, O. 2009. "Accountability in Arab Bedouin Schools in Israel: Accountable to Whom?" *Educational Management Administration & Leadership* 37 (5): 624–644.

Murphy, J., M. Vriesenga, and V. Storey. 2007. "Educational Administration Quarterly, 1979–2003: An Analysis of Types of Work, Methods of Investigation, and Influences." *Educational Administration Quarterly* 43 (5): 612–628.

Nabhani, M., H. Busher, and R. Bahous. 2012. "Cultures of Engagement in Challenging Circumstances: Four Lebanese Primary Schools in Urban Beirut." *School Leadership & Management* 32 (1): 37–55.

Nasra, M. A., and S. Heilbrunn. 2016. "Transformational Leadership and Organizational Citizenship Behavior in the Arab Educational System in Israel: The Impact of Trust and Job Satisfaction." *Educational Management Administration & Leadership* 44 (3): 380–396.

Ogawa, R., E. Goldring, and S. Conley. 2000. "Organizing the Field to Improve Research on Educational Administration." *Educational Administration Quarterly* 36 (3): 340–357.

Oplatka, I. 2004. "The Principalship in Developing Countries: Context, Characteristics and Reality." *Comparative Education* 40 (3): 427–448.

Oplatka, I., and K. H. Arar. 2016. "Leadership for Social Justice and the Characteristics of Traditional Societies: Ponderings on the Application of Western-grounded Models." *International Journal of Leadership in Education* 19 (3): 352–369.

Oplatka, I., and K. Arar. 2017. "The Research on Educational Leadership and Management in the Arab World Since the 1990s: A Systematic Review." *Review of Education*. doi:10.1002/rev3.3095.

Romanowski, M. H., and M. H. Romanowski. 2017. "Neoliberalism and Western Accreditation in the Middle East: A Critical Discourse Analysis of Educational Leadership Constituent Council Standards." *Journal of Educational Administration* 55 (1): 70–84.

Shapira, T., K. Arar, and F. Azaiza. 2010. "Arab Women Principals' Empowerment and Leadership in Israel." *Journal of Educational Administration* 48 (6): 704–715.

Shapira, T., K. Arar, and F. Azaiza. 2011. "'They Didn't Consider Me and No-one Even Took Me into Account': Female School Principals in the Arab Education System in Israel." *Educational Management Administration & Leadership* 39 (1): 25–43.

Sohail, M. S., and N. M. Shaikh. 2004. "Quest for Excellence in Business Education: A Study of Student Impressions of Service Quality." *International Journal of Educational Management* 18 (1): 58–65.

Stringer, P., and R. B. Hourani. 2016. "Transformation of Roles and Responsibilities of Principals in Times of Change." *Educational Management Administration & Leadership* 44 (2): 224–246.

Taleb, H. M. 2010. "Gender and Leadership Styles in Single-sex Academic Institutions." *International Journal of Educational Management* 24 (4): 287–302.

Thorne, C. 2011. "An Investigation of the Impact of Educational Reforms on the Work of a School Principal at a Time of Radical Transformation in the United Arab Emirates." *Educational Management Administration & Leadership*. doi:10.1177/1741143210390058.

Truong, T. D., and P. Hallinger. 2017. "Exploring Cultural Context and School Leadership: Conceptualizing an Indigenous Model of có uy School Leadership in Vietnam." *International Journal of Leadership in Education* 20 (5): 539–561.

Wafa, D. 2015. "Arab Spring Impact on Executive Education in Egypt." *International Journal of Educational Management* 29 (5): 596–608.

Walker, A. D., and C. Dimmock. 2002. "Moving School Leadership Beyond Its Narrow Boundaries: Developing a Cross-cultural Approach." In *Second International Handbook of Educational Leadership and Administration*, edited by K. Leithwood, and P. Hallinger, 67–204. Dordrecht, Netherlands: Springer.

Walker, A., R. Hu, and H. Qian. 2012. "Principal Leadership in China: An Initial Review." *School Effectiveness and School Improvement* 23 (4): 369–399.