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French teachers' intentions to use accommodated materials in learning and assessment¹

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Abstract

The implementation of inclusive practices in mainstream education remains particularly difficult in the French context and is influenced by various factors including the types of disability labels, and the type of assessment practices that are used. Indeed, how student disability is labelled impacts teacher attitudes by disfavouring students labelled with autism. Moreover, normative assessment is strongly linked with selection at schools—a function that works against teacher attitudes towards inclusive education. This article reports on a study in which we examined teacher intentions to use materials accommodated to special educational needs students, as a function of special needs labelling. Specifically, this refers to the use of labels for either a disability or special educational need, in connection to tasks associated with learning or assessment. The results of our study revealed that, for both types of label, the intentions to use accommodated materials are lower when teachers are asked to assess student competence than when prompted to teach this competence. These findings are discussed with notable consideration given the incompatibility between selection in schools—which is aligned with the principle of meritocracy—and efforts to promote inclusive education practices.

Keywords: assessment, inclusive education, teacher attitudes, intentions, accommodations

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1 INTRODUCTION

Inclusive education has been promoted in political, economic, and legislative fora throughout the world with the aim of enabling the access of all students to education and academic success (UNESCO, 1994). In France, recent laws provide articulations for the implementation of inclusive education. Therefore, all students, regardless of their ethnic, cultural, and socio-economic background and educational needs, are to be enrolled in the mainstream system. To ensure effective inclusion, educational settings must be accommodated to meet student needs, including their special education needs. The purpose of a more accommodating learning environment is to allow special education needs students the same learning opportunities as their peers without special needs. Such transformations are not without merit, as research has demonstrated a range of benefits for both students with and without special educational needs (Ruijs & Peetsma, 2009; Szumski et al., 2017).

However, despite growing support, the implementation of pedagogical practices aiming at including students with various special education needs (e.g., Autism Spectrum Disorder; learning, sensory, motor or intellectual disabilities, etc.) in France, as in other countries, remains a challenge. For example, Rattaz and colleagues (2020) recently showed in France that although 88% of students with Autism Spectrum Disorder are enrolled within the mainstream education system, a very large number are still not fully included and do not receive instruction commensurate to their needs. In order to better understand these difficulties, our study investigated the effects of two variables. First, we sought to examine how the label—either *disability* or special *education needs*—used to describe student difficulties may alter teacher attitudes towards student inclusion as well as teacher willingness to use accommodated pedagogical materials. That is, materials that correspond to the student's needs. Second, we sought to understand the ways in which a specific function of the education system (i.e., *selection*, Dornbush et al., 1996) can impact teacher willingness to use accommodated materials.

2 INCLUSIVE EDUCATION IN FRANCE

2.1 Labelling of special education needs

When a student is in academic difficulty, the cause or origin of such difficulty is often investigated. Most of the time, teachers and practitioners presume that medical conditions are to blame, ideally a condition bearing a proper designation (Poutoux, 2011). For example, if a fourth grader is having trouble reading, dyslexia will be suspected, and the student's family will be duly informed. In the same vein, a student unable to stay focused in class will promptly be presented as suffering from Attention Deficit Hyperactivity Disorder (ADHD). Such labelling, even after a formal diagnosis, is fraught with complications. As Lauchlan and Boyle (2020) stated, the question of labelling is particularly sensitive since, on the one hand, it can prove detrimental to students by exposing them to stereotyping. On the other hand, labelling is mandatory to access special resources (e.g., a student assistant, a computer, extended time for exams).

Few studies have examined the impact of such labelling on teacher understandings, perceptions and behaviours. One of the first studies to address this (Gibbs & Elliott, 2015), compared the use of the labels *dyslexia* and *reading difficulties*, and the extent to which the use of the labels affected teacher efficacy and essentialist beliefs (i.e., the extent to which teachers believe difficulties in learning are fixed rather than malleable). If referring to dyslexia seems to lead to slightly greater teaching efficacy (for strategy implementation in particular), it also strengthened teachers' essentialist beliefs, notably the view that difficulties are immutable (i.e., fixed, innate and biologically determined). Expanding on these findings, Gibbs et al. (2016) studied teacher beliefs based on whether reading and behavioural

difficulties are labelled (i.e., dyslexia and ADHD, respectively). Their results did not replicate the previous effect of labelling on teachers' beliefs about efficacy. However, the results confirmed that when difficulties are labelled as pathologies, teachers perceive them as fixed rather than malleable. Thus, these findings suggest that labelling can further reduce teachers' willingness to include students with special needs or to use accommodated teaching materials since their difficulties are not likely to change.

It should nonetheless be acknowledged that among students with special education needs, the multiple profiles of students (and labels used to account for their difficulties) are not equivalent. More precisely, teachers have been consistently shown to hold distinct attitudes towards inclusive education depending on the type of disability a student has. For example, Jury et al. (2021a) recently demonstrated in the French context that teachers are more supportive of including students with motor disability than students with cognitive disabilities; and that teachers are the least supportive of including students with autistic syndrome disorder. Nevertheless, when information about student difficulties is provided in addition to the autistic syndrome disorder label, these attitudes may ultimately become more positive (Jury et al., 2021b).

Taken together, these results (Gibbs & Elliott, 2015; Gibbs et al., 2016; Jury et al., 2021a; 2021b) suggest that using labels to explain student difficulties, notably for those with autistic syndrome disorder, may be particularly detrimental. This therefore leads us to hypothesize that explaining a students' difficulties with the label *autistic syndrome disorder* rather than in terms of *special education needs* would elicit less favourable attitudes and lower intentions to use inclusive practices among teachers. Nonetheless, as discussed in the next section, this discrepancy could be even stronger when students are being assessed rather than taught, especially in relation to the functions of the educational system.

2.2 Incompatibility of selection and inclusive education

Education systems have two functions: education and selection (Autin et al., 2015; Darnon et al., 2009; Dornbusch et al., 1996). More precisely, while schools must "transmit" knowledge and skills to all students, they must also identify (or select) among the student body the greatest achievers and those most capable of earning a degree (Autin et al., 2015; Darnon et al., 2009). Therefore, selection of the best students is supposed to be based on students' personal merit, supposedly determined solely by students' hard work, talent and motivation (i.e., following the principle of meritocracy, Darnon et al., 2009; 2018; Wiederkehr et al., 2015).

However, selection in school is not neutral since it has been shown to sustain inequalities within education systems (see for example, Jury et al., 2015; Smeding et al., 2013; Souchal et al., 2014). For instance, Autin et al. (2019) recently showed that when the selection function is made salient, evaluators are more likely to create a disparity between students from disadvantaged and advantaged backgrounds in their assessment than when the education function is made salient. Thus, selecting students can alter teachers' evaluative practices, thereby contributing to the reproduction of social inequalities from school age (see also Autin et al., 2015; Batruch et al., 2017, 2019).

By perpetuating inequalities, it has been argued that the selection function is also incompatible with inclusive education policy. Indeed, Stanczak et al. (2023) recently proposed that a contradiction exists between the principles of selection and inclusion (see also Benjamin, 2002). More precisely, the contradiction lies in the difficulty to reconcile the full participation of students with special education needs with the competitive nature of schools (Benjamin, 2002; see also Lloyd, 2008). This proposal has received recent empirical support as Khamzina and colleagues (2021) showed that the more teachers believed that the education system has a selection function, the less supportive they were of inclusive education.

For the purposes of this paper, we claim that besides examining the effects of the selection function on teacher personal attitudes, it is also important to examine how the incompatibility between selection and inclusion could impact teachers' intentions to use inclusive pedagogies when assessing students with SEN. Here, we would like to direct attention to a necessary distinction between two types of assessment: formative and normative assessment. In occidental societies, normative assessments are quite common and seek to quantify students' performance to facilitate ranking and social comparison. Such assessment makes it easier to perform a selection between students (Autin et al., 2015; Dornbush, 1996). Alternatively, teachers can use formative assessment designed to foster the learning of all students. Indeed, since it provides detailed qualitative feedback, it aims at promoting the skills and knowledge of all students in line with the educational function of school. In the present research, we focused on the incompatibility of normative assessments with inclusive education policies. Indeed, since normative assessment is a preferred selection tool (Autin et al., 2015), we suggest that teachers have fewer intentions to use accommodated material for students with special education needs during assessment than instruction (see also Darnon et al., 2018). Darnon and colleagues demonstrated that beliefs in school meritocracy (a trait associated with beliefs about selection, Khamzina et al., 2021) are associated with an opposition to the implementation of egalitarian teaching methods aimed at reducing achievement gaps between students from advantaged and disadvantaged socioeconomic backgrounds. A parallel can be drawn between such egalitarian methods and inclusive pedagogy, because both share the objective of providing teaching materials which accommodate the needs of students such that they are afforded the same opportunities to learn and succeed.

2.3 Overview and hypotheses

In sum, the present study focused on teacher attitudes towards inclusive education and teacher intentions to use the accommodated materials, and tests three hypotheses. First, based on studies of Gibbs et al. (2015, 2016) and Jury et al. (2021a, 2021b) showing respectively that using labels led teachers to exhibit greater essentialism and that students with *autistic* syndrome disorder (ASD) received less support for inclusion within the mainstream system, we argue that using such label to explain a student's difficulties versus using special educational needs or no explanation (i.e., a control condition) would lead to less positive attitudes towards inclusive education and lower intentions to use accommodated materials (Hypotheses 1a and 1b respectively). In addition, teacher intentions to use inclusive pedagogies were examined as a function of education phase (learning versus assessment of the acquired skill of special education needs students). Building on our assumption of the incompatibility of selection function and inclusive education policy (Barton & Slee, 1999; Khamzina et al., 2021; Stanczak et al., 2023), our second hypothesis builds on the idea that teacher intentions to use accommodated materials are comparatively reduced when teachers are asked to assess a student with special education rather than instruct. Our third and final hypothesis draws on a consideration of both hypotheses 1b and 2; namely, that the discrepancy outlined in hypothesis 1b is comparatively greater when students with autistic syndrome disorder are *assessed* rather than *taught*.

3 METHOD

3.1 Participants

An a priori power analysis performed with *G power 3.1*. (Faul et al., 2009) revealed that 255 participants were needed to detect a small-sized effect (f = .17) with a targeted power of .80 for a repeated-measure ANOVA (Field, 2013). For the classic ANOVA, it was determined that a sample of 337 participants was needed for an effect of the same size. Thanks to a high response rate, the final sample for this study included 600 participants (90.3% women) The mean age of the sample was 43.4 years (SD = 9.58). Within the present sample, there were 495 general teachers and 71 specialised teachers (with six individuals indicating *other* and 28 who did not indicate their professional status).

3.2 Procedure

An online questionnaire was distributed through professional teacher networks in France. Teachers were at first informed about their rights as study participants and that the purpose of the experiment was to survey opinions regarding teaching materials. Consenting participants were after this asked to think of themselves in a fictitious professional scenario. Specifically, they were asked to imagine that they would have to teach and assess fourth grade students on a particular competence from the curriculum: "*identify explicit information in a text and begin to process the implicit information*".¹

The class in the scenario was described as consisting of 25 students with globally heterogeneous academic levels. One of the students, student P, was described as having *"persistent difficulties in attention and comprehension, especially when reading instructions and texts, as well as some communication difficulties"*. Distinct explanations of the origin of the difficulties were given. After receiving this information, material for learning and assessment were presented and teachers were asked to express their willingness to use them.

Participants were then asked to rate their attitudes towards inclusive education and a variety of demographic descriptors. Finally, participants were fully debriefed regarding the actual purpose of the study, which was different from the initial description that was used to elicit spontaneous responses. The next section presents the research material on which the analysis presented in this article draws.

3.3 Material

3.3.1 Use of disability labels in the study

When the description of student P. was presented, different explanations were given regarding his or her difficulties (the student's gender was not specified) based on a random assignment. In the first explanation, labelled as *Special Educational Needs* (n = 214), P.'s situation was explained with the following text: "*his/her special educational needs to be identified as the need to understand adult expectations and the need to anticipate novelty*". In a second explanation, labelled as autistic syndrome disorder (*ASD condition*; n = 184), P.'s difficulties were explained by "*his/her diagnosed autism spectrum disorder: 'typical autistic with moderate severity*". Finally, in the explanation that served as a control variable (n = 202), no explanation for the difficulties was given. At the very end of the questionnaire a manipulation check was carried out by inviting teachers to recall the origin of P.'s difficulties.

3.3.2 Teacher intentions to use instruction materials for special education needs

After reading the description of P. and the class, participants were informed that in preparation for the lesson, they would have to choose materials relevant to teaching and assessing the targeted competence that is identify explicit information in a text and begin to process the implicit information. Teachers were presented with three different versions of materials for instruction. These materials were either unaccommodated, moderately accommodated, or accommodated to P.'s special educational needs.

The *unaccommodated materials* were extracted from an ordinary school textbook. Such media are not usually adapted to students with special education needs and typically contain abundant amounts of information and multi-coloured images. Moreover, the content of such books is sometimes conveyed in an implicit manner (i.e., non-explicit reading procedure and instructions, photography not related to the text, etc.). In contrast, the *accommodated materials* were developed by the authors and experienced special education teachers based on the principles of a universal design for learning and teaching. The design was structured to eliminate barriers associated with both content (e.g., accessibility of instructions) and presentation (e.g., fewer pictures). A *moderately accommodated* intermediate version (i.e., fewer adaptations) was also provided. For each option of instructional materials, participants were asked to indicate the extent to which they agreed or disagreed to using the material in instructing student P. and the class. A five-point Likert scale was used for the responses, ranging from (1) *totally disagree* to (5) *totally agree*, with higher scores indicating a greater intention to use the materials.

After an initial declaration of intention, three distinct versions of the materials for evaluating competence learned in the previous session were presented (unaccommodated, moderately accommodated and accommodated for P.'s needs). As previously, participants were asked to indicate the extent to which they agreed or disagreed by rating each material for evaluating competence. A five-point Likert scale was used for the responses, ranging from (1) *strongly disagree* to (5) *strongly agree*.

3.3.3 Attitudes towards inclusive education

Teacher attitudes towards inclusive education were assessed with eleven items (e.g., "The more time special education needs students spend in regular classrooms, the higher the quality of their education is likely to be"; Stanley et al., 2003; $\alpha = .81$, M = 3.30; SD = .56).

At the end of the questionnaire, participants were asked to answer various sociodemographic questions addressing points that included age, gender, experience teaching special education needs students and professional status.

4 RESULTS

4.1 Descriptive analyses

Descriptive analyses and zero-order correlations are displayed in Table 1. As can be seen, teachers' attitudes are positively correlated with their intentions to use instruction materials accommodated for the student with special education needs for learning (r = .08, p =.040) and assessment (r = .10, p = .011). The more positive teacher attitudes were, the greater their intentions to use special education accommodated materials.

Table 1

Descriptive statistics and zero-order correlations between main variables

	М	SD	1	2	3
1. Teacher intentions to use accommodated material for learning	4.23	0.99	_		
2. Teacher intentions to use accommodated material for assessment	3.69	1.19	.17***	_	-
3. Teacher attitudes towards inclusive education	3.30	0.56	.08*	.10*	_

Note. N = 600. p < .05. p < .001.

4.2 Main analyses

As indicated in the pre-registration form, a repeated-measures ANOVA was conducted with task type as a within factor at two levels (instruction and assessment) and the difficulties label as a between factor (ASD, special education needs, or control variable) on participants' willingness to use the accommodated materials. Additionally, regarding teacher attitudes towards inclusive education, a classic ANOVA was conducted comparing the roles played by labels for different types of learning difficulties.

The latter analysis, using *label* as the independent variable, revealed a non-significant effect of this label on teacher's attitudes, F(2,597) = .05, p = .955, $\eta_p^2 = .00$. In other words, the differentiation between labels explaining the difficulties of special education needs student did not influence teacher attitudes towards inclusive education ($M_{SEN} = 3.30$; $M_{ASD} = 3.30$; $M_{Control} = 3.29$).

For the initial analysis, the ANOVA does not reveal a significant effect of the label, on teacher intentions to use the accommodated materials, F(2,597) = 1.11, p = .331, $\eta_p^2 = .002$. However, it does indicate that teachers express fewer intentions to use accommodated materials when tasked with assessing the student with special education needs (M = 3.69, SE = .05) than when prompted to teach them (M = 4.22, SE = .04), F(1,597) = 86.25, p < .001, $\eta_p^2 = .126$. Contrary to our expectations, this difference does not depend on the label used to describe the student's learning difficulties, F(2,597) = 0.64, p = .53, $\eta_p^2 = .002$.

4.3 Exploratory analysis

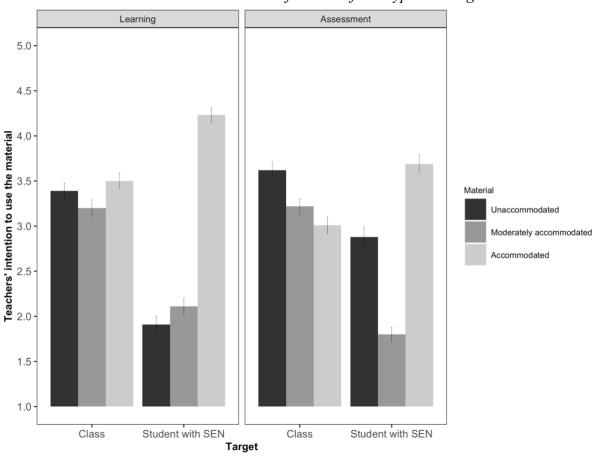
To emulate teacher daily practices better, participants were invited to rate their preference for using (1) *unaccommodated instruction materials*—extracted from the textbook, and (2) *moderately accommodated materials*, for both the special education needs student and

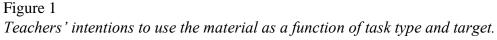
the class. No hypotheses were made but an exploratory analysis was conducted in order to examine potential differences.

Consequently, a repeated-measures ANOVA was conducted with task type as a within factor at two levels (instruction and assessment), the target as a within factor at two levels (class and student with special education needs) and the learning difficulties label as a between factor (ASD, special education needs, control variable) on participant willingness to use the instruction materials (a within factor at three levels: unaccommodated, moderately accommodated and accommodated).

Analyses involving the label variable did not show any significant effect (all *ps* >.07). However, a significant interaction between target, class and material type did appear, F(2,1194) = 60.39, p < .001, $\eta_p^2 = .092$. As illustrated in Figure 1 below, teacher intentions are clearly distinct by material type, the target and task. To do so, Bonferroni corrections for multiple tests were applied to avoid biases due to Type 1 error rates (Field, 2013). Regarding instruction more specifically, it appears that teacher intentions for the class did not differ by material (all $p_{\text{Bonferronis}} > .75$), while for the student with special education needs, teachers expressed greater intentions to use the accommodated materials than for the moderately $(p_{\text{Bonferroni}} < .001)$ and the unaccommodated materials $(p_{\text{Bonferroni}} < .001)$, no difference between these two, $p_{\text{Bonferroni}} = .22$). For assessment, teacher intentions to use the unaccommodated materials for the class were higher than for the accommodated materials (both *p*_{Bonferroni} < .001). However, for the student with special education needs, teachers had greater intentions to use the accommodated material than the moderately accommodated ($p_{\text{Bonferroni}} < .001$) and unaccommodated materials (*p*_{Bonferroni} < .001). Also, they preferred using the unaccommodated rather than the moderately accommodated materials, $p_{\text{Bonferroni}} < .001$). While these results appear quite similar, it should be noted that teacher willingness to use the unaccommodated materials for the student with special education needs was clearly higher for the assessment

than for instruction ($p_{Bonferroni} < .001$ —a difference also found for class, $p_{Bonferroni} < .001$). Also, that willingness to use the accommodated materials was lower for assessment than learning ($p_{Bonferroni} < .001$; a difference also found for class, $p_{Bonferroni} < .001$). These results suggest that teachers may perceive modifying the assessment to be a particularly difficult undertaking².





5 DISCUSSION

The study on which this article reports aimed to understand why inclusive education remains particularly difficult to implement in France. The study focused on two factors identified as possibly impacting teacher attitudes towards inclusive education as well as teachers' intentions regarding the use of special needs accommodated instruction materials.

The first variable examined sheds light on how a student's learning difficulties are labelled. Based on previous research (Gibbs & Elliott, 2015; Gibbs et al., 2016; Jury et al., 2021a, 2021b), we suggested that teachers would be less favourable towards inclusion of a student when his or her educational learning difficulties are labelled as stemming from a disorder, autism spectrum disorder, than when they are explained in terms of special *educational needs*. In the same vein, we expected that teachers would be less prone to use accommodated materials in the former case than in the latter, and in control variable. However, the results of our research do not support these hypotheses, as no differences emerged regarding teachers' attitudes and intentions. Although this lack of difference could be taken as support for the idea that labels do not matter, we believe that such a conclusion is premature. It indeed rather seems that this lack of effects could be explained by our experimental induction. Specifically, an examination of the manipulation checks carried out as part of the survey showed that several participants reporting on their stances for the control group and for special educational needs instruction used the terms disorder and autism when asked to recall the learning difficulties experienced by the student. In other words, it is possible that, contrary to our intentions, participants inferred disability in these groups as well when answering our questionnaire.

Our second variable of interest referred to selection function in schools (Darnon et al., 2012). More precisely, based on what we suggest is an incompatibility between inclusive education and selection (Barton & Slee, 1999; Benjamin, 2002; Khamzina et al., 2021; Stanczak et al., 2023), wee proposed that teachers' intentions to use special needs accommodated instruction materials would be comparatively reduced when they were asked to normatively assess a student with special education needs, than when prompted to teach him or her. The results presented confirmed our expectations by showing differences in the intentions to use accommodated materials based on whether teachers were working with

instruction or assessment. Specifically, the results demonstrate that teachers are more prone to use accommodated materials for learning than for assessment. It is worth noting that the present findings concern uniquely normative assessment, not formative assessment. Indeed, an incompatibility with inclusive education could be expected to be less marked in formative assessment of special education needs students, since it is better aligned with the general education function of schools (Autin et al., 2015). Thus, we encourage further research to examine the eventual links between formative assessment and the implementation of inclusive practices in mainstream schooling. Indeed, the study of both types of student evaluation approaches, and notably how assessment links to inclusive education, would allow to inform best practices in the assessment of students with special education needs.

This result suggests that the use of special needs accommodated instruction materials for learning does not have implications for the selection function, but that using such materials is more problematic when it comes to assessment. Teacher reluctance to use accommodated materials in assessment may be explained by the perception that accommodated assessment would challenge the principles of equity and meritocracy in assessment. Schools are entrusted with discerning student merit on the basis of assessment results and are expected to endorse the rankings they produce, making schools frontline actors for meritocracy (Darnon et al., 2018). Thus, accommodating materials for student assessment would not only complicate the selection that teachers do as part of their work, but undermine the idea of meritocracy on which assessment relies—an idea that teachers seem to strongly embrace (Duru-Bellat, 2015). Stated differently, assessment materials which are accommodated to student needs (e.g., providing space for longer answers; clearer, more explicitly worded questions) can raise questions among evaluators as to the concrete, or real, ability of special needs students to perform. For example, questions may be raised about whether the performance really came from the student, or whether it was due to the facilitating materials. In other words, the use of accommodated materials could give rise to possible concerns about the fairness of evaluations to students without special education needs, since students would not be assessed using the same materials. These concerns might partially account for the different preferences observed in this study.

If such an ideological explanation is agreed to be plausible, then the present study should allow us to move forward in understanding the possible obstacles to the implementation of inclusive policies in educational contexts. A now established understanding is that the successful implementation of inclusive practices in regular classrooms depends mainly on resources and training (Rattaz et al., 2013) and individual teacher characteristics (Pit-ten Cate et al., 2018). Results from the study on which this article reports align with other studies (Khamzina et al., 2021) illustrating that obstacles to inclusive education may be deeply rooted in how the education system functions (Darnon et al., 2012). We therefore encourage researchers to further examine the effects of institutional norms (e.g., academic meritocracy) beyond the individual characteristics of education actors (teachers and students).

5.1 Limits and perspectives

We acknowledge several limitations of the present research. First, the effects of disability labelling on teacher attitudes and intentions towards inclusive education should be tested using more explicit disability designations, to better understand their influence. Second, although we suggested that fewer intentions to use accommodated materials for students with special education needs can be explained by an incompatibility between inclusive education and the selection function, the effect of the latter was not tested in this study. Thus, examining the effects of teacher beliefs on selection and meritocracy, for intentions to use accommodated materials, would allow us to further explore the presumed incompatibility

between selection and inclusion (Khamzina et al., 2021). Study participant perceptions of the suitability of the instruction materials used in this study for teaching and assessing special education needs students (i.e., whether it is accommodated or not) was not measured. Accordingly, it would be of value to further explore such perceptions to verify how teachers perceived the specificity of the material. Finally, to establish a causal link between these phenomena, we encourage future studies to not only test the effect of meritocratic selection but also manipulate it in a more experimental manner. For instance, beliefs can be articulated in an explicit manner using short descriptive texts at the beginning of questionnaires (Darnon et al., 2018). This would allow to better study the consequences of beliefs on teacher attitudes and intentions regarding inclusive education and better understand how ideological barriers are liable to impair the implementation of the inclusive education paradigm.

6 CONCLUSION

Taken together, our findings highlight the tendency of teachers to be less inclined to use special needs accommodated materials when assessing student learning, regardless of how student learning difficulties are labelled. This finding leads us to suggest that the meritocratic function of the education system may be a significant barrier to the implementation of inclusive practices (see also Batruch et al., 2019; Darnon et al., 2018; Khamzina et al., 2021). Accordingly, we propose that increases in financial and human resources that are not accompanied by a shift in mindset among key actors, and changes in how the functional purpose of education is viewed, are prone to inefficiency in enabling every student to enjoy their right to education (Darnon et al., 2018; Stanczak et al., 2023).

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Data availability statement

This study has been pre-enregistered in *AsPredicted* (#38916; <u>https://aspredicted.org/SR9_WSY</u>). The associated data, including all quantitative material and data for this study, are fully accessible online (<u>https://osf.io/7ghf3/</u>). Data for this study were collected in the context of larger projects. None of the findings from the research herein have been presented in any prior work. In this research, no data exclusions were used, all data were collected before any analyses were conducted, and all variables analysed are reported.

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ENDNOTES

¹ Elementary school teachers in France are qualified to teach from kindergarten to 5th grade.

² It should be noted that in the pre-registration form we have indicated that participants with studentized residuals below -3.29 or above 3.29 would be cause for concern (Field, 2012). Preliminary analyses identified 37 participants who could be considered outliers. Analyses were conducted without them, and results were very similar, so we have decided to present the whole sample to maintain higher statistical power.