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► **To cite this version:**

Kamilla Khamzina, Mickaël Jury, Edwige Ducreux, Caroline Desombre. The conflict between inclusive education and the selection function of schools in the minds of French teachers. *Teaching and Teacher Education*, 2021, 106, pp.103454. 10.1016/j.tate.2021.103454 . hal-03335880

**HAL Id: hal-03335880**

**<https://uca.hal.science/hal-03335880v1>**

Submitted on 5 Oct 2021

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## **The Conflict between Inclusive Education and the Selection Function of Schools in the Minds of French Teachers**

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This paper has been accepted for publication in *Teaching and Teacher Education*. This version is a post-print.

This study was funded by Ecole du Professorat et de l'Education – Lille Nord de France and the “Caisse Nationale de Solidarité pour l'Autonomie (CNSA)” (grant no. IReSP-17-AUT4-08). Authors wish to thank Andgelina Andrieux, Jessica Delamarre, Estelle Delcourt, Nicolas Rousseau, Célia Szczepaniak and Emeline Vandewalle for their help in data collection and Céline Darnon and Anne-Laure Perrin for their careful reading and advices. 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 analyzed are reported. All material and data regarding the quantitative studies of this project can be accessed here: <https://osf.io/jrxht/>. Finally, the first and the second authors contributed equally within the present paper.

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**Abstract**

Positive attitudes among teachers toward inclusive education play an essential role in enabling students with special educational needs to participate in mainstream education. In this paper, we hypothesize that a conflict between the selection function of schools (i.e., the sorting of students into different academic pathways) and inclusive education makes it difficult for teachers to hold positive attitudes. Three studies (qualitative and quantitative) were conducted, providing support to this hypothesis. Overall, findings revealed that ideological barriers can hinder the implementation of inclusive education and raise new questions regarding the consequences of selection-predicated scholastic settings on students with special educational needs.

*Keywords:* inclusive education, selection, attitude, meritocracy, mixed method

### The Conflict between Inclusive Education and the Selection Function of Schools in the Minds of French Teachers

The 1994 World Conference on Special Needs Education highlighted the necessity to provide education for all children in mainstream education and to afford students with special educational needs (SEN) the opportunity to achieve and maintain an acceptable level of learning (UNESCO, 1994). In other words, educational systems should implement educational programs allowing students with SEN to fully participate in and benefit from a needs-centered pedagogy. Recently passed legislation in France, for example, supports this viewpoint, encouraging shifts in praxis toward more inclusive approaches for students with SEN.

However, many psychological and social factors have a bearing on the extent to which inclusive practices can be successfully implemented all over the world. Among them, teachers' attitudes toward inclusion (ATI), that is, teachers' viewpoints toward the particular "objective" of inclusive education, have been extensively studied due largely to their potential link with teaching behaviors (Hind et al., 2019; MacFarlane & Woolfson, 2013; Sharma & Sokal, 2016). In recent years, a growing body of literature suggests that most teachers reported neutral or negative ATI (de Boer et al., 2011; Krischler & Pit-ten Cate, 2019).

If student-related variables (e.g., students' type of disability; Avramidis et al., 2000; Jury et al., 2021; Krischler & Pit-ten Cate, 2019), or teacher-related variables (e.g., teaching position, Desombre et al., 2019; teachers' self-efficacy, Pit-ten Cate et al., 2018) are shown to influence these attitudes, some characteristics of the mainstream school environment should not be neglected (e.g., support from special education teachers, Avramidis & Norwich, 2002; Minke et al., 1996, or from relevant authorities, Janney et al., 1995; Urton et al., 2014). Indeed, according to Eiser (1994), personal attitudes also arise from interactions with others in a sociocultural context (see also Grube & Morgan, 1990). Therefore, to understand such attitudes, we believe that institutional norms are also particularly important to consider (Tankard & Paluck, 2016).

Based on this proposal, the present paper precisely intends to investigate the relationship between an institutional function that is recognized as fundamental to our educational systems, namely, the selection function of schools (Dornbusch et al., 1996) and teachers' attitudes toward inclusive education.

#### **The Two Main Functions of Western Educational Systems: Education and Selection**

According to the functionalist perspective in education (see notably Parsons, 1959), in most Western countries, educational institutions fulfill two functions: an educational and a selection function (Autin et al., 2015; 2019; Darnon et al., 2009). If the former consists in providing all students with necessary knowledge, skills and learning abilities, the latter is expected to sort students into different curricula, some vocational and others more academic, to ultimately allot them social positions commensurate with their individual merit (Autin et al., 2015). In other words, the educational function seeks to offer students the same opportunities to develop their potential and supports social mobility through the democratization of knowledge (Autin et al., 2015) while the selection function helps to determine which students are "worthy" of following the most prestigious study pathways (Batruch et al., 2019a) and succeeding within the system (Jury et al., 2017a). The selection function appears to be

linked to an equity-based principle of justice (Deutsch, 1979) implying that rewards should be allocated equitably, based on students' motivation, talent and hard work<sup>1</sup>. Thus, to provide a more objective gauge of such individuals' merit, schools carry out a more or less systematic and explicit selection of the most deserving students (through assessment procedures taking the form of tests and exams; Autin et al., 2015; Darnon et al., 2009). Said differently, the meritocratic principle is thus a specific underlying principle of the selection process at school.

However, and contrarily to its claim, it is widely known that the selection function is not solely based on students' individual merit. Indeed, several international (OECD, 2020), psychological (Jury et al., 2015; Smeding et al., 2013; Souchal et al., 2014) or sociological studies (Ballantine et al., 2017; Duru-Bellat, 2019; Sulkunen, 1982) consistently demonstrated that it favors students belonging to "dominant" social classes, placing those from "dominated" classes at a disadvantage. For example, higher-SES students make up a larger percentage of university graduates and/or earn higher grades than their lower-SES classmates (OECD, 2014). In the same vein, Batruch et al. (2019) have shown that, academic achievement held constant, evaluators considered lower academic tracks to be more suitable for lower-SES students than for higher-SES students, particularly when the selection function was made salient. Such results push some authors to argue that the inequalities between groups of students, instead of reflecting individual differences in merit, are inherently linked to the selection function of the system and the negative stereotypes associated to some groups (Batruch et al., 2019; Duru-Bellat, 2019; Jury et al., 2017a).

Therefore, and given the far-reaching consequences of the selection function of schools on students from disadvantaged social groups, it might also be appropriate to investigate its effects on the schooling of another vulnerable student group, namely, those with special educational needs (for a similar proposition, see Barton & Slee, 1999). More precisely, since the inclusive education policy that aims at sustaining the schooling of these students recognizes that merit is insufficient for learning within the regular system, it leads us to argue that there would be a conflict between this policy and a selection process supposedly based on such individual merit (Batruch et al., 2019).

### **Selection Function and Inclusive Education Policy: Are They Compatible?**

Inclusive policy supports the idea that every student, including those with SEN, can learn in school as soon as teaching practices and curricula are adapted to their needs (Pit-ten Cate et al., 2018). Successful inclusion thus requires that the regular classroom undergo a needs-based reorganization aimed at promoting achievement among all students (Pit-ten Cate et al., 2018) and that teachers must be prepared to meet the educational needs of all students (Smith & Tyler, 2011). If this idea is congruent with the educational function of schools, one can however argue that there is "a contradiction between the simultaneous pressure of education policy toward greater levels of competition, selection and exclusion [i.e., the selection function] and rhetorical commitment to

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<sup>1</sup> It should be noted that both teachers (Duru-Bellat, 2006) and students (Autin et al., 2015) are aware that educational institutions are places where individuals are supposed to express their inherent qualities (i.e., abilities and motivation).

inclusive education” (Barton & Slee, 1999, p. 3) resulting in the idea that, to be considered as inclusive, education should minimize selection (Michailakis & Reich, 2009).

Indeed, while the selection function is strongly linked to meritocratic principles (Autin et al., 2015; Batruch et al., 2019a), “the inclusion agenda does not rest on ‘natural’ and ‘neutral’ concepts of ‘effort’ and ‘merit’” (Runswick-Cole, 2011, p. 116). Put differently, by acknowledging that students’ effort is not enough to succeed within the school system, the inclusive education policy goes precisely against the selection function of the educational systems and the meritocracy behind it. As a result, a support regarding one could be associated to a hindrance regarding the other.

Some results from the literature support this idea. For example, Navarro-Mateu et al. (2019) illustrated that the more teachers support hierarchy (i.e., a consequence of the selection function, Batruch et al., 2019; Jury et al., 2017a), the more negatively they feel regarding inclusive education. In the same vein, Darnon et al. (2018) showed that the more individuals believe in meritocracy, the less they tend to support the implementation of equalizing pedagogical methods and egalitarian assessment, methods at the very core of inclusive education.

Taken as a whole, these two examples as well as the described rationale, leads us to precisely hypothesize that the stronger teachers believe in the selection function, the less favorable they will be toward inclusive education.

### **Overview and Hypotheses**

The three studies described below aim to contribute to the growing body of literature which seeks to better understand the factors influencing teachers’ attitudes toward the inclusion of students with SEN (i.e., ATI). The mixed methods approach (i.e., one qualitative study and two quantitative studies) underpinning this paper falls in line with innovative methodological approaches used in the study of inclusive education (Engelbrecht & Savolainen, 2018). Indeed, researchers in educational psychology have predominantly relied on quantitative data collection methods (Hind et al., 2019; see also McCrudden et al., 2019). However, we believe a combined approach to be valuable in understanding such a complex and sensitive social issue. By using a mixed methods approach, our aim is to provide a clearer representation of teachers’ ATI and gain a broader understanding of the phenomenon of inclusive education. Across these studies, we hypothesize that, due to the conflict between the selection function of schools and inclusive education, the stronger the belief of teachers in this selection function of education, the less favorable they will be toward the inclusion of students with SEN.

### **Study 1**

The first study is a qualitative investigation of the attitudes harbored by teachers regarding inclusive education and the functions of the educational system. More precisely, we seek to examine teachers’ discourses on inclusive education policy and the selection function of the educational system and the manner in which these discourses coexist in teachers’ minds. To explore the latter, we compared the views expressed by teachers about the inclusive education issue and whether they agree or disagree with the selection function of schools. We believe that a qualitative inquiry of the

main actors in education (i.e., teachers) would enhance understanding of these complex phenomena and provide semantic knowledge of concepts.

## **Method**

### ***Participants***

Eighteen French mainstream elementary ( $n = 9$ ) and post-elementary ( $n = 9$ ) teachers agreed to participate in the present study. One participant was excluded since he was not in charge of a class. Thus, in the final sample, there were two male and fifteen female teachers aged between 27 and 60 years ( $M = 43.12$  years,  $SD = 9.96$ ). It is worth noting that the present sample is relatively diversified (in terms of age, gender, grade taught and number of years employed as a schoolteacher).

### ***Recruitment Procedure***

The interviewer went to different French schools and recruited the participants in situ (i.e., face-to-face recruitment). Participants were informed about recruiter's scientific background and the purpose of the study and volunteered to participate. No specific inclusion or exclusion criteria were used.

### ***Procedure and Data Collection***

Study 1 employed a qualitative method of assessing teachers' ATI, as well as their opinions of and beliefs in the selection and educational functions of schools. All participants were asked the same questions in the same order by means of a semi-structured interview method (Bertaux, 2016). To ensure its conceptual validity, interview questions were developed based on a review of the literature on ATI and the dual function of schools. The survey grid was then reviewed by the authors of the study, who possess theoretical expertise on such matters, and was consequently adjusted (Corbière & Larivière, 2014). To minimize the social desirability bias, the interviewer was trained by the research team on the skills necessary for conducting a successful interview (empathetic attitude, receptiveness, neutrality, appropriate pace of questioning based on respondents' answers, Paillé & Mucchielli, 2012). Interviews lasted from 30 minutes to an hour and were recorded using a voice recorder and were transcribed by the interviewer at the end of data collection.

To assess their ATI, participants were asked at the beginning of the interview, "What do you think about the inclusion of children with SEN?". Their beliefs about the functions of the educational system (and notably the selection function) were assessed through the question, "According to some research, schools have a dual mission of educating (i.e., imparting knowledge) and selecting (i.e., picking out those students worthy of graduating). What do you think about that? Do you think that schools serve these two functions?".

The survey closed with several general questions about participants' teaching experience and their prior experience including students with SEN ("Have you ever had a teaching experience with students with SEN?"): all reported having had at least one. Such homogeneity could be due to the breadth of the "students with SEN" category, which encompasses both students with disabilities and those with persistent difficulties. While experience with students with disabilities may be less common within French educational settings, teaching experience with students with persistent difficulties tends to be prevalent.

Finally, data collection was discontinued using both saturation criterion (i.e., examining the repetition of discourse on a given topic, Pirès, 1997) and availability of the participants who agreed to be interviewed.

### **Findings**

A thematic analysis was conducted to parse teachers' discourse using a color code highlighting sentences in which participants voiced new ideas, consequently grouped into two main research themes: teachers' attitudes toward inclusion and their opinions about the educational and selection function of schools (Bertaux, 2016). Respondents were assigned fictitious first names.

#### ***Teachers' Attitudes Toward Inclusion.***

The present data was first analyzed to better understand teachers' discourse on the issue of ATI. To this end, teachers' attitudes were divided into two distinct groups according to valence of attitude (positive vs. negative). Ten of our respondents indicated somewhat positive attitudes toward inclusive education policy, stating:

...I found it [inclusive education] to be a good thing because I believe that diversity enriches us all. (Julie)

...Personally, I think it [inclusive education] is great because it allows students not to feel like they're different... (Thomas)

It is worth noting that many participants were favorable while advancing arguments seemingly reflecting negative attitudes toward inclusive education ( $n = 6$ ). A lack of resources and support with which to meaningfully include students with SEN was commonly cited as a barrier. Teachers feel ill-prepared or that they lack special educators to help them out:

... that it [inclusive education] is a good thing but that very often we lack the resources to help them properly. It could be worthwhile to have a special educator around in order to receive specific information about children's disabilities. (Marie)

Those unfavorable to inclusion ( $n = 7$ ) identified other barriers, such as poor classroom management when a student with SEN is included:

...the issue for me is that it [inclusive education] might put us behind on lessons and slow down students who want to work and who have to put up with, uh... (Anne)

As before, teachers' lack of training was also repeatedly cited as a major barrier to inclusive education:

... for them it [inclusive education] is positive, but for the teacher it's kind of frustrating, because we're not sufficiently trained ... we can't deal with both, with them and the other students, so we have trouble teaching our classes... (Claire)

#### ***Teachers' Beliefs in the Selection Function.***

The second goal was to elicit teachers' views on, among other things, the selection function. We first analyzed the thematic content of their discourse to better grasp their perception of the selection function. A few clearly distinct themes associated with this function emerged, such as "elitism" of the kind described by this respondent:

... The academic blueprint for the future is to ensure that all students succeed, but also to select the finest students, so I think that there is an underlying element of elitism... I don't feel like I'm



promoting it. (Meghan)

The “determination of students’ futures” was also often associated with the selection function:  
 ... They’re not ranked from the outset, but unfortunately, we have a system that passes some and causes others to fail or drop out. Some of them will go on to college, some of them won’t. (Sylvie)

After we examined those quotes associated with the selection function within our sample, teachers’ discourses were categorized into two poles (positive vs. negative expressions on the selection function issue). We found ten of our respondents to have indicated rather negative attitudes toward the selection function, embodied in the following statements:

... What a horrid thing to say [referring to the selection function]! I don’t think there ought to be foregone conclusions. Of course, our role is to identify trouble spots and those students who need to be nudged and followed up on, but I don’t think that we have to carry out a selection. Everyone should be educated and, indeed, we should strive to get away from fatalism. (Clara)

...It’s not an ideology I’m fond of. I am rather opposed to the idea of selection. (Melanie)

Some teachers ( $n = 7$ ), however, emphasized the utility of the selection function, by commenting:

... Of course, it [selection function] goes on! We seek... school is accessible to everyone and then we select students, we encourage them and since we’re their assessors, we expect perfection from them. The best and brightest are prepared for better schools and less bright kids are sent to average schools. I also think that selection is natural, everyone has a “capital”, and we are unequal in that respect. People are diverse. (Julie)

### ***Link Between Teachers’ Beliefs in the Selection Function and their ATI.***

This study also aimed to explore the potential link between teachers’ beliefs in the selection function and their ATI. Contrast found between their opinions toward inclusion and their perception about selection at school points to a possible conflict between these two concepts. For example, some teachers with positive ATI appear nonetheless critical of the selection function of schools ( $n = 7$ ), as is the case for this respondent, who supports inclusion (while citing obstacles to its implementation):

... I think that it’s a very good idea, I’m for [inclusive education]. But nowadays, teachers are ill-equipped to help SEN students... (Eve)

However, when asked about the selection function, Eve voices a more negative view:

... if schools do have two functions, I would refuse outright, because selection isn’t what I’m hired to do. ... I think that the schools are there for those who have difficulties. But if the second function is to carry out a selection determining which students get to pursue a given curriculum ... I’d find that upsetting. (Eve)

Said conflict is also observable when teachers express negative views on inclusion while holding positive views on the selection function of schools. To quote another respondent about the inclusion of SEN students:

...I would say there are two categories of student needs. There are those who are dyslexic or in a wheelchair, who manage even better than someone without disabilities. However, for someone with autism, not only would it complicate learning, taking up all of the class time, it’d also complicate classroom management. Because very often we have students with a variety of academic, social and

family problems and we can't afford to get hung up on any one student because otherwise, we'd get bogged down... (Jenny)

The same respondent sounded off when asked about the selection function:

... selection is a built-in feature, seeing that students are assigned at a certain juncture either to a general high school or vocational school, and have to compete for admission into both. Such a selection happens automatically, and it stands to reason, given that it's no use putting an academically lackluster student in a higher-level academic track where they'll struggle to pass ... (Jenny)

As the above quotes bear out, some teachers appear to have either positive ATI coupled with negative beliefs regarding the selection function, others have negative ATI combined with positive beliefs regarding the selection function, reflecting a possible conflict between these two constructs.

## Discussion

Study 1 marks the first step in our investigation of teachers' ATI and their beliefs in the selection function, as well as a potential link between these two constructs. Overall, the present study revealed the mixed nature of attitudes, thereby confirming the large body of previous research (de Boer et al., 2011). Indeed, in some studies, teachers were found to hold positive views toward the broader ethos of inclusion, whereas other studies highlighted potentially serious reservations about its practical implementation. The present semantic analysis of French teachers' discourse reveals the complex nature of these attitudes, notably by showing that teachers are not unequivocally supportive evoking barriers when it comes to implementation (i.e., "yes but..."). This finding might be helpful in understanding why the implementation of inclusive policy in France continues to be hampered by problems.

One interesting observation was made by associating teachers' discourse with their opinions on the selection function of schools. Despite teachers (Duru-Bellat, 2006) and students (Autin et al., 2015) having strongly internalized principles of meritocracy and believing by and large that educational institutions are meant to select the most deserving students through these principles, Study 1 shows a sizeable gap between the perception of institutional function and teachers' intention to uphold it. Indeed, except a few teachers who openly endorse this function, teachers seem to be genuinely offended by selection as a standalone objective. In other words, teachers appear not to overtly subscribe to such practices, nuancing the overall picture of views on the selection phenomenon. These conclusions should however be interpreted cautiously in view of a possible social desirability bias (somewhat intractable for qualitative methods, Bergen & Labonté, 2020).

As a final remark, crossing teachers' discourses on inclusive education policy and the selection function of schools illustrates a possible conflict between teachers' ATI and beliefs in the selection function. Teachers who hold positive beliefs regarding the selection function could indeed hold rather negative ATI, and vice versa.

The use of a qualitative design was valuable in identifying the semantics behind teachers' beliefs in the selection function. As can be inferred from their discourse, teachers often associate the selection function with elitist practices as well as with the determination of students' futures. Results from this method also revealed that teachers mostly hold negative attitudes toward the selection function, confirming this topic to be particularly sensitive, as well as the challenging nature of

measuring teachers' beliefs in the selection function. To better understand teachers' perceptions of such controversial issue as selection function of schools, further studies should benefit from supplemental techniques of analysis (e.g., phenomenological analyses by using informational systems, St-Germain et al., 2009) of the qualitative data (Paillé & Mucchielli, 2012).

Finally, it should be noted that teacher discourses encountered in this study put into words obstacles previously reported in literature, such as lack of financial and institutional support, training and self-confidence (Hind et al., 2019). Those who feel ill-prepared seem to object to the inclusion of SEN students in their classes (Pit-ten Cate et al., 2018). Since teachers' beliefs in their self-efficacy seem to have such a strong influence on ATI, this criterion is bound to come under consideration in upcoming studies, with analyses examining the links between teachers' attitudes and their beliefs in the selection function.

Nonetheless, the links between teachers' beliefs in the selection function and their ATI should be interpreted cautiously given the restricted sample size of this preliminary study. Indeed, even though the sample size used appears to meet the empirical saturation criterion for qualitative research (Pirès, 1997), it remains low ( $N = 17$ ). The following two studies were designed to address such shortcomings by using a survey method of investigation on larger teacher samples.

## Study 2

The previous qualitative study provided support for the hypothesis proposing a link between teachers' attitudes toward inclusion and their beliefs in the selection function of the educational system. The study and its findings enabled us to push our investigation further and quantitatively test the link between these two constructs. Based on the literature cited above and the suggested conflict, we hypothesized that the greater teachers' belief in the selection function, the less positive their ATI will be.

### Method

#### *Participants*

A total of French 351 elementary ( $n = 138$ ) and post-elementary ( $n = 173$ ) teachers participated in this study<sup>2</sup>. Participants ranged in age from 22 to 61 years, with a mean age of 38.4 years ( $SD = 9.12$ ). Eighty percent of the present sample were female ( $n = 249$ ).

#### *Procedure and Measures*

Participants were invited by email to complete an online version of the questionnaire during the spring semester of the 2017–2018 school year. Participants were contacted through different national teachers' associations, the National Higher Institute of Professorship and Education (*Institut National Supérieur du Professorat et de l'Éducation*) as well as various education networks at the local and regional level. Participants came from different regions of France, but no information (neither school, nor city of origin) was collected on their geographical origin.

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<sup>2</sup> Forty participants did not complete the demographic information section (age, sex, etc.), however, since no specific hypotheses were formulated about the role of demographic variables, final analyses were carried out on the total sample of 351 participants.

Participants received an email informing them about the purpose of the study and its procedure<sup>3</sup>. Subsequently, participants were prompted to give their consent. They were then informed that their participation was voluntary, that they could quit the study without consequences and that they would not receive any financial compensation for their participation. Once consent was given, participants were asked to fill in the measures of attitudes, beliefs in the school functions and beliefs in teachers' self-efficacy. At the end of the questionnaire, they completed demographic information and received further details regarding the purpose of the study.

It should be noted that study data were collected as part of larger projects; none of the research results herein have been presented in any previous paper. In this research, no data exclusions were used, all data were collected prior to their analysis, and all variables analyzed have been reported. All materials and data relating to the quantitative studies which make up the present project can be accessed at: [https://osf.io/jrxht/?view\\_only=f2634ed3eebb427d91ace6d906f353b9](https://osf.io/jrxht/?view_only=f2634ed3eebb427d91ace6d906f353b9)"

**Teachers' attitudes toward inclusion.** Three items inspired by the Multidimensional Attitudes Toward Inclusive Education Scale (Mahat, 2008) were used to assess teachers' attitudes (e.g., "I believe that an inclusive school is one that permits academic progress among all students regardless of their ability"). Participants used a five-point Likert scale (1 = "totally disagree", 5 = "totally agree") to answer the questionnaire ( $\alpha = .63$ ,  $M = 4.01$ ,  $SD = 0.73$ ).

**Teachers' beliefs in the selection function of the educational system.** The scale used by Autin et al. (2015)<sup>4</sup> encompasses three items assessing teachers' beliefs in the selection function of the educational system. As a low reliability coefficient ( $\alpha = .38$ ) was revealed for this scale, one item, weakly correlated with the others, was dropped. Thus, the final scale included two items: "...the educational system seeks to detect among students those who are the most able to pursue their curriculum" and "...the educational system seeks to deliver the best diplomas to the best students" and was considered in the present analyses ( $\alpha = .54$ ,  $M = 3.12$ ,  $SD = 0.98$ ). It should be noted that, in contrast to Autin et al. (2015), these items were formulated in descriptive form (i.e., the educational system seeks to) instead of a prescriptive one (i.e., the role of the educational system should be to). This scale also included three items measuring beliefs in the educational function (e.g., "...the educational system seeks to help students to gain solid knowledge",  $\alpha = .78$ ,  $M = 3.65$ ,  $SD = 0.72$ ). No specific hypothesis was made regarding this measure.

**Teachers' self-efficacy.** Due to the strong link between teachers' self-efficacy beliefs and their ATI (Desombre et al., 2019), the expected relationship between the beliefs in the selection function and teachers' ATI are examined while controlling for this parameter. Therefore, sixteen items extracted from Skaalvik and Skaalvik (2010) were used (e.g., "In your current teaching responsibilities, to what extent do you think that you are able to adapt instruction to the needs of low ability students while you also attend to the needs of other students in class",  $\alpha = .90$ ,  $M = 3.74$ ,  $SD = 0.49$ ). Descriptive statistics and zero-order correlations of the present data are displayed in Table 1.

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<sup>3</sup> To avoid a selection bias only applying to participants with an opinion on inclusive education, participants were informed that the study was about the work of teachers in general in Study 2 and teachers' well-being in Study 3.  
<sup>4</sup>It should be noted that this scale was originally developed by Darnon et al. (cited by Autin et al., 2015).

**Table 1***Descriptive Statistics and Bivariate Correlations between Main Variables (Study 2)*

	<i>M</i> ( <i>SD</i> )	1	2	3	4
1. Attitudes toward inclusive education	4.01 (0.73)	-			
2. Beliefs in the educational function	3.65 (0.72)	-.05***	-		
3. Beliefs in the selection function	3.12 (0.98)	-.11***	-.13***	-	
4. Teachers' self-efficacy	3.74 (0.49)	-.26***	-.07***	-.03***	-

Note. \* $p < .05$ . \*\*\* $p < .001$

## Results

To examine the relationship between teachers' ATI and their beliefs in school functions, the former variable was regressed on a model including teachers' beliefs in the selection function, teachers' beliefs in the educational function, teachers' self-efficacy, and all interactions between these parameters. To ensure that multicollinearity between predictors and interaction terms did not affect the results, each variable was mean-centered, and the interaction terms were based on the centered scores (see Aiken & West, 1991).

The analysis (overall model:  $F(7, 343) = 5.62, p < .001, \eta_p^2 = .10, R^2_{adj} = .08$ ) showed that, as expected, beliefs in the selection function predicted teachers' attitudes toward inclusion,  $\beta = -.12, t(343) = -2.31, p = .021, \eta_p^2 = .02$ . The more teachers believed that the educational system seeks to select students, the less favorable their ATI were. It is worth noting that beliefs in the educational function were not significantly related to ATI,  $\beta = .00, t(343) = .09, p = .93, \eta_p^2 = .00$ . Teachers' self-efficacy was also significantly associated with teachers' ATI such that the more confident teachers felt in their teaching skills, the more they reported positive ATI,  $\beta = .29, t(343) = 5.53, p < .001, \eta_p^2 = .08$ .

Unexpectedly, a marginal interaction between the beliefs in the selection function and teachers' self-efficacy appeared,  $\beta = .09, t(343) = 1.87, p = .062, \eta_p^2 = .01$ . This interaction tends to show that among teachers with a low level of confidence in their teaching abilities (i.e., -1 *SD* below the mean), beliefs in the selection function were negatively associated with ATI,  $\beta = -.21, t(343) = -2.93, p = .004$ . However, this perception was not related to ATI among teachers with high confidence in their teaching abilities (i.e., +1 *SD* above the mean,  $p = .65$ ). No other interaction reached significance (all  $ps > .09$ )<sup>5</sup>.

<sup>5</sup> Due to the intermediate reliability of the attitudinal score, analyses were replicated for each item of the scale separately. Results reveal a negative link between teachers' beliefs in the selection function and ATI for two items out of the three (item 1,  $p = .27$ ; item 2,  $p < .001$ ; item 3,  $p = .002$ ).

## Discussion

Study 2 aimed to quantitatively examine the relationship between teachers' attitudes toward inclusive education and their beliefs in the selection function. The present data brought support to our expectations: the more teachers believe that the educational system has a selection function, the less favorable their attitudes toward inclusion.

A great body of social psychology research has already stressed the significant influence of perceived institutional norms on individual behaviors and attitudes (Tankard & Paluck, 2016). However, such influence on teachers' attitudes has not received much attention so far within the field of inclusive education. Our study showed that the perception of an (implicit) institutional norm (i.e., the selection function of the educational system) can be linked to teachers' ATI, suggesting the importance of taking into account the very functioning of the educational system when predicting teachers' ATI.

However, despite these promising results, this second study has limitations worth mentioning. First, the effect size for beliefs in the selection function is small (smaller than for teachers' self-efficacy). Second, the low reliability of the scale used to assess teachers' degree of beliefs in the selection function might reduce the validity of the present results. To do away with said psychometric limitations and understand the relations between beliefs in the selection function and teachers' ATI, a third study was conducted.

### Study 3

In line with current recommendations within the psychology field (Open Science Collaboration, 2017), a pre-registered replication of Study 2 with an increased statistical power appears to be necessary. In addition, Study 3 was designed to consider a major construct within our rationale, namely, teachers' beliefs about meritocracy and test its links with teachers' attitudes toward inclusion. As noted in the introduction, if the selection function and meritocracy are distinct constructs, they are intrinsically linked (Batruch et al., 2019b). Indeed, as the selection function is formally based on the principle of equity, this one is supposedly made based on students' inherent characteristics such as motivation, effort or talent, in other words, students' merit (Autin et al., 2015). Meritocracy appears thus to be one of the underpinning mechanisms of the selection function of school.

Given the negative associations found between teachers' beliefs in selection function and their ATI in study 2, study 3 seeks to test the hypothesis that the beliefs in school meritocracy are also negatively related to teachers' attitudes toward inclusion. We believe that exploring the exact role of beliefs about meritocracy could be particularly helpful in understanding the link between teachers' beliefs in the selection function and their attitudes toward inclusive education.

## Method

### *Participants*

As indicated in the pre-registered form (AsPredicted#30160<sup>6</sup>), an a priori power analysis performed with G power 3.1 (Faul et al., 2007) revealed that 305 participants would be needed to detect a small-sized effect ( $f^2 = .02$ ) with a targeted power of .80. This study was part of a larger project involving two other studies and was sent out to a large number of teachers. The entire project sample was randomly split into two datasets<sup>7</sup>, resulting in a total of 524 French post-elementary teachers being enrolled in the present study. The sample contained 360 females and 155 males (9 missing) aged from 22 to 64 years ( $M = 44.2$ ,  $SD = 9.51$ ).

### *Procedure and Measures*

As in Study 2, the survey was sent out through teachers' professional networks, workgroups and social media in fall 2019. Participants came from different regions of France, but this parameter was not considered in the present analyses.

In the beginning of the study, participants were informed about its purpose and procedure. As with the second study, participants were prompted to give their consent and were informed that their participation was voluntary, that they could quit the study without any consequences and that they would not receive any financial compensation for their participation. Once consent was given, participants were asked to fill in the proposed measures. At the end of the questionnaire, they completed demographic information and received further details regarding the purpose of the research project. It should be noted that this study received an IRB approval (IRB00011540-2019-29).

**Teachers' attitudes toward inclusion.** The same three-item measure used in Study 2 was used here to assess teachers' ATI ( $\alpha = .64$ ,  $M = 3.50$ ,  $SD = 0.89$ ).

**Teachers' beliefs in the selection function of the educational system.** The same three-item measure used in Study 2 was also used to assess teachers' beliefs in the selection function. In this study, its reliability score was satisfactory<sup>8</sup> ( $\alpha = .70$ ,  $M = 3.00$ ,  $SD = 0.83$ ). As with Study 2, teachers' beliefs in the educational function were also measured ( $\alpha = .86$ ,  $M = 3.18$ ,  $SD = 0.86$ ), although no hypothesis was made regarding this measure.

**Teachers' beliefs in school meritocracy (BSM).** An eight-item measure (Wiederkehr et al., 2015) was used to measure teachers' beliefs in school meritocracy (e.g., "At school, where there is a will, there is a way"; "Willingness is not always enough to succeed at school" [reversed],  $\alpha = .84$ ,  $M = 2.61$ ,  $SD = 0.65$ ). It should be noted that our measure of BSM assessed the descriptive aspect of beliefs in meritocracy (as opposed to its prescriptive aspect), or how teachers perceive the current educational system.

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<sup>6</sup> The pre-registered form regarding this project can be accessed at: <http://aspredicted.org/blind.php?x=yi2dr7>

<sup>7</sup> Contrarily to what we pre-registered, we did not enroll as many participants as thought for the whole project (Target  $N = 4\ 000$ ). Therefore, to reach our statistical power objective for our three projects, we did not split the whole sample into three sub-samples, but two.

<sup>8</sup> Although not pre-registered, the analysis of reliability and linear regression including only two belief scale items in selection function (the same as in study 2) yielded the same results as the three-item scale.

**Teachers' self-efficacy.** Nine items from Skaalvik and Skaalvik (2010) were used in this study (e.g., "In your current teaching responsibilities, to what extent do you think that you are able to get all students in class to work hard with their schoolwork",  $\alpha = .85$ ,  $M = 3.64$ ,  $SD = 0.54$ ).

For all measures, participants used a five-point Likert scale (1 = "totally disagree", 5 = "totally agree"). Descriptive statistics and zero-order correlations of the present study are displayed in Table 2.

**Table 2**

*Descriptive Statistics and Bivariate Correlations between Main Variables (Study 3)*

	<i>M</i> ( <i>SD</i> )	1	2	3	4	5
1. Attitudes toward inclusive education	3.50 (0.89)	-				
2. Beliefs in the educational function	3.18 (0.86)	-.17***	-			
3. Beliefs in the selection function	3.00 (0.83)	-.12***	-.39***	-		
4. Beliefs in school meritocracy	2.61 (0.65)	-.22***	-.23***	-.21***	-	
5. Teachers' efficacy	3.64 (0.54)	-.29***	-.19***	-.11***	-.08 <sup>t</sup>	-

*Note.* <sup>t</sup> $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

## Results

### *Pre-registered Analyses*

In order to replicate the results obtained in Study 2, teachers' ATI were first regressed on a model including teachers' beliefs in the selection function (mean-centered), teachers' beliefs in the educational function (mean-centered) and teachers' self-efficacy (mean-centered). Additionally, a second analysis in which teachers' beliefs in school meritocracy (mean-centered) replace teachers' beliefs in the selection function was conducted. For both regressions, preliminary analyses controlling for participants' gender and teaching experience were conducted. As they were not significantly related to ATI in both analyses, they were removed from the final analyses.

The first multiple regression analysis (overall model:  $F(7, 516) = 9.07$ ,  $p < .001$ ,  $\eta_p^2 = .11$ ,  $R^2_{adj} = .10$ ) revealed that beliefs in the selection function, contrary to our hypothesis and previous results, were not significantly related to ATI,  $\beta = .06$ ,  $t(516) = 1.32$ ,  $p = .186$ ,  $\eta_p^2 = .00$ , whereas belief in the educational function appeared to be marginally related to teachers' ATI,  $\beta = .08$ ,  $t(516) = 1.80$ ,  $p = .072$ ,  $\eta_p^2 = .01$ . There was a significant association between teachers' self-efficacy and ATI such that the higher teachers' confidence regarding their teaching abilities, the more positive their ATI,  $\beta = .28$ ,  $t(516) = 6.13$ ,  $p < .001$ ,  $\eta_p^2 = .07$ . Out of all the interactions, only the interaction between beliefs in the



selection function and educational function was significant,  $\beta = -.10$ ,  $t(516) = -2.28$ ,  $p = .023$ ,  $\eta_p^2 = .01$ . It unexpectedly indicated that among teachers who did not strongly believe in the selection function (i.e.,  $-1$  SD below the mean), the stronger the belief in the educational function, the more positive teachers' ATI were,  $\beta = .08$ ,  $t(516) = 3.12$ ,  $p = .002$ ; a non-significant link was found for those who strongly believe in the selection function (i.e.,  $+1$  SD above the mean),  $p = .941$ .

The second multiple regression analyses aimed to regress ATI on teachers' beliefs in the educational function, beliefs in school meritocracy and teachers' self-efficacy (overall model:  $F(7, 516) = 15.54$ ,  $p < .001$ ,  $\eta_p^2 = .17$ ,  $R^2_{adj} = .16$ ). This analysis revealed a significant link between teachers' beliefs in school meritocracy and their ATI,  $\beta = -.28$ ,  $t(516) = -6.81$ ,  $p < .001$ ,  $\eta_p^2 = .08$ , a significant link between teachers' beliefs in the educational function of school and their ATI,  $\beta = .18$ ,  $t(516) = 4.13$ ,  $p < .001$ ,  $\eta_p^2 = .03$ , and a significant link between teachers' self-efficacy and their ATI,  $\beta = .27$ ,  $t(516) = 6.26$ ,  $p < .001$ ,  $\eta_p^2 = .07$ . As predicted, it seems that the stronger the belief of teachers in school meritocracy, the less positive their attitudes toward inclusive education. None of the two and three-way interactions were significant (all  $p_s > .12$ )<sup>9</sup>.

### **Exploratory Analysis**

Results from the previous section revealed a significant association between teachers' beliefs in school meritocracy and their ATI: the more teachers believe in meritocracy, the less they support the inclusion of students with special educational needs in mainstream classes. As a result, based on literature and the correlation between teachers' beliefs in the selection function and their beliefs in meritocracy,  $r = .21$ ,  $p < .001$ , we sought to go beyond our initial pre-registration and investigate the existence of an indirect link between teachers' beliefs in the selection function with their ATI through their beliefs in school meritocracy (i.e., a mediation path).

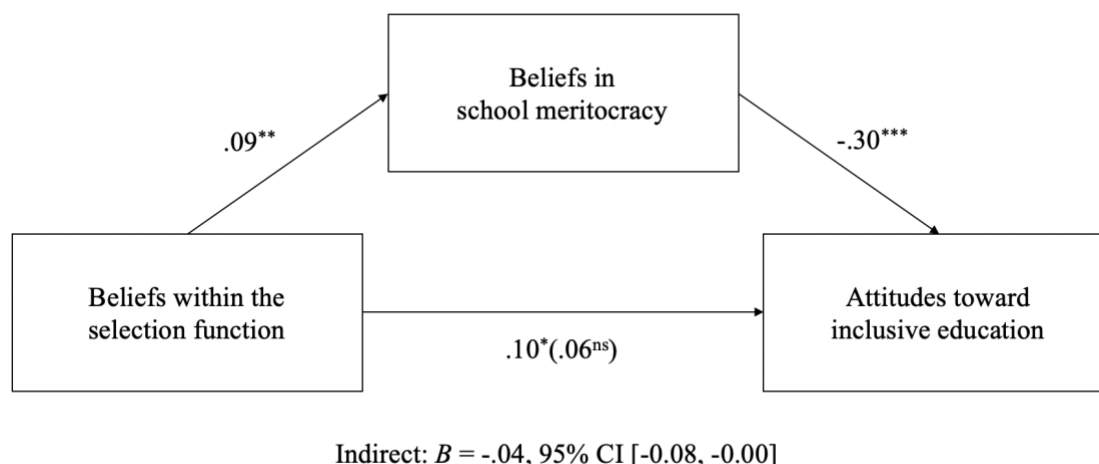
Results from the analysis (see Figure 1) confirmed, across 5 000 trials, that the bootstrap estimated for the indirect link was significant,  $B = -0.04$ , 95% CI [-0.08, -0.00]. In other words, the more teachers believe that the school exerts a selection function, the more they also believe in meritocracy and the less favorable they are toward inclusive education. However, it should be noted that the direct link between beliefs in the selection function with teachers' ATI is significant,  $B = 0.10$ , 95% CI [0.01, 0.20], suggesting that beliefs in school meritocracy plays a suppressor role (MacKinnon et al., 2000; Rucker et al., 2011). Put differently, once the negative influence of beliefs in school meritocracy on teachers' ATI is removed, beliefs in the selection function of schools and teachers' ATI may reveal themselves to be positively associated. The theoretical implications of this unexpected point will be elaborated in the general discussion below.

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<sup>9</sup> Although not pre-registered, the analyses were replicated on each item of the attitude scale (due to the intermediate reliability, as in Study 2). Results were unchanged.

**Figure 1.**

*Indirect link between participants' beliefs in the selection function and their attitudes towards inclusive education through their beliefs in school meritocracy*



*Note. Values indicate unstandardized regression coefficients, with and without — in brackets — controlling for beliefs in school meritocracy, <sup>ns</sup>  $p > .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .*

### General discussion

The factors influencing the successful implementation of inclusive education represent one of the foremost sensitive topics in educational psychology and the educational sciences at large (Ferguson, 2008). As mentioned above, teachers' attitudes toward inclusive education (ATI) have received a great deal of attention in recent years (for reviews, see Avramidis & Norwich, 2002; de Boer et al., 2011). The present research aimed to shed light on a previously overlooked factor possibly influencing these attitudes: teachers' beliefs in the selection function of the educational system. Due to a hypothesized conflict between this selection function and inclusive education, we have suggested that teachers' beliefs in this selection function would be negatively associated with their attitudes toward inclusive education. This hypothesis was examined across three studies of French elementary and post-elementary school teachers, using both qualitative and quantitative methods. All three studies tend to support our expectations by revealing either directly or indirectly that the stronger the belief of teachers in the selection function, the less they support the inclusion of students with SEN.

By analyzing teachers' discourse, the first qualitative study provided us with an insight into how teachers respond when asked about the selection function and inclusive education and appeared to corroborate an expected conflict. The second study provided correlational evidence of the expected negative link above and beyond one of the most robust predictors of teachers' ATI, teaching self-efficacy - which still explains more variance than the variable of interest. The third and final study, specifically designed to provide a replication of Study 2 (through pre-registration and an increased statistical power), yielded mixed results. Indeed, while teachers' beliefs in the selection function did not

appear to be directly linked to their ATI, exploratory analysis suggested that a negative link could occur through a mediator: teachers' beliefs in meritocracy. By highlighting the role of this core component of the selection function (Autin et al., 2015; Ballantine et al., 2017; Batruch et al., 2019; Duru-Bellat, 2019) on teachers' attitudes, this negative indirect link brought support to the contention that selecting students based on merit is inconsistent with a needed-centered pedagogy founded on the idea that merit is not the only factor in academic success (see also Darnon et al., 2018).

Altogether, these findings seem worthy of consideration from a theoretical standpoint. Until now, most of the literature regarding teachers' reluctance toward inclusive education focused on individual factors in order to understand teachers' attitudes regarding this policy (de Boer et al., 2011). Indeed, most studies have considered the influence of personal factors (such as teachers' self-efficacy beliefs or students' type of disability), somehow overlooking any impact that normative influence might have. Institutions such as governments, schools and mass media disseminate and therefore prescribe (explicitly and implicitly) certain social norms bound to further guide the way individuals think and behave (Tankard & Paluck, 2016). It has been repeatedly demonstrated that such institutional decisions and norms successfully influence perceived norms by individuals, which in turn impact their personal attitudes (Guimond et al., 2013). In other words, showing that the selection function of the educational system may also be an important factor in understanding teachers' ATI reinforces the idea that the perception of a normative context may also be a significant barrier to the successful implementation of inclusive teaching practices. More broadly, in order to move forward regarding the challenge of inclusive education (Ferguson, 2008), these results call scholars to conduct research involving multiple levels of analysis (Doise, 1982). We believe that teachers' reluctance regarding inclusive education would probably be better understood by simultaneously considering intra-individual (e.g., teachers' self-efficacy), inter-individual (e.g., teachers perceived social support), positional (e.g., teachers' status), and ideological explanations (e.g., the functions of the educational system).

Even though our research benefited from large samples of French teachers and a mixed methods approach, several limitations should be acknowledged. First, our data are correlational and do not imply causality. Although the observed relations (in Study 2 and 3) are somewhat consistent with our hypotheses (even weak in terms of effect sizes), we cannot claim that the selection function causes negative teachers' ATI. These relationships could therefore be examined in future studies by experimentally manipulating (e.g., via fictitious scenarios) the importance and salience of the selection function (for an example, see Jury et al., 2017b).

Second, as evoked previously, studying attitudes toward inclusive education and beliefs in the selection function is challenging since these two constructs are not exempt from a social desirability bias. Indeed, as illustrated in Study 1, while the former is associated with high social desirability (i.e., a difficulty expressing strictly negative attitudes regarding the social participation of students with SEN, Lüke & Grosche, 2018), the latter suffers from high social undesirability (i.e., a difficulty expressing positive attitudes regarding the selection function of schools, Darnon et al., 2009). Moreover, and as it can be observed from teachers' discourse in study 1, the concept of the selection, although shown to be both officially and empirically omnipresent through the meritocratic foundational principle of schools, is still an issue of high ambiguity in teachers' minds. Such a difficulty might explain the

relatively poor to intermediate reliability scores obtained in Study 2 and 3. Additional caution is therefore in order when reading and interpreting these results, as well as during subsequent research on bias-free instruments to measure and investigate the relationships between these two constructs.

Finally, it should be noted that Study 3 revealed an unanticipated but thought-provoking finding. After removing the negative influence of teachers' beliefs in meritocracy, a positive relationship (i.e., direct link) between teachers' beliefs in the selection function and their attitudes toward inclusive education was found. Such a result suggests that some aspects within the selection function might in fact be compatible with inclusive education. The reason for this could lie in the aim to enforce the selection function whilst enacting inclusive education policy. On the one hand, selection revolves around student achievement, even after (supposedly based on merit) competition between students is removed. On the other hand, inclusive education is not driven by a morally-based objective alone (i.e., "Education for all"), but is also meant to foster achievement in students with SEN (i.e., the Salamanca statement declared that regular schools should "provide an effective education to the majority of children", UNESCO, 1994). Therefore, this common focus on students' achievement (even if the intended students are not the same) may explain why the two constructs could be compatible. Nonetheless, it should be noted that these results cannot necessarily be generalized to the whole population of teachers since only post-elementary teachers have participated in this last study. Since these are more exposed to the selection process than elementary teachers in the French system, they might have more negative attitudes toward inclusion. A replication with a more balanced sample in terms of level of teaching (as in Study2) would be relevant to investigate and replicate these negative indirect links.

Despite these obvious limitations, the results obtained raise relevant questions. Specifically, by suggesting that selection of the best students could be in conflict with the inclusion of students with SEN, one might speculate that the educational system, through its norms and values, could create an environment which jeopardizes the success of students with SEN (as for an example with lower-SES students, see Batruch et al., 2019; Jury et al., 2017a). Future research within the field should examine such potential concerns.

Finally, several decades of research have illustrated that the implementation of inclusive education is no straightforward task, and that reluctance to implement the policy remains despite prominent early adopters (Saloviita & Consegna, 2019). The present research suggests that these difficulties might lie not only with those who keep the educational system functioning on a day-to-day basis (i.e., teachers), but may in fact emanate from the very core of the educational system (i.e., its functions and objectives).

### Conclusion

Overall, the present work raises new questions regarding the determinants of teachers' attitudes toward the inclusion of students with special educational needs in mainstream education. Indeed, findings indicate that ideological barriers could be important to consider in addition to the personal factors previously studied in the literature. By suggesting a possible conflict between the selection function of the educational system and inclusive education policy, the present paper opens up a new perspective for understanding why students with SEN still face difficulties finding their place within the educational system.

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