

**The structures and processes governing education research in the UK from 1990-2020: A
systematic scoping review**

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Abstract

This paper presents the findings of a systematic scoping review spanning thirty years (1990-2020) that sought to understand the structures and processes influencing education research activities in UK higher education (HE). Review work of this scale has not previously been undertaken on the topic. The purpose of the review was to ‘take stock’ of research in the field, identify continuing and emerging areas of concern regarding education research as a profession, and point to directions for future research. Seven databases were searched and additional strategies included citation chasing and hand-searching. We located 114 peer-reviewed journal articles and one doctoral thesis. Six themes emerged relating to formal structures/processes: culture of performativity and accountability; funding regime; impact agenda; ‘what works’ agenda; heated debates; and professional bodies. A further six themes related to informal structures/processes: academic pressures; affective issues; non-traditional academics; second-career researchers; career stages; and departmental cultures. The themes were complex and appeared to interact with each other. Evidence of the negative impact of neoliberal regimes on working conditions and wellbeing emerged more strongly in the past decade. The review indicates that further research is required into the experiences and academic identities of education researchers from under-represented groups (i.e. women, ethnic minority, working-class, disabled, LGBTQ+ academics). There is also a need for more studies in Northern Ireland, Scotland and Wales to understand their unique political-economic-educational contexts. The findings have relevance to education researchers and policy-makers in countries across the globe, particularly in comparable HE systems (e.g., North America, Australia).

Keywords: Education research; higher education; professional identities; systematic scoping review

Introduction

Neo-liberalism and UK higher education

Emerging as a guiding political and economic ideology following the restructuring of the welfare state in the 1980s, neoliberal reform has seen the further embedding of free market principles and competition into the sphere of higher education (HE) in the United Kingdom (UK) – a situation mirrored in other countries globally (Ball, 2016; Naidoo and Williams, 2015). This has been understood by government and some senior HE policymakers and managers as a means to enhance productivity, efficiency and quality within the sector. Techniques of new public management such as flexibilisation, performance measures, and ‘contractualist norms and values’ (p.324) have intensified within universities (Olssen & Peters, 2005), and there has been an accompanying shift towards increased levels of audit and accountability in teaching and research. Such a competitive and economistic model of academia has been justified as grounded in arguments of fiscal rationalisation – yet this model is seen by some to lie in tension with traditional conceptions of the purpose and value of higher education based on notions of intellectual autonomy, freedom, and public good (Marginson, 2011; Tomlinson, 2018).

One very recent change in HE governance in the UK has been in relation to the Research Excellence Framework (REF, 2014, 2021) – formerly the Research Selectivity Exercise (RSE, 1986, 1989) and Research Assessment Exercise (RAE, 1992, 1996, 2001, 2008) – which requires higher education institutions (HEIs) submit evidence of their profile of research activities and outcomes for discipline-based Units of Assessment (UoAs), including outputs, impact and environment statements. The REF submission procedure has been modified for 2021 in light of questions as to the perceived fairness of previous criteria (Torrance, 2020), with a new requirement that all staff with a ‘significant responsibility for research’ (REF, 2019, p. 13) be entered for the REF. Previously it was the case that UoAs could be selective and choose those submitted for return. The number of outputs per academic has also changed from 4 to between 1-5, and a focus is placed on UoAs needing to submit an average of 2.5 outputs per academic. It is anticipated that these changes will have an impact on the experience of researchers currently working in academic departments (Torrance, 2020) – although it is unclear at present exactly what these impacts might be.

Another significant change has been the introduction of the Teaching Excellence Framework (TEF) in 2015 – that might be seen as paralleling the REF but in relation to teaching – that is currently voluntary and requires HEIs to demonstrate teaching ‘excellence’ in order to gain accreditation (i.e., a Gold, Silver or Bronze award). This has been said to have the potential to reshape the nexus between teaching and research (Gunn, 2018). There has been a prominent strand of scholarship emerging around these assessment frameworks from a critical perspective, with it argued that the REF and TEF represent the further incursion of neoliberal governance into UK HE and the continued embedding of high-pressure evaluation and accountability agendas into both university management and academic life (Naidoo, 2018; Canning, 2019).

Recent research indicates that such structural changes at the socio-political-economic and institutional level have impacts upon academics’ work and professional identities on the local level. A growing body of research suggests that competitive conditions have created increasingly unfavourable working environments for academics, who are experiencing increasingly fractured and fragmented academic identities (Loveday, 2018; Watermeyer & Tomlinson, 2021). Studies indicate that such conditions can cause high levels of anxiety and mental distress due to demanding performance-driven targets and the precariousness of employment. This has produced the emergent figure of what Loveday (2018) terms the ‘neurotic academic’ (p.154) – an ‘entrepreneurial self who is

governed through responses to the anxiety precipitated by uncertainty in the neoliberalising HE sector...' (p.163).

Research conducted with academics in the field of education appears to resonate with these findings. For example, studies by Cotton et al. (2017) and Wyse et al. (2018) suggest that REF requirements can influence education researchers' perceptions of their opportunities for research and sense of themselves as 'valued' academics. Similarly, Marques and Powell (2020) found that the increasing prioritisation of rankings and ratings by HE bodies, and the media had a knock-on effect within UK Schools of Education. They noted that managers were operating strategically in order to strengthen their department's REF submission (e.g. recruiting high-profile academics), which could impact negatively on organisational research cultures. At present, there is a lack of review work drawing together relevant literature and collating insights from the field – which this paper seeks to address.

This paper presents the findings of a large-scale systematic scoping review spanning a substantial thirty year period (1990-2020) that sought to understand the formal and informal structures and processes influencing education researchⁱ as a profession in HE across the four UK nations – England, Northern Ireland, Scotland and Wales. The review was originally commissioned by the British Educational Research Association (BERA) as part of its work in monitoring the state of UK education research, with the aim to extend mapping activities conducted by others such as Oancea (2010), Whitty et al., (2012) and Oancea & Mills (2015). These reports were produced in response to potential political and/or economic changes that posed perceived threats to education research in the UK. For example, the Whitty et al. report was motivated by proposed changes to initial teacher training (ITT) in England that were seen as affecting the viability of HE education departments (DfE, 2010), e.g., more school-led ITT, increased tuition fees for teacher trainees. There were also concerns over major reforms of the HE system and a significant reduction in public expenditure that threatened to reduce government funding of education research (e.g., BIS, 2011). As discussed above, recent years have seen further changes take place in HE policy and governance that have the potential to re/shape the field of education research and affect its future direction. It is important, then, to 'take stock' (Tinkler & Allan, 2015) of the structures and processes that have been, and are currently salient to help us develop strategies for moving ahead. If education research is to continue to provide an important voice in UK society and beyond and 'act for the common good' (Moss, 2016, p.927), then it is important to understand and engage with the contextual factors influencing the field.

Whilst the mapping activities outlined above drew on secondary data sources such as policy documents, datasets from HESA and RCUK, and information from institutional websites to develop a 'profile' of the profession at particular time points, our review represents the first systematic mapping of the extant research literature. Further, we adopt a longitudinal and comparative perspective in order to highlight similarities and differences across the four UK nations, adding unique insights to our current understandings.

Conceptualising education as a discipline and education research

Education as a discipline might be understood in organisational terms as a structural component within the HE system. Education is subject to how academic institutions seek to draw the 'map of knowledge' within their organisation, and the 'operational distinctions' that have been purposively conceived in an attempt to demarcate education from other disciplines (Becher and Trowler, 2001, p.42). This is further shaped in response to government definitions and HE policy frameworks; for

example, the categorisations of disciplines used by the Office for Students (OfS) and Higher Education Statistics Agency (HESA) for the purposes of funding and monitoring. Yet the discipline of education is also fashioned in and through wider historical understandings and the epistemological structures and cultures that have shaped its development over time (see e.g., McCulloch, 2002; Biesta, 2011). In this way, the discipline of education might be understood as retaining certain characteristics that make it recognisable as a field – but with what counts for education differing between universities, and the field itself being an entity that is fluid, dynamic and changeable (Trowler, 2014).

On entering HE, education academics become a member of their disciplinary community and are socialised into certain ‘ways of being’ (Becher & Trowler, 2001, p.48). Disciplinary communities have been conceptualised variously but are usually seen as including aspects such as: a shared set of values, attitudes, heritages, traditions, rituals, concepts, symbols, discourses and codes of practice (Becher & Trowler, 2001; McCulloch, 2002). An integral part of academic life is research, and there are particular pressures for education academics to ‘prove’ that they are valued members of the research community through external markers such as peer-reviewed publications and grants (Deem & Lucas, 2007). Whether an academic feels that they belong within their discipline is significant; yet we contend that professional identities are made possible in and through the assemblage of practices that constitute their disciplinary community. Whilst there is some room for professional identities to be negotiated within this community, there are certain structures, processes and norms that govern this identity-work – with some academics greater able to resist external pressures and renegotiate successful identities than others (Trowler, 2012).

Of course, not all education academics are necessarily located within Departments/Schools of Education. Questions might be raised, for example, as to where medical education researchers sit within university and disciplinary boundary lines. In REF terms, they are part of the Education submission, as are those undertaking education research in life sciences, computing, etc. It might be the case that such researchers hold less distinct identities as education researchers and feel a closer affinity with another discipline. In this review, we took an open stance and defined education research/ers in line with the definitions adopted by the authors of the texts – but with the texts, in reality, focusing overwhelmingly on those in Schools of Education.

Defining structures and processes in the field of education research

One common distinction that has been made by organisational theorists when studying workplace organisations and the experiences of those working within them – including academics working in academic departments within universities – is between *formal* and *informal* structures and processes (Watson, 2003; Rank, 2008). This conceptual distinction has helped scholars to attempt to capture the complex interplay between: 1) the bureaucracy, rules and procedures that pattern action and provide a degree of predictability within an organisation, which is often prescribed by management, and; 2) the human actors who take up roles within organisations and bring with them their own thoughts, feelings, interests and purposes.

It has been argued that the formal/informal distinction is overly simplistic and risks minimising focus on the wider external patterns of inequality and conflict that lie outside of workplace organisations (Mease, 2016; Watson, 2003). We are sympathetic to this critique, however we adopt the formal/informal distinction in this review for two reasons. First, we feel it has analytical purchase as it makes clear a distinction between the activities, values, practices and identities that are ‘officially’ sanctioned, and those that are ‘unofficial’ and might develop more organically. Second, it helps us to operationalise fuzzy and diffuse social phenomena and collect ‘data’ from the located literature, so

that we can draw some sort of meaningful conclusions. But as an important caveat, we recognise the dialectical relationship that exists between formal and informal structures and processes within education research and understand both as influencing each other in a mutually constitutive way. We also recognise that HEIs are located within the wider order of the social system and how society is structured as a whole, including established patterns of advantage and disadvantage (Bird, 2011).

Aims and research questions of this review

As outlined above, the aim of this systematic scoping review was to locate and synthesise research literature that presents evidence on the types of structures and processes influencing education research activities in UK HEIs from 1990-2020. This enabled us to consider which structures and processes might be particularly salient today, and why. The ultimate purpose of this review was to ‘take stock’ of the structures and processes shaping education research as a profession, identify continuing and emerging areas of concern in relation to the field moving forwards, and point to directions for future research. The research questions framing the review were:

1. What is the type and kind of research evidence that is relevant to understanding the structures and processes that influence research activities in the UK?
2. What are the main themes reported in research evidence relevant to understanding the structures and processes (both formal and informal) that influence education research activities in UK HEIs?
3. How has the narrative within the research literature regarding the structures and processes that influence education research activities in the UK changed over time?

It is important to highlight that this review was conducted between June 2020 and February 2021 and, at that point in time, it was too early to capture published literature reporting on the possible effects of the Covid-19 pandemic on education research and education researchers in UK HEIs. This paper should therefore be understood as an account of education research activity before the impacts of the pandemic were being felt.

Although the insights presented in this review are based on the UK context, the findings should have relevance to education researchers and policy makers in other countries across the world, particularly those working in comparable HE systems (e.g. North America, Australia).

Methodology

We conducted a systematic scoping review informed by the approaches outlined by Askey and O’Malley (2005) and Levac et al. (2010); the aim was to provide coverage of the breadth of studies available, the types and nature of the studies, and to identify gaps in the existing literature.

Scoping and search term development

A comprehensive search strategy was developed following a preliminary search of the topic area, scanning the titles and abstracts of known relevant articles for possible key terms, and collaborative discussion amongst the research team. Table 1 contains a list of the search terms used in this review. Search terms were grouped according to two key constructs: 1. geographical terms (shaded in blue) and; 2. education research terms (shaded in green).

In response to preliminary search results, we sought to expand the search with an additional focus on capacity building and practitioner research. The additional search terms at the bottom of Table 1 were cross-referenced with the geographical terms and the limiter “Education*”.

Table 1: Search terms and databases

BEI, ERIC, ERC (via EBSCO)	AEI, IBSS (via ProQuest)	Web of Science
"UK"	"UK"	"UK"
"United Kingdom"	"United Kingdom"	"United Kingdom"
England	England	England
English	English	English
"Northern Ireland"	"Northern Ireland"	"Northern Ireland"
"Northern Irish"	"Northern Irish"	"Northern Irish"
Scot*	Scot*	Scot*
Wales	Wales	Wales
Welsh	Welsh	Welsh
Brit*	Brit*	Brit*
"Education* research*"	"Education* research*"	"Education* research*"
"Research* education*"	"Research* education*"	"Research* education*"
"Teacher* research*"	"Teacher* research*"	"Teacher* research*"
"Research * education"	"Research in education"	"Research in education"
	"Research on education"	"Research on education"
	"Research for education"	"Research for education"
	"Research and education"	"Research and education"
BEI, ERIC, ERC (via EBSCO)	AEI, IBSS (via ProQuest)	Web of Science
"Capacity Build*"	"Capacity Build*"	"Capacity Build*"
"Build* Capacity"	"Build* Capacity"	"Build* Capacity"
"Practitioner* Research*"	"Practitioner* Research*"	"Practitioner* Research*"

Searching for studies

The search terms were input into the following electronic databases in June and November 2020: British Education Index (BEI); Education Resources Information Centre (ERIC); Education Research Complete (ERC); Australian Education Index (AEI); International Bibliography of the Social Sciences (IBSS); and Web of Science. We wanted to include key education databases and more generic databases to maximise the scope of the search. Terms were cross-searched in title and abstract fields.

Additional search strategies: A number of additional search strategies were also undertaken:

1. *Forwards and backwards citation chasing*: the reference lists of all included texts were scanned (backwards chasing). The titles of included texts were input into Google Scholar and all citing literature was screened (forwards chasing).
2. *Hand/targeted searching*: Key journals in the field were hand searched to ensure that relevant literature pertaining to the four UK nations was sufficiently captured: Wales Journal of Education; The Welsh Journal of Education; Education in the North; Scottish Educational Review; and Irish Educational Studies. All volumes and editions were checked dating back to 1990, or as far back as was available online. We also searched the following websites: BERA, SERA, HEFCE, HESA, HEA, OfS, Advance HE.

'Freehand' search terms were input into selected databases manually (i.e., ERC, ERIC, BEI and Google Scholar). We were particularly keen to capture literature on informal structures and processes that might not have been located through the formalised database searches (i.e., researcher identities and backgrounds). This included combinations of phrases such as "women in academia", "female academic*", "BAME academic*", "disab* academic*", "early career researcher*", "mid career research*", "late* stage research*" AND "education*". We also hand searched the publication lists of key academics who appeared frequently in our include list, e.g., Alis Oancea, Stephen Gorard, Chris Holligan, Jean Murray, Rosemary Deem, John Furlong.

3. *Doctoral theses*: We searched for unpublished doctoral theses via ProQuest Dissertations and Theses Global. The search terms listed in Table 1 were input into the database in January 2021.

Data management: EndNote X9 software was used to manage references throughout the review. Search results were exported into EndNote and duplicates were removed before screening commenced.

Screening studies

We used the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type) tool in order to establish inclusion criteria to inform the review's study selection (Cooke et al., 2012) – see Table 2.

An initial sample of 50 records from the June 2020 search were piloted amongst four reviewers (LS, GK, SB-C, JSR) in order to agree on screening decisions, and eligibility criteria were refined in response to this pilot stage. The titles and abstracts of records retrieved through searching were then screened for relevance independently by SB-C and JSR, who classified each paper as potentially include or exclude according to the pre-specified eligibility criteria. Full text copies of potentially relevant texts were obtained by JS and SB-C. Another pilot stage was conducted amongst the four reviewers (GK, LS, JSR, SB-C) using 15% of the full text records, and eligibility criteria were further refined. Any disagreements between reviewers after piloting were resolved by discussion, with involvement of a third reviewer where necessary. All retrieved full texts were assessed for inclusion by at least two reviewers independently (a combination of SB-C, JSR, LS and GK), with involvement of a third reviewer from the team where disagreements occurred.

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Table 2: Inclusion criteria

Sample	<ul style="list-style-type: none"> - Texts must report on the activity of education researchers working in higher education. This includes teacher/practitioner educator researchers where employed by, and working in HEIs (i.e. not employed by schools/FE colleges).
Phenomenon of Interest	<ul style="list-style-type: none"> - Texts must report on the structures/processes influencing education research activities. These structures/processes might be: <ol style="list-style-type: none"> 1. formal, e.g., government and/or institutional authority structures, policies and procedures, financial resources; or, 2. informal, e.g., individuals' beliefs, assumptions, norms, values, attitudes, perceptions (see Prell et al., 2010). - The focus of the texts must pertain to the UK context.
Design	<ul style="list-style-type: none"> - Any study design/method (including any supporting theoretical framework), e.g., interview, questionnaire, observation, intervention trial, process evaluation, secondary data analysis, policy analysis, discussion/opinion/conceptual piece, etc. - Studies might or might not have participants.
Evaluation	<ul style="list-style-type: none"> - Outcome measures will depend on the purpose/methods used in each text but might include: statistics or performance indicators or participants' views, experiences, or beliefs.
Research type	<ul style="list-style-type: none"> - Qualitative, quantitative or mixed methods research. - Peer reviewed journal articles* - Doctoral theses - Research published from 1990-2020 <p>Excluded:</p> <ul style="list-style-type: none"> - Editorials, replies, lecture addresses** - Books, book chapters, book reviews*** - Research reports**** - Texts published in languages other than English.

*We were unable to place inter-library loans for a small number of journal articles (n=13) for screening due to Covid-19 restrictions (see below).

**We excluded editorials and replies as we assessed a sample of 15 that we located through database searching and found that such texts were usually short (e.g., 2-4 pages) and did not contain sufficient information to analyse for the purpose of this review. We excluded lecture addresses as we sought to focus on peer-reviewed literature.

***Following the Covid-19 pandemic and in accordance with lockdown restrictions in the UK in Spring 2020, we were prohibited from visiting libraries in person or placing interlibrary loans for electronic or paper copies of books/texts that could be shared amongst the research team. We therefore had to take the decision to exclude books and book chapters from the search.

**** We discovered that the authors of many relevant reports had subsequently published at least one peer-reviewed journal article from these reports (e.g., Leitch, 2009; Daugherty & Davies, 2011). We were keen to avoid duplicating findings from reports and articles in the analysis, so made the decision to exclude reports.

The number of studies identified, included and excluded at each stage of the review have been reported using a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram (Moher et al., 2009), together with reasons for exclusion at the full-text stage (see Figure 1).

Data extraction

A data extraction form was developed specifically for this review, guided by the full-text screening stage. The data extraction form was pilot tested on several studies included in the review and refined, in discussion with all six team members. Data extracted included: first author name; date; journal; geographical focus; methodology; and relevant findings regarding the formal and informal structures and processes influencing education research activities. Data was extracted from included texts by SB-C, JSR and LS, and double checked by another reviewer.

Quality assessment

Risk of bias and study quality were assessed for the 114 peer-reviewed journal articles using appropriate quality appraisal tools given the nature and design of the studies located. This was done to raise discussion of relevant issues within the texts, rather than as a basis for exclusion. We used the Critical Appraisal Tools from the Joanna Briggs Institute (<https://joannabriggs.org/critical-appraisal-tools>), including the *Checklist for Qualitative Research* and *Checklist for Text and Opinion*. After a pilot exercise to agree on decisions where 20 studies were assessed and discussed (JSR, SB-C, CB and LS), the quality of studies was assessed by one reviewer and checked by a second reviewer (JSR, SB-C, and LS). Table 3 presents the results of our quality assessment.

Table 3: Quality Assessment

Type	Reviewer 1 Decision	Reviewer 2 Decision	3 rd Reviewer Required	Total Papers Accepted Unanimously
Narrative (n=75; 65.8%)	Include (n=64; 85.3%) Unsure (n=11; 14.7%)	Include (n=70; 93.3%) Unsure (n=5; 6.7%)	n=15 (20%)	60 (80%)
Empirical (n=39; 34.2%)	Include (n=38; 97.4%) Unsure (n=1; 2.6%)	Include (n=37; 94.9%) Unsure (n=2; 5.1%)	n=3 (7.7%)	36(92.3%)
Overall:				96(84.2%)

From the 114 papers it was agreed unanimously by two reviewers that 84.2% met the Joanna Briggs Institute (JBI) criteria as applied (i.e., met over three quarters of the criteria on each checklist) and therefore were notional ‘includes’. The papers were split into two categories, that of narrative and empirical (see Findings section), with the former category having an 80% unanimous agreement and the latter at 92.3%. As can be seen from Table 3 there was more disagreement between the two reviewers on narrative paper inclusion (20%) than with the empirical (7.7%). Where there was disagreement a third reviewer was consulted. All 114 papers were confirmed as meeting the criteria – however, it should be noted that in reality we found it very difficult to make concrete judgements on quality, such as whether the line of argument in a narrative text was ‘logical’ (i.e. Criterion 4 on the JBI Checklist for Text and Opinion). We therefore see our quality decisions as a subjective interpretation.

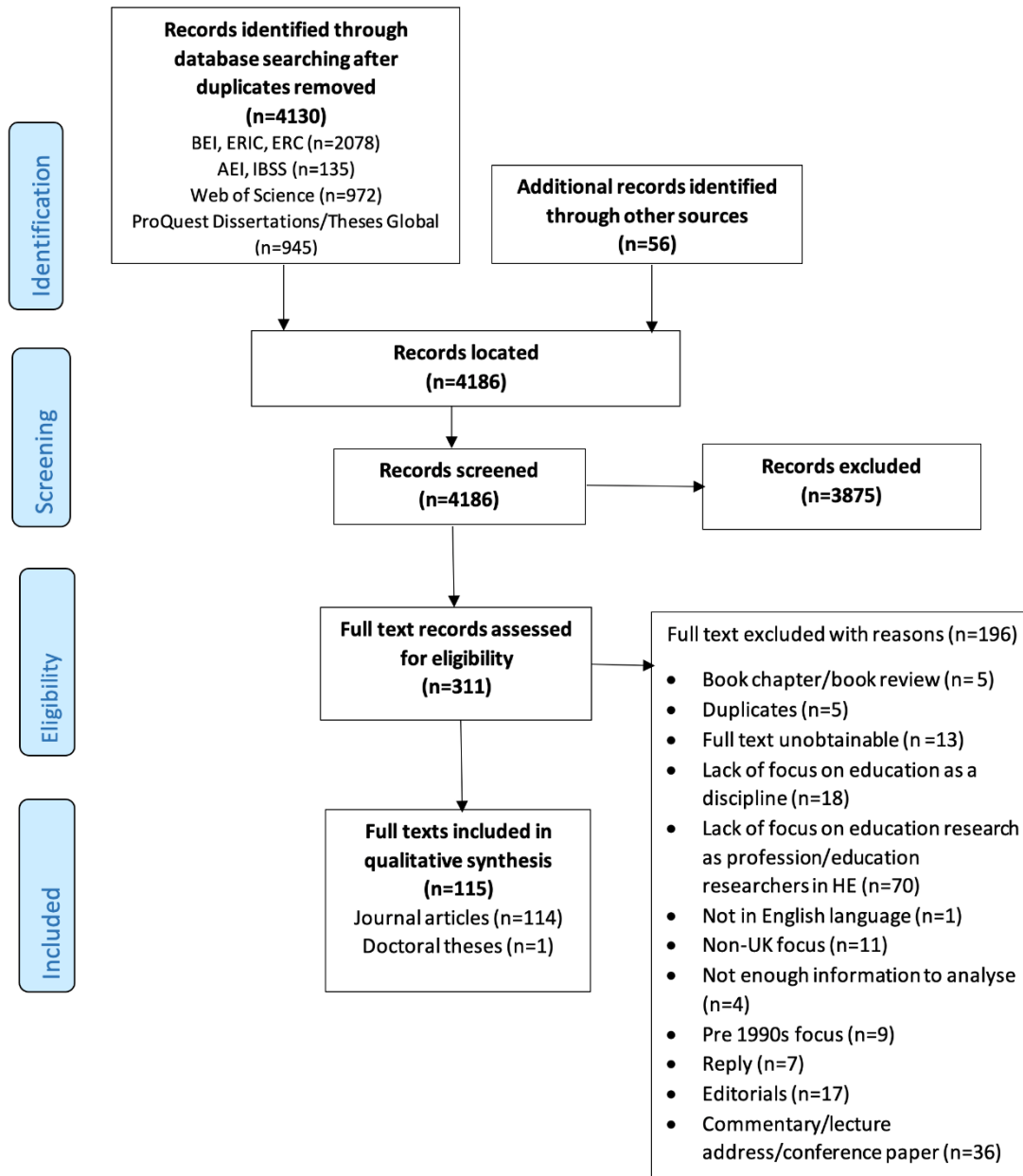


Figure 1: PRISMA flow diagram depicting the number of texts located, screened and included/excluded at each stage

Data analysis and synthesis

We used thematic synthesis (Thomas & Harden, 2008) to combine the findings from the located studies and identify key themes emerging from the texts. We imported included full texts into NVivo 12 software and read each text several times to gain familiarity with the content. LS then coded each text line-by-line to draw out formal and informal structures and processes. This was done via a combination of descriptive and in vivo coding (Saldaña, 2013). Analytic memos were created and initial ideas regarding the relationships between structures and processes, changes over time, and variation by country were recorded. GK and LS then worked together with the codes and collapsed them into a smaller number of categories, and emergent themes were then identified. These themes were discussed with and agreed upon by CB and DJ-S.

Findings

The findings of the review are presented organised by the three research questions. Overall, 114 peer reviewed journal articles matched the inclusion criteria and one doctoral thesis (Craig, 2012). We discuss these data sources in turn, but not all papers have been cited to aid brevity.

Type and kind of published research evidence

Peer reviewed journal articles

We start with a descriptive overview of the peer reviewed journal articles. A table of findings for the 114 articles can be accessed through this [link](#).

Date of publication

Figure 2 presents an overview of the number of papers organised by publication date. As discussed in the methodology, we included papers from 1990 onwards. There is an interesting trend in the papers included, suggesting a peak between 2004 and 2013 (with most papers in 2007, n=13) – this is when the *Research Assessment Exercise* (RAE) (last results in 2008) was replaced by the *Research Excellence Framework* (REF) (first used in 2014 to assess the period 2008-2013), perhaps indicating that this change generated some discussions around the nature and quality of education research. An alternative explanation is that there might have been issues with the implementation of the RAE that generated discussions around 2007, and that contributed to the formation of the re-developed REF. Before and after this peak, interest into the nature of education research in the UK appears to be relatively stable.

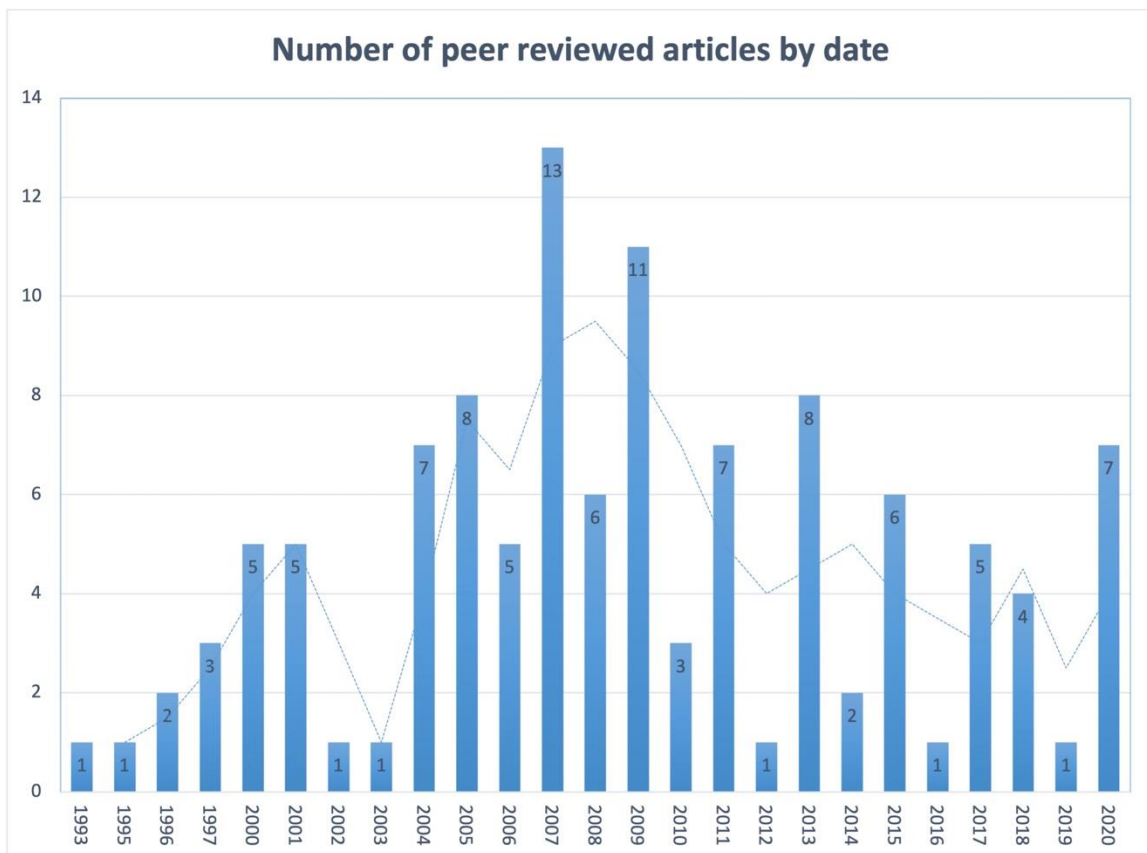


Figure 2: Number of peer reviewed articles by publication date (114 papers in total)

Geographical mapping

With regards to UK nation of focus (Figure 3), most papers focused on the UK as a whole (n=79), followed by a sole focus on Scotland (n=13), England (n=10), Wales (n=4) and Northern Ireland (n=2). A small number of studies spanned England and Scotland (n=6).

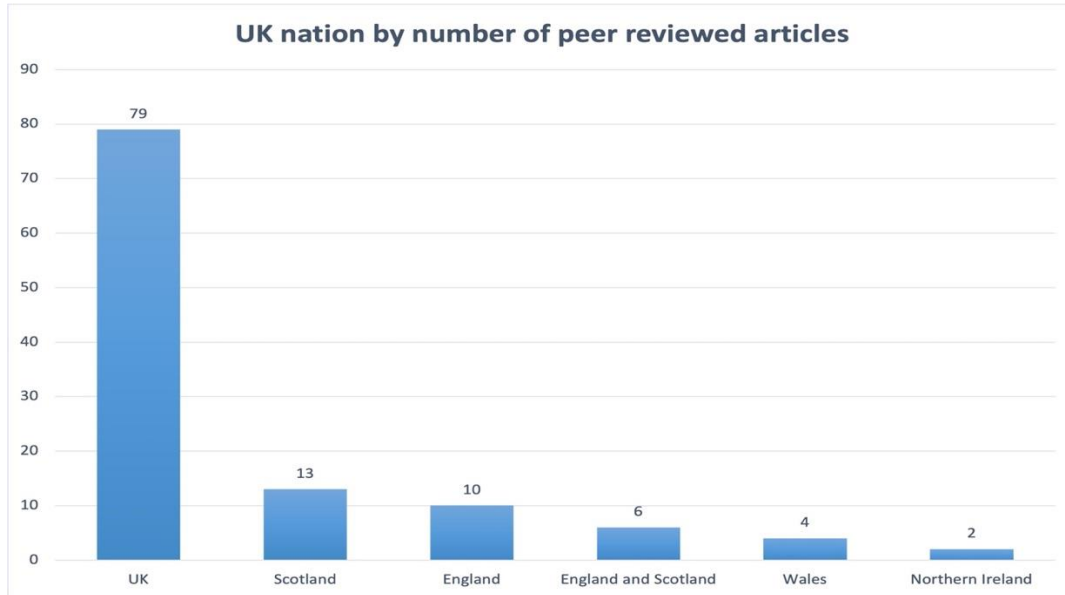


Figure 3: Number of peer reviewed publications by UK nation

Whilst 79 of the studies indicated that they were focussing on UK structures and processes, discussion in many seemed implicitly to be on the English context. The number of studies published explicitly and solely about other nations was low. The reasons behind the variation in the number of papers focussing on each nation might be explained based on the relative number of HEIs (with a department of Education) and the number of staff working in those departments (e.g., REF returns from Wales and Northern Ireland suggest fewer staff engaged in research: REF 2014 results [https://results.ref.ac.uk/\(S\(5ignumywgqh4ra3nurgzuvz\)\)/Results/ByUoa/25](https://results.ref.ac.uk/(S(5ignumywgqh4ra3nurgzuvz))/Results/ByUoa/25)). Alternatively, this could be due to the framing of the research questions for this review which might be more in line with the debate/s in particular nation/s.

Journals where papers were published

The 114 papers were published in a range of diverse journals (55 different journals), all with an educational focus. Thirty-five journals were represented by a single paper (see [link](#)). The most represented journal was the *British Educational Research Journal* (BERJ) with 14 included papers; it was followed by the *European Educational Research Journal* (EERJ) (n=7), the *Journal of Education for Teaching* (n=6), the *Scottish Educational Review* (SER) (n=5), the *British Journal of Educational Studies* (n=5), the *British Journal of Sociology of Education* (n=5) and other journals presented in Figure 4. Many of these journals have a strong theoretical focus (for instance, *Journal of Philosophy of Education*), but there are also some practice-oriented journals, such as *Teacher Development*. It is also noteworthy that these are journals with an international readership, and that not all journals are UK-based (e.g., *Spanish Journal of Pedagogy*).

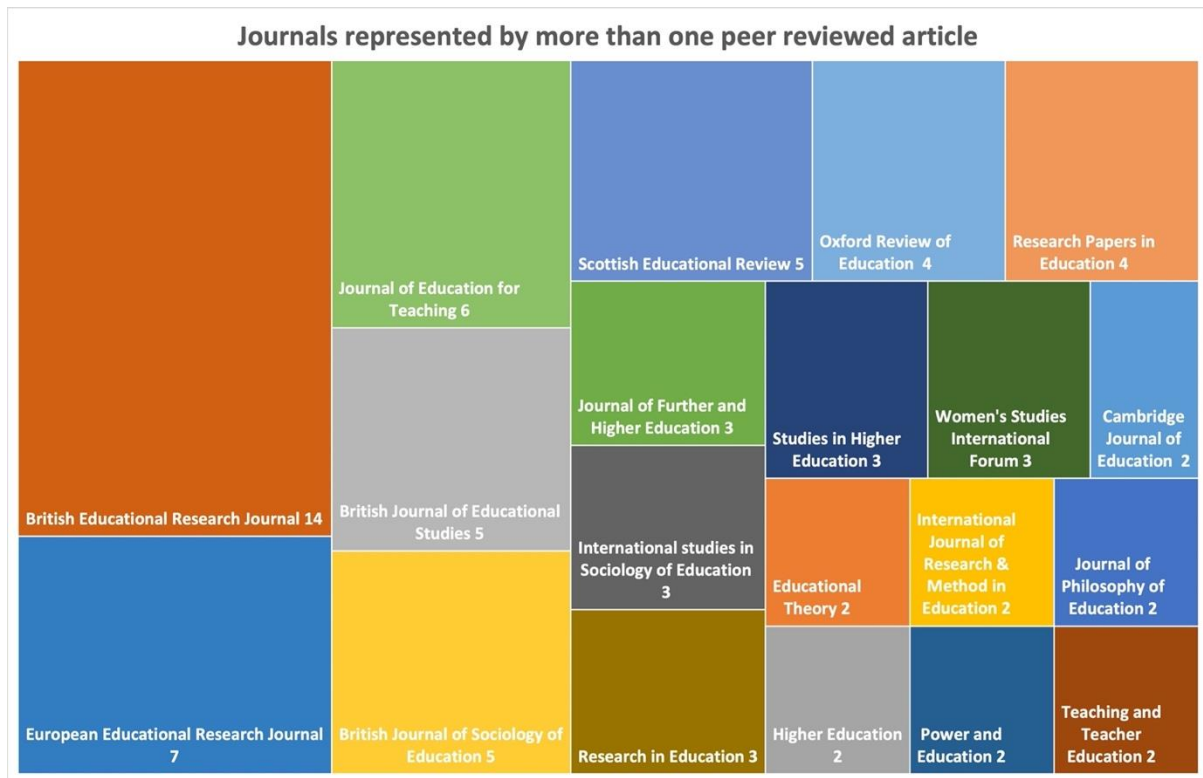


Figure 4: Journals represented by more than one peer reviewed article

Although the reviewed papers were published in over 56 journals, the majority were published in journals aligned with key education academic bodies (e.g., BERA) and university presses (e.g., Oxford and Cambridge). BERA seems to be leading these conversations as 12% (n=14) of the studies were published in BERJ, with the next highest being through EERA’s journal EERJ with exactly half of that number (6%, n=7), and SERA aligned SER (4%, n=5). Other studies were published in journals with a specific focus on teaching, philosophy and theory, sociology, and FE and HE. This spread of journals appears relatively healthy.

Type of studies and methodology

Most of the papers were narrative pieces (n=71) covering a wide range of topics from critiques of the ‘what works’ agenda (e.g., Atkinson, 2000), to aspects of researcher identities (e.g., Lucas, 2007) (Figure 5). To distinguish between narrative and empirical studies, we used guidance on classifying research approaches, methodologies and methods in systematic reviews produced by the Joanna Briggs Institute (Godfrey & Harrison, 2015). We defined narrative texts as those where the author/s presented a perspective or opinion, discussed a project, or reviewed literature in an unsystematic manner without a clearly specified methodology. We defined empirical texts as those where primary and/or secondary data had been obtained by the author/s and was analysed using an established data analysis technique (e.g. thematic analysis, discourse analysis, content analysis).

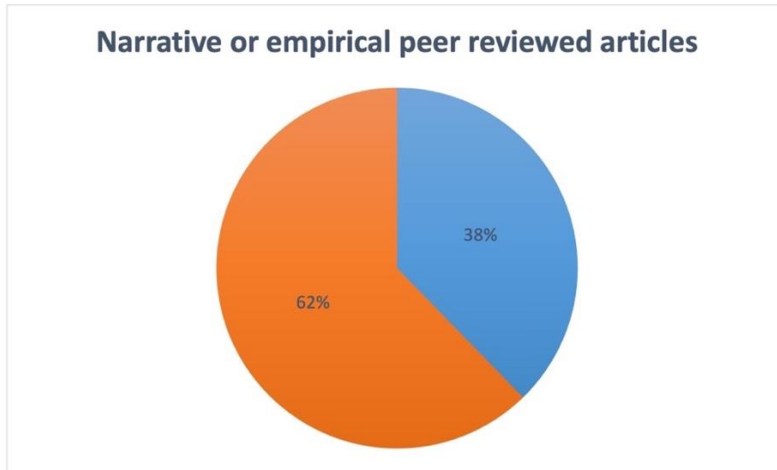


Figure 5: Narrative or empirical peer reviewed articles.

The main methodologies/approaches employed in the narrative papers are presented in Figure 6, with most studies illustrating the author/s' perspectives and opinions (n=71).

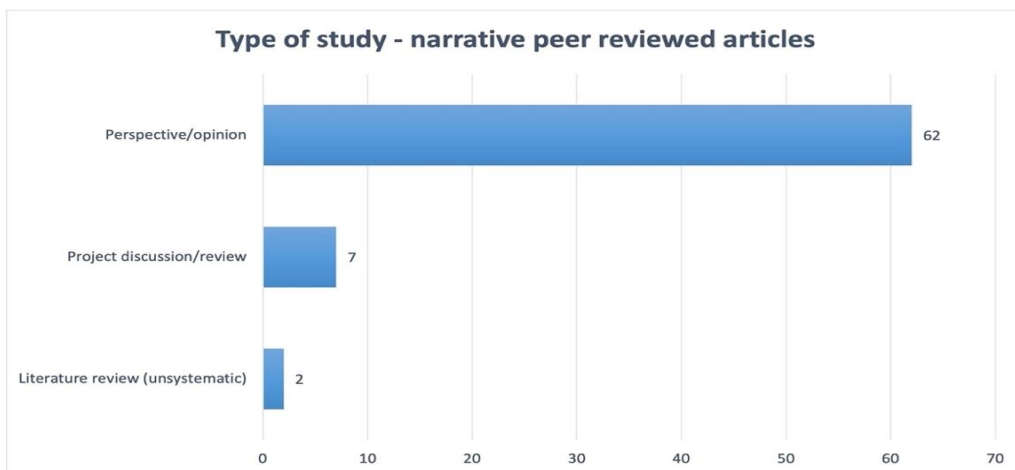


Figure 6: Main methodologies/approaches – narrative peer reviewed articles.

Of the 114 papers, 62% (n=71) were narrative papers, that included opinion pieces in the main (n=62, 87% of narrative papers). Most narrative papers were sole authored apart from four authors writing multiple narrative papers. There was a dearth of empirical studies despite a substantial period of 30 years (n=43, 38%; averaging at 1.43 empirical studies/year).

From the remaining papers, 43 involved the collection of empirical data, including questionnaire, interviews or documentary analysis, and involving largely qualitative methods or secondary analysis. Figure 7 represents what we interpreted as being the primary method used in each of the studies (i.e., the reviewers felt the paper focused most substantially on interrogating data generated by this method). Interviews were the most popular method used as a basis for core discussion (n=19, with different types of interviews specified including 'semi-structured' (presumably face-to-face), 'telephone' and 'email').

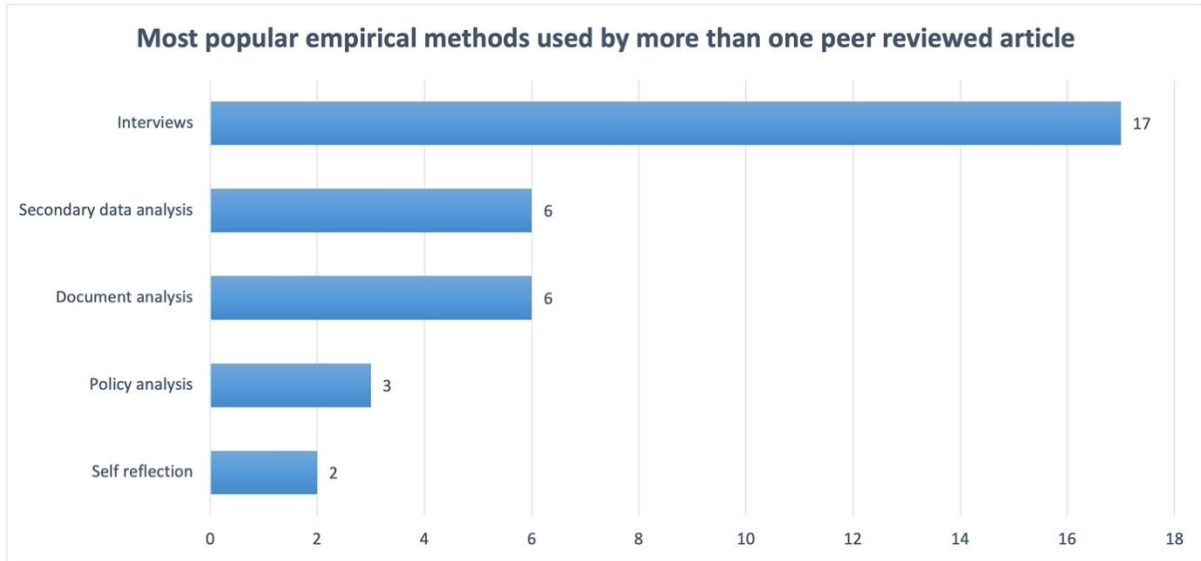


Figure 7: Main methods used – empirical peer reviewed articles.

Table 4 shows a more detailed breakdown of the methodologies/methods used in the 43 empirical papers, the sources of the data, and the participants. Overall, 29 papers employed a single method, and 14 employed multiple methods. The latter might have enabled the authors to build up a more comprehensive data set and triangulate methods. There were a rich variety of methods used, including self-study, time logs and bibliometric analysis. Perhaps unsurprisingly, most of the studies conducted with human participants involved education academics working in HEIs. Participants had different roles and occupied different levels in the HE system (i.e., research assistants, lecturers, senior lecturers, professors) (n=33 separate papers). A small number of studies also contained senior HEI staff/managers (e.g., Heads of Department, Directors of Research) (n=6) and/or education stakeholders in their sample (e.g., policy-makers, education research journal editors, individuals from funding bodies) (n=4). These were all interview-based studies. Given that this review spanned a period of 30 years, there appear to be a low number of studies conducted with these latter two groups – although it must be acknowledged that a relatively low number of individuals might occupy these positions in the first place.

Of the studies without human participants (i.e., involving document analysis, secondary data analysis), stated sample sizes ranged from one piece of policy in Holligan (2020) (i.e., A Research Strategy for Scottish Education, 2017), to 8,691 individual RAE returns to education in Gorard et al. (2004). The qualitative studies with human participants with a stated sample size ranged from one (e.g., Leitch’s (2018) autoethnographic ‘life history’ account of her career as an education academic), to 40 (i.e., Deem & Lucas (2007) interviewed academics working in universities in England and Scotland). Questionnaire studies ranged in sample size from 521 participants (Gorard et al., 2004) to 28 participants (Murray & Male, 2005).

EDUCATION RESEARCH IN THE UK

Table 4: Breakdown of methodologies/methods used in empirical papers, sources of the data, and participants

Methodology and/or data collection methods*/source (where applicable)	Frequencies of papers	Types of participants**
Interviews (i.e., face-to-face, group, email)	24	Academics (i.e., lecturers, senior lecturers, professors) x 22; senior HEI staff/managers (e.g., Head of Department, Director of Research, those responsible for REF submissions) x 6; education stakeholders (e.g., policy-makers, education research journal editors, individuals from funding bodies) x4
Questionnaire	6	5x education researchers; 1 x teacher educator researchers
Autoethnography	2	2x professors of education
Self-study/self-reflection	2	1x lecturer/senior lecturer; 1 x professor of education
Collective memory work	1	1x early career researchers
Observation	1	1x lecturers
Time logs	1	1x teacher educator researchers
Document analysis (e.g., REF impact case studies, education research projects funded by ESRC)	10	N/A
Secondary data analysis (e.g., Scottish government research contract funding data, data on REF submissions)	10	N/A
Policy analysis (e.g., English, Scottish, Welsh, NI government teacher training frameworks, education research strategies)	3	N/A
Bibliometric analysis (i.e., published teacher education research articles)	1	N/A
Video analysis (i.e., BBC news reports with education academic)	1	N/A

*Some studies used multiple data collection methods

**Numbers refer to number of papers

Looking at the first authorship, nineteen authors published more than one paper that was included in this review (n=52). Of these, 10 first authors wrote two papers each, six wrote three papers each, one author four, and two authors five papers each. Apart from seven authors who either published all narrative (n=4, Brown, Hodkinson, Reay, two narrative papers each; Hammersley three papers) or all empirical papers (n=3, Hulme, Marques, two papers each; Holligan, five empirical papers between 2011-2020), 12 authors published a mix of empirical and narrative papers. In some cases, there were similar topics explored through the multiple papers, such as Furlong in both papers focussed on the impact of RAE, and Oancea focussed on performance and accountability in one narrative paper and two empirical papers. However, in some other cases the focus was on multiple topics, for instance,

Holligan’s five empirical papers focussed on departmental research cultures (n=2), research funding structures and constraints (n=1), researcher identities (n=1), and evidence-based policy and practice (n=1). Similarly, Gorard and colleagues focussed on the role of BERA and government influence each in two narrative papers, and in the empirical paper surveyed education academics about methods they used in their research.

Doctoral thesis

In addition, there was a single PhD thesis that met our inclusion criteria (Craig, 2012). The thesis explored the role of publications in the work of academics in mathematics education in England. The author conducted nine semi-structured interviews with academics and conducted an ‘exploratory social network analysis’ using publication data from ‘fourteen mathematics education research journals over a ten-year period’ (p. iii). This was done in order to consider patterns in researcher collaborations. We felt that the themes emanating from this thesis were well represented in the peer-reviewed literature, so did not include this in the analysis (see below).

Main themes relevant to understanding formal and informal structures and processes

Formal structures and processes affecting education research

This section examines the main formal structures seen to be affecting education research in the UK. We defined formal structures as structures and processes associated with educational policy, government agendas, government and/or institutional authority structures, and funding resources and priorities (see Prell et al., 2010). Of the 114 papers, five papers did not appear to discuss any formal structures based on the definition above (Figure 8).



Figure 8: Peer reviewed articles discussing formal structures and processes.

We identified the following formal structures in the papers, organised according to broad themes (Table 5).

Table 5: Formal structures according to theme.

Formal Structures – Themes
Culture of performativity and accountability
The funding regime
Impact agenda
'What works' agenda
Heated debates
Professional bodies, values and ethics

Culture of performativity and accountability

A number of articles (n= 27) discussed aspects of the growing agenda of performativity and accountability in HE and the field of education research that has led to an audit culture (Lawy & Armstrong, 2009). The impact of this culture has materialised in a number of different ways, including increasing importance placed on ratings and rankings (e.g., national and international league tables) leading to a culture of competition between universities, departments of education, and individual researchers (e.g., Marques & Powell, 2020); a growing impact agenda (e.g., Papatsiba & Cohen, 2020); and the pressures of the research assessment exercises (e.g., O’Connell, 2019). With regards to this culture, Oancea (2007) notes that accountability is seen as a way to achieve objectivity, consensus and legitimacy in the field of research – and is perhaps not surprising given that the government is a key funder of HE education research and wants to ensure that funds allocated offer value.

Among the most discussed accountability tools are the research assessment exercises (RAE until 2008 and REF still in effect). The RAE was first used in 1992, with a number of authors noting that education as a discipline has not historically performed well in the RAE and showed little improvement in metrics in the years before the REF was introduced (2014) (e.g., Gorard, 2004; McNay, 2003; Whitty, 2006) – although Whitty (2006), amongst others, highlights that this does not necessarily reflect the quality of all education research. A side-effect of years of ‘low’ RAE results for education was that many newer universities received little or no funding compared to more established research-focused universities such as those in the Russell Group (Tanner & Davies, 2009; Furlong, 2011). This was seen as reinforcing a hierarchy of institutional prestige and, more specifically, a hierarchy of education departments. A similar effect has been seen as produced by the REF, with Smith (2015) writing that: ‘the channelling of research funding to the REF “winners” is beginning to result in a de facto degree of stratification’ (p. 747).

Both the RAE and REF were seen as strongly driving behaviour in HE and, in turn, education departments (n = 13). When reading this section, it is important to keep the year of publication of the texts in mind because over time changes have been introduced due to wider discussions of the type that are reported here. For example, Winch (2001) writes that RAE requirements have often led to decisions and choices amongst academic managers and individual researchers that are perceived

as appealing to the panels judging the quality of submissions, thus affecting the trajectory of some research pursuits.

It has been argued, for example, that longitudinal studies could be discouraged by the timeframes of the exercises and that interdisciplinary research might not always fit well with the assessment criteria (McNay, 2003). However, interdisciplinarity has arguably more recently become greater recognised in the REF with the option of HEI Units of Assessment flagging interdisciplinary research and identifying them for cross-referral to other disciplinary panels (<https://www.ref.ac.uk/about/interdisciplinary-research/>).

When discussing the research exercises in relation to impact, Colley (2014) notes that critical research which does not satisfy powerful research users' expectations can potentially be marginalised – with Marques et al. (2017) highlighting that certain topics and themes tend to become 'fashionable' in different research assessment cycles. Others argue, though, that the sector is learning how to 'play the game' (Cotton et al., 2017, p. 1633) and 'reverse engineer' to achieve best individual or departmental results (Marques et al, 2017, p. 837). For example, in the located studies, there was evidence of academic managers submitting only a small number of staff for the RAE/REF to create a stronger portfolio, recruiting successful academics from other institutions and overseas, and creating new research-related job roles in advance of the RAE/REF submission cycles (e.g., Furlong, 2011; Oancea, 2014; Marques et al., 2017). It was noted that more prestigious universities were those more likely to be able to mobilise the capitals necessary to engage in this game playing (Torrance, 2020) – in effect creating a virtuous circle.

For Wilson and Holligan (2013), there is evidence of a lack of resistance to the culture of performativity and accountability within education. However, some positive influences of the research assessment exercises have also been acknowledged, e.g., 'it does make you get up and write up research for publication' (as one participant reported in Oancea, 2014, p. 90) – or the development and enhancement of the research culture of education departments (Marques et al, 2017).

There was also evidence of ratings and metrics creating a hierarchy of disciplines within HEIs, with education departments seen as having to compete internally with other disciplines for resources and reputation. It was noted how 'good' performance in the research assessment exercises was crucial for education departments to be valued institutionally – in part to counter entrenched assumptions that education is of lesser status due to its practical orientation (Furlong, 2011; Marques & Powell, 2020). However, the Stern Review (2016) has sought to address these criticisms by giving weightage to research impact and it will be important to undertake future studies on these topics after REF2021.

It was interesting to note that we located no papers in this review that discussed the Teaching Excellence Framework (TEF, 2015) and the implications this new form of assessment might have for education researchers' research activities (e.g., an increasing emphasis placed on 'quality' teaching instead of 'quality' research). It could be the case that currently little research has considered the TEF in relation to this – or, perhaps more likely, that the search terms we used in this review which focused on 'research' did not capture this literature. We therefore cannot make claims about the TEF as a structural force in shaping education researchers' research activity in this paper.

The funding regime

A culture of performativity and accountability also has implications for the way research is funded and conducted (Finlay et al. 2013), with funders (i.e., funding bodies such as the ESRC and external contractors/private sector organisations such as the government and charities) seen as controlling the research agenda (n=13, e.g., Marshall et al., 2015; Leitch, 2018).

Funders are often perceived as prioritising the use of particular research approaches, and also determining the content of research (i.e., projects put out for tender). This has been common in the sciences for some time but is now also becoming influential in the social sciences including education research (Lawy & Armstrong, 2009). A side effect of this external control is an increased focus on evidence-based practice (discussed below) that is seen as being championed by both funders and governments (e.g., Biesta, 2007; Constable, 2018) and the gradual marginalisation of perspectives and methodologies influenced by the arts and humanities. It was argued, for example, that narrative research, arts-based research and ethnographic studies are less likely to be looked upon favourably by funding panels (Finlay et al., 2013; Marshall et al., 2015; Leitch, 2018). With regards to the tendering process, St Clair and Belzer (2007) write that ‘if the methodological, philosophical and quality aspects of the research are defined in advance, all that remains is to determine who will offer to conduct it most cheaply’ (p. 484). Writing as far back as the mid-1990s, Simons (1995) also emphasises the notion that education research as being independent of politics or of specific political interests (understood as in government agendas and not broader ideologies) is a thing of the past; ‘educational research funded by government has an agenda set by the ruling party, controlled by the ruling party and used by the ruling party’ (p. 437).

One of the main concerns for academics appears to be the ‘unwritten’ requirement to generate research income based on broader agendas at the expense of personal interests; with such demands often generating much dissatisfaction and, in some cases, forms of resistance (Lawy & Armstrong, 2009; Rowbottom & Aiston, 2011; Casey & Fletcher, 2016). For example, there was some evidence of researchers obtaining grants from key funders and then working ‘from within’ (i.e., making small changes to proposed methodological approaches) in order to satisfy personal research agendas (e.g., Lawy and Armstrong, 2009; Finlay et al., 2013).

The reputation and esteem of an HEI (as reflected in metrics and the media) was also seen as related to levels of funding awarded, and the ability for researchers to pursue a more autonomous research agenda. Four papers discussed how education researchers working in more ‘prestigious’ institutions might be more likely to be awarded grants/research council grants (e.g., Lawn & Furlong, 2007; Papatsiba & Cohen, 2020). This was generally linked with two factors: 1. that prestigious institutions are more likely to have good research infrastructure and capacity in place and so can develop stronger bids; and 2. the assumption that researchers in prestigious institutions are more likely to produce high quality work (Papatsiba & Cohen, 2020).

Impact agenda

A relevant matter to REF and funding regimes is the growing emphasis on demonstrating research impact, which was discussed in seven papers. Francis (2011), for example, discusses how the discourse of ‘impact’ has gradually dominated education research and its aims – through the REF and the subsequent redefining of research priorities within education departments. Writing in 2011, Francis argued that impact was often something that academics added later on – in that there was a ‘retrospective construction of narratives’ (p. 5) to fit in with the REF criterion.

Zapp et al. (2017) make a similar point when they argue that research proposals to research councils (and the ESRC in particular) now include a separate section to estimate the potential impact of the work, with such funder requirements seen as shaping and driving ‘the research aims and the cognitive development of a discipline’ (p. 391). O’Connell (2019) found that the impact agenda is often perceived by education researchers as having negative effects, including the valuing of certain types of research, internal organisation rankings of departments based on impact, and the strengthening of a managerial culture within education. Positive effects were also reported, however, including the opportunity for departments to extend the reach of their research, and the chance for those engaging in more applied, practice-based research to gain greater recognition for their work (e.g., Jerome, 2020).

There was a general sense from the literature that education researchers are increasingly under pressure to demonstrate the impact of their research (Laing et al, 2017); especially in the form of impact cases studies, which are a prominent feature of the REF and being given increasing weightage, now forming 25% of the split in REF2021 as compared to 20% in REF2014. For example, Marques and Powell’s (2020) study found that the emphasis on impact case studies had changed academic behaviour, with one academic they interviewed asserting that ‘Institutions are constantly on the lookout for potential impact case studies. They start to draft them and refine them from very early on [and make] political choices about which ones to strengthen even more’ (p. 841).

Jerome (2020) calls this ‘performativity in action’ and writes that: ‘academics feel compelled to perform to external agendas with a degree of inauthenticity as they respond to the (policy-led) priorities established by government and start to second-guess what outcomes they might achieve in order to project desirable impacts’ (p. 11). This is often reflected in the impact case studies produced that, Jerome argues, might emphasise superficial elements or rely on the writer’s skill to produce a convincing and well-written narrative. Francis (2011) also states that academics might lack the skills to engage user groups and demonstrate impact; however, as this paper was published 10 years ago, one needs to be mindful that universities are becoming better at public engagement and often provide staff with training and opportunities to improve this.

The increased emphasis on impact is also discussed with regards to the broader aims of education research, and education as an intellectual endeavour. Rees and Power (2007), for example, note that: ‘conventional distinctions can be drawn between research which is ‘curiosity-driven’, aiming to contribute to the development of knowledge and understanding, and research which – to varying degrees – is defined in terms of practical problems and their solution’ (p. 88). Francis (2011) similarly writes that: ‘clearly not all research in education can or should have direct relevance or utility for educational practice – ‘blue skies’ research remains valuable, here as in other disciplines’ (p. 6). The distinction between applied and ‘blue skies’ research is further discussed in the next sections.

‘What works’ agenda

Critiques about education research have focused on its perceived lack of relevance to practitioners, the lack of ‘scientific’ approaches (such as RCTs and systematic literature reviews), and also a lack of rigour (Whitty, 2006). For instance, twenty papers discuss elements of the 1997 talk that David Hargreaves delivered to the Teacher Training Agency, where he argued that teaching was not a sufficiently research-based profession, that education research was poor value for money, and could not ensure the quality of school education. This talk has seemingly fuelled a 25-year long debate about the quality of education research. It has been argued that the talk caused a ‘moral panic’

(Pirrie, 2001, p. 125); and Hargreaves' arguments have since been heavily questioned (e.g., Atkinson, 2000).

Biesta (2007) notes that Hargreaves raised two main issues: that education research should be more practically relevant and that it should support a transformation of educational practice into evidence-based practice. Twenty-five of the papers in the review critically examined issues of evidence-based practice; particularly the perceived high value placed on RCTs and the growing emphasis on systematic literature reviews (Oakley, 2006). This trend was described as part of shifting government agendas (Pollard, 2006; Lawy & Armstrong, 2009), and can in turn be related to an understanding of the state as determining, producing and consuming research (Rees & Power, 2007). In addition to David Hargreaves' talk, Tooley and Darby's (1998) review of educational research commissioned by OfSTED, and the contemporaneous Hillage Report (Hillage et al. 1998) were pinpointed by a number of authors as key 'turning points' in the field of education research, and as sparking long-standing questions as to the quality of such research in the UK (e.g., Oancea, 2005; Lawy & Armstrong, 2009; Oakley, 2006).

Heated debates

These arguments and counterarguments have led to what Byrne and Ozga (2008) term a series of 'rather heated' (p.378) or acrimonious debates within the academic community about the relationship between education research with policy and practice (e.g., Gorard, 2004; Oancea, 2005; Rees & Power, 2007) that reflect different perceptions of the purposes of education research (i.e., evidence-based practice vs curiosity vs capturing 'voices' vs to advance theory). It has also been argued that research deemed to be more relevant to policy or practice is not necessarily more rigorous, especially when political bodies put forward research agendas and not academics (Gorard, 2002).

A similar point has been raised by Hammersley (2005b) who writes that: 'policy or practice cannot be based on research, in any exclusive sense, and that to try to make it research-based will distort either research or practice, or both. The most likely outcome [...] is a damaging effect on research' (p. 321). He argues that, although research has a role in policymaking and practice, seeking to develop 'research-based policymaking practice' (p. 321) might result in: increased bias; further decline in funds for studies not seen as crucial by policy makers or practitioners; a focus on research that seeks to answer questions that cannot be answered effectively; and a reduction of turn-around time for projects which might further negatively impact the quality of education research. Munn (2005) discusses this same issue with regards to a distinction between applied and 'blue skies' research, with the latter being 'unpredictable, high risk for funders and usually not intended to have a direct and immediate effect on policy' (p. 19).

Professional bodies, values and ethics

Another formal structure that might be regarded as shaping the work of education researchers in the UK is that of the professional bodies that lead the field, e.g., BERA and SERA. Pollard (2006), for example, discusses the role that BERA plays in organising events, conferences, and facilitating the dissemination of ideas amongst the educational community through its journals and Research Intelligence magazine.

There was also discussion of the wider professional and ethical values that education researchers need to uphold in order to maintain trust and integrity in the profession. Some authors mentioned

the *BERA Ethical Guidelines* that were established in 1992 as providing a framework for collective action (e.g., Simons, 1995; Rowbottom & Aiston, 2011). However, both sets of authors raise questions as to whether all sponsors and education researchers always abide by these ethical guidelines in practice – particularly given the increasingly pressurised and performance driven nature of academia. Indeed, Rowbottom and Aiston (2011) contend that: ‘the competitive nature of the tendering process will mean that there is always someone willing to do whatever the funding bodies ask for’ (p. 651).

Some authors raised questions as to whether the need to seek external funds forced researchers to pursue projects that did not necessarily align with their personal values (e.g., see Casey & Fletcher, 2016), or make dubious decisions to cater to funder requirements, e.g., providing the funder with ‘what they want to hear’, or signing over data access and control rights (Rowbottom & Aiston, 2011). Colley (2014), for example, reflects on the tensions she and her colleagues experienced when conducting a research project on the youth support service Connexions, when the findings they obtained presented a negative portrayal of the service. Colley documents the research team’s attempts to disseminate the findings out of a sense of moral duty and responsibility to academic freedom, but also the hostility they faced from certain UK policy makers and stakeholders who sought to publically criticise the rigour of the research.

Informal structures and processes affecting education research

This section examines the main informal structures and processes identified in this review. We found that from the 114 papers, 63 reported on some kind of informal structure affecting education research in the UK. We defined informal structures as structures and processes associated with institutional cultures, career priorities, matters of identity, as well as individuals’ beliefs, assumptions, norms, values, attitudes and perceptions (Prell et al., 2010). Out of the 114 papers, 51 papers did not discuss any informal structures based on the definition above (Figure 9).

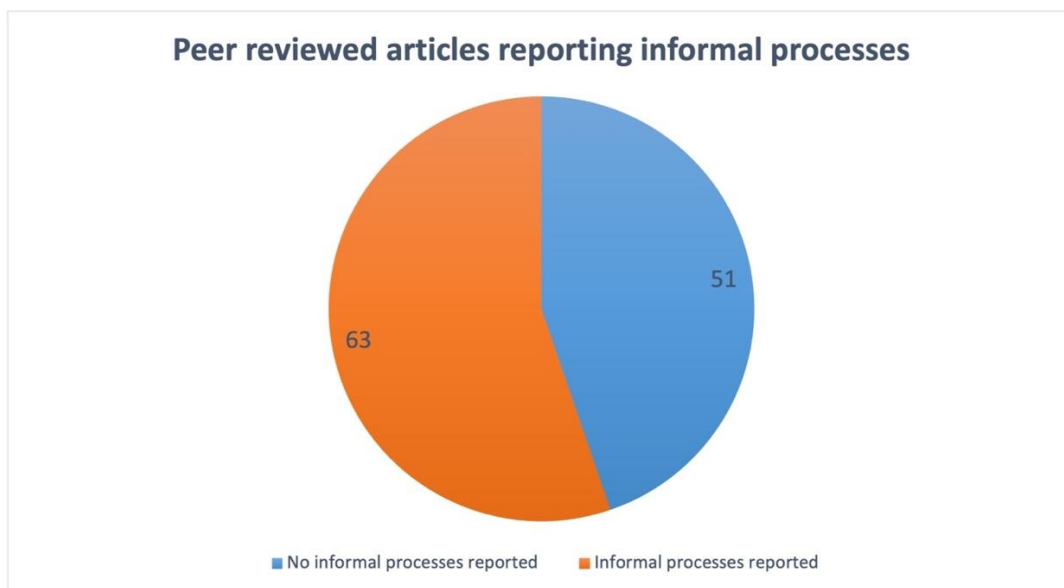


Figure 9: Peer reviewed articles discussing informal structures.

We identified the following informal structures in the papers, organised according to broad themes (Table 6).

Table 6: Informal structures according to theme.

Informal Structures – Themes
Academic pressures
Affective issues
Non-traditional academics
Second-career researchers
Career stages
Departmental cultures

Academic pressures

One of the informal structures discussed related to academic pressures and the heavy demands placed upon academics working in HE education departments (n=20, e.g., Deem & Lucas, 2007; Holligan, 2011). Such pressures appeared to be generated through the dual demands of teaching alongside research, and it was noted that a delicate balance was required to fulfil both obligations satisfactorily. Eleven papers discussed the heavy teaching loads given to academics – particularly early career researchers and staff responsible for initial teaching training (ITT) – which limited the time such individuals could devote to research (e.g., Skelton, 2004; Sikes, 2006a; Read & Leathwood, 2018). Research was also widely discussed as being highly valued both within HEIs and by academics themselves, with the implication being that teaching was of lesser importance and could ‘get in the way’ of research (Holligan, 2011; Furlong, 2011) – although there was some indication that certain groups (e.g., teacher educators who had previously worked in the school sector) could place higher value on teaching than research (Calvert et al., 2012; Hemmings et al., 2013).

Pressures relating to research included publication demands; in particular, the need to consistently produce a high quantity of high-quality publications (Marques et al., 2017). This was seen as important not only in order to fulfil personal goals and satisfy one’s intellectual curiosity, but to meet the demands of the research assessment exercises (Oancea, 2014). This, in turn, was seen to justify one’s position both within academia and one’s department, ensuring continued employment. Marques & Powell (2020) detail the need for academics to build up a ‘good’ research profile in order to generate academic capital and become a profitable asset to their employing institution in an increasingly marketised sphere. Another strong research pressure to emerge related to external grant capture; the academic work environment was described as particularly competitive, with authors writing about academics’ ‘frenetic attempts’ to secure funding (Holligan, 2011, p. 54). It was noted that this could place academics under considerable stress, given that their job security, probation and promotion prospects were dependent on this (Read & Leathwood, 2018) – yet paradoxically, the funding environment can be seen as growing ever more turbulent in recent times.

The most precious commodity in education departments seems to be time; or more specifically, the time that one can devote to research (Deem & Lucas, 2007; Furlong, 2011; Sharp et al., 2015). It is notable that time can be secured by winning grants that, in turn, can bring elevated status, publications and research students (Holligan, 2011). Finlay (2013) and Francis (2011) discuss how time restrictions can also have a negative impact on research design and dissemination.

Being an academic also means job uncertainty for some, and there was discussion of recent shifts in HE employment policy towards fixed term and temporary contracts. These positions were often said to be held by younger researchers, women and ethnic minority staff (e.g., Reay, 2000; Read & Leathwood, 2018; Mahony & Weiner, 2020). Reay (2000, 2004), for example, discusses the challenges that contract researchers can encounter based on her past experiences, namely being undervalued despite doing much of the 'spadework' (p.15) on projects – which can often lead to frustration and anxiety. Researchers on a fixed-term contract might also feel that they cannot make an intellectual contribution to research given that they do not have ultimate control over projects (Rees et al., 2007) – and, therefore, can feel that they are not 'real academics' (Read & Leathwood, 2018, p. 341).

An additional issue raised in the papers was that of life-work balance. Six papers reported that academics often work significantly more than their contractual hours, including during evenings and weekends (e.g., Sikes, 2006a). Heavy workloads were also said to impact on family life and, in some cases, academics' decisions as to whether or not they might be able to have children and manage this alongside their job. For example, an academic in Holligan's (2011) study stated: 'it can take a dreadful toll from your personal life. I am not surprised that many of my colleagues don't have children ... I have got four kids, but thankfully I have got a very understanding partner' (p. 67). In this way, a healthy life-work balance is often seen as an 'unattainable chimera' (Sikes, 2006a, p. 564). It is important to note that these work conditions were not described as temporary or a response to extreme and unanticipated circumstances, but as the norm. In terms of the origin of this situation, Wilson & Holligan (2013) notes that: 'work intensification [can be] attributed partly to performance-driven research, coupled with demanding research grant and publication targets at a time of severe competition to gain external funding' (p. 230).

Affective issues

There were also reflections on affective issues. Four papers discuss the difficulties in dealing with personal criticisms from other academics, such as when sending out papers and research proposals for peer review, or when research is published and enters the public domain. Such judgments have been said to reveal that one's 'rational mind cannot be separated out from [their] emotional self' (Hodkinson, 2004, p. 18). Indeed, academics were discussed as having an emotional and personal investment into their approaches and ideas, and therefore criticism can be keenly felt (Lefstein, 2008).

Others documented the need for academics to possess certain traits that might make them more likely to succeed in the profession; namely, self-esteem, confidence, and an ability to deal with rejection (Holligan, 2011). It was noted that some staff members might be more likely to possess these traits than others; for example, it was suggested that teacher entrants and younger academics might have less confidence in conducting research due to their relative inexperience, lack of training, and/or conflict between one's pre-established professional identity and new academic identity (e.g., Murray & Male, 2005; Hemmings et al., 2013).

Perhaps surprisingly, only one paper discussed the positives and pleasures of academic life in a significant way (Wilson and Holligan, 2013); these authors reported that academics could gain pleasure from collaborations, publications and research activities.

Non-traditional academics

A very small number of papers discussed the experiences of women (n=5) and ethnic minority (n=1) academics, both seen as underrepresented or non-traditional groups in academia. Using an intersectional approach, Mahony & Weiner (2020) explored the experiences of female ethnic minority academics and reported that they can encounter challenges due to colleagues and students questioning their competence, be subject to racism and sexual harassment, receive less support within their department from managers, be less represented at professorial level (or their recruitment is tokenistic), and be likely to be paid less than colleagues with similar experience and qualifications.

Others note that female academics are often shouldering teaching and administrative duties at the expense of research, due to gender-biased assumptions amongst managers that women are better suited to such work (Deem & Lucas, 2007). There was discussion of how women do not fit the stereotype of the 'traditional' academic, i.e., 'male, middle-class and middle-aged' (Skelton, 2004, p. 99), which can prompt 'compensatory' behaviours; for example, Skelton (2004) discusses how some of the 'young' women academics in her study sought to align themselves with a more masculine identity, such as trying to appear more serious, mature and formal. Another finding related to gendered perceptions of what constitutes a successful research culture, with the women in Holligan's (2011) study emphasising the importance of networking, support and community, whilst the men often cited personal drive and outputs as important. And finally, Sikes (2006a) found that some of the female academics in her study expressed deep-seated feelings of inadequacy and confusion (e.g., whether they should be prioritising teaching or research) – despite Sikes' observation that these women performed their jobs 'in a committed, conscientious and effective manner [and] undertake research and have published in peer-reviewed outlets' (p. 564). Such findings are indicative of tensions and challenges in women's academic identity work (however, this is based on two studies from the same author with very small sample sizes).

There were some notable omissions in the literature pertaining to 'non-traditional' academics; notably, those from lower social classes (apart from Reay, 2000, 2004 – working class female contract researchers), those who identify as having disabilities, and LGBTQ+ academics.

Second-career researchers

We found that there was little consistency in the terminology used by authors when referring to individuals who had entered academia following a teaching career, with some referring to teacher researchers, teacher educators, practitioner researchers and/or second-career researchers. We use the term 'second-career researchers' here to refer to all of these groupings – with the connector being that these individuals are employed by HEIs and work in education departments, rather than in schools (i.e., who are not teachers conducting research within their school) (n=15).

Education academics often have very different career trajectories to those in other disciplines, and many have started their careers as teachers in schools or further education colleges – Deem and Lucas (2007), for example, write that 'new entrants typically arrive in midcareer, with significant professional experience but minimal research experience' (p. 121). This has often created a wider separation between teaching and research in education departments (Jerome, 2020) that can

translate into different identities, expectations and concerns; and might hinder the development of a sense of community (Lucas, 2007; Deem & Lucas, 2007). Furlong (2013) and Sharp et al. (2015) note that many academics employed in education departments do not have a doctorate and are not research active (often employed on teaching only contracts); therefore, some academics will never get the opportunity to develop their research and publications. Some of these elements are seen as unique to education.

The findings suggest that second-career researchers are sometimes employed in institutions with lower levels of 'prestige', lower research capacity, and are teaching-led, which can inhibit staff ability to gain research training and 'learn their trade' (e.g., Murray & Male, 2005; Sharp et al., 2015). It was frequently documented that second-career researchers can be allocated very high teaching loads – including responsibilities for placements and school visits – which can impact on their time and ability to produce high-quality research (e.g., Murray & Male, 2005; Furlong, 2011; Mercer, 2013).

Another factor seen as important was that of lack of confidence in their ability to conduct research. It was suggested that because teacher entrants are likely to be older and successful in their previous careers, they are often mistakenly assumed to know how to conduct research (Mercer, 2013). Further, some studies reported on the identity-shifts required when they make the transition into HE; it was noted that some can hold different perceptions of the importance of teaching and research, and seek to prioritise teaching as it aligns more closely with their existing identity – in turn impacting on their desire to engage in research (e.g., Lucas, 2007; Hulme & Sangster, 2013; Sharpe et al., 2015). This can cause tension and identity conflict given the increasing emphasis placed on high-quality research outputs in HE (Sikes, 2006a; Wilson & Holligan, 2013). This can further reinforce perceptions amongst second-career researchers that they are not as 'valued' within the education research community.

Career stages

There was also discussion of education researchers in terms of career stage and the specific challenges that different groups might encounter. We identified only one text that discussed explicitly those in the mid-career phase – Leitch (2018) who, employing an autoethnographic method, reflected on her need as a mid-late career academic to avoid 'career boredom' (p.163) through utilising different research approaches and taking up different managerial roles. Small pockets of the literature explored the experiences of early career academics (n=7) and later-career academics (n=3), which we will now discuss in turn. However, the small number of texts located should be kept in mind when interpreting the following findings:

i. Early career academics (ECAs)

A notable finding in the literature is that ECAs can experience heavy workloads and be affected by anxiety caused by temporary and short-term contracts. Studies indicated that ECAs are often given a high teaching and administrative allocation, which can take time away from developing a strong publication profile and securing research grants in order to establish themselves as leading academics in their field (Hulme & Sangster, 2013; Read & Leathwood, 2018). For example, Skelton (2004, p.93) found that a number of the 'young' women academics in her study were expected to take on leadership and administrative roles (e.g., programme leaders) beyond their experience and contractual obligations in order to demonstrate commitment to receive tenure (permanency). Hulme and Sangster (2013) obtained similar findings and one example highlighted is an ECA being advised to work part time in order to have more time for research activities.

Another pressure seemingly experienced quite intensely by ECAs is the need to gain external funding (Skelton, 2004; Casey & Fletcher, 2016). Such grants were seen as enabling ECAs to advance their careers and be promoted. However, authors discussed the tensions that ECAs can experience in seeking 'attainable' funds (e.g., contract research, government projects), or funds to further one's own line of inquiry. For example, Casey & Fletcher (2016) use self-study to reflect on their experiences as ECAs in physical education. They describe how they entered the profession post-PhD under the illusion that they could pursue their own research agendas and be autonomous academics – but Casey documents his disillusionment with the HE system that rewards those who obtain funds regardless of the 'worth' of the project, his attempts to pursue his own (unfunded) line of inquiry, and the response of the managers in his department.

It was also highlighted that ECAs in education as 'second-career' researchers can be older than those in other disciplines; some authors noted how it was relatively rare in education for academics to have gone straight from undergraduate degree, to postgraduate degree, to PhD, which is traditional in most other disciplines (Lawn & Furlong, 2007). This can necessitate the creation of hybrid-identities, with older ECAs having to combine both old and new professional identities, which can leave them questioning their place in academia (Read & Leathwood, 2018).

ii. Later career academics (LCAs)

A different set of challenges emerged in relation to LCAs. One theme emanating from Skelton (2004) and Read and Leathwood's (2018) studies was that LCAs are growing increasingly disillusioned with the business-managerial discourse becoming embedded in HE (e.g., the priority placed on external grants and certain types of publication for the RAE/ REF). Several of the 'vintage' women academics in Skelton's (2004) study found the culture to be workaholic and competitive. Some of the participants in Read and Leathwood's (2018) study were concerned about keeping pace with the rigours of increasingly heavy workloads and articulated fears over failing to 'make the grade' (p. 344) – expressing that they might like to reduce their hours, voluntarily take up a 'lower status' teaching post, or leave the profession as a result. There was some evidence in these studies, however, of LCAs acknowledging the fortunate positions that they occupied, and a sense of guilt about holding onto positions that could be given to younger academics.

Departmental cultures

There was also discussion of the centrality of departmental cultures in shaping education academics' happiness with their job and ability to produce high quality research (n=10). A key finding was that good leadership was necessary for an education department to flourish (Lucas, 2007; Holligan, 2011; Wilson & Holligan, 2013) – and likewise bad leadership could quickly 'damage' a department. For example, when reflecting on her career as an education academic and personal experience of being a manager, Ozga (2009) writes: 'The work of management, even good management, is written on water, and thriving departments can be restructured into mediocrity in less time than it takes to rewrite a job description' (p. 1).

Good leadership was said to consist of multiple facets but centred on the Head being supportive of research and becoming a 'role model' for staff. For example, Holligan (2011) interviewed academics across ten Scottish and English universities and asked them what they felt facilitated a positive research culture. Holligan concluded that: 'Effective leaders are good role models, inspire a sense of purpose, provide clear direction and inject others with enthusiasm' (p. 725). But Holligan also notes that leaders need to provide adequate infrastructure to support research, such as sufficient time

allocated to academics to pursue research, research centres where staff with similar interests can network and share expertise, opportunities for study leave, a programme of external speakers, internal 'seedcorn' funds, and mentoring opportunities (also see Deem & Lucas, 2007; Sharpe et al. 2015).

Whilst good leadership is clearly important, many papers discussed the need for individual staff members to be self-motivated and possess positive attitudes. As one education lecturer in Holligan's (2011) study asserted, 'you might have the best sort of management structure, but if the people at the ground level are not interested for whatever reason then it will fail' (p. 725). Factors also seen as inhibiting a positive research culture included 'cliques' and a lack of collegiality. For example, the academics in Hulme and Sangster's (2013) study did not always enjoy working in their institutions and found it difficult to negotiate the 'micro-politics' within their department, sometimes expressing that they could have a higher profile 'externally than internally' (p. 190).

It was also acknowledged, however, that wider structural forces such as the level of prestige a university enjoys, its history, and its position as either a teaching-led or research-led institution have an impact on driving a flourishing research culture (e.g., Deem & Lucas, 2007). Perhaps unsurprisingly, education departments in research-led institutions are likely to have better infrastructure, support and networks already in place to enable academics to engage in research. It is likely that such departments will have a larger number of senior, established academics (e.g., professors) who can mentor others, lead research teams, include ECAs on bids for larger grants, be a 'critical friend', and/or engage in co-writing (Holligan, 2011). Conversely, there was evidence of managers in teaching-led institutions not actively encouraging staff to engage in research as it was not seen as an institutional priority.

Northern Ireland, Scotland and Wales

Having now presented the analytic findings emerging from the 114 peer reviewed articles in relation to structures and processes, we move on to provide a breakdown of thematic trends by three UK nations.

As noted in the descriptive findings, there were distinct trends in terms of quantities of literature published relating to the different UK nations. Most authors discussed the UK seemingly as a whole (n=79); however, when authors did this they often appeared to refer largely to the English context, with little consideration of how differing policies and practices across the four nations might impact on education research activity. Only six papers included some sort of explicit comparative element (e.g., between England and Scotland in Deem & Lucas, 2007).

A reasonable pocket of literature had a sole focus on Scotland (n=13), but significantly fewer papers focused exclusively on Wales (n=4) and Northern Ireland (n=2). This could reflect the lower number of universities and the smaller populations in the latter two than the former. Given the small number of texts located for two of these three nations, in this section we attempt to draw out key themes relating to the structures and processes shaping education research activity across these geographical contexts. Given the low number of papers identified – and that many were published over a decade ago – these findings should be treated cautiously, and as indicative of possible issues rather than as an accurate representation of current conditions. A comprehensive history of issues relating to educational research activity in the three nations is beyond the scope of this review.

Devolved governments and political histories

Across all nations, authors discussed the impact of changing political structures and moves towards devolution and noted how this has often shaped education research activities in HE. Whilst different UK nations have always had unique education systems in place at both compulsory and post-compulsory level and some degree of political autonomy, many authors noted how more recent moves towards devolution had to some extent handed further control to the three nations. For example, Humes (2007) stated that Scottish government officials and politicians post-devolution in 1999 were more engaged with research and, more specifically, teacher engagement with research than those in England and that a range of policy initiatives had stimulated greater focus on education. In contrast, Daugherty and Davies (2011) contend that, at the time of writing in 2011, education research in Wales had become fractured along two lines. They note that one set of research was ‘undertaken in response to the policy-driven needs of the [devolved] Welsh Assembly Government...[and] mainly undertaken by private sector consultancies’, and the other set conducted by education academics in HEIs who engage in more specialist research that is suitable for the REF (p. 20).

NI was also discussed in relation to its very specific and turbulent political history, infused with religious tensions. Leitch (2009) contends that local politicians and policy-makers have generally been ‘highly sensitive to the perennial problems associated with religious and identity affiliations, the lack of political consensus [and] perceived differences in educational priorities’ (p.360). However, Leitch argues that because of the complexity of these issues, ideological appeasement rather than evidence-based decision-making frequently tip the balance when it comes to issues of educational policy and practice.

A lack of research capacity

Another theme to emerge that connected strongly with quality concerns was to do with a lack of research capacity. It was reported by authors that this was a key reason why research quality was not ‘higher’ across these three nations. Gardner and Gallagher (2007) discuss the impact of the small number of education researchers in NI; they note that NI recorded just 39 ‘active’ education researchers in the RAE 2001. According to Leitch (2009), this creates a systemic problem with it being difficult to retain high quality, national and international researchers in this small country. Issues concerning a lack of funding, training and skills were expressed in the NI, Scottish and Welsh contexts (e.g., Leitch, 2009; Brown, 2007; Daugherty & Davies, 2011).

The literature also discussed a number of large-scale initiatives that had been implemented to try to build research capacity across the three nations. The most widely discussed initiative in Scotland was the Applied Education Research Scheme (AERS), which ran from 2004 to 2009 and was funded by the Scottish Higher Education Funding Council and the Scottish Executive’s Education Department (Lucas, 2007). In the Welsh context, Delamont et al. (2008) discuss the WERN (Welsh Education Research Network) and WISERD (Welsh Institute for Social and Economic Research Data), that had been instigated using Welsh Assembly Government and ESRC funds to try to increase research capacity in Welsh HEIs other than Cardiff. Concerns were expressed by Leitch (2009) that NI had not witnessed the same levels of funding and drive for capacity building.

Research assessment and quality concerns

The literature located in this review also indicates that there has often been unease about the quality of education research in these nations (in RAE/REF terms) – particularly in Scotland and Wales. Several authors focusing on the Scottish context drew attention to the fact that no HE

institution in Scotland achieved a 5* or 5 rating in the 2001 RAE (e.g., Humes, 2007; Deem & Lucas, 2007), and discussed how this seemed to spark subsequent concern amongst policy makers and the education research community. Much was also made of research quality in Wales; the authors noted that following the RAEs in the 1990s and early 2000s, only Cardiff University performed well (e.g., a 5* rating 'world-class' rating in 2001), with other Welsh universities rating towards the lower end of the assessment scale. This meant only Cardiff received core funding for education research, having a detrimental impact on other Welsh universities (Murray et al., 2008; Delamont et al., 2008). Less was discussed about NI in relation to research quality and the RAE/REF, although Gardner and Gallagher (2007) suggest that the nation has performed reasonably well, albeit not at world-leading levels.

Culture of performativity and accountability

Another theme emanating from the literature was that, despite having some degree of political autonomy, all four nations were subject to the rigours of the RAE/REF, as this is a UK-wide policy. This was seen as having similar implications for the professional experiences of education researchers as those discussed previously in this paper. For example, these authors highlighted issues such as the pressures experienced by academics to obtain research funding, publish in peer-reviewed outlets, gain good ratings in the REF, and the very heavy teaching and administrative loads that often made it difficult to produce high-quality research and maintain a healthy work-life balance (e.g., Deem & Lucas, 2007; Ozga, 2009).

Funding structures

Questions were also raised in the literature as to the fairness of the allocation of research funds in these smaller nations. Holligan & Wilson (2013), for example, noted an increasing trend for government grants in Scotland to be awarded to research organisations outside of Scotland, and that the third sector dominated the applied education research marketplace – leading to the Scottish education research community feeling marginalised. Similarly, Gardner and Gallagher (2007) noted how government funds in NI were often awarded to non-governmental organisations or researchers in other UK universities, reducing the opportunities for local researchers to develop their skills and research profiles.

Regional education researcher identities

Whilst not emerging strongly as a theme in the located papers (n=1), Delamont et al. (2008) discuss issues of scholarly identity that might be bound up with national identities. Writing about the Welsh context, the authors argue that a consequence of the research assessment exercises have been that education researchers have focused attention away from Wales as a nation, since there is a danger that research conducted by those *in Wales on Wales* could be seen as too local and parochial in nature.

Change in narrative over the last 30 years

We also sought to establish what key topics authors had focused on across the 114 papers so that we might map potential trends over time. In order to do this, we read each paper several times and discerned topics of interest. We found that often articles discussed a number of topics, but for the purpose of analysis, the team agreed on what was felt to be the primary focus and that had been foregrounded in the text.

The overall trends in top five topics of focus across the entire 30-year period are presented in Table 7.

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Table 7: Top 5 overall topics of focus (identified in 70 out of 114 papers)

Top 5 overall topics of focus*	Frequencies (number of peer reviewed articles)
Performativity, accountability, RAE/REF	20
Evidence based policy and practice	19
Researcher identities	13
Teacher educator research	11
Impact agenda	7

* (Note – numbers refer to the number of papers categorised for these topics)

When these topics were further broken down by decade, some interesting trends emerged across the papers. In Table 8, we present the top 5 topics for each decade.

Table 8: Top 5 overall topics of focus for each decade (identified in 81 out of 114 papers)*

Top 5 overall topics of focus for each decade*	
1990-1999**	Frequencies (number of peer reviewed papers)
Research funding structures and constraints	2
Location/purpose of education as a discipline in HE	2
Evidence based policy and practice	2
Research ethics	1
2000-2009	
Evidence based policy and practice	16
Performativity, accountability, RAE/REF	9
Researcher identities	6
Teacher educator research	6
Government influence	3
2010-2020	
Performativity, accountability, RAE/REF	11
Impact agenda	7
Researcher identities	7
Teacher educator research	5
Research funding structures and constraints	4

*Numbers refer to the number of papers categorised for these topics

**The top 4 are listed for 1990-1999 as only 4 different topics were identified

From Tables 7 and 8, it is possible to place the topics in wider socio-historical context and consider what important events, debates and ‘turning points’ might have been taking place around these moments in time that might have ignited research interest.

As previously noted, we identified relatively few papers matching our criteria from the 1990s. Topics of focus included research funding structures and constraints, as well as research ethics. Two papers, in particular, discussed broader concerns regarding the structural location and purpose of education as a discipline in HE and its relationship with other disciplines (Deem, 1996; Ranson, 1996).

By the 2000s, there was a clear shift in focus towards evidence-based policy and practice. These papers were those that discussed – often critically – the shift in educational policy discourse towards evidence-based practice and the ‘what works’ agenda (e.g., Hammersley, 2005b; Whitty, 2006; Biesta, 2007). It is not overly surprising that researchers might have devoted significant attention to this topic in the early 2000s given the ‘heated debates’ taking place about the quality and relevance of education research that were sparked by key events in the late 1990s (e.g., Hargreaves’ TTA talk in 1997, Tooley and Darby’s critique of education research in 1998). Also prominent were papers exploring aspects of performativity, accountability and the RAE/REF; many of these papers focused on the increasing emphasis placed on the RAEs (2001, 2008), and sought to question the narrow and instrumental way in which research was being evaluated (e.g., McNay, 2003; Oancea, 2007). There was also an emerging interest in education researcher identities – often these papers were authored by prominent UK scholars known for their qualitative research on social inequalities and gender issues, often seen as working in the field of the sociology of education (e.g., Sara Delamont, Diane Reay). Teacher educator research also garnered some interest; Jean Murray was lead author of four of the papers in this category, which included findings from projects exploring capacity-building in teacher educator research that had been funded by the Teaching and Learning Research Programme (TLRP) (e.g., Murray et al., 2008).

During the 2010s, there was a notable shift in attention away from debates around evidence-based policy and practice – they do not feature in the top 5 topics and, in fact, we identified only one paper from this decade primarily focusing on this. Instead, authors appear to have become more preoccupied with issues of performativity, accountability, RAE/REF and the impact agenda. This is again perhaps unsurprising given the wider structural changes taking place in HE governance and finance (i.e., neoliberal regimes) that might be seen as intensifying in the 2010s. Again, these papers are often critical of assessment frameworks and how they have impacted upon academics’ lives (e.g., Furlong, 2011; Oancea, 2014; Marques et al., 2017). Papers focusing on the impact agenda also come to the foreground in this decade, with a number of authors analysing impact case studies submitted as part of the REF 2014 (e.g., Cain & Allan, 2017; O’Connell, 2019). Researcher identities also continue to be of interest – particularly how regimes of performance and accountability might shape the experiences of researchers from different backgrounds (Holligan & Wilson, 2015; Read & Leathwood, 2018).

It is difficult to ascertain from this analysis whether the academic community might be ‘driving’ discussions around education research as a profession and raising emerging concerns, or responding to issues and debates of the day. We suggest it is likely to be both, as both are closely interwoven.

Discussion

Having now presented the findings, we move on to discuss the significance of the formal and informal structures and processes identified in the 114 articles and their potential interrelationships.

Reflections on formal and informal structures and processes

Formal structures and processes

Six main themes relating to formal structures were identified in the 114 papers: culture of performativity and accountability; funding regime; impact agenda; ‘what works’ agenda; heated debates; and professional bodies. Although they have been separated for the purpose of analysis, the themes are complex and appear to interact. In Figure 10, we attempt to represent their interrelationships visually to capture their interplay. Emerging most strongly (in a numeric sense) as a theme in the located literature was culture of performativity and accountability (n=27), suggestive that this topic is of particular interest – or perhaps more accurately of concern – amongst education researchers. Culture of performativity and accountability are firmly embedded in, and driven by UK-wide government policy structures that frame higher education as a field and the political decisions that underpin its generation. The research assessment exercises were highlighted by authors as critical in driving behaviour in HE and, in turn, the organisational structures and day-to-day operations within education departments. Perhaps unsurprisingly, the longitudinal analysis revealed that matters of performativity and accountability have garnered increasing research interest in the past decade (2010-2020).

Although not unidirectional, culture of performativity and accountability might be seen as linked with the funding regime and impact agenda, the latter of which emerged from funding bodies’ and REF’s requirements. Some papers engaged with tensions between: 1. universities’ expectations of education researchers to generate funding and the funders’ agenda in prioritising particular research topics and methodologies over others, and; 2. individual’s freedom to undertake research/methodologies that they consider professionally and ethically most appropriate to their personal values. In the main the discourse around these external factors was negative, with dissatisfaction amongst the authors and their participants (i.e., education researchers). Further, there was a view of a divide based on metrics and league tables between universities, with competition seen as embedded at the heart of HE. Those HEIs that were seen to be highly reputable were able to attract more research funding due to better capacity and infrastructure, as well as the perception that their research was of a higher quality. This, in turn, was seen to give more autonomy and freedom to education researchers employed there, driving their research agendas in particular ways.

Another tension, leading to heated debates that seem to dominate within academic discourse was related to the relationship between research, policy and practice. These debates were in the context of the purpose and nature of education research, including whether research should be undertaken to drive policy/practice – which often requires a quick turnaround time, and with perceived negative repercussions for the quality of research and limited attractiveness of ‘blue skies’ thinking research. Professional bodies who govern the profession might be understood as framing these tensions and debates, and as providing some sort of formal regulation within the field. Values and ethics are held differently by education researchers at the individual and personal level, but are to some extent guided and informed by the ethical codes produced by these professional bodies.

When reviewing the papers, the socio-political environment in which these formal structures and processes were experienced appeared significant. For example, in the devolved nations, the specific

political and/or religious contexts in Northern Ireland, Scotland and Wales mediated the relationship between policy and practice and the emphasis placed on certain ‘types’ of research (e.g. practitioner research). The different funding contexts and organisational properties of HE in the nations (i.e. number of HEIs/education researchers) were also seen as enabling or constraining research quality and capacity-building. However, UK-wide policy initiatives such as the RAE/REF were seen as overriding national structures and geographic boundary lines and as producing similar working environments and cultures within education departments across UK HEIs.

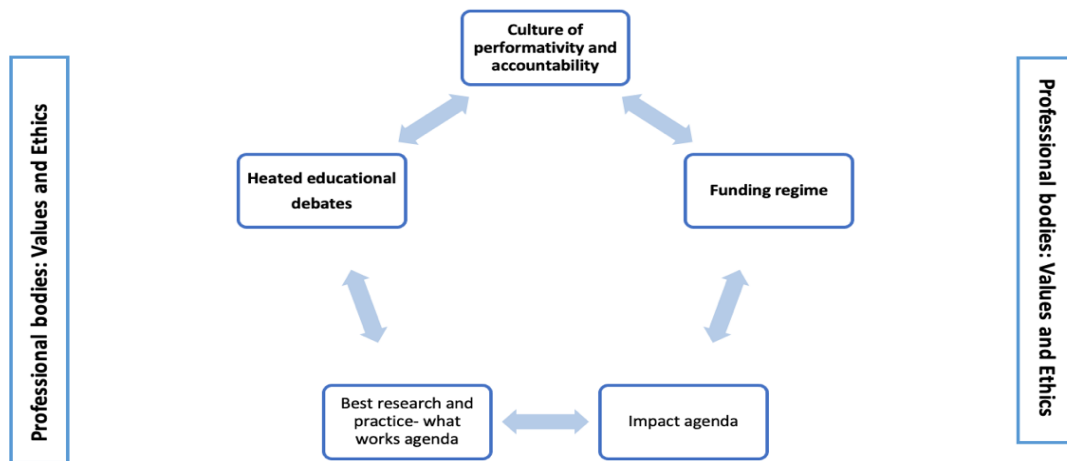


Figure 10: Relationship between formal structures and processes

Informal structures and processes

An analysis of the papers that focussed on informal structures and processes led to the identification of six key themes which were: academic pressures; affective issues; non-traditional academics; second-career researchers; career stages; and departmental cultures. We represent the relationships between these themes and those of the formal structures visually in Figure 11.

The findings suggested that the identities of researchers and career stages are situated in a departmental culture that can lead to/produce affective issues and perceived academic pressures. Formal structures and processes were, in turn, seen to have an impact on these; for instance the impact of RAE/REF on academic pressures and as shaping researchers’ affective responses and identities.

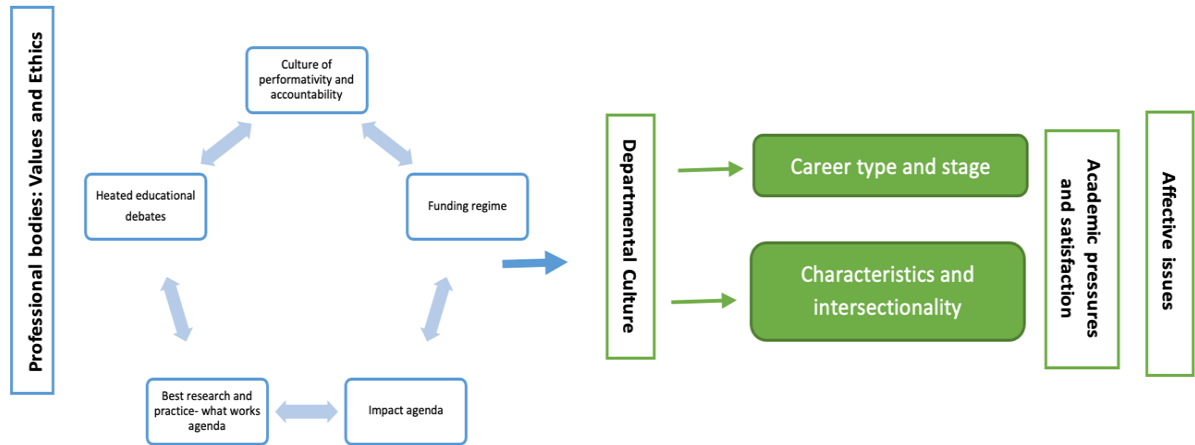


Figure 11: The intersection of formal and informal structures and processes

There was evidence in the papers that there might be differences in departmental culture and expectations across research- or teaching-intensive departments and universities. Yet a focus on teaching and research across all HEI contexts and nations seemed to lead to high workloads and a shortage of time, with individuals trying to fulfil both obligations and ultimately creating academic pressures on staff. This was seen to have an impact on their work-life balance – which was also exacerbated by pressures for those on temporary or fixed-term contracts and on probation. In a related way, affective issues were highlighted which were in the main negative, such as feelings of rejection and perceived criticism during the peer review process. Overall, as can be expected, academics’ job satisfaction was seen to depend on ‘good’ departmental cultures where ‘good’ leadership was seen as instrumental – as well as the importance of academics themselves being self-motivated and having positive attitudes.

Only five studies focussed on, or discussed implicitly the experiences of women in academia, with one of these also considering the experience of ethnic minority staff. None of the included studies looked at the experiences of disabled and/or LGBTQ+ staff. Papers focused more substantially on second-career professionals (i.e., former teachers) (n=15), and with some authors exploring the narratives of early career researchers (n=7) and later career academics (n=3). A common connector was that all groups were identified as experiencing challenges in social, self and professional identity which the authors related to the formal structures of accountability and research targets driven by funding agendas and the RAE/REF. There was also emerging evidence of systemic structural barriers within education departments (i.e. gender and/or racial barriers) that might disadvantage members of these groups, e.g. women academics given heavy teaching and pastoral loads.

Education research as shaped by neoliberal HE reform

The findings of this review suggest that education researchers are firmly located within wider neoliberal economic and political forces that have come to characterise HE – as are all academics. However, the discipline of education as practice-orientated and with a dual-focus on ITT presents particular challenges and tensions in terms of research purpose, quality, capacity-building, and the integration of staff within an academic community who might come to the profession via very different entry routes. The review findings highlight the consequences of accountability, audit and flexibilisation for different ‘types’ of education researchers working in HE in terms of working conditions, subjectivity and affect.

Of potential concern in this review is the lack of research documenting the pleasures of academic life (n=1). The findings suggest that many education researchers might be less than happy with their jobs/careers, and that such feelings are intensifying more recently due to highly competitive and sometimes relentless work demands. There are potential longer-term implications here in terms of retention in the profession, wellbeing, 'burnout', diversifying the research community, and the mentorship and training of younger and newer education researchers who might ensure the profession will flourish moving forwards. It could be the case that studies that present education researchers 'eulogising' about the profession are unlikely to capture the interest or sympathies of journal editors, reviewers or the wider readership. However, more research exploring these issues would be beneficial. We need to know whether working conditions really are deteriorating, whether inequalities amongst and between groups of education researchers are perhaps growing – or whether, more controversially, challenges might be being over-stated.

What do we still need to know?

In the spirit of taking stock of the field, this review has also highlighted important omissions in the existing literature and where new insights are required. Of the 114 articles, 62% (n=71) were narrative papers and 38% (n=43) were empirical, averaging at just 1.43 empirical studies per year despite a substantial 30-year period. The small number of empirical studies, with mainly small and homogeneous samples suggests a pressing need for additional studies to explore aspects of intersectionality, and a diverse sample of academics at different career stages – particularly given the lack of studies focusing on women, ethnic minorities, individuals with disabilities, those from working-class backgrounds, and LGBTQ+ staff. If inequalities and barriers persist that are inhibiting the progress of these academics, then more research is needed to investigate relevant issues, on social justice grounds. This is especially pertinent in light of the Black Lives Matter and decolonisation movements that are having current impact within the HE sector. Such studies could involve issues of belonging, inclusion/exclusion, career-related prospects, and whether all academics have opportunities to pursue personal research agendas. Further, it is important that these studies are conducted across the four nations to probe deeper into the formal and informal structures and processes having an impact on these academics. A large-scale study (e.g. a nationwide survey) involving the collection of both quantitative and qualitative data with a sample size large enough to be able to undertake within and across key demographic analyses would, for example, be beneficial.

Most studies focused on the UK (or more specifically, the English context) with a dearth of studies focusing on Northern Ireland, Scotland and Wales. This suggests a need to undertake collaborative UK-wide empirical studies to understand the different nations' political-economic-educational contexts, structures and processes, and their impact on academics' unique experiences. The findings of our longitudinal analysis indicate that future research should use a longitudinal research design (both retrospective and prospective) and/or a life histories design that can show the impact of changes in formal and informal structures and processes over time and their impact on education research across the UK, to build up a richer and historically-situated research account.

Finally, future research should focus on studies that listen to the voices of all stakeholders (i.e., education academics, senior executives in universities and education departments, policy makers) to provide multiple perspectives on the themes uncovered in this literature review. This might lead to more effective communication between those responsible for particular structures and processes and those whose professional lives are affected by them.

Limitations

Despite the rigorous methodology used by the team, we acknowledge limitations that will inevitably impact upon the conclusions we can draw. It has been argued that it is more difficult to conduct a truly exhaustive search of qualitative literature than quantitative given the practical and epistemological difficulties associated with searching for and screening qualitative studies (Dixon-Woods et al., 2006). This includes the less standardised ways in which qualitative researchers write abstracts, issues with the indexing of qualitative studies in the electronic databases, and the ambiguity of certain concepts (e.g., ‘teacher research’). Whilst we located a very high number of texts in this search, it is possible that we have missed some relevant literature that did not meet our inclusion criteria or where access restrictions were in place due to Covid-19. Nevertheless, we feel that the methodical way in which we have conducted this review, the inclusion of both published and unpublished literature sources (i.e., journal articles and doctoral theses), and the transparency of the reporting can enable meaningful conclusions to be drawn.

Conclusion

Our review represents the first systematic mapping of the extant research literature relating to the formal and informal structures and processes that govern education research in the UK from 1990-2020. Overall, the findings of this review provide much for reflection in terms of the current state of the field of education research in the UK. As this literature review covers a 30 year period, some of the discussions are slightly dated and it is important to keep the changing trends in mind. But the themes emerging strongly within the studies raise important – and increasing – concerns around working conditions and academic pressures that should not be ignored. Some of these concerns are not exclusive to researchers working in the discipline of education, or indeed confined to academics operating in the UK context. Rather, they are the product of globalised shifts and the restructuring of HE in line with a drive towards marketization, competition and accountability. Thus, the review findings have relevance for those working in HEIs on the global level.

Questions might be raised as to why the field of education research matters and why the future of the profession should be of concern – or worthy of further investigation. Such questions touch on deeper issues regarding the purpose of education, and what the discipline might and can contribute to society. In terms of broader implications, as Whitty et al. (2012) argue:

‘The enlargement of our understanding, the enhancement of the quality of public services, the nation’s economic productivity, the wellbeing of the community, the wisdom and effectiveness of public policy, all depend on the maintenance of a vigorous [education] research culture.’ (p.35)

We see education as playing a vital role in ensuring that young people live happily, morally, and productively in democratic society, and so it is imperative that we maintain a vibrant and diverse research community to sustain critical debate and develop the quality of educational provision. This review enhances our current understandings of the complex interrelationships between the formal and informal structures and processes influencing UK education research, considers their origins, and illustrates how they are not static but subject to change over time. We acknowledge however, that simple solutions to the issues outlined in the review are not possible, and that many of the conditions cannot be eliminated. So, we still require much more information – and, we suggest, critical analyses of the impacts of an increasingly market-driven environment – if we wish to understand how the profession can address these challenges going forward.

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ⁱ We use the term 'education research' rather than 'educational research' throughout this paper in line with Whitty's (2006) definition of education research as pertaining to research conducted both on and for education.