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Teachers' Perceptions of Evidence-Informed Practice: An Analysis According to School Complexity Level in Catalonia

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The research-informed approach is attracting increasing interest in European and national education policy, as well as in local education policy in Catalonia (Spain). Previous studies have revealed that it is associated with multiple benefits for improving equity and inclusion. This is particularly relevant in the case of vulnerable children: teachers' use of research can facilitate more inclusive practices, benefiting the learning outcomes of such children. In the present paper, we analyse teachers' perceptions of the importance of evidence-informed practices according to the level of complexity of the schools where they work. In doing so, we applied an ad-hoc survey to 314 early childhood, primary and secondary teachers working in high-, medium- and low-complexity schools in Catalonia. The measure of school complexity, as defined by the Catalan administration, classifies schools and distributes resources according to socioeconomic and administrative complexity indicators. Descriptive and comparative analyses were conducted. The findings revealed that although teachers acknowledge the value of educational research, its use is shaped by organisational conditions and the broader school context. Low-complexity schools provide more favourable environments for the systematic use of evidence, highlighting both an opportunity and a challenge to enhance these conditions in more complex settings. Nevertheless, differences across schools by complexity level are generally subtle, with only a few statistically significant variations. Time for training and regular practice evaluation emerge as key factors for implementing teachers' evidence-informed practice across all school types.

Keywords: evidence-informed practice, inclusion, research use, teacher, teaching practice

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Zaznave učiteljev o na dokazih utemeljeni dejavnosti: analiza glede na stopnjo kompleksnosti vzgojno-izobraževalnih zavodov v Kataloniji

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Za na raziskavah temelječi pristop je v evropski in nacionalni izobraževalni politiki pa tudi v lokalni izobraževalni politiki v Kataloniji (Španija) čedalje več zanimanja. Prejšnje študije so pokazale, da pristop prinaša več koristi za izboljšanje enakosti in inkluzije. To je še posebej pomembno pri ranljivih otrocih: uporaba raziskav na strani učiteljev lahko olajša inkluzivnejše prakse, kar koristi pri učnih izidih ranljivih otrok. V tem članku analiziramo zaznave učiteljev o pomembnosti na dokazih utemeljene dejavnosti glede na stopnjo kompleksnosti vzgojno-izobraževalnih zavodov, v katerih delajo. Pri tem smo izvedli za ta namen sestavljeno anketo med 314 učitelji v vrtcih ter osnovnih in srednjih šolah, ki delajo v vzgojno-izobraževalnih zavodih z visoko, s srednjo in z nizko stopnjo kompleksnosti v Kataloniji. Merilo kompleksnosti vzgojno-izobraževalnih zavodov, kot ga opredeljuje katalonska uprava, razvršča vzgojno-izobraževalne zavode in razporeja vire glede na kazalnike družbenoekonomske in upravne kompleksnosti. Izvedene so bile opisne in primerjalne analize. Ugotovitve so pokazale, da učitelji sicer priznavajo vrednost raziskav na področju vzgoje in izobraževanja, njihovo uporabo pa oblikujejo organizacijske razmere in širši šolski kontekst. Vzgojno-izobraževalni zavodi z nizko stopnjo kompleksnosti zagotavljajo ugodnejše okolje za sistematično uporabo dokazov, kar poudarja priložnost in izziv za izboljšanje teh razmer v kompleksnejših okoljih. Kljub temu so razlike med vzgojno-izobraževalnimi zavodi glede na stopnjo kompleksnosti na splošno neznatne, z le nekaj statistično pomembnimi odstopanji. Čas za usposabljanje in redno ocenjevanje dejavnosti se kažeta kot ključna dejavnika za izvajanje na dokazih utemeljene dejavnosti pri učiteljih v vseh vrstah vzgojno-izobraževalnih zavodov.

Ključne besede: na dokazih utemeljena dejavnost, inkluzija, uporaba raziskav, učitelj, pedagoška praksa

Introduction

The research-informed approach is attracting increasing interest in European and national education policy, as well as in local education policy in Catalonia (Spain). This approach seeks to improve educational practices at both the school and classroom levels through broader institutional reforms, such as specialised programmes or organisational change, or by encouraging teachers to integrate academic research into their teaching in order to guide and enhance teaching methods and practice.

The benefits of the research-informed approach for advancing educational equity and inclusion have been highlighted by recent studies (Mikulyuk & Braddock, 2018; Mincu, 2014; Rangel-Pacheco & Witte, 2023). At the institutional level, the integration of research into practice can contribute to the development of more inclusive school cultures through sustained organisational learning and improvement. It is particularly salient for addressing the needs of vulnerable student populations, as teachers' engagement with research can inform more inclusive pedagogical practices and positively influence student learning outcomes.

The question remains, however, as to whether teachers believe research is useful for improving their practice, while a related issue is the extent to which research use can impact inclusion in schools, particularly in those that face more challenges due to the high concentration of students with socioeconomic difficulties and specific educational support needs.

Teachers' Research Use

The relationship between evidence and educational practice is complex, being shaped by personal experience, shared knowledge environments and organisational cultures (Brown et al., 2016; Ion & Iucu, 2016). Despite the growing interest in incorporating the use of research evidence into education, and specifically into professional teaching practice, the literature shows that few teachers actually integrate research into their daily practice (Ahmed, 2015; Kowalczuk-Walędziak et al., 2020). Moreover, some teachers "consider research irrelevant to teaching" (Kaçaniku, 2020, p. 66). For this reason, numerous studies have sought to demonstrate the potential benefits of research for teaching practice. However, it appears that awareness of these benefits does not translate into greater use of research evidence by teachers.

Teachers' engagement with research could explain the apparent gap between the systematic and regular use of research evidence in teaching practice and the perceived benefits of its use. Research engagement appears to be a

key variable that plays a fundamental role in having informed teaching teams capable of integrating research into their professional practice (Kowalczuk-Walędziak & Ion, 2024; Li & Xu, 2024). However, this engagement is largely determined by teachers' perceptions of the meaning and significance of research in their professional contexts (Ion & Iucu, 2014; Thomm et al., 2021). Teachers tend to prioritise the perspectives of their colleagues and their established practices or other sources of information, such as professional blogs, over evidence from scientific studies (e.g., Hood, 2003; Gairín, López-Sirvent, & Suárez, 2021; Ion & Iucu, 2014).

As shown in recent studies in Spain, teachers' engagement with research largely depends on its perceived relevance to their immediate or short-term needs, along with their ability to produce research and to effectively use data derived from research (Ion et al., 2022; Olmos & Pattier, 2021). Teachers value educational research, as it can contribute to improving educational outcomes, yet they often hesitate to incorporate research into their classroom practice. Among other reasons, they argue that organisational conditions, such as time constraints, the absence of collaboration among teacher staff or the lack of leadership in introducing research into the school, hinder its implementation (Gairín, López-Sirvent, & Suárez, 2021; Ion, Díaz-Vicario & Suárez, 2021). Moreover, some teachers continue to consider research an academic product detached from reality and only useful to academics (Camarero-Figuerola et al., 2023; Ion & Brown, 2022; Suárez-Rivarola & Díaz-Vicario, 2025). This attitude creates the need for a deeper exploration of teachers' conceptions regarding the use of research in their practice.

Teachers' Perceptions of Evidence-Informed Practice

In order to understand why teachers decide to engage with research evidence, it is essential to understand how they perceive the debate about evidence-informed practice. Studies in this field have primarily focused on teachers' perceptions of the benefits and costs of evidence-informed practice (Diery et al., 2020; Ion et al., 2024). However, few studies have examined teachers' conceptions of research and its contribution to their teaching practice.

Tack and Vanderline (2014) developed an instrument to improve the understanding of teachers' research disposition. This instrument relates three dimensions: the affective dimension (the value that teachers attribute to research in their daily practice), the cognitive dimension (the capacity to participate in research) and the behavioural dimension (participation in research activities as consumers and producers of research findings). It is interesting to focus on the affective dimension, since it directly conditions the other two dimensions.

Previous research shows that a negative or sceptical attitude towards the use of research evidence is one of the main barriers to evidence-informed practice (Forman et al., 2012; Lilienfeld et al., 2013; Merle et al., 2023). For this reason, it is interesting to analyse which variables condition the attitudes or beliefs that teachers configure around research evidence, since these attitudes or beliefs have been identified as a prerequisite for the use of research evidence (Merle et al., 2023; Nilsen, 2020).

Brown and Zhang (2016) found that teachers' perceptions of research evidence are influenced by organisational practices designed to facilitate and promote the use of evidence within their schools. Similarly, a study conducted by Rahimi and Weisi (2018) concluded that teachers perceive the value of research and engage in research if the work context supports their research activities. Therefore, although attitudes are individual factors, they may be largely mediated by group or institutional variables (Li & Xu, 2024). A teacher may display positive attitudes towards evidence, but institutional conditions may not be conducive (e.g., there may be a lack of institutional support), which may hinder the implementation of evidence-informed practices (Georgiou et al., 2023; Sorgo & Heric, 2020).

We could consider Tien et al.'s (2019) Research Capacity Model (RCM) as a theoretical framework for understanding how multiple factors interact with and influence teachers' research engagement. Specifically, the model integrates individual factors related to teachers' motivation and perceived self-efficacy to engage in research, and institutional factors such as institutional support, school structures and working conditions. Ion et al. (2024) show that teachers' beliefs and perceptions regarding the desirability of using research are linked to their inclination to want to be associated with the act of using research rather than to the perceived benefits of using research. The same study finds that teachers are more inclined to use research when it aligns with their school's overall priorities and when it is an integral part of their school's decision-making processes.

Even though teachers perceive the value and importance of incorporating evidence into their teaching practice, the adoption of this evidence "depends on the feasibility in the classroom as well as on individual situations of the teacher and school" (Hillmayr et al., 2024, p. 9). In short, the limited literature in this field suggests that the real engagement of teachers with research should be analysed in terms of the influence that institutional factors (extrinsic motivation) exert on individual factors (intrinsic motivation).

The "Escoles de Complexitat" Initiative: Supporting Schools in Catalonia

In Catalonia (Spain), there is a longstanding tradition of educational innovation. This tradition has undergone further growth in recent years, as public administrations and private entities have introduced substantial school reforms to promote evidence-based teaching practice aimed at enhancing early childhood and primary education (Ion, Díaz-Vicario & Suárez, 2021). The reforms include a new curriculum for early childhood education encompassing both cycles (ages 0–3 and 3–6); a reduction in class size in the second cycle of early childhood education by the 2024–2025 academic year; and a digital device usage strategy, implemented in 2024, which includes the prohibition of the use of mobile phones in primary and secondary education classrooms in order to promote better coexistence and minimise disruptions.

Among these initiatives, the "Escoles de Complexitat" (complexity schools) programme, implemented by the Catalan Department of Education, aims to provide additional resources and support to ensure educational equity and inclusion in the education system. This programme classifies Catalan schools according to a set of indicators that determine their "nivell de complexitat" (level of complexity). The main indicators used to determine the level of complexity of a particular school are families' educational and occupational background, the migrant background of the students, and the presence of students with specific educational support needs (SEN). According to these indicators, schools are divided into five levels of complexity: low complexity, medium-low complexity, medium-high complexity, high complexity and very high (or maximum) complexity. In practice, however, schools are usually referred to as being of low, medium or high complexity.

The classification system aims to promote educational equity by providing targeted assistance to those institutions facing the greatest challenges. Some of the objectives of the "Escoles de Complexitat" programme include: a) preventing early school leaving and academic failure, b) ensuring the emotional wellbeing of students, c) facilitating positive coexistence within educational centres, d) contributing to student guidance, e) encouraging family involvement, f) strengthening the connection between the school and its community, g) contributing to the development of community-wide plans, and h) reducing absenteeism.

The designation of a level of complexity helps the administration when it comes to providing resources and support to the schools. By 2023, Catalonia had 212 public primary schools classified as maximum-complexity centres, representing 13.39% of the total number of public primary schools in Catalonia

(Ferrer-Esteban et al., 2025). These schools require dedicated support to face the challenges derived from a rapidly changing society, where the changeability of social, economic and cultural factors creates a more complex scenario for education and teaching. These measures include increasing the number of teaching and specialised staff to better address students' diverse educational needs; offering training and support programmes for teachers focused on managing diversity and supporting special educational needs; enhancing material and technological resources to create a more suitable learning environment; and promoting innovative educational initiatives that foster inclusion and academic achievement (Ferrer-Esteban et al., 2025).

Research Questions

In the present study, we describe the use of research evidence by Catalan teachers and examine their beliefs and perceptions regarding the desirability of using research (significance). In addition, we determine whether there are statistically significant differences between the teachers' perceptions of what works in different school complexity levels in Catalonia (Spain). The following research questions are addressed:

(RQ1) How do Catalan teachers use research evidence in their teaching practices?

(RQ2) What are the beliefs and perceptions of Catalan teachers regarding the desirability of using research in their professional activities?

(RQ3) Are there statistically significant differences in the perceptions of research use among teachers working in schools with varying levels of complexity in Catalonia?

Method

The study uses a quantitative and descriptive research approach employing a survey methodology.

Participants

The survey targeted a convenient sample of teachers working in early childhood, primary and secondary education in Catalonia (Spain). A total of 314 teachers answered the questionnaire: 71.7% were female, 24% were male and 4.3% preferred not to state their gender. The participants' ages ranged from 22 to 64 years old: 10.6% were 20–30 years, 23.4% were 31–40 years, 35% were 41–50 years, 28.3% were 51– 60 years and 2.7% were 61–70 years. Regarding educational level, 46.7% held a bachelor's degree, 46.6% a post-graduate or master's

degree and 3.6% a PhD, while 3% had completed vocational education or other types of studies.

A total of 90.9% of the participants worked in public schools, 5.8% worked in private or state-subsidised schools and 3.3% worked in a cooperative school. Of the participants, 19.3% taught in early childhood education, 27.3% in primary education, 58.2% in secondary education and 3.3% in a combination of levels. Regarding their role in the school, 26.6% were senior leaders (school principal, secretary or head of study), 18.3% were middle leaders (coordinators) and 55% were dedicated exclusively to teaching tasks. A full-time employment contract was held by 91.5% of the participants.

With respect to school complexity level, 21.5% of the participants worked in a low-complex school, 47.3% in a middle-complex school and 25.8% in a high-complex school.

Instruments

We used the Research-Use BCS Survey (Brown et al., 2022), which uniquely and simultaneously measure the benefits, costs and significance (BCS) factors associated with educators' use of research, based on Baudrillard's (1968) semiotic theory of consumption and other recent literature (broadly 2010 and later) on research-informed educational practice (RIEP). The survey included 55 items distributed as follows: 15 items for uses, 14 items for benefits, 12 items for costs and 14 items for significance of research, as well as an additional 13 items referring to sociodemographic variables, including the respondents' information and their role and the context of the school in which they work. The items were measured with a 5-point Likert scale (1 = totally disagree and 5 = totally agree). In the present study, only 29 items are analysed: the 15 items related to research use and the 14 items related to research significance. Specifically:

- Eight items were designed to examine how teachers engage with research evidence to inform both their instructional practices and ongoing professional development. Additionally, seven items focused on organisational factors that may facilitate or hinder the integration of research evidence in educational settings.
- The items addressing the perceived value of research use explore teachers' beliefs and attitudes regarding the desirability of incorporating research into their work. This perceived desirability reflects the extent to which educators are inclined to associate themselves with research-informed practices. Such desirability may stem from internal motivations (e.g., alignment with professional identity) or external influences (e.g., expectations from peers or the school environment).

The analysis of the internal consistency of the questionnaire revealed a Cronbach's Alpha of 0.852. Specifically, for the dimensions analysed in this article, the Cronbach's Alpha was 0.870 for the research use dimension and 0.734 for the significance dimension. Globally, the Cronbach's Alpha values are adequate.

Research Design

The data collection process was carried out via convenience sampling. Contact with the teachers was made through the school principals, who voluntarily agreed to send the questionnaire link to the entire teaching staff. The teachers' participation was voluntary. Teachers were informed via email and on the questionnaire's homepage about the study purpose, the data protection policy and how the research team would use the data. The data were collected anonymously to prevent the possible identification of participants.

The data were analysed via the IBM Statistical Package for the Social Sciences (SPSS v. 26.0.0.1). First, a descriptive analysis of the sociodemographic variables was conducted in order to characterise the sample. Second, the means and the standard deviation of the 29 items related to research use and significance were calculated, considering that the nature of the variables is ordinal. Finally, a parametric test (ANOVA and Scheffé test) was applied in order to compare the teachers' perceptions according to the complexity level of the school where they work.

Results

The results are presented and organised in two sections. First, we present the descriptive analysis for the items of the dimension 'research use' and the comparative analysis based on the complexity level of the school in which the surveyed teachers work. Second, we do the same for the dimension 'significance', presenting the descriptive and the comparative analysis.

Teachers' Research Use

Table 1 presents an overview of the descriptive results for the research-evidence use dimension. Research-evidence is mostly used on the teachers' own initiative, rather than on the imposition of the school's management team. Teachers use research evidence to explore new practical techniques (M = 2.94; SD = 0.753), to understand how to think about an issue (M = 2.91; SD = 0.807), to develop new practices (M = 2.77; SD = 0.738) and to persuade colleagues to a point of view or a course of action (M = 2,57; SD = 0.931). However, there seem

to be few teachers who carry out in-class or in-school inquiries to improve their practice (M = 2.75; SD = 0.881).

Regarding the organisational conditions linked to a greater use of research evidence, the participants point out that in their schools they experiment with new ways of working (M = 3.19; SD = 0.708), there is time for training activities (M = 3.16; SD = 0.848), new ideas are valued (M = 3.11; SD = 0.764) and underlying assumptions that might affect key school decisions are frequently discussed (M = 2.84; SD = 0.954).

Table 1

Descriptive analysis for the dimension 'research use'.

Items	*M*	*SD*
I have used research evidence to help me develop new practices	2.77	.738
I have adopted new practical techniques that are based on research evidence	2.94	.753
I have used research evidence to help me understand how to think about an issue	2.91	.807
I have used research evidence to persuade colleagues to a point of view or a course of actions	2.57	.931
I have used research evidence because my organisation requires me to	2.29	.895
I have conducted in-class or in-school enquiries to improve my practice	2.75	.881
I can access a professional learning community or network that supports and encourages professional learning and improvement.	2.80	.893
My immediate colleagues (e.g., department, key stage or year-level colleagues) experiment with new ways of working	3.02	.729
My school (i.e., the organisation as a whole) experiments with new ways of working	3.19	.708
In my school, most people value new ideas	3.11	.764
In my school, time is made available for education/training activities for school staff	3.16	.848
My school regularly evaluates programmes or practices	2.82	.871
My school regularly shares information with staff in relation to the effectiveness of programmes or practices	2.81	.896
My school frequently discusses underlying assumptions that might affect key decisions (e.g., the reasons for selecting a new policy or programme)	2.84	.954

Note. *Likert Scale (1 = totally disagree and 5 = totally agree)
Source. Prepared by the authors.[3]

On analysing research-evidence use with regard to the complexity level of the school in which the teachers work (see Table 2), it can be seen that

3 The prompts in Table 1 correspond to the "Research Use BCS Survey" from Brown et al. (2022) – supplementary material https://www.frontiersin.org/articles/10.3389/feduc.2022.890832/full#supplementary-material The analyses presented here were conducted exclusively for the present study.

teachers who work in low-complexity schools seem to make greater use of research evidence than teachers who work in high-complexity schools. The difference is especially notable for two items: 'I have adopted new practical techniques that are based on research evidence' (M = 3.03; SD = 0.696 / M = 2.86; SD = 0.693) and 'I have used research evidence to help me understand how to think about an issue' (M = 3.00; SD = 0.697 / M = 2.78; SD = 0.878). For both items, however, the differences are not statistically significant.

Regarding organisational conditions, it seems that low-complexity schools have more favourable organisational factors for the use of evidence than medium- and high-complexity schools. Statistically significant differences between low- and high-complexity schools were found for two items:

Teachers working in low-complexity schools report having more time for training activities than teachers in high-complexity schools (M = 3.39; SD = 0.746 / M = 2.94; SD = 0.917) (p = 0.007).

Teachers working in low-complexity schools are more likely than those working in high-complexity schools to report that regular evaluations of programmes or practices are carried out in their schools (M = 3.00; SD = 0.811 / M = 2.58; SD = 0.993) (p = 0.010).

Table 2

Comparison of means based on the school complexity level for the dimension 'research use'.

	School complexity level								
	Low (n = 71)		Medium (n = 156)		High (n = 85)		NS/NC (n = 18)		
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	Sig.
I have used research evidence to help me develop new practices	2.86	.723	2.74	.752	2.69	.756	2.94	.539	.372
I have adopted new practical techniques that are based on research evidence	3.03	.696	2.92	.823	2.86	.693	3.11	.583	.398
I have used research evidence to help me understand how to think about an issue	3.00	.697	2.92	.831	2.78	.878	3.11	.583	.225
I have used research evidence to persuade colleagues to a point of view or a course of action	2.61	.836	2.53	.953	2.59	.979	2.61	.916	.935
I have used research evidence because my organisation requires me to	2.49	.860	2.17	.851	2.32	.978	2.33	.907	.092
I have conducted in-class or in-school enquiries to improve my practice	2.89	.919	2.77	.841	2.64	.949	2.67	.686	.336

	School complexity level								
	Low (*n* = 71)		Medium (*n* = 156)		High (*n* = 85)		NS/NC (*n* = 18)		
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	Sig.
I can access a professional learning community or network that supports and encourages professional learning and improvement	2.96	.917	2.78	.918	2.71	.843	2.83	.786	.356
My immediate colleagues (e.g., department, key stage or year-level colleagues) experiment with new ways of working	3.11	.708	2.99	.745	3.00	.756	2.94	.539	.638
My school (i.e., the organisation as a whole) experiments with new ways of working	3.37	.660	3.15	.717	3.13	.737	3.17	.618	.132
In my school, most people value new ideas	3.23	.721	3.08	.823	3.05	.706	3.22	.647	.413
In my school, time is made available for education/training activities for school staff	3.39	.746	3.19	.836	2.94	.917	3.00	.767	.007*
My school regularly evaluates programmes or practices	3.00	.811	2.85	.818	2.58	.993	3.06	.725	.010*
My school regularly shares information with staff in relation to the effectiveness of programmes or practices	2.96	.853	2.81	.851	2.64	.986	3.11	.900	.065
My school frequently discusses underlying assumptions that might affect key decisions (e.g., the reasons for selecting a new policy or programme)	2.97	.956	2.88	.901	2.62	1.023	2.89	.963	.105

Note. Likert Scale (1 = totally disagree and 5 = totally agree)
*The significance level is .050.
Source. Prepared by the authors.[4]

Teachers' Perceptions of Research Significance

In the significance dimension (see Table 3), the surveyed teachers exhibit a propensity to use research evidence when this is aligned with meeting the needs of their class (M = 4.05; SD = 0.792) or/and the school's improvement priorities (M = 3.96; SD = 0.754). In addition, they establish a connection between the use of research evidence and the level of reputation and the attractiveness of the school (M = 3.90; SD = 0.840). Similarly, the results show that the teachers are more inclined to use research evidence if their colleagues also use it (M = 3.71; SD = 0.889) and/or if it is a requirement of their performance management targets (M = 3.59; SD = 0.889), both of which are related to external factors. The participating

4 The prompts in Table 2 correspond to the "Research Use BCS Survey" from Brown et al. (2022) – supplementary material https://www.frontiersin.org/articles/10.3389/feduc.2022.890832/full#supplementary-material The analyses presented here were conducted exclusively for the present study.

teachers therefore globally perceive that use of research evidence is a hallmark of an effective profession ($M = 3.68$; $SD = 0.923$). However, they also remark that they think there are few examples of successful use of research evidence in education ($M = 3.59$; $SD = 0.896$). On the other hand, the teachers consider that the complexity level of a school and/or the existence of a research-friendly school culture is not a reliable indicator to use research evidence ($M = 2.67$; $SD = 0.977$).

Furthermore, the surveyed teachers' perceive that there is an expectation in their schools to engage with research evidence to improve practice ($M = 3.53$; $SD = 0.956$), but they felt that the teachers' ($M = 2.96$; $SD = 0.859$) and school leaders' ($M = 3.08$; $SD = 0.874$) awareness, engagement and research use is not developing as quickly as one might expect.

Table 3

Descriptive analysis for the dimension 'significance'.

Items	*M*	*SD*
I can think of few, if any, examples of successful uses of research evidence in education	3.59	.896
Using research evidence enhances a school's reputation and attractiveness as a place to work and learn	3.90	.840
The use of research evidence is the hallmark of an effective profession	3.68	.923
Schools with a low or medium complexity level are more likely to use research-based interventions and/or have a research-friendly culture	2.69	1.122
School leaders seek out research evidence to support their existing views or plans of action	3.42	.924
I am more inclined to engage with research evidence when it is aligned to meeting my school's improvement priorities	3.96	.754
Researchers are not expert authorities in relation to education	2.67	.977
Teachers' awareness, engagement and use of research evidence are developing rapidly	2.96	.859
School leaders' awareness, engagement and use of research evidence are developing rapidly	3.08	.874
I am more inclined to engage with research evidence when this is a requirement of my performance management targets	3.59	.889
The awareness, engagement and use of research evidence are developing rapidly among other key staff in schools	3.11	.923
I am more inclined to engage with research evidence when it is aligned to meeting the needs of my class	4.05	.792
There is an expectation in my school that we should engage with research evidence to improve practice	3.53	.956
I am more likely to use research evidence if my colleagues are also using research evidence	3.71	.889

Note. *Likert Scale (1 = totally disagree and 5 = totally agree)
Source. Prepared by the authors.[5]

5 The prompts in Table 3 correspond to the "Research Use BCS Survey" from Brown et al. (2022) – supplementary material https://www.frontiersin.org/articles/10.3389/feduc.2022.890832/full#supplementary-material The analyses presented here were conducted exclusively for the present study.

On analysing research significance with regard to the complexity level of the school in which the teachers work (see Table 4), it can be seen that that teachers who work in low-complexity schools tend to have a greater perception that using research is desirable. However, there are three items for which teachers working in medium-complexity schools tend to have a better perception of significance: (i) 'School leaders seek out research evidence to support their existing views or plans of action' (M = 3.46; SD = 1.000), compared to low-complexity schools (M = 3.45; SD = 0.883) and high-complexity schools (M = 3.30; SD = 0.880); (ii) 'I am more inclined to engage with research evidence when it is aligned to meeting my school's improvement priorities' (M = 4.01; SD = 0.772), compared to low-complexity schools (M = 3.94; SD = 0.773) and high-complexity schools (M = 3.88; SD = 0.705); and (iii) 'Researchers are not expert authorities about education' (M = 2.68; SD = 0.973), compared to low-complexity schools (M = 2.64; SD = 0.964) and high-complexity schools (M = 2.67; SD = 1.007). Moreover, the teachers working in high-complexity schools are more inclined to engage with research evidence when this is a requirement of their performance management target (M = 3.68; SD = 0.747), compared to low-complexity schools (M = 3.60; SD = 0.875) and medium-complexity schools (M = 3.53; SD = 0.978).

Despite the differences in perceptions between teachers working in low-, medium- and high-complexity schools, statistically significant differences were only found in one of the 40 items in this dimension, i.e., teachers working in high-complexity schools believe more than teachers in medium-complexity schools that schools with a low or medium complexity level are more likely to use research-based interventions and/or have a research friendly culture (M = 3.08; SD = 1.114 / M = 2.47; SD = 1.066) (p = 0.003).

Table 4

Comparison of means based on the school complexity level for the dimension 'significance'

	School complexity level								
	Low (n = 71)		Medium (n = 156)		High (n = 85)		NS/NC (n = 18)		
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	Sig.
I can think of few, if any, examples of successful uses of research evidence in education	3.81	.791	3.53	.955	3.54	.889	3.50	.707	.157
Using research evidence enhances a school's reputation and attractiveness as a place to work and learn	3.99	.707	3.91	.901	3.79	.822	4.06	.873	.405
The use of research evidence is the hallmark of an effective profession	3.89	.772	3.67	.972	3.52	.929	3.61	.916	.105

	School complexity level								
	Low (*n* = 71)		Medium (*n* = 156)		High (*n* = 85)		NS/NC (n = 18)		
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	Sig.
Schools with a low or medium complexity level are more likely to use research-based interventions and/or have a research-friendly culture	3.08	1.114	2.47	1.066	2.79	1.144	2.71	1.160	.003*
School leaders seek out research evidence to support their existing views or plans of action	3.45	.883	3.46	1.000	3.30	.880	3.63	.500	.488
I am more inclined to engage with research evidence when it is aligned to meeting my school's improvement priorities	3.94	.773	4.01	.772	3.88	.705	4.00	.767	.621
Researchers are not expert authorities in relation to education	2.64	.964	2.68	.973	2.67	1.007	2.59	1.004	.977
Teachers' awareness, engagement and use of research evidence are developing rapidly	3.04	.898	2.95	.874	2.91	.830	2.82	.728	.724
School leaders' awareness, engagement and use of research evidence are developing rapidly	3.32	.849	3.04	.849	3.00	.916	2.88	.885	.071
I am more inclined to engage with research evidence when this is a requirement of my performance management targets	3.60	.875	3.53	.978	3.68	747	3.67	.767	.657
The awareness, engagement and use of research evidence are developing rapidly among other key staff in schools	3.29	.956	3.05	.945	3.05	.876	3.24	.752	.272
I am more inclined to engage with research evidence when it is aligned to meeting the needs of my class	4.11	.622	4.05	.836	3.96	.828	4.28	.826	.408
There is an expectation in my school that we should engage with research evidence to improve practice	3.75	.823	3.46	.989	3.42	1.000	3.67	.907	.122
I am more likely to use research evidence if my colleagues are also using research evidence	3.84	.792	3.73	.908	3.58	.912	3.53	.943	.242

Note. Likert Scale (1 = totally disagree and 5 = totally agree)
*The significance level is .050.
Source. Prepared by the authors.[6]

Discussion and Conclusions

In this paper, we have reflected on teachers' perceptions of the importance of evidence-informed practices concerning the level of complexity of the schools where they work. We started by exploring recent studies about teachers'

6 The prompts in Table 4 correspond to the "Research Use BCS Survey" from Brown et al. (2022) – supplementary material https://www.frontiersin.org/articles/10.3389/feduc.2022.890832/full#supplementary-material The analyses presented here were conducted exclusively for the present study.

research use and their beliefs about evidence-informed practice. This theoretical framework enabled us to examine and reflect on teachers' perceptions of research evidence in the Catalan context, where schools are categorised by complexity based on socioeconomic and administrative complexity indicators that determine the resources allocated by the Catalan Administration. For this purpose, we have explored three main questions: (RQ1) How do Catalan teachers use research evidence in their teaching practices? (RQ2) What are the beliefs and perceptions of Catalan teachers regarding the desirability of using research in their professional activities? and (RQ3) Are there statistically significant differences in the perceptions of research use among teachers working in schools with varying levels of complexity in Catalonia?

First, the findings indicate that teachers predominantly engage with research evidence (RQ1) on their own initiative, such as to explore new practical techniques and to understand how to think about an issue, rather than by imposition of the school's management team. While research is used to improve practice, deepen understanding and support collegial persuasion, it remains uncommon for teachers to undertake formal inquiries within the classroom. Moreover, in line with authors such as Rahimi and Weisi (2018) and Li and Xu (2024), teachers show greater involvement with research when it aligns with classroom needs, school improvement priorities and/or when other colleagues in the school are also involved.

Second (RQ2), with regard to teachers' beliefs and conceptions about research, we find that teachers attribute a high value to research for professional and organisational improvement. Specifically, the results indicate that teachers perceive the use of research evidence as enhancing a school's reputation and attractiveness as a place to work and learn, and as a hallmark of an effective profession. At the same time, teachers affirm that their schools expect them to engage with research evidence in order to improve practice. However, although the teachers in our study recognise the value and importance of using research in their professional practice, it is surprising that these same teachers believe that teachers' awareness, engagement and use of research evidence are not developing rapidly (Ahmed, 2015; Kowalczuk-Walędziak et al., 2020). These findings confirm the existence of variables that act as mediators between teachers' perceptions of research, their engagement and the actual use of research evidence in professional practice (Hillmayr et al., 2024; Sorgo & Heric, 2020).

Third, regarding teachers' perceptions of research use in schools of varying complexity in Catalonia (RQ3), our findings indicate that educators in both low-, medium- and high-complexity institutions view their schools as environments that foster experimentation with innovative practices and value

new ideas. This aligns with previous studies showing that teachers appreciate research-based approaches to enhancing teaching and schools (Gairín, López-Sirvent & Suárez, 2021; Suárez-Rivarola & Díaz-Vicario, 2025), even though the literature reports variability in their actual implementation (Ahmed, 2015; Ion, et al., 2022; Kaçaniku, 2020; Kowalczuk-Walędziak et al., 2020). Moreover, our study found that teachers in high-complexity schools are more likely than those in medium-complexity schools to believe that research-based interventions are implemented in schools with solid performance, high educational standards, well-achieving students and a research-friendly culture. This could indicate that the implementation of evidence-based research is related not only to the teacher's perceptions but also to organisational conditions and contextual factors. As determined by other studies in the field (e.g., Brown et al., 2016; Hillmayr et al., 2024; Ion & Iucu, 2016), this could indicate the need for a deeper exploration of individual, organisational and systemic factors influencing the adoption of the evidence-based research approach.

Integrating research into everyday classroom activities can improve learning outcomes and help bridge the gap between theory and practice. The present paper supports the idea that research can help to build an education system that is more equal and inclusive by empowering teachers to enhance their instructional methods, make informed decisions and adapt to diverse student needs through evidence-based practices. It is therefore essential not only to analyse how teachers use scientific research but also to understand how they perceive the relevance of educational research for their teaching practice and how the organisational and contextual factors impact this perception. In this regard, it becomes essential to strengthen the organisational conditions of more complex school settings, where research-informed practices may yield the greatest benefits. Promoting equitable access to professional development and fostering collaborative and reflective structures may help to reduce disparities in research engagement across schools.

The present study has some limitations: the sample is context-specific with a relatively small number of teachers, making generalisation difficult. Reliance on surveys could also constrain validity; thus, future research should integrate qualitative methods for greater depth.

Nonetheless, the findings of the study highlight the need to further examine the gap between the perceived value of evidence in teaching and its actual adoption, particularly through the interactions between teacher, classroom and school variables.

Ethical Statement

The study adhered to the principles outlined in the Code of Good Research Practices of Universitat Autònoma de Barcelona (Spain), the home institution of all of the authors, and was confirmed as ethically appropriate by the Ethics Commission of the Faculty of Education, University of Ljubljana, Slovenia. The authors declare that this research was conducted under the ethical principles established for the social sciences, ensuring respect for the dignity, privacy and autonomy of all of the participants. Informed consent was obtained from all of the participants. Furthermore, data confidentiality and transparency in the use of information were safeguarded.

Data Availability Statement

The data that support the findings of this study are available in FIGSHARE (DOI: 10.6084/m9.figshare.25262332).

Disclosure Statement

The authors have no conflict of interest to declare. When preparing this article, the authors declare they have not used any type of artificial intelligence. The authors accept full responsibility for the content and integrity of the publication.

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