The Relevance and Impact of Business Schools: In Search of a Holistic View

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Abstract

The degree to which business schools are relevant and impactful for society has been disputed. Critics that engage in the so-called "relevance problem" have argued that business schools are preoccupied with academic rigour at the expense of practical relevance, resulting in a lack of societal impact. This systematic literature review synthesizes the fragmented body of knowledge pertaining to the relevance and impact of business schools. Appreciating the contributions of both research and education, this review offers a holistic view that acknowledges the multidimensional nature of business schools. Based on an analysis of 266 journal articles, we present the four main literature streams in this domain. We find limited evidence of cross-fertilisation between discussions of research and education. However, by acknowledging the contribution of applying a multidimensional lens to the study of business schools, we develop a holistic thematic framework that provides theoretical directions for the future. Using this, we demonstrate four avenues for advancing the business school literature. First, we emphasise the potential of an institutional logics perspective to viewing business schools. Second, we offer a novel proposal for understanding the bridge between research and education. Third, we emphasise the application of a value co-creation theoretical lens when considering how business schools engage with stakeholders in research and education. Finally, we propose an all-encompassing stakeholder-centric definition of relevant and impactful knowledge and advocate for this inclusive definition to conceptually bridge the fragmented discussions of research and education.

Key words: business schools; business school research; business school education; relevance; impact; holistic thematic framework

1. Introduction

The increasing demand for business school education alongside the need for academic research to improve business and organisational practices has entrenched business schools as significant knowledge-producing bodies within higher education institutions across the world (Durand and Dameron 2011). Simultaneously, business schools have become entities in their own right to be researched, examined, and written about. Despite the growing popularity of business schools, as both knowledge providers and as subjects of empirical and conceptual examination, there has been a wealth of scepticism and questioning about their purpose within society and their wider impact beyond academia (Pettigrew *et al.* 2014). Criticisms of business schools have been wide-ranging, spanning the arenas of research and education (Bennis and O'Toole 2005), with a central theme of how "relevant" they are (e.g., Butler *et al.* 2015).

A myriad of criticism of business schools has manifested in a relatively fragmented evidence base spanning several streams of literature. At the macro-level, there are two vast yet isolated streams of scholarship related to the so-called relevance problem: one stream that focuses on business school research and one that focuses on business school education. In terms of research, Palmer *et al.* (2009) note that critique has arisen surrounding the creation of knowledge that is bound by a strict adherence to academic rigour. Some authors, such as Liu and McKinnon (2019), highlight that this involves a lack of emphasis placed on finding out things that are useful, or *actionable*, for practitioners and policymakers. Beyond the outputs themselves, the debate also encapsulates issues related to engagement with practitioners. As Vermeulen (2007) notes, for example, it is important to consider engagement with practitioners not only to maximise the impact of our research, but also to inform our research. In terms of education, the discussion shifts towards how the aforementioned research outputs are embedded in the syllabi of education programmes of business schools (e.g., Tucker and Scully 2020). A central argument in this space is the risk that students of business school programmes

could be "ill-equipped for the challenges of the real world" (Chia and Holt 2008 p. 471). Debates surrounding education in the context of the relevance problem are far-reaching, with some authors proposing specific suggestions to fill knowledge and skill gaps (e.g., Calma 2021; Cole and Snider 2019; Neriz *et al.* 2020).

Across these two streams of literature, there have been various areas of focus, including a focus on the sources of the relevance problem, a focus on the nature of the problem, a focus on how the situation can be improved, and a focus on what actually constitutes relevant knowledge. Although it is entirely appropriate to investigate the arenas of business school research and business school education separately and in-depth, when assessing the relevance of business schools in their entirety it is important to acknowledge that they are not one-dimensional entities with one area of interest. As Jensen and Wang (2018 p. 1024) articulated, business schools are "complex multi-unit organisations that serve a variety of audiences with different products, such as student education, academic research, and business consulting". When assessing the relevance of business schools in their entirety, fragmented streams of literature that are somewhat isolated from each other may not be reflective of business school practices in reality. Thus, it is crucial that any review of this literature base explores business schools beyond the view of the rigour-relevance debate associated exclusively with business school research, instead encompassing both research and education activities. A comprehensive view acknowledging the significance of education alongside research should not be overlooked when addressing business schools as a unit of analysis. Thus, there is a need to combine the various streams of literature related to the relevance of business schools to reflect their multiunit, complex nature in the twenty-first century. This reflects the idea that the rigour-relevance debate should be concerned with research and education as intimately connected activities.

This systematic literature review, therefore, is a response to the disjointed evidence base that currently exists. This paper reviews and synthesizes the current knowledge bases in the domain

of business schools with respect to the relevance and impact of the knowledge they produce and disseminate in their research and education activities. This is done with the intention of meeting two research objectives. These are:

- To synthesize and thematically analyse the wide spectrum of literature in the area of the relevance and impact of business school research and education in order to generate themes that encompass the multidimensionality of business schools.
- To extend our synthesis, and contribute to advancing the business school literature, by identifying theoretical directions for the future and topics in need of empirical investigation led by a *holistic thematic framework*.

Thus, business schools are our unit of analysis. Our review is very much focused on the role played by business schools as producers and disseminators of knowledge – looking at the discourse on the relevance and impact of their activities and discussions surrounding the environment of business schools themselves. The key theoretical contributions of this review are threefold. First, the themes identified provide an oversight of the business school literature related to relevance and impact, providing clarity of the different streams of knowledge. The holistic thematic framework demonstrates how our thematic analysis can be augmented with different theoretical approaches to advance the business school literature. This integrative framework demonstrates the theoretical importance of acknowledging that research and education do not exist separately but instead co-exist in a wider system. Second, this review exhibits the significance of understanding the wider context and environment of business schools. We identify the numerous expectations placed upon actors within the business school environment that have been documented and put forward an agenda for using an institutional lens as a vehicle for developing our understanding of these expectations. Finally, we offer a much-needed definition of relevant and impactful knowledge that can act as a point of reference for future scholarly investigations into relevance and impact. Based on a comprehensive synthesis of how relevance and impact have been conceptualised in the literature, this is particularly significant given that there is currently no universally agreed definition of relevance, or indeed, relevant and impactful knowledge. Adopting such a definition, that is inclusive of research and education, can act as a conceptual bridge between the two and is helpful for understanding what it means for either activity to have a real-world impact.

The paper proceeds as follows. First, the systematic literature review methodology used is explained, providing information about the search strategy, how the literature was selected, and the subsequent analysis approach adopted to draw insights from the literature. The descriptive analysis of the literature base is then presented. Then, before we present the findings of the review, we take a look at what contribution other reviews in this area have made prior to conducting our own. Not only does this contextualise our review, but it also provides a further justification for why our review is necessary. This is followed by an account of the results of the review – the four streams of literature – and the relevant themes. We then present our *holistic thematic framework* with particular emphasis on the implications for future research into business schools. The paper concludes with a discussion of the contributions this review makes, as well as its limitations.

2. Methodology

This systematic literature review adopts an approach advocated in Tranfield *et al.*'s (2003) seminal paper on conducting a systematic review in the field of management. This review synthesizes 266 articles that were published or available in press at the time of the literature search in March 2021. This review is motivated by methodological best practice for executing a systematic literature review, and thus follows a comprehensive and methodical process as a way of allowing conclusions to be drawn from the literature. A systematic literature review should be transparent, inclusive, and illustrative (Saunders *et al.* 2016). Based on this premise,

both conceptual and empirical papers were included in the review because they were deemed to be significant to the body of literature, consistent with earlier systematic literature reviews (e.g., Xiao and Nicholson 2013). Analysing conceptual papers in conjunction with empirical and review papers allowed for a more inclusive and thorough review process for this particular domain.

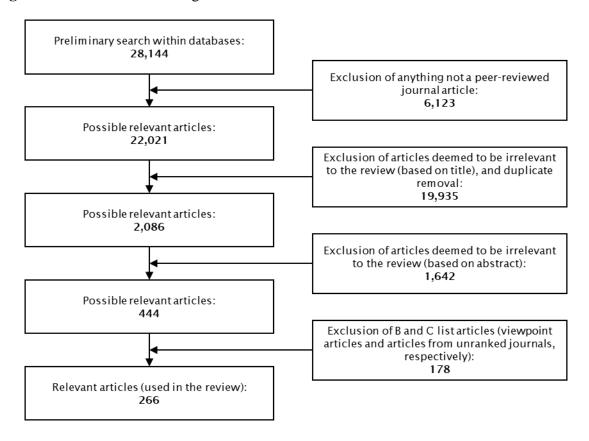
This paper takes a five-step approach to conducting a systematic literature review: (1) identifying keywords, search terms and search strings, (2) searching in bibliographic databases, (3) applying inclusion and exclusion criteria (see **Appendix 1**), (4) data extraction, and (5) synthesis of the literature. The importance of these activities has been echoed by various authors (e.g., Denyer and Tranfield 2009; Tranfield *et al.* 2003). These five steps manifested into 12 transparent and replicable stages (**Table 1**), with a visual breakdown of the number of journal articles excluded at each step of the literature search presented in **Figure 1**.

Table 1. Stages of the systematic literature review

Stage	Description
1	Preliminary searches within key bibliographic databases were conducted to identify key articles
	in the field. The titles, abstracts and keywords of these articles were evaluated to generate two
	groupings of keywords related to business schools and their relevance and impact. This was an
	iterative, back-and-forth process in which keywords were continuously updated based on
	emerging literature from the range of databases.
2	The keywords were assembled into two search strings:
	1. "business scho*" OR "management scho*" OR "business educat*" OR "management
	educat*" OR "school of business" OR "school of management" OR "business research*" OR
	"management research*" OR "business studies" OR "management studies"
	2. "relevan*" OR "impact*" OR "influen*" OR "legit*"
	The Boolean operator "AND" was used in between the two search strings. The protocol for the
	use of these search strings was consistently applied within each database used for searching. Strict
	use of these search strings echoes the particular focus on relevance and impact as it applies to
	business schools as our unit of analysis, reflecting the scope of the review.
3	The search strings were used to search three bibliographic databases: Business Source Premier,
	Scopus, and Web of Science Core Collections. Based on the experimentation of different
	databases in Stage 1, these three databases were deemed to provide fruitful results and
	consequently were selected. No restrictions were put on the time period in the search because it
	was important to collect as many papers as possible, and it was not immediately clear when the
	very first discussions of this topic were published. Therefore, the search included anything

	published up until the time of the literature search (March 2021). A total of 28,144 citations were
	identified from the search (including duplicates).
4	All citations that were <i>not</i> a peer-reviewed journal article were excluded, thus applying the first inclusion/exclusion criterion. This action was taken to ensure that only sources subjected to rigorous academic scrutiny could be included in the review. At this stage, 6,123 citations were excluded, and the remaining 22,021 were exported to an EndNote library.
5	The remaining citations were assessed according to the second inclusion/exclusion criterion: the article must indicate some relevance to the topic and objectives of the review. This initially involved applying this criterion to the article titles, and any article that had a title that was deemed to be totally irrelevant to the research objectives was excluded. At this stage, 19,935 citations were excluded, leaving a new total of 2,086. Duplicates were also removed during this stage.
6	After article titles were reviewed, the same inclusion/exclusion criterion was then applied to the abstracts of the remaining articles. At this stage, 1,642 citations were excluded, leaving a new total of 444.
7	The 444 citations were separated into an A list, a B list and a C list using strict quality criteria. The A list (266 articles) represented empirical articles, conceptual articles, or review papers from journals ranked as 1, 2, 3, 4 or 4* in the ABS Academic Journal Guide 2018. The B list (118 articles) represented any article that appeared to be a viewpoint or opinion piece, regardless of the journal ranking. The C list (60 articles) represented any empirical articles, conceptual articles, or review papers that were <i>not</i> from a journal ranked in the ABS Academic Journal Guide 2018. Citations from the B and C lists were ultimately excluded from further analysis, applying the two final inclusion/exclusion criteria, leaving a final sample of 266 articles.
8	A Microsoft Excel Spreadsheet was compiled, comprising of important data that was extracted from all 266 citations. This included basic data such as publication year, author(s), journal title, ABS Academic Journal Guide 2018 ranking, and article title. This also included study information such as the focus of the article (research, education, both, or other), methodological choice, the management subdiscipline that formed the context of the article (if any), the geographical origin of the article, the theoretical lens used in the article (if any), and the article abstract.
9	The abstracts from the 266 articles were imported into computer-assisted qualitative data analysis software (NVivo). These abstracts were coded according to their content. A first-level thematic analysis was consequently conducted to generate sub-themes.
10	An iterative secondary-level analysis was conducted using the sub-themes, resulting in refined themes, which were organised into literature streams. These literature streams were developed to demonstrate how the holistic approach to viewing business schools has captured a wider range of literature elements than a view of just research <i>or</i> education would have.
11	The articles were reviewed in light of the themes that were uncovered in Stage 10. In reviewing the articles, the authors sought promising approaches that have been adopted, or alluded to, by other authors to advance the business school literature. A conscious effort was also made to organise the fundamental principles of relevant and impactful knowledge, as has been emphasised in a multitude of ways by previous authors, into an inclusive definition that represents the entire scope of business schools.
12	The authors ascertained how the divide between research and education could be conceptually bridged based on an understanding of the literature base. Consequently, a <i>holistic thematic framework</i> was developed, detailing this bridging mechanism and also injecting the previously identified literature streams with a proposed theoretical direction. These insights drew on the analysis from Stage 11 as well as broader understanding of the business school context.

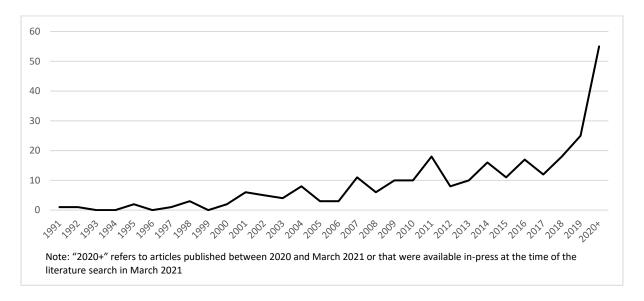
Figure 1. Article exclusion stages



3. Descriptive analysis

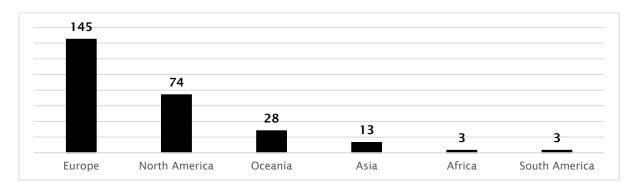
An analysis of the sample of articles revealed a range of descriptive insights that are useful for understanding the composition of the business school literature. Perhaps the most prominent finding, and one that emphasises the necessity of this review, is that the scholarly interest in the relevance of research and education in business schools has grown considerably – especially in the past few years (see **Figure 2**). Interest in the area began in the early 1990s, although only a modest number of articles were published pre-2001. After 2001, interest increased substantially, undoubtedly due to a series of seminal articles published in the early 2000s such as Starkey and Madan (2001) and Pfeffer and Fong (2002). The number of articles per year following these seminal articles increased steadily and this growth extended into the next decade, with a subsequent sharp increase in articles towards the end of the 2010s and the beginning of the 2020s.

Figure 2. Volume of literature per year



The articles included in the review were also analysed on the basis of their geographical origin. This was determined by examining each article to understand the specific setting being referred to, or for empirical articles, the location of the fieldwork. Where neither of these were evident, the institution of the lead author was used as an indication of geographic region. Of the 266 articles included in this review, the majority (54.5%) originate from Europe (see **Figure 3**). Despite concern that business schools on a global scale have succumbed to an excessive influence from the United States HE landscape (e.g., Boyacigiller and Adler 1991; Pfeffer and Fong 2004) – a factor which could have conceivably therefore featured in the literature *about* business schools – a smaller proportion of articles (27.8%) came from North America. The body of knowledge appears to not be reflective of all geographic regions, particularly Africa and South America, which both have very little representation in the literature. In terms of actual countries, the most represented country in the sample is the United Kingdom (n = 71), followed by the United States (n = 57), Australia (n = 25), Canada (n = 17) and Sweden (n = 15). These five countries together make up almost 70% of the sample.

Figure 3. Geographical composition of literature



The analysis also revealed the most popular journal to accommodate articles on this topic is the Academy of Management Learning & Education (n = 26), followed by the British Journal of Management (n = 21). Conceptual papers (n = 97) and qualitative studies (n = 96) were the most popular article types, followed by less common quantitative studies (n = 39), mixed method studies (n = 19), and reviews (n = 15). The majority of articles focused solely on business school research (n = 168), with fewer focused on business school education (n = 72). Some articles focused on both research and education (n = 22), whilst a small amount were classified as "other" (n = 4). Those classified as "other" did not relate specifically to either research and/or education but instead business schools more generally, such as the issue of managing business schools. The majority of articles did not concentrate on a specific business subdiscipline (n = 161), but where a subdiscipline was focused on, the most common was the subdiscipline of sustainable and responsible business (n = 19). Finally, almost a third of articles had no distinct theoretical lens (n = 80). By far the most common lens through which the relevance of research and education in business schools is examined is that of knowledge exchange (n = 59). Knowledge exchange here is used as an overarching term to classify studies that draw on concepts such as knowledge transfer, knowledge co-production, knowledge creation and integration, knowledge markets, knowledge ecosystems, knowledge translation, forms of knowledge, value co-creation, and design science. Institutional theory (n = 12),

experiential learning theory (n = 8), social constructivism (n = 6) and Boyer's (1990) model of scholarship (n = 5) follow as the most popular frameworks to be utilised in this area.

4. Previous reviews

Before we delve into the findings of our systematic literature review, we wish to highlight the previous reviews in this area that were returned in our literature search. Not only does this provide a context for our own review, but this also helps us elucidate the current knowledge gap that makes our own review necessary. As detailed in the previous section, the systematic literature search returned, among other article types, fifteen review articles (see **Appendix 2**). Drawing on the definition given by Post *et al.* (2020 p. 352), we determined a review paper as being a "study that analyses and synthesizes an existing body of literature [...] through an examination of a body (or several bodies) of prior work". Previous reviews in this area were therefore selected on the basis that they, through a general or specific literature review methodology, either (1) synthesized previous work that is directly related to the topic of this review; or (2) adopted a lens for assessing relevance and/or impact as they may relate to a certain relevant context or area.

It is important to acknowledge the great strides made in this area from the perspective of previous reviews. Not only do they enhance our understanding of how the field has been synthesized, but they also help us to understand how the current review can contribute. The majority of the reviews focus on research, with three that consider both research and education (i.e., a more general view of business schools) (Anderson *et al.* 2020; Pettigrew and Starkey 2016; Ungureanu and Bertolotti 2020) and only two focused exclusively on education (Govender and Vaaland 2022; Rubin and Dierdorff 2013). Even though there are three previous reviews that encompass both research and education, similar to the current review, they each take a markedly different form. We note the thorough work by Carton and Mouricou (2017),

who conducted a systematic analysis of the rigour-relevance debate in top-tier journals. We also note the comprehensive systematic analysis of the literature related to the practical relevance of management research by Kieser *et al.* (2015), who proposed a redirection of the relevance debate towards an enhanced empirical understanding of how research can be utilised. Although similar themes to our own review, we acknowledge the distinct differences in the focus and aims.

A number of the previous reviews refer to specific business subdisciplines – namely, international business (Oesterle and Laudien 2007), information systems (Moeini *et al.* 2019), and supply chain management (Lambert 2019; Svanberg 2020; van Weele and van Raaij 2014). Contrastingly, the current review considers research and education activities without regard for any particular management subdiscipline, in line with some of the previous reviews that have approached this area with a more general unit of analysis such as "business schools" (e.g., Pettigrew and Starkey 2016) or "management research" (e.g., De Frutos-Belizón *et al.* 2019).

5. Research objective 1: Thematically analysing the literature

In order to meet the first research objective, this section demonstrates the outcome of our thematic analysis of the abstracts of the articles included in our review. The themes we uncovered were organised into four streams of literature that encapsulate the ways in which the relevance and impact of business schools has been discussed. These streams are: (1) the business school environment; (2) criticism of core business school activities; (3) proposals for enhancing relevance; and (4) fundamental elements of relevant knowledge.

Connections made between research and education in general throughout the literature base are lacking. Despite this, the different streams of literature identified in the review do not exist in isolation. The literature streams, together, form a bigger picture. The environment in which business school academics operate (Literature Stream 1) is perceived as being a primary

contributor (the "Source") to the relevance problem (Literature Stream 2) (the "Problems"). The relevance problem is fixable, and various solutions (Literature Stream 3) (the "Solutions") have been put forward which, potentially, could help to make the knowledge produced in business schools reach the fundamental criteria of relevance (Literature Stream 4) (the "Outcome").

The following subsections explore each individual literature stream and details the main points derived from previous authors.

5.1. The business school environment (the "Source")

Business schools have been subject to criticism regarding the relevance of their activities, and there has been interest in diagnosing the source of the issues that have attracted this criticism. The body of literature suggests that the environment of business schools, in which business school academics operate, is a significant contributing factor to the so-called relevance problem. The general argument in this area is that the institutional environment in which business schools exist makes it difficult to balance the competing priorities of generating rigorous theoretical knowledge versus generating practical solutions of immediate relevance to practice and society (Harrington *et al.* 2015; Stentoft and Rajkumar 2018).

A significant element of this stream is embedded in the notion of the legitimacy of business schools. The quest to be seen as a legitimate knowledge-producing institution has been challenged on the basis of business schools' role in society and their overall purpose (Snelson-Powell *et al.* 2016). How legitimate business schools appear to practitioners, students, and research funding bodies is a significant cause of concern – and fundamental to the relevance problem (Birkinshaw *et al.* 2016; Tushman *et al.* 2007). Thomas and Wilson (2011) cite academic rigour and practical relevance as the two key conflicting sources of legitimacy for business schools in terms of research activities, and some have argued that this drive for

academic legitimacy, and thus academic rigour, has threatened the ability of business schools to concentrate on the real-world impact of their outputs (e.g., McGrath 2007; Seal 2012). Legitimacy is earned largely from the perspective of key external stakeholders (Masrani *et al.* 2011) and these external stakeholders are increasingly defining what constitutes legitimate and relevant knowledge in the field of business and management (Lehtimäki and Peltonen 2013). An empirical study by Paterson *et al.* (2018 p. 1371) supports this argument, finding that practitioner evaluations of relevance were "stronger predictors of academic legitimacy than methodological rigor".

The discussion of the business school environment has manifested in three main focus areas: publishing expectations, student expectations, and impact expectations (**Table 2**).

Table 2. The business school environment literature stream

Literature	Theme	Sub-	Main Points
Stream		Theme	
Stream 1: The business school environment (the "Source")	Co-existing expectations	Publishing expectations	 It is argued that "one of the most enduring beliefs in academe relates to what is often referred to as the 'publish or perish' phenomenon" (Miller <i>et al.</i> 2011 p. 423) Research productivity remains a primary indicator of excellence for business school academics (Hamet and Michel 2018)
		Education expectations	 Business school education is somewhat seen as a "cash cow" (e.g., Pfeffer and Fong 2002), putting increasing pressure on business schools to attract and retain large volumes of high-quality students Business schools are under pressure to reflect the needs of businesses in their educational programmes (McMillan and Overall 2016)
		Impact expectations	 Expectations to evidence impact outside of academia arise from formal research assessment structures such as the Research Excellence Framework (REF) in the UK (Rao-Nicholson <i>et al.</i> 2018) Impact can be conceptualised in many different formal and informal ways and thus measurement of impact is not straightforward (Johnson and Orr 2020)

5.2. Criticism of core business school activities (the "*Problems*")

At the heart of most business schools are the core offerings of research and education. However, criticism has arisen that these core activities are potentially insufficient with respect to producing relevant and impactful knowledge – criticism that has been picked up on by

authors in this space (**Table 3**). The literature pertaining to business school relevance is heavily skewed towards criticising research activities, with a smaller literature base focusing on the relevance of business school education. With respect to research activities, criticism has arisen in the areas of research outputs and dissemination of knowledge. In terms of education activities, the body of literature is largely focused on Master of Business Administration (MBA) programmes and executive education, undoubtedly because these courses are practitioner-focused and thus are expected to be significantly relevant for practice. Despite this, other levels of education have also received attention, such as Anderson and Gold (2019) contending that norms in doctoral education favour the academic community at the expense of practice.

Table 3. Criticism of core business school activities literature stream

Literature Stream	Theme	Sub-Theme	Main Points
Stream 2: Criticism of core business school activities (the "Problems")	Research activities	Research outputs	 It is speculated that much business school research is pre- occupied with scientific rigour and neglects practical relevance, known as the rigour-relevance gap (e.g., Starkey and Madan 2001) The rigour-relevance gap manifests in the different languages, styles, logics, and problem-solving methods that academics and practitioners use (Kieser and Leiner 2009)
		Dissemination	 It has been argued that business school academics operate in a closed loop of communication in which they "read the work of other academics and write in academic journals to reach that same audience" (Vermeulen 2007 p. 754) Business schools are under increasing pressure to lower their "walls" in the interests of society and practice (Currie <i>et al.</i> 2016)
	Education activities	MBA programmes	 Various authors have acknowledged the critiques of the value of MBA programmes (e.g., McGrath 2007; Pfeffer and Fong 2002; Rubin and Dierdorff 2011, 2013) Issues have been found with how research outputs are positioned and communicated to enhance learning on MBA programmes (e.g., Tucker et al. 2019)
		Executive education	 Various authors have acknowledged the critiques of the value of executive education programmes (e.g., Harrison <i>et al.</i> 2007; Paton <i>et al.</i> 2014; Tushman <i>et al.</i> 2007) There is a significant relational potential for academic-practitioner knowledge exchange in executive education programmes, but this is dependent on how such knowledge exchange is approached (Ungureanu and Bertolotti 2018)

5.3. Proposals for enhancing relevance (the "Solutions")

The current issues with core activities in business schools are not irreversible (Barrett and Oborn 2018). The literature discusses strategies that can contribute to the bridging of the gap between rigour and relevance in both research and education. The literature base is compartmentalised in that the methods for enhancing relevance are very much applicable to either research *or* education. Nevertheless, these various proposals comprise a set of impact-oriented strategies and approaches that, if used appropriately and perhaps in combination, could seemingly enhance the relevance of research and education in business schools (**Table 4**).

Table 4. Proposals for enhancing relevance literature stream

Literature Stream	Theme	Sub-Theme	Description
Stream 3: Proposals for enhancing	Mode 2 research	Design science	An approach with the intent of developing "knowledge that the professionals of the discipline in question can use to design solutions for their field problems" (van Aken 2005 p. 20)
relevance (the "Solutions")		Engaged scholarship	A "collaborative form of inquiry in which academics and practitioners leverage their different perspectives and competencies to co-produce knowledge about a complex problem" (Van de Ven and Johnson 2006 p. 803)
		Action research	Action research is a research strategy whereby the researcher "simultaneously studies the phenomena and actively participates in organizational change" (Fendt <i>et al.</i> 2008 p. 482)
		Pragmatism	A "philosophy of science that addresses the relationship between theorising and practice [] focusing on asking the 'right' questions and providing empirical answers to those questions" (Fendt <i>et al.</i> 2008 p. 473)
		Critical realism	A philosophy of science that commits to a realist and pluralist ontology, acknowledging that our knowledge is always contextually relative and that a variety of research methods are necessary to access different social and conceptual structures (Syed <i>et al.</i> 2010)
		Interdisciplinarity	Finch <i>et al.</i> (2017) cite the definition from Davis (1995 p. 5): "the work that scholars do together in two or more disciplines, subdisciplines, or professions, by bringing together and to some extent synthesizing their perspectives"
	Curriculum and pedagogy improvements	Social responsibility in teaching	The adjustment of business school curricula to more of a sustainable focus, beyond the superficial incorporation of business ethics programmes and away from the embedded assumption that profit maximisation should be the primary objective (e.g., Baden and Higgs 2015)
		Action learning	Action learning "couples traditional content-driven learning with learning-by-doing" and "is rooted in real problemsolving, involving data gathering, active reflection, and action planning" (Tushman <i>et al.</i> 2007 p. 350)

	Practice-focused education	Education in business schools that equips students with the necessary competencies for the workplace (e.g., Andrews and Higson 2014)
Direct stakeholder engagement	Knowledge co- production	Business school academics' "active and participatory involvement with multiple stakeholders from business, government, and society through 'deep interactions' [] in which all parties leverage distinct resources to generate new knowledge collaboratively" (Rossi <i>et al.</i> 2017 p. 1)
Indirect stakeholder engagement	Knowledge transfer	A "process whereby knowledge is transmitted unidirectionally from academics to external stakeholders, who benefit by using such knowledge for their own objectives" (Rossi <i>et al.</i> 2017 p. 1)

The proposals related to research are all grounded in the overarching idea of Mode 2 knowledge production, a widely cited concept in the body of literature. Mode 2 knowledge production refers to research approaches that are "driven by a quest for problem solutions that transcend traditional disciplinary boundaries and which results in the rapid dissemination of findings through a variety of channels" (Hodgkinson *et al.* 2001 pp. 41-42). On the other hand, the proposals related to education are grounded within the theme of curriculum and pedagogy improvements. These suggestions all display a shared goal of making business school education more reflective of, and sensitive to, real-world issues, enhancing the skills and knowledge needed to succeed in a range of contexts.

Evidently, numerous approaches have been put forward for more impactful research and education in business schools. It is apparent from the literature that each of these approaches share a common purpose: to improve engagement with various external stakeholders to enhance the impact of business school activities. It is a consensus in the literature that "relevant and impactful management research requires close interaction between academics and external stakeholders" (Rossi *et al.* 2017 p. 1), a view that is echoed in business school education (e.g., Anderson *et al.* 2017). The literature identifies not only indirect engagement with stakeholders (knowledge *transfer*), but also direct engagement with stakeholders (knowledge *co-production*).

5.4. Fundamental elements of relevant knowledge (the "Outcome")

Three primary facets of relevance emerged from the literature base: a requirement for knowledge to have a solution focus, a requirement for knowledge to have societal value, and a requirement of knowledge to have visibility for those who need it. These elements seemingly form the basic criteria for business school outputs to be deemed as relevant and impactful beyond academia (see **Table 5**).

Table 5. Fundamental elements of relevant knowledge literature stream

Literature	Theme	Sub-	Main Points
Stream		Theme	
Stream 4: Fundamental elements of relevant knowledge (the "Outcome")	Relevant and impactful knowledge	Solution focus	 Knowledge that practitioners can utilise to find solutions to realworld issues (de-Margerie and Jiang 2011) Resonates with similar conceptualisations of practically-focused outputs, such as prescription-driven research (e.g., van Aken 2004), applied research (e.g., Tranfield and Starkey 1998), actionable research (Liu and McKinnon 2019), and instrumental knowledge production (e.g., Mesny and Mailhot 2012)
		Societal value	 Knowledge that can help to solve problems that actually exist; problems that are experienced by practitioners and society (Jarzabkowski <i>et al.</i> 2010; Tushman and O'Reilly 2007) In achieving research and education that is of societal value, scholars could draw on so-called "grand challenges" such as climate change and global health (Brammer <i>et al.</i> 2019)
		Visibility	 Knowledge that is utilisable because it is visible and accessible to the stakeholders who need it (Hamet and Maurer 2017) There have been calls for more "boundary-spanning intermediaries" to facilitate knowledge dissemination (e.g., Bansal <i>et al.</i> 2012)

6. Research objective 2: Advancing the literature

Embracing the multidimensional and complex nature of business schools in this review has led to insights that would certainly have been missed if simply focusing on one activity, such as research. Indeed, exploring business schools through a lens of being something of a living organism with multiple interrelated activities allows the notion of relevance and impact to be viewed much more holistically. This has consequently raised some important issues for further research, and we believe that conceptualising business schools in a similar way as in this review

could be useful for other scholars who both theoretically and empirically examine business schools in the future.

With this in mind, herein we present a *holistic thematic framework* (**Figure 4**) that goes beyond the identification of different literature streams by integrating some of the relevant theoretical considerations for advancing the business school literature. It is important to note that we are not simply proposing theories and concepts to be shoehorned into future research on business schools, but rather this is a reflection on what appears to be some of the potential avenues for investigating business schools based on the development of the field we have synthesized. Thus, in fulfilling the second research objective of this review, we offer our *holistic thematic framework* which can contribute to advancing the business school literature by identifying future ways of researching business schools and avenues in need of empirical investigation.

Figure 4. Holistic thematic framework

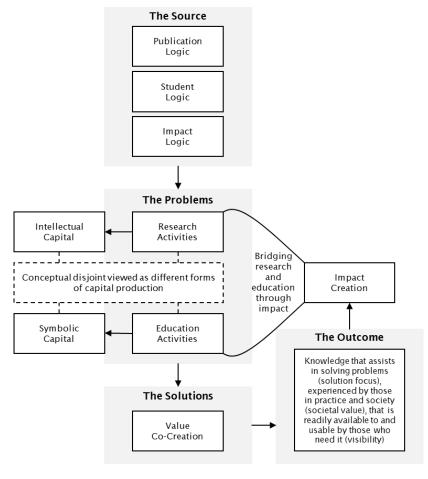


Figure 4 demonstrates how we wish to augment our examination of the past to offer new ways of thinking about business schools in the future. The different expectations identified in the "Source" literature stream lend themselves to being reconceptualised as coexisting institutional logics. We note the lack of cross-fertilization between the discussions of research and education, as identified in the "Problems" and the "Solutions" literature streams. Thus, we propose a novel hypothesis for why this may be the case: framing business and management as a temporally dominant discipline mirroring the distinct publication and student logics. We further argue that the plethora of suggestions of how business schools can enhance their relevance and impact (the "Solutions") can be contextualised by drawing on the wider concept of value co-creation. Finally, we emphasise that the "Outcome" – relevant and impactful knowledge – should be reflected in an inclusive definition that is representative of the different ways relevance has been approached in the literature. We argue that embedding holism in how we conceptualise business schools is something that can be achieved by applying the same criteria of impact (reflective of our proposed definition) to both research and education, acknowledging that both activities are critical to the wider impact agenda.

The following four sub-sections are each the result of careful evaluation and consideration of the literature streams, reflecting our *holistic thematic framework*.

6.1. Reconceptualising Expectations as Institutional Logics

There exists a gap in the literature base in that, although there have been claims that the institutional environment of business schools is complex (e.g., Alvesson and Sandberg 2013; Bullinger *et al.* 2015), there is a lack of empirical evidence of the potentially problematic nature of the academic environment of business schools and how this environment contributes to the relevance problem. Indeed, some authors (e.g., Paterson *et al.* 2018) have acknowledged that there is not enough empirical research into the institutional logics at work in the academic

environment of business schools. The issue of lacking empirical evidence seems to also be evident in the wider business school literature (e.g., Koris and Aav 2019; Tucker and Scully 2020). It is likely that there are various institutional pressures at play which may influence behaviour of organisational actors. For example, one of the institutional pressures not overly documented in the reviewed literature base is accreditation standards, arising from accreditation bodies (e.g., EQUIS, AMBA, AACSB, etc.) which in themselves may manifest in different institutional logics (Lejeune and Vas 2014). However, most critically, it is unclear from the literature base how business school education fits into the wider discussion of the institutional environment (i.e., the discussion is skewed towards the trade-off between rigour and relevance in the context of research), which brings us back to the idea that business school research does not exist in a vacuum but is instead executed in an environment in which business school education is also delivered. The role that student expectations play in the interplay between publishing expectations and impact expectations is an area that is currently not well understood that requires scholarly consideration.

There are many detailed and thought-provoking papers that, although not empirical, make great strides in our understanding of the institutional environment of business schools. For example, Harley (2019) points out many factors within the environment that have contributed to the so-called crisis, such as incentives and the "rules of the game", competition for funding and prestige, and good teaching being seen as, fundamentally, a hygiene factor. What is needed is an empirically-grounded understanding of this environment, in the context of the lived experiences of those who act within it.

Therefore, we propose the need to study business schools as comprising of multiple yet potentially conflicting institutional logics that demonstrate varying stakeholder interests. In this we echo the idea put forward by Finch *et al.* (2018 p. 153) that "productive engagement between science and practice exists on a continuum, and the position of a discipline on the

continuum is determined by institutional forces ranging from macro-level variables (institutional mission, discipline and profession) to micro-level variables (academic training and practitioner experience)". Such research would be invaluable for understanding how identity conflict of academics at the crossroads between research, teaching and knowledge exchange is facilitated and maintained (Empson 2013). However, there are relatively scarce discussions related to competing institutional logics in business schools (e.g., Alvesson and Sandberg 2013; Bullinger et al. 2015) and there is a lack of empirical evidence in this area. There is a need for such evidence that explores the experiences of business school academics in the environments in which they work, in order to truly appreciate the contribution that the academic environment makes to the relevance problem and the impact agenda. As mentioned, there is a need for discussions related to the institutional environment to acknowledge the significant role that education activities play in the life of business school academics, which is something that could also be illuminated through further empirical work. Thus, drawing on the insights of the holistic thematic framework and particularly Literature Stream 1 (the business school environment), it would be sensible to conceptualise the field of business schools as comprising of three distinct logics that are direct counterparts to the three identified expectations: the publication logic, the student logic, and the impact logic. This is demonstrated in the holistic thematic framework. Future research on business schools could use this conceptualisation as a foundation for exploring why business school activities are seemingly "irrelevant", the micro-level behaviour and strategies of actors within this environment, and for understanding what institutional forces legitimise different objectives, such as high-ranking publications and increasing student numbers.

6.2. Business and Management as a Temporally Dominant Discipline

We have consistently argued that research and education have largely been discussed in isolation when business schools are discussed, and yet there is no clear explanation as to why

this is the case. Understanding this divide is a research gap in itself. Whilst we encourage others in this space to speculate why this disjoint may exist, we would like to offer our own hypothesis that may help us to understand the divide, both practically and conceptually. Our novel suggestion is that the business schools can be seen as the home of a temporally dominant discipline, as advocated by Wacquant (1990) some decades ago, relating to disciplines such as medicine and law that can address varying sources of capital. Relating to the "currency" of actors in a field, capital refers to an actor's power and resources, and it enables those in a field to gain social position and status (Bourdieu 1986). Capital has been applied previously in the business school context, notably in assessing the career trajectories of business school academics themselves (Rossier 2020). We also draw inspiration from authors included in our review who have utilised a Bourdieusian perspective (e.g., Andrews and Higson 2014; Brooks et al. 2019) as well as the plethora of applications of such thinking to the HE context. As a starting point, business schools can be defined as a field, described by Bourdieu as a configuration of relations between different social positions determined by different sources of capital, involving specific "rules of the game" that are needed for actors to navigate said field (Bourdieu and Wacquant 1992). This is most obviously seen in relation to the business school environment (Literature Stream 1), which consists of multiple competing expectations (or logics) that foster an air of complexity and determine the rules of the game and how capital is accumulated. A novel application of Bourdieusian thinking from the holistic thematic framework, however, relates to the different forms of capital and how this can help to explain the chasm between research and education and the subsequent lack of cross-fertilisation between discussions of them with reference to relevance and impact.

One explanation for this apparent disconnect is the idea that research and education address and produce different forms of capital. Business schools are tasked with producing intellectual capital (i.e., research outputs), the "knowledge and knowing capability of a social collectivity,

such as an organization, intellectual community, or professional practice" (Nahapiet and Ghoshal 1998 p. 245). They can also produce symbolic capital – the compilation of an actor's symbolic cultural resources that can be leveraged to accrue value and legitimacy (Bourdieu 1994) – which in the case of business schools relates to granting degrees (e.g., Ryan et al. 2015) and providing prestigious affiliations, both for those inside (academics and students) and outside (partners and graduates) of the immediate business school system. Another layer of complexity is added when one considers that perhaps the wider university that a business school is positioned in wishes to transform these various forms of capital into economic capital, in order to fund and manage the (often resource-scarce) university, concurrent with critiques of universities treating business schools as "cash cows" (e.g., Parker and Guthrie 2010). We strongly believe that this conceptualisation would augment the previously described institutional logics approach. Indeed, previous work in multiple areas has examined the relationship between institutional logics and the Bourdieusian idea of capital – capital acts as a basis on which a particular logic is acted upon (Misangyi et al. 2008) and the value of a certain capital is defined by a logic (Weik 2011). Thus, we argue that the intellectual capital produced is representative of the publication logic, whereas the symbolic capital produced is representative of the student logic.

Temporally dominant disciplines are more directly associated with external sources of power (e.g., Lapping 2004), which is therefore arguably the case for business schools as the home of the temporally dominant discipline of business and management. Thus, they are faced with producing intellectual capital, which is linked to producing academically rigorous research outputs, whilst simultaneously producing symbolic capital, which is linked to producing graduates and building an educational reputation. Under this lens it is clear that the disconnect between research and education could be reflective of the inherent need for business schools to address different forms of capital. Since business school research and education are both

concerned with external structures of power in different ways, it is no surprise that the discussions of how they should go about becoming more impactful are largely divorced. However, as seen in Literature Stream 4, relevance as it applies to produced knowledge is applicable to both research and education. An important consideration for future study is to understand to what extent the relevance and impact of research compared to education is contingent on the different criteria for relevant knowledge (solution focus, societal value, visibility) given the different sources of power they are associated with. This could provide an insight into the divide. As a starting point, for example, given that education produces symbolic capital for graduates and future businesspeople, one could hypothesise that the need for content in education programmes to be solution-focused and societally valuable is greater than that for research outputs. This would support the notion that education is a principle disseminator of university-produced knowledge (e.g., Visser-Wijnveen *et al.* 2010), perhaps even more so than other forms of dissemination.

6.3. Value Co-Creation

As we noted in the descriptive analysis of our sample of articles, the most common theoretical framework utilised in the literature is $knowledge\ exchange\ (n=59)$, yet only a small proportion of these papers focus on co-production or co-creation. Furthermore, we identified through our review of the literature the lack of connection made between the proposals for enhancing the relevance of business school education, and direct stakeholder engagement. We found a clear connection across the literature base between research and $knowledge\ transfer$, and between education and $knowledge\ transfer$. There is also a clear connection between research and $knowledge\ co-production$. However, there is only a tentative connection between education and education and education in other words, there is a lack of cross-fertilization in the literature between education and the education-focused proposals for creating impactful knowledge.

Although a relatively novel connection, and one that would perhaps not be expected of business school education (except for the case of executive education, where it is more likely to be anticipated), the importance of co-producing knowledge cannot be underestimated (Rossi et al. 2017). In its direct nature, knowledge co-production manifests in the dialogue between academia and practice. This dialogue provides an invaluable platform for "support, challenge, exchange, generation, and experimentation" (Marcos and Denyer 2012 p. 444). Knowledge coproduction is generally seen in collaborative research with practitioners (Kieser and Leiner 2012), and thus has not been widely applied to business school education. However, some key authors within the literature base have highlighted the potential applications of knowledge coproduction to business school education. Berggren and Söderlund (2008) demonstrate that business school education, particularly programmes for practicing managers, can offer promising foundations for knowledge co-production. Anderson et al. (2017) describe the coproduction of management knowledge through education as "relational" education. This notion has been supported by Werr and Strannegård (2014) who, after observing an educational programme for practitioners involving collaborative research with business school academics, conclude that programmes of this nature can nurture the development of relevant, co-produced knowledge. These authors emphasise that knowledge co-production can be applied in the context of business school education, but this is an area that requires further research. Some authors have explored the notion of business school students participating in real-life projects and work-based learning, but without any explicit use of a theoretical lens of co-production of business school knowledge.

It would therefore be beneficial to better understand how business school education can involve direct stakeholder engagement. Indeed, it can be argued that impact is contingent on stakeholder engagement (Huzzard 2021), and in this spirit we propose that future research on business schools moves towards expanding the use of a *value co-creation* lens for

understanding impact and relevance across the entire spectrum of activities that business schools assume. Studies into how knowledge can be co-produced and co-created with practitioners in an education setting are sparse, but it should not be assumed that business school education is limited to the transfer of knowledge to practitioners indirectly via graduates. The notion of co-production can be extended, using the ideas behind servicedominant logic (Vargo and Lusch 2004), to theorise how value is co-created (e.g., Farr 2016). Co-creation, defined as "an interactive, creative and social process between stakeholders that is initiated by the firm at different stages of the value creation process" (Roser et al. 2013 p. 23), is often seen as interchangeable with co-production, with there being no empirically remarkable difference between the two concepts (Voorberg et al. 2015). It appears that the papers that have championed co-production did not make explicit reference to the adjacent field of co-creation, despite adopting the general principles of co-creation. Rossi et al. (2017 p. 2) argue that the idea of generating knowledge collaboratively "provides a more accurate description of the engagement process of business school academics, as well as a more suitable theoretical framework with which to characterise how academic engagement generates impact". The findings of this review support this sentiment, and so it would be sensible for future research on business schools to draw on the wider literature and theoretical underpinnings of co-creation, given that co-production and co-creation are interchangeable. Thus, our holistic thematic framework points towards understanding the approaches for enhancing relevance under the wider lens of value co-creation. In the spirit of our holistic approach taken with the framework, we wish to emphasise that co-creation should occur both with practitioners and with students. More explicit theorising related to the co-creation concept is needed when exploring co-production, in order to build bridges between the examination of knowledge co-production in business schools and co-creation theory which emphasises the role of the "consumer" (Cova et al. 2011).

As a starting point, drawing on the ideas of Vargo and Lusch (2004), and the importance of stakeholders and the co-creation process, it would be appropriate to consider the following points in future research: (1) relevance, or impact, is "value"; (2) relevance is defined by and co-created with practitioners and/or students; (3) relevance is determined by practitioners and/or students on the basis of "value-in-use"; (4) value-in-use in this context implies that the value of knowledge is an outcome of engagement with practitioners and/or students; (5) relevance results from the application of operant resources (i.e., the approaches for enhancing relevance and core competencies of business schools); and (6) business school outputs have "relevance potential" but are not embedded with relevance – rather, relevance is realised based on specific stakeholder needs through knowledge co-creation. These assumptions are borne out of an approach that would emphasise co-creation with practitioners and with students, as per the holistic thematic framework. Furthermore, Vargo and Lusch (2004 p. 9) emphasise that knowledge and skills "can be transferred (1) directly, (2) through education or training, or (3) indirectly by embedding them in objects". This conceptualisation of value resonates with our findings of Literature Stream 3, with regards to the idea of direct and indirect stakeholder engagement, whereby "objects" could be research articles, for example.

6.4. A Stakeholder-Centric Definition of Relevant and Impactful Knowledge: Bridging Research and Education

As a final point, our review reveals the absolute importance of stakeholders in any discussion of the impact of business schools, highlighting that any strategy taken to enhance the relevance of either research or education involves some form of engagement with stakeholders, whether that be directly or indirectly. Despite this clarity on the significance of business school stakeholders, the definition of relevant and impactful knowledge is less clear. Relevance and impact are far-reaching and can encapsulate many meanings. Indeed, impact itself can be achieved in a multitude of ways, ranging from integration of research into the L&D activities

of organisations (e.g., Ross *et al.* 2021) or through professional doctorate graduates being able to apply their accumulated skills and critical thinking abilities to practice (e.g., Creaton and Anderson 2021).

Inspired by stakeholder theory (Freeman 1984; Laplume *et al.* 2008) and its applications to higher education (e.g., Alves *et al.* 2010; Chapleo and Simms 2010) and even specifically business schools (e.g., Rao-Nicholson *et al.* 2018), and drawing on the findings of what relevant knowledge *actually* is, we propose a stakeholder-centric definition of relevant and impactful knowledge in the context of business schools. This definition does not only speak to those critics who have identified a lack of clarity around what relevance *is* but represents a thorough and representative amalgamation of decades of debate on the purpose of business schools. Based on our in-depth synthesis of the relevance literature, we offer the following stakeholder-centric definition of relevant and impactful knowledge:

Knowledge that assists in solving problems (solution focus), experienced by those in practice and society (societal value), that is readily available to and usable by those who need it (visibility)

It has been argued previously that relevance is a difficult concept to empirically assess with respect to university-produced knowledge (e.g., Palmer *et al.* 2009), and we echo the point raised by Kieser *et al.* (2015 p. 196) that "practical relevance has many different dimensions", which have "not been properly acknowledged in most contributions to the relevance debate". Thus, it is hoped that synthesizing previous discussions of relevance and impact with a view to offering an all-encompassing definition will be useful for future research. Furthermore, we believe that our definition can be applied to two of the three forms of knowledge utilization as explained Astley and Zammuto (1992), them being instrumental – directly influencing managerial behaviour, and conceptual – influencing how managers perceive a problem. Our

definition echoes the idea that business school research should be relevant to the issues of a wide array of key stakeholders (Hodgkinson *et al.* 2001), including practitioners, government, and consumer groups, reflecting the diverse requirements of modern business schools to meet multiple needs. Furthermore, the "visibility" aspect emphasises the importance of considering *how* knowledge is communicated with stakeholders, in conjunction with authors such as Cummings and Cummings (in press) who highlight the role of language use in communications with students and practitioners.

It is important to note that, in addition to the ideas that relevant knowledge should have a solution focus, societal value, and visibility to external stakeholders, it is also vital that such knowledge is based on valid evidence. This reflects the growing popularity of "evidence-based management" (Pfeffer and Sutton 2006; Rousseau 2006) in business and business schools. Discussions of evidence-based management were minimal in the returned literature, with only one result looking at the concept in-depth (van Aken and Romme 2009). This was not enough to generate a meaningful theme that would ultimately be included in our framework. This may represent a weak link between the evidence-based management literature and the conceptual and empirical relevance literature, considering that this review omits to analyse viewpoint articles. However, it can be argued that a precursor to the three identified fundamentals of relevant knowledge would be for ideas to be based on scientifically valid insights, and thus evidence-based. This acknowledges the legitimacy and validity of the rigour side of the rigour-relevance spectrum – the issue here is striking the right balance.

We wish to offer a fruitful application of our definition for advancing the business school literature. The *holistic thematic framework* demonstrates the criticality of capturing the relevance of business schools in the context of research *and* education, appreciating the respective roles they play within a wider multidimensional entity (e.g., Jensen and Wang 2018). Importantly, it also allows us to expose facets of the literature that are underdeveloped and

require further investigation. In particular, the lack of previous studies that acknowledge the multidimensional nature of business schools is evident, with little cross-fertilisation between discussions of research and education. This review emphasises that business school research does not exist in a vacuum, but instead goes hand-in-hand with education in the wider business school system. It has been identified previously that research into the complex relationship between research and education is lacking (Starkey and Hatchuel 2014). The findings of this review support this stance, identifying a significant gap in the literature in that there has been little examination of the complex relationship between research activities and education activities in business schools in the context of relevant knowledge production and dissemination.

We therefore argue that our definition epitomizes this multidimensional view, given that it is borne from synthesis of literature from both sides of the topic. Our definition of relevant and impactful knowledge is applicable to the whole business school portfolio without discrimination against either research or education. The conditions for co-created knowledge to be relevant and impactful is the same, we argue, for both. Thus, impact – which reflects the ultimate outcome of relevant and impactful knowledge – can act as the conceptual bridge between research and education, hence the final piece of the puzzle: "bridging research and education through impact". This coincides with our belief that scholars who engage in the rigour-relevance debate in the future should not omit to recognise the role that education plays in the endeavor for impact.

We should note that the interrelation between research and education has not been *completely* omitted in the literature, and has been recognised by some key authors, which is a useful foundation for understanding the interconnections between the two. Critically, authors in this space have recognised the immense potential of education activities as a key disseminator of research findings and as a way of achieving impact (e.g., Anderson *et al.* 2017). In a similar

vein, others have appreciated the role of research findings in the business school curriculum (e.g., Berggren and Söderlund 2008), highlighting the organic relationship that exists between research and education. Others have been more critical of the relationship – for example, Pearce and Huang (2012) found evidence that research in business schools has become less actionable and is therefore less useful for students. Additionally, Peng *et al.* (2018) suggested that new research findings seldom make it into textbooks and classroom environments in a timely and efficient way, suggesting a level of distance between research and education. Overall, however, discussions of the relationship between research and education have been lacking, and the *holistic thematic framework* has demonstrated that applying holism to the study of business schools is beneficial for appreciating their complex nature.

7. Conclusion

This paper has provided a systematic review of the literature on the relevance and impact of business schools, encompassing their multidimensional nature by recognising both research and education activities. Based on a systematic analysis of 266 journal articles published between 1991 and March 2021, we have developed a *holistic thematic framework* that incorporates the main streams of literature in this domain and represents how business schools could be studied in the future. Not only do these frameworks demonstrate how these streams of literature fit together within the wider body of knowledge, but they also expose the gaps within this knowledge base that need to be addressed. Fundamentally, our thematic findings demonstrate that the environment in which business school academics operate is perceived as a primary contributor to the relevance problem; however, the relevance problem is seemingly fixable, and various solutions have been put forward to encourage business schools to produce and disseminate knowledge that meets the fundamental criteria of relevance. By exposing gaps in related strands of the body of literature, our findings have mapped out a much clearer route for researching and understanding business schools in the future.

This review makes three key contributions to our scholarly understanding of business schools. The first contribution is our synthesis of the body of knowledge in this area and the resultant holistic thematic framework. As has been reiterated throughout, the underlying premise of this review is the conceptualisation of business schools as multidimensional entities. The previous lack of cohesion among both the different activities that business schools undertake, and the different schools of thought in the overarching topic of the relevance and impact of business schools, has resulted in a fragmented body of literature with little oversight of the development of the field. We have developed this oversight in our framework, which is the first framework to our knowledge that has laid out a processual map of different thematic streams (the "Source", the "Problems", the "Solutions", and the "Outcome"). The framework presented in this review not only provides a way for scholars to comprehend the different areas within this topic and how they relate, but it also demonstrates the theoretical importance of applying a multidimensional lens to the study of business schools. This lens, which encapsulates both research and education within business schools, can allow us to appreciate that neither activity exists within a vacuum, and despite the compartmentalisation of previous literature, that the issues of relevance and impact apply to them both simultaneously and can thus conceptually bridge the two concepts. We have exposed the fact that whilst these two streams of literature exist, and they both draw on similar concepts (e.g., knowledge exchange; the institutional environment; societal value of knowledge), they are actually almost completely divorced from each other. Viewing business schools in their entirety as a unit of analysis – and appreciating the inclusivity of what impact can be and how it can be achieved – is the way to marry these separate schools of thought.

Second, among other theoretical perspectives that could offer useful ways for investigating business schools in the future, this review has highlighted both the value that could be offered by using an institutional lens through which to view business schools, as well as the urgent

need for more attention to be given to empirically understanding the institutional environment of business schools. Specifically, the synthesis of previous research revealed three distinct expectations that exist within the business school environment (publishing, student, and impact). This review has proposed a link between these expectations and the notion of institutional logics. Only a handful of previous papers have used an institutional complexity or institutional logics lens in order to understand the environment (e.g., Kieser 2011), but principally focus on research activities. This review has emphasised the fact that these institutional forces apply to both research *and* education and should prompt future scholarly work in this area to use an institutional lens that considers the entire spectrum of life within a business school. This review has also demonstrated that the consensus among scholars in this area is that the current problems faced by business schools are principally facilitated by the institutional environment, and thus emphasises the necessity for more empirical studies of said environment.

Finally, it has been noted previously that relevance, in the context of business schools, is ill-defined. For example, Augier and March (2007 p. 138) commented that "the definition of relevance is ambiguous, its measurement imprecise, and its meaning complex", whilst Butler et al. (2015 p. 733) argued that "the precise definition of 'relevance' is rarely explicated in detail by commentators, yet the pursuit of relevance is unanimously accepted as a worthwhile common goal within the business school". Following the literature synthesis, we were able to identify the key constructs of relevant and impactful knowledge and thus form a definition of what said knowledge actually embodies. This definition is anchored on the three facets of relevance found within our analysis: knowledge that is solution-focused, societally valuable, and visible. Not only does this provide a practical "checklist" of sorts for assessment of knowledge production efforts, but it can be used in future research to help conceptually understand what is meant by relevance. Furthermore, this definition, as we have illustrated it,

is applicable to both research and education, representing a critical bridge between the two in how impact can be equitably assessed across activities.

As with any review paper, this one has strengths and limitations. This systematic literature review provides a transparent and replicable methodology guided by experts in the field of systematic literature reviews (e.g., Denyer and Tranfield 2009; Tranfield *et al.* 2003). Furthermore, using rigorous and comprehensive qualitative methods to derive dominant themes from the literature has helped in drawing robust insights from textual data. In terms of limitations, it is possible that there is a certain level of publication bias. Similar to previous systematic literature reviews (e.g., Nolan and Garavan 2016), only peer-reviewed journal articles were considered and other forms of literature (e.g., conference papers) were disregarded. It is therefore possible that some relevant literature was not considered in the review. Furthermore, this review only included peer-reviewed and ABS Academic Journal Guide 2018 ranked work and excluded viewpoint papers. Although this is common of systematic literature reviews, we have simultaneously emphasised the various critiques related to an overreliance on scientific rigour in business schools in this review, something which – to an extent – we have replicated through a strict methodology. However, it could be argued that this meant that a high level of quality was maintained in the selected sample of articles.

A final limitation – which is perhaps not only a limitation of this review but also a limitation of the wider rigour-relevance and impact debates – is that there are likely variations in the size of the rigour-relevance gap within business schools themselves (i.e., across subdisciplines). One could argue that some distinct subdisciplines that are more quantitative in nature and less focused on managerial issues per se – such as data analytics, accounting, and finance – could innately be more relevant to practice than, say, organisational behaviour or critical management studies. On finance, Brooks *et al.* (2019 p. 25) comment that "beyond direct involvement with firms operating in the sector, finance is an area that is of interest to governments and regulators

both in the banking sector and beyond [...] finance is a leading indicator of the direction of travel of other scholarly sub-fields in business schools". With this in mind, given that our unit of analysis is business schools and thus encompassing all subdisciplines, we must acknowledge the possibility that our own conclusions drawn here may be more fitting for those less quantitative areas of business schools – however, this would need to be empirically verified. This is an inherent issue of looking at business schools in their entirety. However, this opens up another interesting avenue for future research – to compare and contrast relevance and impact between various business school subdisciplines.

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Appendices

Appendix 1. Inclusion and exclusion criteria

Include	Exclude
Peer-reviewed journal articles	Journal articles without peer-review; conference
	papers; book chapters; working papers
Articles that bear some relevance to the topic and	Articles that do not bear any relevance to the topic
objectives of the review	and objectives of the review
Quantitative research; qualitative research; mixed	Viewpoint papers
method research; conceptual papers; review papers	
Articles from journals ranked in the ABS	Articles from journals that are not included in the
Academic Journal Guide 2018 as 4*, 4, 3, 2, or 1	ABS Academic Journal Guide 2018

Appendix 2. Previous reviews

Author(s)	Year	Type	Summary	Focus
Hemsley-Brown	2004	Literature review	A review of the literature pertaining to the utilisation of research across three sectors: management, education, and medicine. Suggested that there is a tension between those producing new knowledge (academics) and those who use new knowledge (practitioners) which can be attributed to a difference in the goals of these two groups.	Research
Oesterle and Laudien	2007	Literature review	A review of the discussion of the future of international business research with a focus on practical relevance. Suggested that international business research, as a "young" discipline, lacks both legitimacy and a strong link between theory and practice.	Research
Rubin and Dierdorff	2013	Literature review	A review of the literature pertaining to Master of Business Administration (MBA) programmes from the <i>Academy of Management Learning & Education</i> . Highlighted previous literature that has emphasised insufficiencies in the MBA curriculum related to excessive focus on <i>shareholder</i> value and not enough on <i>stakeholder</i> value.	Education
van Weele and van Raaij	2014	Literature review	A review of purchasing and supply management literature under the lens of rigour and relevance. Argued that there are ways in which the research methods used in this field can advance and initiate enhanced relevance and rigour.	Research
Kieser, Nicolai and Seidl	2015	Literature review	A review of the literature pertaining to the relevance of business school research with the aims of: (1) evaluating articles that suggest ways of solving the relevance problem; (2) evaluating articles that concentrate on the interplay between business school research and practice; and (3) drawing on the evidence to develop a research programme to encourage the utilisation of business school research.	Research
Pettigrew and Starkey	2016	Literature review	A review of the literature pertaining to the legitimacy and impact of business schools. Acknowledged the interconnectedness of legitimacy and impact and noted the excess of viewpoint articles in this area that reflect on personal experiences instead of empirical findings.	Both
Carton and Mouricou	2017	Systematic literature review	A systematic literature review of the rigour- relevance debate in top-tier journals. Acknowledged that various positions on the rigour-relevance problem co-exist and are consistently repeated. Raised issues such as dissemination and collaboration.	Research
Brammer, Branicki, Linnenluecke and Smith	2019	Literature review	A review of business school research related to "grand challenges" to examine the extent to which business school researchers contribute to significant global problems. Suggested that	Research

			harmians for angesting in sured at all .	
			barriers for engaging in grand challenges research include the complexity of grand challenges and the difficulty of publishing interdisciplinary research in top-tier management journals.	
De Frutos- Belizón, Martín- Alcázar and Sánchez-Gardey	2019	Literature review	A review of the literature pertaining to the different perspectives put forward to bridge the gap between business school research and practice. Identifies several different perspectives within this area and argues that the one-sided discussion between scholars is stifling the development of the research-practice debate, calling for the involvement of the professional community in order to fully understand the gap from both sides.	Research
Lambert	2019	Literature review	A review of the literature pertaining to the relevance of business school research with a focus on logistics and supply chain management. Suggests that scholars need to build relationships with policymakers and executives, and that journal editors in this area should avoid following some other management subdisciplines which produce less practically useful research outputs.	Research
Moeini, Rahrovani and Chan	2019	Multimethod review	A review of information systems strategy research using a framework of "potential practical relevance". Argues that relevance should be considered in topic selection, knowledge creation, knowledge translation, and knowledge dissemination.	Research
Anderson, Thorpe and Coleman	2020	Systematic literature review	A systematic literature review of a 24-year period of articles from <i>Management Learning</i> . Argues that research has moved away from an applied focus on management development to a more theoretical approach to the field, and consequently the connection with practice has been weakened. Urges critical reflection and for researchers to be more outward-looking.	Both
Svanberg	2020	Literature review	A review of logistics and supply chain management journals in order to produce guidance for demonstrating practical relevance. Advocates for research in this area to be problem-driven, timely, important, and implementable for practitioners.	Research
Ungureanu and Bertolotti	2020	Literature review	A review of the theory-practice debate among business school academics. Argued that scholars and practitioners are represented as separate and incompatible groups. Proposed an alternative way of understanding the relationship between theory and practice that involves different boundary-spanning strategies for exchanging knowledge.	Both
Govender and Vaaland	2022	Literature review	A review of the literature pertaining to work- integrated learning in business schools. Argued that gaps exist between the business school domain and the business domain which are	Education

	related to, among other factors, irrelevant	
	curriculum and a lack of institutional support.	