

# **Methodological review of studies on educational leaders and emotions (1992-2012): Insights into the meaning of an emerging research field in educational administration**

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## **Abstract**

**Purpose:** This a methodological review of the literature on educational leaders and emotions that includes 49 empirical studies published in peer-reviewed journals between 1992-2012.

**Design/methodology/approach:** The work systematically analyzes descriptive information, methods, and designs in these studies, and their development over time.

**Findings:** The review suggests that scholarly interest in educational leaders and emotions has increased over time, and identifies methodological patterns in this body of research. The results are compared with methodological data from other syntheses in the disciplines of educational administration (EA) and organizational behavior (OB) for the purpose of using the findings to produce broader insights into the meaning of an emerging research field in EA.

**Originality/value:** The findings of the methodological review are interpreted from two conceptual perspectives: functionalist and critical. Together, they offer a holistic portrayal of the meaning of producing scientific knowledge in an emerging research field in EA.

**Keywords:** Emerging research field; emotions, leadership, methodological review

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The present study is inspired by prior published reviews of research in the educational administration (EA) community addressing or focusing on methodological issues (e.g., Bridges, 1982; Hallinger, 2011). The present review complements the authors' narrative systematic review of the content of research on educational leaders and emotions published in peer-reviewed journals during 1992-2012 (Berkovich and Eyal, 2015). The present review does not focus on the contents of the studies, but limits its focus to methodological issues related to studying educational leaders and emotions in the last two decades. Following Hallinger's (2013) claim that "reviews of research play a critical role in the advancement of knowledge" (p. 127), we argue that methodological exploration of an *emerging* research field in EA may be informative about the practices and norms of the EA community that underlie the production of research knowledge in EA.

In this paper, we adopt two perspectives on scientific knowledge production: functionalist (i.e., the scientific work operates as an integrative arena) and critical (i.e., the scientific work operates as a conflictual arena). Apparently, the systematic approach is more functional in nature, and the critical perspective is at odds with it, but is not necessarily the case. Hallinger (2013) acknowledged that a systematic review is never value-neutral and recognizes the possibility of critical perspective as the lens used in the systematic review. He argued, however, that a systematic review should be always objective in its analytical procedures. Therefore, we paid special attention to ensure objectivity in the systematic procedures of this methodological review, and confined the critical perspective to the interpretation of results in the discussion.

### **Educational leaders and emotions as a domain of EA research**

The scholarly interest of the EA community in educational leaders and emotions cannot be addressed without a broad discussion of the changing status of emotion research in the field of organizational behavior (OB)<sup>1</sup>, a field that has influenced the EA community greatly (Oplatka, 2014). Until the 1990s, emotions were considered an illegitimate focus of research in OB (Ashkanasy *et al.*, 2002). This marginalization of emotions as a field of research may be viewed as linked with the dominance of a

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<sup>1</sup> OB has been defined as the field of inquiry that focuses on understanding the cognitive, emotional, and behavioral aspects in organizational settings (Oplatka, 2014).

specific manifestation of managerial rationality that could be termed "masculine" (Domagalski, 1999). At the same time, there has been a rise in non-rational approaches in management- the growing legitimacy of qualitative research (Brinkmann *et al.*, 2014) has inspired the interpretative stream led by influential scholars (e.g., Weick, 1995). As a result, the "cold shoulder" shown to the topic of emotions by the OB community has been "reevaluated" as emotions became not only a legitimate focus but also a highly popular one, particularly with regard to leadership (Gooty *et al.*, 2010).

A recent review of leadership theory and research published in 2000-2012 in ten top-tier management journals identified emotions and leadership as a leading area among the emerging fields concerned with leadership, second in scope of scholarly interest in the new millennium<sup>2</sup> only to team leadership and leadership development (Dinh *et al.*, 2014). Research on emotions and leaders focuses on various facets, including (Gooty *et al.*, 2010): (a) *leaders' emotions* – intense mental responses to events that are linked with psychological, physical, and behavioral changes; (b) *leaders' self-emotion regulation* – the ability to control emotional processes in order to shape the timing and type of emotions experienced and how these are expressed; (c) *leaders' emotional labor* – in a workplace context, leaders often invest effort to alter their affective experience or maybe expression to accommodate norms or expectations; (d) *leaders' interpersonal emotion regulation* – the ability to influence and control emotional processes of other people, specifically of their followers; (e) *leaders' empathy* – the ability to understand and experience other people's emotions; (f) *leaders' emotional intelligence* (i.e., set of emotion-based capacities) – abilities to perceive emotion, use knowledge about emotions in rational thinking, understand emotions, and manage emotions in oneself and others; and (g) *the emotional nature of leader-follower interactions* – how leaders' emotions, and behaviors shape their followers' emotions. In the present work we use the phrase “emotions and educational leaders” to describe a range of aspects noted above, which are related to this field of research.

The research of emotions has become a central topic in transformational leadership theory (Gooty *et al.*, 2010), which is one of the leading leadership

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<sup>2</sup> Excluding other research fields that are not relevant to EA, such as upper echelons theory and top executive theory (see Table 2 in Dinh *et al.*, 2014).

conceptualizations in education. Acknowledgement of the vital role of emotions in effective leadership is reflected also in the educational administration literature, which suggests that transformational leadership is likely to influence student learning through its effects on teachers' emotions (Sun and Leithwood, 2015). We contend that emotions are vital for understanding educational leaders for several reasons: (a) emotional experiences and displays represent educational leaders' reactions to social reality, and provide insights into their authentic motives and fears (Blackmore, 2010); (b) educational leaders' behaviors influence teachers' emotions, which in turn shape teachers' attitudes and practices (Sun and Leithwood, 2015); (c) educational leaders' emotion-based abilities are antecedents of their emotions and behaviors (Cai, 2011); and (d) in many countries, common policy changes and reforms foster a post-bureaucratic context that alters the nature of administration work in a manner that amplifies leaders' need to rely on emotional influence to motivate others (Bush, 2014).

Our narrative review of empirical studies on emotions and educational leaders identified interest in three themes (Berkovich and Eyal, 2015). The first theme describes empirical knowledge on educational leaders' emotional experiences and displays, specifically on how macro- and micro-contextual factors, leadership role factors, and mission-related factors shape leaders' positive and negative emotions. The second theme describes empirical knowledge about leaders' behaviors and their effects on followers' emotions, specifically on leaders' relationship-oriented behaviors and mistreatment behaviors that were found to stimulate teachers' emotions. The third theme describes leaders' set of emotional abilities, specifically leaders' empathic, self-emotion regulation, and interpersonal emotion regulation abilities.

During our work on the narrative review, several intriguing questions emerged about the unfolding methodological dynamic of the field of research on emotions and educational leaders over time. Based on our familiarity with findings from parallel reviews, we identified these questions as warranting separate attention. Among these questions were: (a) How did interest in the empirical exploration of emotions and educational leaders develop over the years 1992-2012? (b) How did researchers use research methods and designs to explore topics related to emotions and educational leaders? (c) How did research methods and designs change over these two decades? and (d) How do trends in the production of knowledge in EA affect the development of a field of research of emotions and educational leaders, and its methodological lacunae?. Methodological insights into a specific quantitative measure (e.g., Hallinger,

2011), construct (e.g., Leithwood and Jantzi, 2005), or national context (e.g., Eyal and Rom, 2015; Walker and Qian, 2015) may be primarily functional because the scope was too narrow or too broad; we argue, however, that methodological trends in a given research field can offer interesting functional and critical insights into knowledge production in the EA community.

### **Two perspectives on scientific knowledge production**

Scholars recognize two opposite approaches to the sociology of science or knowledge: one that draws on functionalist or quasi-economic logic, and another based on social construction logic (see Knorr-Cetina, 1982; Sismondo, 2010). The functionalist perspective on scientific work has been articulated most clearly by the American sociologist, Merton (1973). According to him, science performs the social function of providing reliable knowledge, a function supported by four norms: (a) communalism (research is basically a co-promotion and co-ownership of scientific discoveries); (b) universalism (valuable research knowledge is impersonal and universal); (c) disinterestedness (research is motivated by the will to promote the common scientific enterprise and not personal interests); and (d) organized skepticism (research is committed to critically testing each claim). Merton's view of scientific work ignores or minimizes the social aspects involved in the practice. Among the noted critics of this functionalist view of science are European scholars such as Bloor, Bourdieu, Callon, Knorr-Cetina, Latour, and Luckmann. Callon (1984) suggested that it is impossible to separate the structure and the content, and therefore objective universal knowledge is in essence particular and subjective. For example, Berger and Luckmann (1967) argued that knowledge varies between perceivers as a function of culture and time. Bourdieu (1975) further contended that science is a conflictual arena, in which individuals and groups compete on legitimacy, prestige, and fame, with the aspiration to acquire a monopoly on scientific authority. In sum, the literature offers two main sociological perspectives for understanding the production of scientific research: functionalist and critical (Table I).

**Table I.** Functionalist and critical perspectives on scientific knowledge production

<b>Functionalist perspective</b>	<b>Critical perspective</b>
1. The production of scientific knowledge is a professional effort to create a unified and agreed-upon knowledge that is needed by society.	1. The production of scientific knowledge is a social effort to create knowledge in the service of society that legitimizes some privileges and denies others.
2. The scientific community operates as an organic body: different parts play different roles, the parts are co-dependent on each other, and in time they are coordinated in an optimal way.	2. The scientific community comprises separate groups of researchers that struggle for control of resources such as publication space, money, power, prestige, and influence.
3. The field of science values stability, therefore its development is slow and incremental.	3. The field of science is not stable but constantly changing because there is no consensus.

The sociology of knowledge often focuses on macro arenas such as categories of academic disciplines (e.g., social sciences, see Bourdieu, 1975), or more specific academic disciplines (e.g., sociology, see Fuchs and Turner, 1986). Although macro arenas of science are explored by both approaches, micro arenas (specific research fields) are usually explored in the form of research synthesis, which are dominated by functionalist logic. In the present work we seek to import both logics used in macro works in the sociology of knowledge to the micro level.

*Two perspectives on scientific knowledge production in a given field of research*

We identified two suitable frameworks (i.e., functionalist and critical) that illustrate the use of the different logics of scientific work in research on emotions and educational leadership.

*Functionalist perspective on the dynamics of a given field of research.* A functionalist perspective on the production of scientific knowledge is a modernist perception of progress that includes moving "up" in stages toward more positivist forms of inquiry. Edmondson and McManus (2007) offered a functionalist viewpoint

on the level of maturity of a given theory, which we believe can also be applied when discussing a given field of research. The researchers suggested that a linear correlation exists between the development of theory and the development of methods, so that a given research field can move from an "*emerging*" (or "*nascent*") stage to a more mature status, first to an "*intermediate*" stage and later to a "*mature*" one, as progress is made by the scientific community. Borrowing from Edmondson and McManus's (2007) descriptions, the "*emerging*" stage of a research field generally focuses on open-ended inquiry, which adopts a qualitative method design and collection techniques (interviews, observations, documents, etc.) and seeks to develop new constructs or to present a typology of pattern identification; the "*intermediate*" stage of a research field generally focuses on hybrid relations that combine new and established constructs and adopt both qualitative and quantitative techniques (e.g., interviews and surveys) with the aim of formulating new constructs and exploratory propositions; a "*mature*" field of research can be viewed as generally focused on testing hypotheses relating to existing constructs, adopting quantitative methods and collection techniques (e.g., surveys), and seeking to provide support for formal hypotheses by statistical inference. The progression across these development stages represents the maturing of a research area in a given discipline. The various stages also signify the degree of agreement about the knowledge.

The same trends and patterns associated with the dynamics of scientific knowledge production can be understood from a critical perspective.

*Critical perspective on the dynamics of a given field of research.*

Jovchelovitch (2001) offered a critical perspective on the body of knowledge in social psychology, which may be suitable for guiding a critical interpretation of the findings of the systematic review. According to her, research knowledge is a social representation of reality, and as such its production is also social, therefore both its genesis and the context of its production are integrated and embedded in a specific social setting. Three social dimensions are suggested as relevant to explaining variations in research knowledge (Jovchelovitch, 2001):

- The historical dimension of knowledge: changes in research knowledge occur not in a vacuum but with respect to prior social representations of the specific knowledge.

- The cultural dimension of knowledge: the production of research knowledge is contextualized, and variations appear between contexts (national, ethnic, etc.) that hold different value-based assumptions about reality.
- The public dimension of knowledge: research knowledge mirrors different interests of different social parties; therefore, it often reflects power struggle over differential access of individuals and groups to resources central for the production of knowledge.

A critical viewpoint of science emphasizes the contextualized nature of knowledge produced in a given time and place and involving specific power structures.

The two theoretical frameworks described above, explaining the dynamics of scientific knowledge production differ greatly: the first one offers a modernist structural explanation, the second a critical, post-structural explanation. We view the field of research on educational leaders and emotions as an ideal candidate for such an analysis, for reasons outlined above.

## **Method**

### *Data collection*

This systematic methodological review complements our narrative systematic review of the content of the empirical research on educational leaders and emotions (Berkovich and Eyal, 2015). We mined empirical peer-reviewed studies published between 1990 and 2012 in the ERIC database using a combinations of affective keywords (e.g., emotion, emotional, affect, affective, emotional intelligence, emotional labor, emotion regulation, empathy) and keywords related to educational leadership (e.g., administrator, superintendent, principal, head teacher, vice-principal, deputy principal, educational leader). We also used the same keywords in Google Scholar searches in 17 educational administration and school psychology journals (the list appears in Berkovich and Eyal, 2015).

The searches produced over 800 papers. We narrowed these in a two-stage screening procedure, using first inclusion criteria (i.e., relevance to the topic and empirical nature), then exclusion criteria (i.e., inadequate information on constructs or method, use of composite measures that do not separate affective from non-affective bases of constructs, and results mixing leaders and non-leaders). The empirical corpus



included 49 peer-reviewed publications between 1992-2012 on the topic of educational leaders and emotions.

*Categorization, coding, and analysis procedures*

In the present study we used directed content analysis, which relies on existing theory or findings as initial categories in coding of the data, unlike conventional content analysis, in which categories are derived inductively while coding the data (Hsieh and Shannon, 2005). We adopted Hallinger's (2013) suggestion to embrace a "lineage-linked design" that enables comparative deductions using prior synthesis efforts as reference points. This choice is motivated by our wish to "magnify" the value of the review (Hallinger, 2011, 2013). But whereas Hallinger viewed this rationale as having to do with generating a categorization that corresponds to a single past synthesis, we adopted a broader interpretation. Because we attempt to make deductions about the status of a field of research, we turned to multiple relevant syntheses of EA and OB literature to serve as reference points and assist in formulating our categories (see Table II).

**Table II.** Sources of references used to formulate the categories and codes of the current review

Source	Description	Categories used to code empirical studies
Bridges (1982)	Review of 322 research reports in educational administration published in journals and dissertations abstracts in 1967-1980	Job title of the administrator studied; Institutional setting in which the administrator was employed; Research design used in the investigation; Mode of data collection; Approach to analyzing the data; The frame of reference of the researcher; Key variables employed in the investigation (see p. 14).
Dinh <i>et al.</i> (2014)	Review that includes 542 quantitative studies on leadership published in the 10 top-tier management and organizational psychology journals in 2000-2012	Journal name; Year of publication; Title; Keywords, Authors; Abstract, Type of article; Data collection timing and research method; Analytical method; Leadership theory categorization; Level of analysis, Form of emergence, Emergence/theory match/mismatch (see pp. 38-39).

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Gooty <i>et al.</i> (2010)	Review that includes 46 empirical studies on leadership and emotions published in the 10 top-tier management and organizational psychology journals and in book chapters in 1990-2010	Name of study; Definitions of emotions (yes/no); Type of theoretical lens; Type of design; Measurement; Type of context; Level of analysis (see Table 1 in pp. 984-988).
Hallinger (2011)	Review of 130 doctoral dissertations using the PIMRS concluded in 1983-2010	Job title of the role group(s) studied; Institutional setting in which the administrator was employed; Sample size by respondent role group; Research questions and hypotheses; Major constructs or variables included in the study; Conceptual model guiding the research; Research design; Instrumentation; Data analysis approach and tests; Main findings and significance; University sponsoring the research; University type; Degree type; Country of origin of the research (see pp. 9-10 in online pre-print version).
Oplatka (2010)	Content analysis of 57 CVs of authors (out of 235) who published in JEA, EAQ, and EMAL in 2004-2007	Education of author; Author's country of current employment; Author's countries of previous employment; Author's courses; Author's consultation services, Author's honors and grants; Author's list of publications by theme (see p. 397).

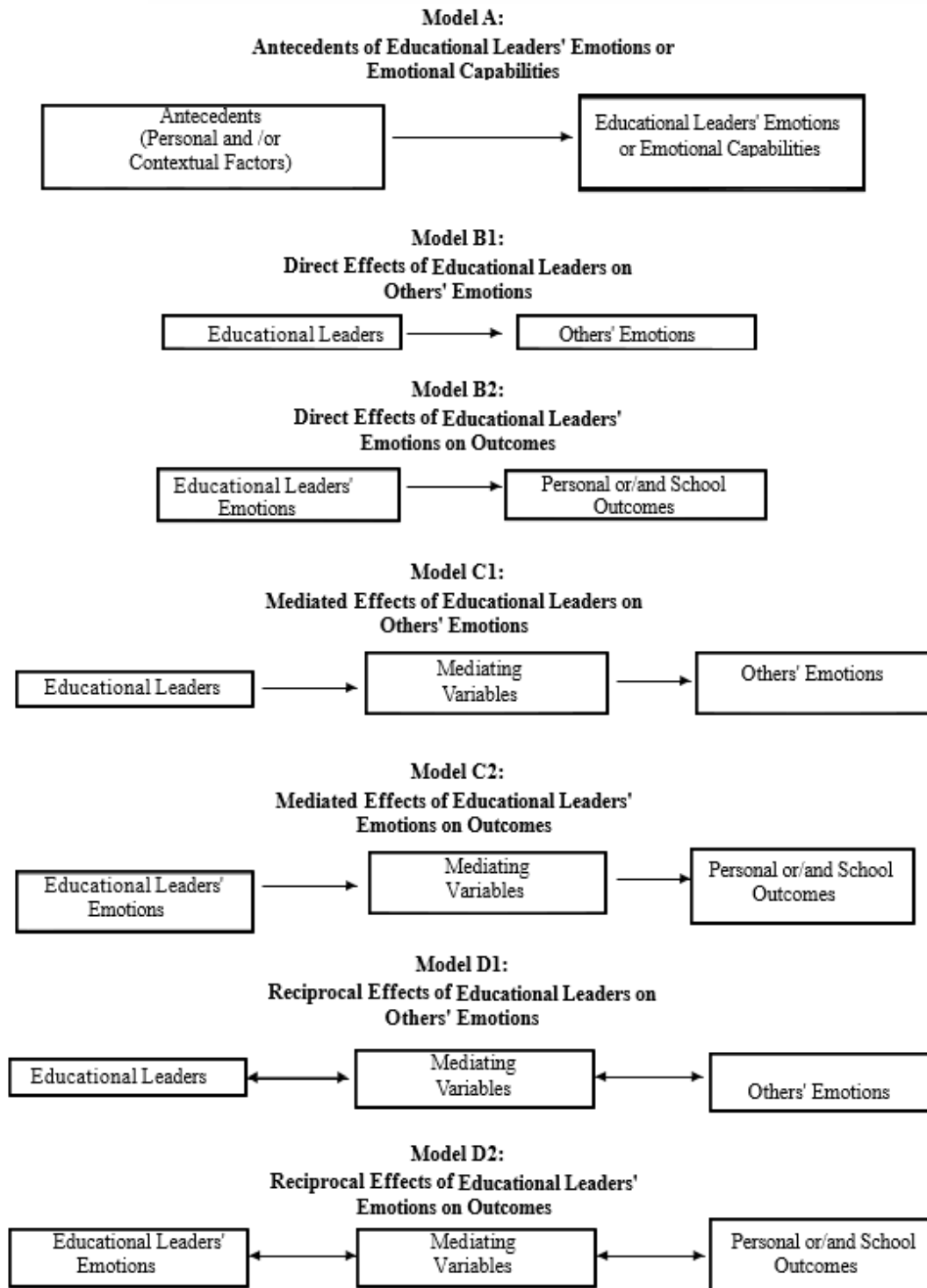
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We also made some necessary changes to the methodological procedures as a result of differences in types of research and methodology in the body of research knowledge we investigated, particularly because this corpus did not include a specific quantitative instrument and contained a large body of qualitative studies.

We used the following categories and codes to guide our mining of relevant information:

1. The national context in which the study was conducted.
2. Publication outlet.
3. Year of publication.
4. Level of educational unit in which participating educational leaders were employed (elementary school, middle school, high school, multiple/mixed school levels; other).
5. Type of method (qualitative, quantitative, or mixed).
6. Type of qualitative research paradigm (phenomenological/narrative/storytelling, case study, critical incidents, life story/autoethnography, general qualitative design, grounded theory).
7. Number of qualitative data collection techniques.
8. Type of qualitative data sources (one-on-one interview, focus group, journal/self-reflection, observations/field notes, documents (formal/personal), open questionnaires/feedback, series of one-on-one interviews).
9. Conceptual model of quantitative study (antecedent effect model, direct effect model, mediated effect model, reciprocal effect model (see Figure 1 for more information)).
10. Type of quantitative research design (descriptive, repeated measures, cross-sectional, comparative, interventional/scenario).
11. Quantitative level of analysis (individual, dyadic, group).

**Figure 1.** Conceptual models for quantitative exploration of educational leaders and emotions (adaptation of Hallinger, 2011)



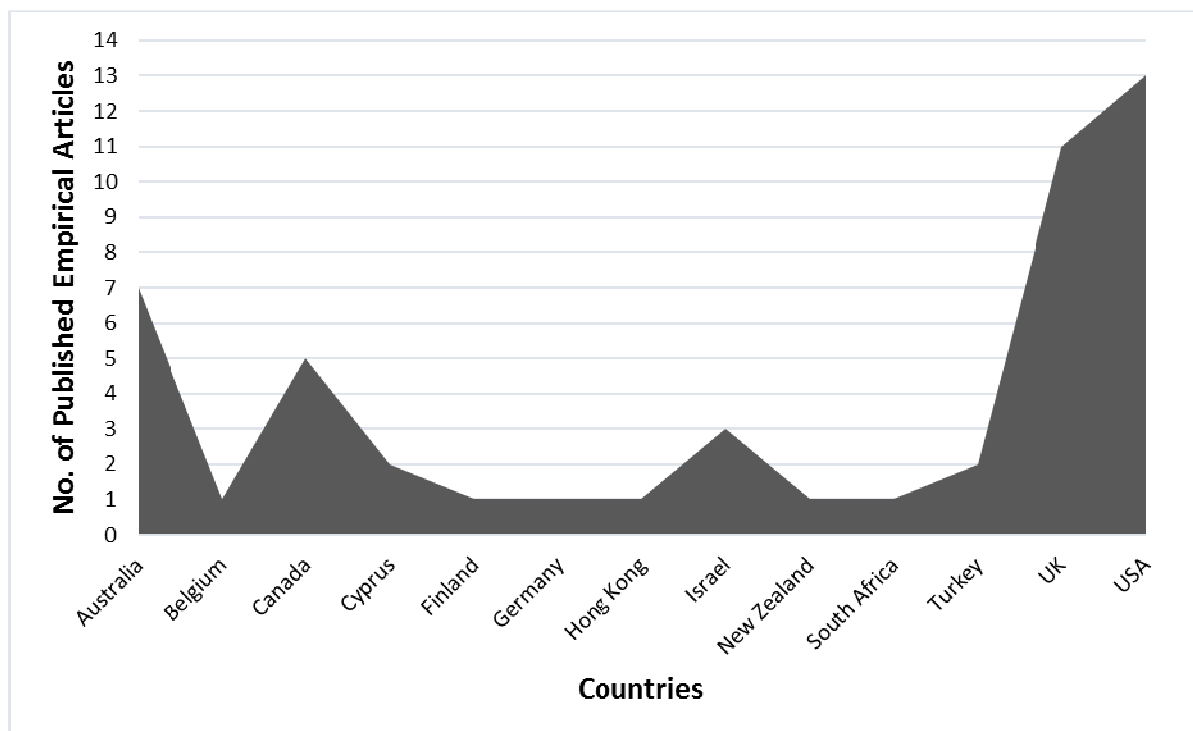
Note: We used sub-conceptual models in Models B, C, and D differently than in other publications (e.g., Hallinger, 2011) because our focus is not a specific measure but an entire field of research; therefore, the need emerged for sub-models that represent various groups of variables of interest in the field.

We inserted the data into a master table that mapped the characteristics of the studies and used the table in subsequent descriptive analyses of variations across studies, sub-groups of studies, and trends over time. We used content analysis of methodological trends as a primary method of analysis because it is considered suitable for review (Hallinger, 2011).

## Results

First, as shown in Figure 2, the analysis of publications by national context indicates that the highest interest in educational leaders and emotions is in the US, with 26.5% of publications, followed by the UK with 22.4%, Australia with 14%, and Canada with 10.2%. Exploring the distribution of publications by country with the conventional lens of language or region indicates a clear interest in educational leaders and emotions in the English-speaking community, which includes the US, UK, Australia, Canada, New Zealand, and South Africa (77.5%). A geo-cultural breakdown of the publications shows a second community with high interest in educational leaders and emotions located in the Mediterranean region and including Israel, Cyprus, and Turkey (14.3%).

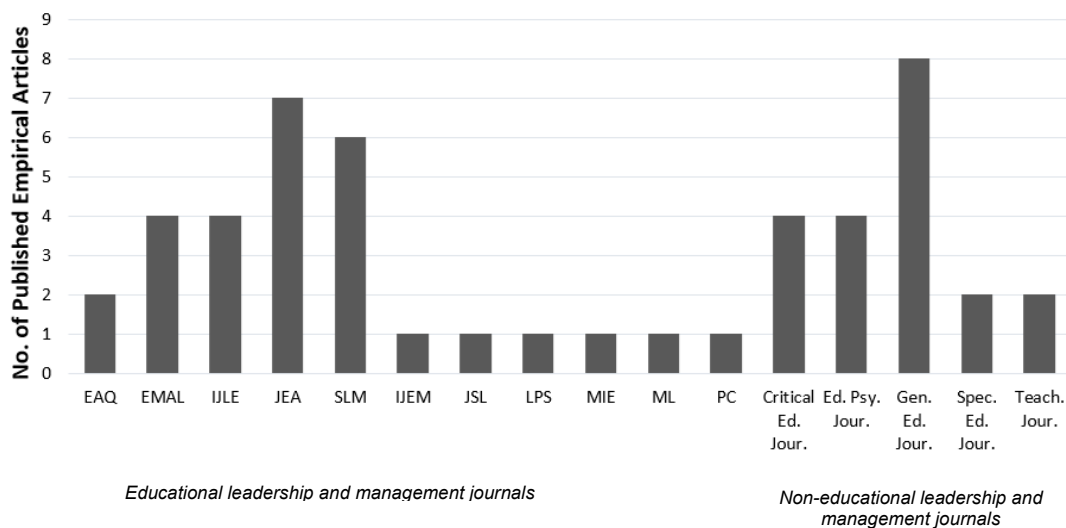
**Figure 2.** Total publication output on educational leaders and emotions in peer-reviewed journals, 1992-2012, by country



Note: one study included participants from two countries, but because this was a unique case, for the sake of simplification the study was coded under the country that was also the location of the researcher's affiliation.

Second, we explored the publications by journal. Figure 3 shows the number of articles on educational leaders and emotions published by journals. Analysis of publication outlets indicates that about 40% of all reviewed studies on educational leaders and emotions in the last two decades were not in educational leadership and management journals. Among educational leadership and management journals, which accounted for about 60% of all reviewed studies, two journals (JEA and SLM) were responsible to nearly half the publications (a quarter and a fifth, respectively).

**Figure 3.** Number of studies on educational leaders and emotions published in journals, 1992-2012



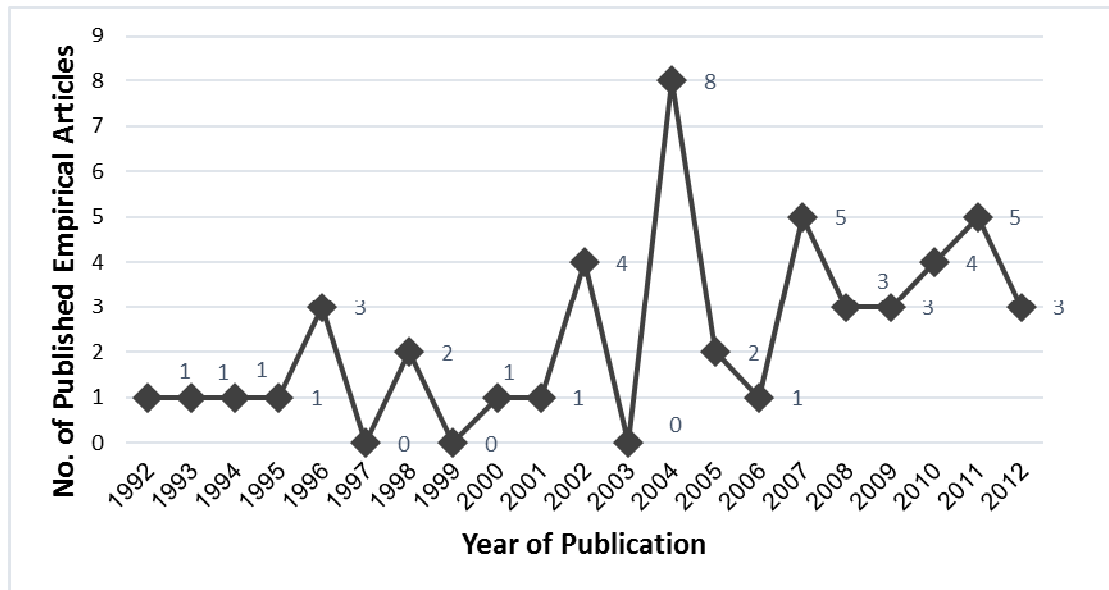
Over time, publications on educational leaders and emotions find their way into both educational leadership and management journals and into non-educational leadership and management journals, and there seems to be no clear change in pattern over time (Table III).

**Table III.** Distribution of studies on educational leaders and emotions by publication outlets over time (N=49)

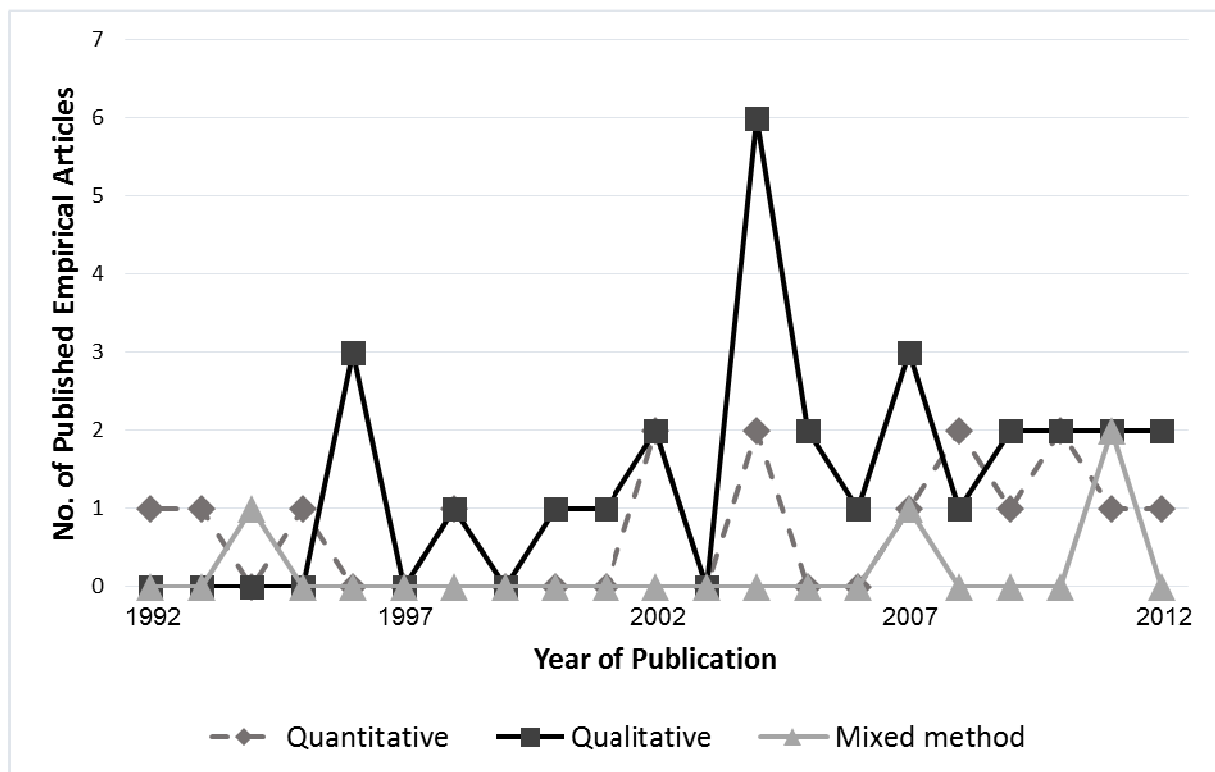
	Number of studies by period				
	1992-1996	1997-2001	2002-2006	2007-2012	Total
Educational leadership and management journals	3	3	11	12	29
Non-educational leadership and management journals	4	1	4	11	20

Third, the analysis explored the level of interest of the research community in educational leaders and emotions over the past two decades (Figure 4). The data indicate consistent and growing interest in the study of educational leaders and emotions between 1992 and 2012. About 60% of the studies used a qualitative method, 30% of the studies a quantitative method, and the rest mixed methods. Over time (Figure 5), the data indicate a steady increase in the last two decades in the interest in educational leaders and emotions, particularly among qualitative researchers. The interest of quantitative researchers shows stability since the early 2000s, and the interest of mixed-method researchers shows a slight increase since mid-2000s.

**Figure 4.** Change in annual publication output on educational leaders and emotions in peer-reviewed journals, 1992-2012



**Figure 5.** Distribution of publications on educational leaders and emotions in peer-reviewed journals by method, 1992-2012



Fourth, we investigated the institutional unit that was used in the empirical studies and whether there has been a change in the pattern of the type of unit chosen over time. Table IV shows that the researchers chose participants and sites from



multiple school levels as the most common method of sampling. But a change appears between 2007 and 2012, and elementary schools move into the lead.

**Table IV.** Distribution of studies on educational leaders and emotions by institutional level

<b>Institutional unit</b>	<b>Number of studies by period</b>				<b>Total</b>
	<b>1992-1996</b>	<b>1997-2001</b>	<b>2002-2006</b>	<b>2007-2012</b>	
Elementary school	1	1	4	11	17
Middle school					
High school			3	2	5
Multiple school levels	5	2	7	8	22
Other	1	1	2	1	5
Total	7	4	16	22	49

Fifth, because the review included large bodies of quantitative and qualitative studies, we conducted separate follow-up analyses of relevant methodological aspects for each method. We classified quantitative studies into several basic designs: phenomenology/narrative/storytelling, case study, critical incidents, life story/autoethnography, general qualitative design, and grounded theory (Table V). We classified studies as general qualitative design when they indicated a qualitative conceptualization, but did not provide direct account of method or sufficient information that can assist in classifying the design. We found that 34.48% of research on educational leaders and emotions used a general qualitative design, followed by two designs tied in the second place: case study and life

story/autoethnography (17.24 % each). The rarest design was grounded theory (3.44%). We also explored whether there have been changes in the pattern of use of qualitative designs over time. As shown in Table V, since the beginning of the 2000s there has been greater diversification in the use of qualitative designs and a clear rise in the two designs noted above (case study and life story/autoethnography), the general qualitative design.

**Table V.** Distribution of frequency of use of qualitative paradigm over time in studies on educational leaders and emotions (N=29)

<b>Qualitative paradigm/ period</b>	<b>Phenomenology/narrative/storytelling</b>	<b>Case study</b>	<b>Critical incidents</b>	<b>Life story/ autoethnography</b>	<b>General qualitative design</b>	<b>Grounded theory</b>
1992-1996					3	
1997-2001	1		1		1	
2002-2006	2	2	2	1	3	1
2007-2012	1	3	1	4	3	
Raw total	4	5	4	5	10	1
% Total (out of N)	13.79%	17.24%	13.79%	17.24%	34.48%	3.44%

Sixth, we examined the frequency of qualitative data collection techniques used in the qualitative studies over time (Table VI). The data indicate that during the 1990s (1992-2001), studies that used multiple qualitative data collection techniques were twice as prevalent as those that used a single data collection technique, but in the second decade included in the review the studies that used a single qualitative data collection technique were more frequent than those that used multiple techniques (1:0.76 ratio).

**Table VI.** Distribution of the number of qualitative data collection techniques and their frequency of use over time in qualitative studies on educational leaders and emotions (N=29)

<b>Number of qualitative collection technique / period</b>	<b>One data collection technique</b>	<b>Two data collection techniques</b>	<b>Three data collection techniques</b>	<b>Over three data collection techniques</b>	<b>Ratio of one technique to more than one techniques</b>
1992-1996	1		1	1	
1997-2001	1	1	1		1:2
2002-2006	7	3	1		
2007-2012	6	2	3	1	1:0.76
Raw total	15	6	6	2	
% Total (out of N)	51.72%	20.68%	20.68%	6.89%	

To further understand the use of multiple vs. single qualitative data collection techniques, we examined separately studies that used single qualitative data collection technique (N =15) and those that used multiple data collection techniques (N = 14). Table VII shows that studies that tend to use single data collection technique relayed mostly on a one-time one-on-one interview (60%), a dominant preference that appears stable over time. Use of a series of one-on-one interviews for data collection (26.66%) appears to be a new phenomenon that emerged in the mid-2000s.

**Table VII.** Distribution of frequency of use of data collection techniques over time in qualitative studies on educational leaders and emotions that used a single qualitative data collection technique (N=15)

Qualitative data collection type/ period	One-on-one interview	Focus group	Journal/ self-reflection	Observations/ field notes	Documents (formal/ personal)	Open questionnaires/ feedback	Series of one-on-one interviews
1992-1996	1						
1997-2001	1						
2002-2006	5	1				1	
2007-2012	2						4
Raw Total	9	1				1	4
% Total (out of N)	60%	6.66%				6.66%	26.66%

Table VIII shows that studies that tend to use multiple data collection techniques relied frequently on a one time one-on-one interview (64.28%), followed by observations (57.14%) and focus groups (50%). Use of existing formal or personal documents was the least preferred additional technique in studies that use multiple data collection techniques (14.28%). It is difficult to find an increase in the popularity of one data collection technique over another over time, but we note that since the mid-2000s there has been greater diversification in data collection techniques among studies using multiple techniques. This effect may be linked to the increase in the volume of publications.

**Table VIII.** Distribution of frequency of use of data collection techniques over time in qualitative studies on educational leaders and emotions that used multiple qualitative data collection techniques (N=14)

<b>Qualitative data collection type/ period</b>	<b>One-on-one interview</b>	<b>Focus group</b>	<b>Journal/ self-reflection</b>	<b>Observations/ field notes</b>	<b>Documents (formal/ personal)</b>	<b>Open questionnaires/ feedback</b>	<b>Series of one-on-one interviews</b>
1992-1996	2	2		2	1	1	
1997-2001	1		2	2			
2002-2006	2	2		1	1		2
2007-2012	4	3	1	3		3	2
Raw Total	9	7	3	8	2	4	4
% Total (out of N)	64.28%	50%	21.42%	57.14%	14.28%	28.57%	28.57%

Regarding quantitative studies, Table IX shows that about 60% of researchers embraced Model A (antecedent effects) as a conceptual model to guide their quantitative exploration. Studies were distributed more or less evenly between the sub-models in the Model A category. The second most common conceptual model was Model B (direct effects), comprising about 25% of the studies. In this category, sub-model B1, which described the direct effects of educational leaders on others' emotions, was dominant. No studies embraced Model D (reciprocal effects). Table X displays the frequency of use over time of conceptual models in quantitative exploration of educational leaders and emotions between 1992-2012. Two trends emerge from the data: the prevalent use of Model A throughout the period of the review and the recent trends of greater diversification in conceptual models, since the mid-2000s.

**Table IX.** Summary of theoretical models used in the quantitative exploration of educational leaders and emotions (N=16)

<b>Mode</b>	<b>Description of conceptual model</b>	<b>Number of studies</b>	<b>Total</b>
A1	Antecedents of educational leaders' emotions or emotional capabilities: Personal	2	
A2	Antecedents of educational leaders' emotions or emotional capabilities: Contextual	2	
A3	Antecedents of educational leaders' emotions or emotional capabilities: Role	3	10
A4	Antecedents of educational leaders' emotions or emotional capabilities: Personal, role, and contextual	3	
B1	Direct effects of educational leaders on others' emotions	3	
B2	Direct effects of educational leaders' emotions on personal and/or school outcomes	1	4
C1	Mediated effects of educational leaders on others' emotions	2	
C2	Mediated effects of educational leaders on educational leaders' emotions and on personal and/or school outcomes	0	2
D1	Reciprocal effects of educational leaders and the emotions of others	0	0
D2	Reciprocal effects of educational leaders' emotions on personal and/or school outcomes	0	0

**Table X.** Distribution of frequency of use of models among quantitative studies over time (N=16)

<b>Period</b>	<b>Model A</b>	<b>Model B</b>	<b>Model C</b>	<b>Model D</b>
1992-1996	2	1	0	0
1997-2001	1	0	0	0
2002-2006	3	1	0	0
2007-2012	4	2	2	0
Raw total	10	4	2	0
% of total (out of N)	62.5%	25%	12.5%	0

We also explored the design and the level of analysis of quantitative studies, which we classified into several basic designs: descriptive, repeated measures, cross-sectional, comparative, interventional/scenario (Table XI). We found that 68.75% of quantitative research on educational leaders and emotions used a cross-sectional design, followed by a Comparative design (12.5%). Concerning the level of analysis (Table XII), an overwhelming majority of studies focus on individual level of analysis (87.5%). Over time cross-sectional studies that focus on the individual level of analysis have been gaining in popularity.

**Table XI.** Breakdown of quantitative studies on educational leaders and emotions over time by design (N=16)

<b>Design/ period</b>	<b>Descriptive</b>	<b>Repeated measures</b>	<b>Cross- sectional</b>	<b>Comparative</b>	<b>Interventional/ scenario</b>
1992-1996			2		1
1997-2001			1		
2002-2006			2	2	
2007-2012	1	1	6		
Raw total	1	1	11	2	1
% of Total					
(out of N)	6.25%	6.25%	68.75%	12.5%	6.25%

**Table XII.** Breakdown of quantitative studies on educational leaders and emotions over time by level of analysis (N=16)

<b>Level of analysis/ period</b>	<b>Individual</b>	<b>Dyadic</b>	<b>Group</b>
1992-1996	3		
1997-2001	1		
2002-2006	4		
2007-2012	6	1	1
Raw Total	14	1	1
% of Total			
(out of N)	87.5%	6.25%	6.25%



## Discussion

Following our earlier efforts to promote the interest in educational leaders and emotions (Berkovich and Eyal, 2015), we sought to advance the understanding of the methodological nature of the educational leaders and emotions field of research by shedding light on the methodological patterns and trends that emerged. We suggest that these patterns provide broader insights into the meaning of an emerging research field in EA.

Systematic review of the research information and methodological practices in the field of research dealing with educational leaders and emotions produced the following key findings:

- (#1) The US and UK are responsible for half the research, together with other English-speaking countries accounting for 77.5% of the research produced.
- (#2) 40% of publications are in non-educational leadership and management outlets, a trend that continues.
- (#3) The qualitative method was and remains the dominant type.
- (#4) A multiple/mixed institutional unit was and remains the sampling unit.
- (#5) Initially a general qualitative design was prevalent, but since the 2000s there has been greater diversification of qualitative designs.
- (#6) Initially multiple data collection techniques were prevalent in qualitative studies, but since the 2000s the single data collection technique prevails.
- (#7) Initially conceptual models outlining antecedent effects were prevalent in quantitative studies, but since the mid-2000s there has been greater diversification in conceptual models.
- (#8) Cross-sectional design and individual level of analysis were and remain characteristic of quantitative studies.

As noted above, we suggest that our findings can be explained in two ways, depending on whether one's interpretive perspective on scientific knowledge production is functionalist or critical.

### *Functionalist perspective on the findings of the review*

From a functionalist perspective, our study suggests that overall the emerging field of research on educational leaders and emotions seems to be in an "emerging" stage. The

qualitative method was and remains the leading one (#3), and can be viewed as ideal in an emerging field in EA because it formulates new constructs and inductive typologies contextualizing the topic to education and EA, particularly when the topic derives from the general OB literature (Oplatka, 2014). We found some evidence of maturity within the emerging stage itself, as researchers in the past favored the use of general qualitative design, but since 2000s there has been a diversification of qualitative research designs (#5). We also identified a potential shortcoming in the emerging research field in EA. Our findings indicate that the multiple/mixed institutional unit of sampling was and remains the dominant unit in studies of educational leaders and emotions (#4). It is possible that such a mixed sample of schools is characteristic of an emerging field of research because clear definitions are lacking and there is only an initial mapping of the phenomenon. By comparison, in a more mature research the picture is reversed. Hallinger's<sup>3</sup> (2011) quantitative analysis indicates that 46.8% of the studies he reviewed used elementary schools as the institutional unit, 26.9% used high schools, and only 14.3% of the studies used multiple school levels without differentiating between them. The field of research on educational leaders and emotions favors the use of antecedent effects model in quantitative explorations (#7). The current preference for this type of model represents a higher interest in conceptualization of antecedents (62.5% vs. 52%) and a lower interest in the conceptualization of direct effects (25% vs. 37%) relatively to a more established research area (Hallinger, 2011). Reciprocal models appear to be absent not only in the present corpus but also in more mature fields of research in EA (Hallinger, 2011), therefore it is possible that these types of models emerge only in highly mature research areas.

The quantitative studies in our review attest to a simplification in methodological design, as their overwhelming majority uses a cross-sectional design and individual level of analysis (#8). This may be considered as a characteristic of an emerging research field, but it may be more reflective of the EA disincline. Earlier reviews in EA have found cross-sectional design to be the most common one (Bridges, 1982; Hallinger, 2011). Bridges (1982) suggested that over 90% of studies in EA adopt a cross-sectional design, whereas in leadership research in OB only 62%

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<sup>3</sup> We must exercise caution in drawing inferences from Hallinger's (2011) work because it focuses on the specific framework of principal instructional management rating scales, which is much more prone to quantitative exploration (93% of works reviewed).

of quantitative articles are based on such a design (Dinh *et al.*, 2014). The same is true for the dominance on the individual level of analysis over other levels of analysis in EA (87.5%), which is higher by comparison to OB. Previous reviews reported that in the general OB leadership research, studies focusing on individual level of analysis represent only 63.5% of the corpus (Dinh *et al.*, 2014), whereas in the emerging field of leadership and emotions in the general OB discipline they amount to only to 32.6% (Gooty *et al.*, 2010). This may be explained by the fact that the greater diversification in levels of analysis in the field of leadership and emotions in OB is related to researchers being more attuned to methodological innovation, such as multi-level exploration. But the lack of longitudinal designs and other levels of analysis limits our understanding of how the time dimension and nesting influence emotions and educational leadership.

In sum, the functionalist analysis of the findings suggests that the first steps of the field, as it is has been advancing toward an intermediate stage since the mid-2000s,<sup>4</sup> involve more sophisticated designs that include greater diversification of research methods (more frequent use of mixed methods) and of conceptual models (#5, #7).

#### *Critical perspective on the findings of the review*

The present work provides a traditional methodological analysis of the research, therefore we interpret only the trends and changes we identified in relation to the historical, cultural, and public aspects of knowledge production in the EA research community. Because we were interested in identifying arrangements that affected scientific knowledge production in EA, viewing the unfolding sequences in knowledge production, and creating a baseline overview that can be used for comparison, we mapped the cultural hegemony of scientific knowledge production in EA over time (Appendix A). For this purpose, we collected data for three leading EA journals (JEA, EAQ, and EMAL) from 1972 until 2012, in five-year intervals (1972, 1977, 1982, etc.).<sup>5</sup> We scanned and coded a total of 161 articles.<sup>6</sup> The coding

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<sup>4</sup> Note that the discipline of EA as a whole is in its early stage and still maturing (Oplatka, 2010, 2014).

<sup>5</sup> We used data from the first issue (i.e., issue 1) of the sampled year with only two exceptions: in EMAL 5(2) was the first issue in 1977, and in JEA, the first issue of 2012 was an anniversary special issue, and therefore we chose issue 50(2) instead.

<sup>6</sup> We omitted editorials, book reviews, international one-page reports, conference promos, and letters from the field in the analysis.

included: (a) the geographic location of the university of the authors' affiliation?;<sup>7</sup> (b) the paper design type (quantitative, qualitative, mixed method, policy/reform/program study, or review/essay study); and (c) for qualitative articles, the number of collection techniques (one or multiple). The data were used to further support our claims about the existence and effects of power structures, prior history, and disciplinary norms in EA.

First, the present review suggests that an emerging field of research in EA maybe reflects the intensive involvement of researchers from UK and Mediterranean countries (#1). It is reasonable to conclude, therefore, that legitimization of a new field of research is partly the result of a joint effort by two types of groups: one that is part of the English-speaking circle (a core group), the other from the Mediterranean region (a peripheral group). Prior research indicates a clear dominance of the US in the EA discipline. For example, Oplatka's (2010) analysis of authors who published in the three leading EA journals (JEA, EAQ, and EMAL between 2004-2007) found that 63.1% were employed in the US. Our baseline overview of EA suggests that this is indeed a structural feature of the EA community, but much smaller in proportion than previously found, because only 30.8% of published authors in the years 1992-2012 were US-affiliated (Appendix A1). This ratio is higher than the one found in the present review of the emerging research field of educational leaders and emotions (i.e., 26.5%). The overall share of the English-speaking countries in this emerging research field (77.5%) is lower than their ratio among authors in the baseline overview of three leading EA journals, which was 83.9% in the same time period (Appendix A1). We may have uncovered evidence that an emerging field in EA is associated with a limited increase in the national diversification of researchers. These comparisons prompt thoughts about the problematic aspects of core-periphery relations in scientific knowledge production and scientific agenda setting (Westwood *et al.*, 2014), and how these might constrain new research fields. Based on our findings, we speculate that researchers who are at the periphery of a core group (e.g., UK) may play a key role in introducing new topics into the mainstream. The growth in knowledge production in East Asia (Hallinger and Bryant, 2013) did not manifest

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<sup>7</sup> Each paper was coded as one affiliation to avoid inflation because of co-authorship. In the few cases in which co-authors were from different countries, we used the majority rule or the location in which the data were collected to code the paper.

in our findings. This may have to do with different cultural value-based assumptions concerning the role of emotions (Markus and Kitayama, 1991), but the acceleration of knowledge production in this region is a relatively new phenomenon.

Second, the dominance of the qualitative method in the present review on educational leaders and emotions (#3) may be seen as an outcome of disciplinary norms. There are variations across disciplines with regard to legitimate and illegitimate products (e.g., qualitative vs. quantitative methods). In emerging fields within leadership research in OB, design choices aimed at producing "historical data" are even more prevalent than in the general leadership research in OB (Dinh et al., 2014). For example, Gooty *et al.* (2010), who reviewed 46 empirical studies on leadership and emotions between 1990 and 2010 in OB, found only two qualitative papers (4.3%), but found that 47.8% of studies on leadership and emotions were based on experimental designs, and 6.5% were based on longitudinal or repeated measure designs. In EA, however, particularly since the 1990s (Appendix A2), both the quantitative and the qualitative methods are legitimate in published works. Statistical reports of one leading journal in EA indicate a similar number of submissions of quantitative and qualitative works during 2000-2008 (EAQ, 2008). At the same time, longitudinal, experimental, and quasi-experimental designs aimed at producing "historical data" are absent from EA studies (Hallinger, 2011).

Third, our findings suggest that in the 1990s certain researchers involved in the emerging field of EA may have tended to avoid demands for methodological rigor by submitting their publications to journals outside the field of educational leadership and management (#2). This finding should be understood in the context of our baseline overview of EA, which suggests that in the 1990s publication of a qualitative study using single data collection technique was much more difficult in EA: four times less likely to be published than a study using multiple techniques (Appendix A3). Qualitative studies that used a single data collection technique (most frequently interviews), that did not triangulate data with observations or documents, tended to be constructivism-oriented. This paradigmatic research perspective is well suited for exploring emotion-related topics, many of which are at the individual level. Qualitative research on educational leaders and emotions shows a higher ratio of published articles based on a single collection technique (a ratio of 2 articles using multiple techniques vs. 1 article using a single technique), partly because they aimed their publication efforts outside of EA journals. This disciplinary duality of

educational outlets in publications on educational leaders and emotions in EA persisted even after the 2000s, when the publication of a qualitative study using a single data collection technique became significantly easier based on acquired legitimacy within EA (Appendix A3). The bloom of qualitative research in the 2000s may be viewed as part of the institutionalization of this method in social sciences (Brinkmann *et al.*, 2014), which has reduced the need for excessive stringency aimed at ensuring legitimacy through triangulation. It is reasonable to assume that the rise in the legitimacy of qualitative studies in EA in the early 2000s, particularly of studies that used a single data collection technique, may have indirectly promoted also the validity of educational leaders and emotions as a conventional research field in EA. In this historical context, one can interpret the moderation of the demand for multiple data collection techniques in qualitative studies about educational leaders and emotions (#6) as possibly linked with a rise in the legitimization of both the method and the topic.

In sum, the critical analysis of the findings indicates that power structures, disciplinary norms, and prior history are likely to shape the possibility of publication, the methods, and the outlets of publications of researchers in an emerging field (#1, #2, #3, #6). A new field of research involves the introduction of new ideas, researchers, and methods, that are partly entangled in broader changes in the institutional context of EA.

*Recommendations based on insights into the meaning of an emerging research field in EA*

Our findings suggest that from a functionalist perspective, an emerging research field in EA, such as the study of school leaders and emotions, is (a) highly oriented toward qualitative design, (b) uses opportunistic, less “clean” institutional unit sampling, and (c) incorporates simplified research designs in quantitative studies. Advancing a research field from an emerging state to intermediate and mature stages requires several steps:

- Developing more mixed-method and quantitative studies.
- Choosing “cleaner” participant profiles and institutional units, abandoning a sampling design based on multiple/mixed school affiliation.

- Adopting more diverse conceptual models in quantitative research (involving direct effects, indirect effects, and reciprocal effects) as well as longitudinal designs and non-individual levels of analysis that better differentiate between effects related to leaders and those related to the perceptions of individual followers.

From a critical perspective, our findings suggest that an emerging research field in EA, such as the study of school leaders and emotions, (a) at time deals with enduring stigmatization, (b) shows greater national diversification but is confined mainly to English-speaking countries, and (c) is more subject to disciplinary norms. There are several follow-up critical counter-hegemonic steps that the EA discipline can adopt:

- Promoting de-stigmatization of an emerging research field requires editors to adopt affirmative policies with regard to particular research fields, for example, by producing special issues or publication opportunities (e.g., a point-counterpoint section).
- Researchers from non-hegemonic countries in the EA discipline can focus on an emerging research field where innovativeness partly makes up for the US bias of the discipline. This requires researchers from non-hegemonic countries to be attuned to latest research trends in both the EA and OB communities. Promoting national diversification in EA disciplines requires that editors adopt culture-sensitive policies in their reviewing procedures.
- Researchers must be aware of disciplinary norms that play a more central part in an emerging research field than in an established one, maximizing their publication potential.

Creating a new discourse as specific knowledge is promoted to gain center stage is in itself an act that involves marginalization of old knowledge. But maintaining a level of dynamism is essential for producing counter-hegemonic richness. New knowledge may have a transformative effect on the discipline because it allows the discourse to become less hegemonic ("feminine") and helps introduce alternative views of the "ideal" principalship.

*Conclusion*

Our study provides a methodological review of research on educational leaders and emotions based on patterns in research methods. We believe that methodological exploration of studies on educational leaders and emotions can produce not merely knowledge in this specific field, but boarder insights as a case study of an emerging field in EA. In our interpretation of the findings of the study we aimed to provide both functional and critical insights on the meaning of an emerging field of research in EA. We view scientific knowledge production as an integrated professional effort and a social activity, and recognize that the two are often difficult to distinguish from one another. But making sense of this duality must be a central commitment of a research community if it aspires to promote the field.



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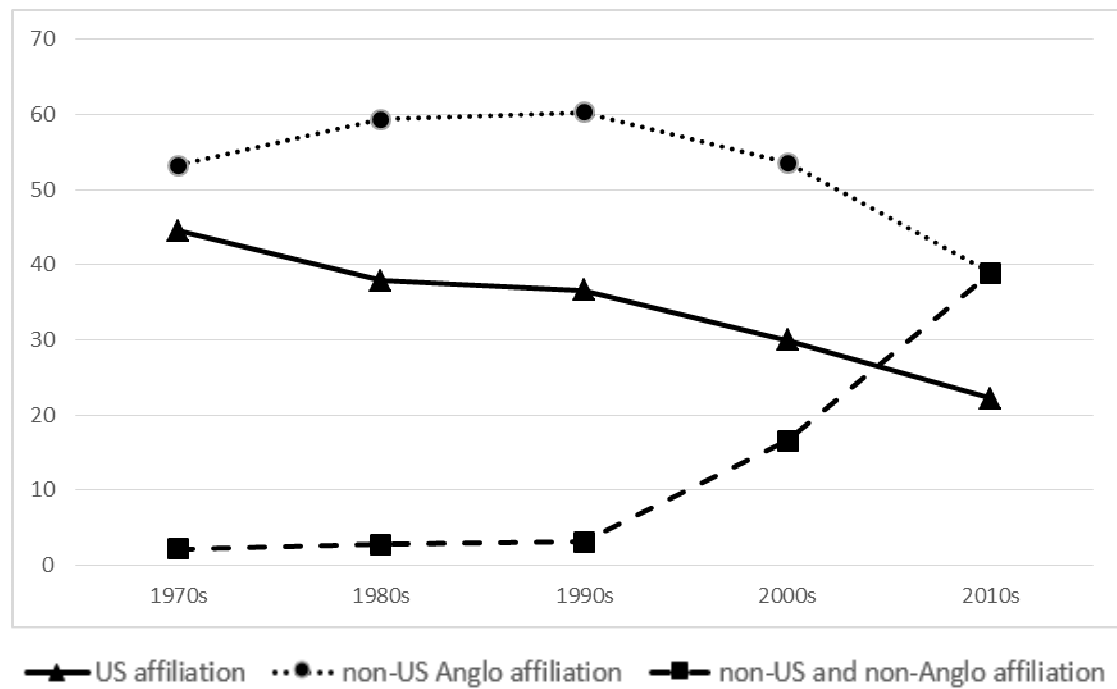
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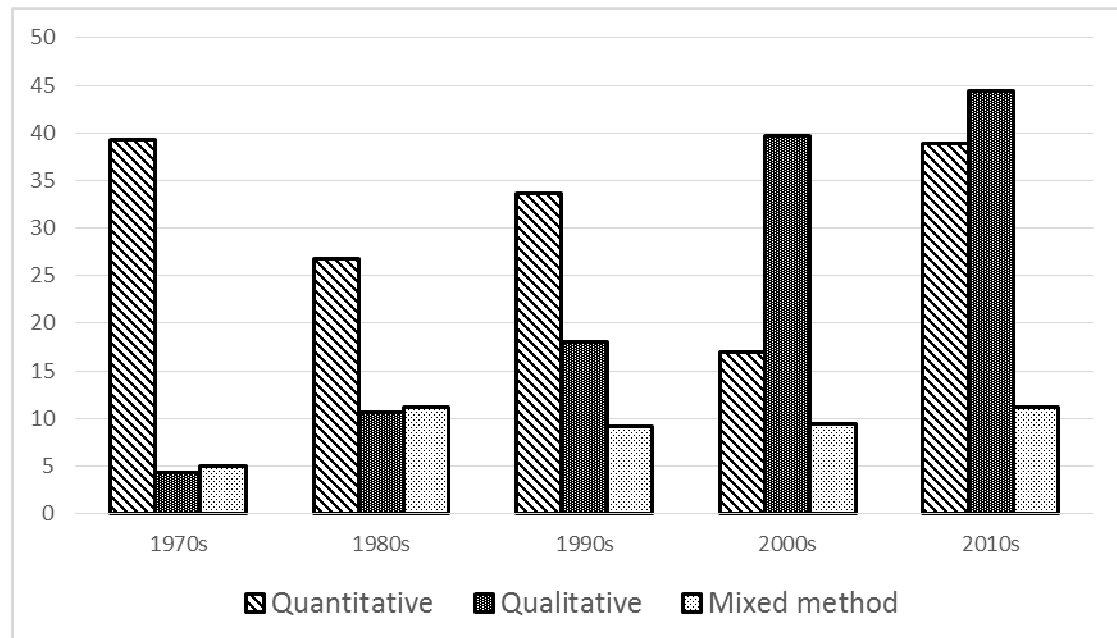


## Appendix A

**Appendix A1.** Percentages of published authors in EA over time by geographic affiliation (N=161)

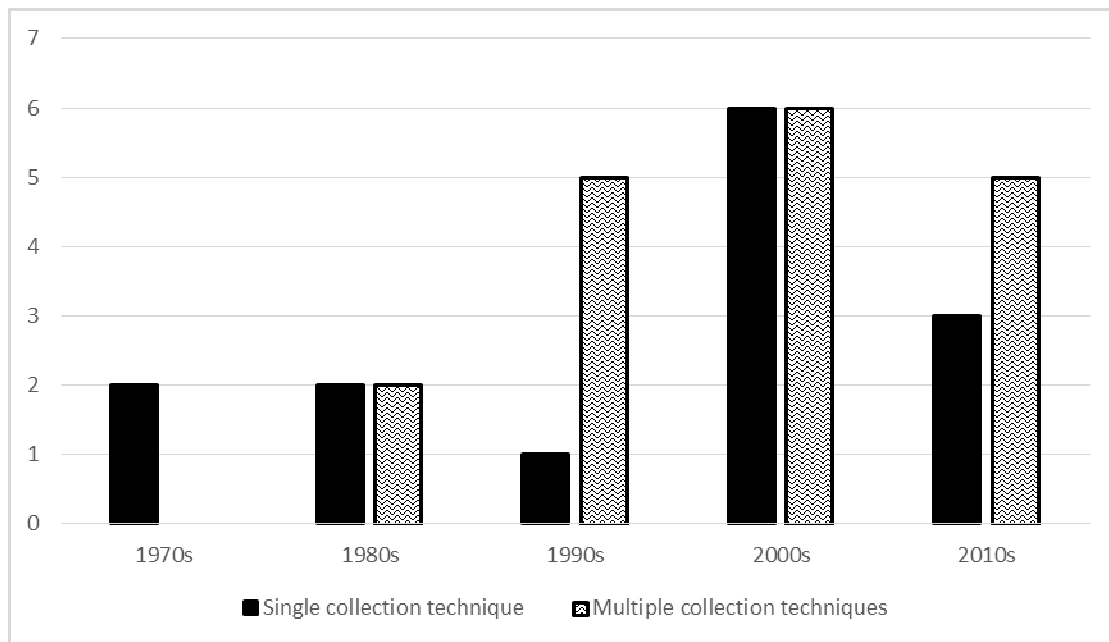


**Appendix A2.** Percentages of published articles in EA over time by research method (N=161)



Note: Other categories that complete the 100% (i.e., policy/reform/program articles and review/essay articles) are not displayed to facilitate parsimonious presentation.

**Appendix A3.** Distribution of frequency of use in one or multiple collection techniques in qualitative articles in EA over time (N=32)



Note: There is no overlap between the qualitative articles included in this analysis and the qualitative articles included in the review on educational leaders and emotions.