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Exemption or Exclusion? A study of student exclusion in PISA in Norway

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ABSTRACT

In recent years, exclusion rates in PISA have risen in many countries, including a sharper-than-average rise in Norway. This article focuses on Norway's experience with exclusion rates in PISA, including an analysis tracking this increase between 2000 and 2018. Through interviews with key stakeholders, this article explores several ideas that might explain why Norway's exclusion rates have risen so dramatically. Key findings revealed that Norway's exclusion rates may be high because there is a distinction between using the terms 'exemption' and 'exclusion' in Norway, so exempting students is interpreted to be much softer and kinder in Norway. Interviews also revealed a high degree of school leader subjectivity in determining student participation, and that many Norwegian school leaders made decisions to promote student feelings of mastery and minimize feelings of defeat. Interviews revealed that many Norwegian school leaders see excluding students as positive and beneficial, and are not concerned with its effects on test representativeness and validity.

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Introduction

Lower than expected results from PISA 2000 gave rise to national 'PISA shocks' and subsequent educational reforms around the world including Japan (Takayama, 2008), Denmark (Egelund, 2008), Germany (Ertl, 2006) and a host of other European countries (Grek, 2009). Specific to Norway, the PISA shock has been seen as a 'turning point' for Norwegian education policy (Østerud, 2016) which coincided with strong political consensus about the need for improvement. In many ways, PISA has captivated Norwegian politicians and the media since its inception in 2000, operating as a high stakes assessment for national leaders (Haarvik Sanden, 2010; Hatch, 2013; Sjøberg, 2013). Sjøberg (2015) argues, 'There is no doubt that the major reforms of Norwegian schools [over] the last decade have been strongly influenced by the OECD, with PISA as the main instrument' (p. 115). To that end, Hatch (2013), argues that Norway's response to PISA has spurred neoliberal accountability reforms such as the Knowledge Promotion Reform of 2006 that places a focus on testing, measurement, and accountability.

Fuelling public discourse around poor PISA results, the Norwegian press has played an active role. For example, following the PISA 2000 results an article in a leading Norwegian newspaper was titled, 'Norway is a school loser: Here is the solid evidence! It is typical Norwegian to be average' (Ramnefjell, 2001, author's translation). And upon receiving the 2000 results, the then-Minister of

Education Kristin Clement was quoted as saying, 'this is disappointing, almost like coming home from a winter Olympics without even a single Norwegian medal. And this time, we can't blame the Finns for using drugs' (as cited in Ramnefjell, 2001, author's translation). Here, Clement spoke to her people in the most Norwegian way possible, reaching hearts and minds with a metaphor of skiing. Although Norway's scores in PISA 2000 and PISA 2003 were actually very close to the OECD average, the media focused on 'over-simplified' rankings tables, and made the results seem catastrophic (Sjøberg, 2016, p. 107).

Along with increased assessment, the Norwegian Knowledge Promotion Reform of 2006 brought new curricula with more rigorous skill development, as well as a new focus on ensuring quality. Norway, as a nation, increased their national data collection to include student surveys, parent surveys, legal inspections, mapping tests of basic skills for students in early grades, and national tests of students in middle-grades (Hatch, 2013). With an increasing focus on accountability in 2007 the government launched an 'improved Assessment Practices' programme with reinforced focus on assessments both nationally (national tests, teacher-given grades, and external examinations) and internationally (PISA, PIRLS, and TIMSS) as ways of monitoring education (Tveit, 2014).

Although some critics in the leftmost political parties want to end Norway's participation in PISA, a recent Minister of Education, Torbjørn Røe Isaksen, has come

Table 1. Overall exclusion rate (%) from 2000–2018, PISA population and samples.

	2000	2003	2006	2009	2012	2015	2018	Change from 2000 to 2018
Australia	2.29	2.15	1.76	4.36	4	5.31	5.72	3.43
Austria	0.73	1.62	2.16	0.81	1.33	2.11	2.54	1.81
Belgium	2.33	1.53	2.7	2.2	1.4	1.66	1.94	−0.39
Canada	4.94	6.83	6.35	6	6.38	7.49	6.87	1.93
Czech Republic	1.88	1.2	1.06	1.76	1.83	2.44	1.67	−0.21
Denmark	3.08	5.33	6.07	8.17	6.18	5.04	5.7	2.62
Finland	1.88	3.38	4.47	3.4	1.91	2.78	3.42	1.54
France	3.45	3.4	3	2.66	4.42	4.16	2.58	−0.87
Germany	1.68	1.89	1.22	1.3	1.54	2.14	2.73	1.05
Greece	0.77	3.19	2	3.74	3.6	1.89	2.08	1.31
Hungary	0.71	3.94	3.69	3.14	2.58	3.31	3.68	2.97
Iceland	2.44	2.59	2.37	4.5	3.81	3.62	5.99	3.55
Ireland	4.55	4.29	1.76	3.23	4.47	3.11	3.91	−0.64
Italy	2.47	1.88	1.7	2.52	3.33	3.8	0.75	−1.72
Japan	2.34	1.02	1.36	1.93	2.15	2.35	2.39	0.05
Korea	0.44	0.87	0.66	0.69	0.82	0.89	0.56	0.12
Latvia	3.75	4.89	3.21	8.15	4.02	5.07	4.29	0.54
Luxembourg	9.13	1.59	3.92	8.15	8.4	8.16	7.92	−1.21
Mexico	0.06	4.3	0.27	0.56	0.74	0.91	1.24	1.18
Netherlands	4.37	1.87	0.15	3.46	4.42	3.67	6.24	1.87
New Zealand	5.12	5.07	4.58	4.19	4.61	6.54	6.78	1.66
Norway	2.67	3.39	3.51	5.93	6.11	6.75	7.88	5.21
Poland	9.7	3.91	2.22	1.88	4.59	2.38	3.77	−5.93
Portugal	2.7	2.3	2.05	1.57	1.6	1.29	2.37	−0.33
Spain	2.68	7.29	3.52	3.88	4.38	3.16	2.63	−0.05
Sweden	4.73	4.2	4.46	4.75	5.44	5.71	11.09	6.36
Switzerland	2.32	4.39	3.38	3.08	4.22	4.35	6.68	4.36
UK	4.87	5.4	3.27	4.62	5.43	8.22	5.45	0.58
US	4.08	7.28	4.28	5.16	5.35	3.31	3.83	−0.25

out publicly as a strong supporter of PISA. He called PISA the ‘foremost and best school research project in the world, which gives us important and useful information about Norwegian schools’ and says that ending Norwegian participation would be ‘a really bad idea’ (UtdanningsNytt.no, 2016, author’s translation). Røe Isaksen cited the PISA 2015 results as evidence of Norwegian school success, saying, ‘PISA results show that a lot is going well in Norwegian schools’ (Regjeringen.no, 2017b, author’s translation). Given that the conservative government coalition was re-elected in the fall of 2017 (NRK.no, 2017), Norway’s participation and its politicians’ faith in PISA testing is most likely going to continue.

In general, PISA is often considered a low stakes assessment, especially for students. However, in countries such as Norway, where PISA has clearly informed and influenced public debate, stakes can be high for politicians and educational leaders. Fittingly, the high stakes can result in increased pressure by these stakeholders for school leaders to improve scores. Such pressure can manifest itself in different ways. For example, in some countries ‘data irregularities’ were found because national markers were too lenient on their scoring of open-ended questions. In other countries, such as the United Arab Emirates, the high stakes of PISA has resulted in PISA cram sessions where all students are

administered PISA items and coached on how best to take the assessment (Pennington, 2017).

Another possible way to help improve scores is to manage who takes the assessment, namely by excluding those students that may not do well. For example, some of the top performing systems in China have been criticized for excluding a large portion of their 15 year-old population from their sampling frame in PISA 2015 as well as PISA 2018 (Loveless, 2014, 2019). Additionally, Vietnam, a surprise high performer on PISA, only included about half of its 15 year old population in its sampling frame (Rutkowski & Rutkowski, 2016). Both these cases lead to questions around who is being excluded from these assessments and for what purposes. However, an analysis of PISA exclusion rates shows that national exclusion rates among OECD countries have only increased slightly from 2000 to 2018 (see Table 1). That said, when looking to exclusion rates, Norway is an outlier and saw an increase in exclusion rates of over 5% between 2000 and 2018 (see figure 1 and figure 2), placing Norway 3rd highest among OECD countries. Further, Norway had the second-largest increase in exclusion rates of all OECD countries during this time (second only to Sweden), and it has been above the 5% exclusion threshold set by the OECD since (and including) 2009 (see figure 2). Norway’s ever-increasing exclusion rate has started gaining national attention as some begin to question the validity of the results in light of high exclusion. After

the 2018 PISA results were published, an article in Norway's leading newspaper *Aftenposten* titled 'it's not typically Norwegian to be good' mentioned Norway's high exclusion rate, remarking that 'the numbers could have been even worse' and pointing out that Norway has been over the OECD's allowed exclusion rate since 2009 (Sollilen, 2019, author's translation).

We do not expect that there was a concentrated effort by the Norwegian government to increase exclusion rates with an explicit hope of improving scores. However, this anomaly does deserve further investigation in order to understand possible explanations for the large increase in exclusion rates. In the following paper we interview a group of Norwegian educational leaders to explore



Figure 1. Norway's PISA exclusion rate from 2000 to 2018 compared to the average of 29 OECD countries participating in all cycles of PISA.

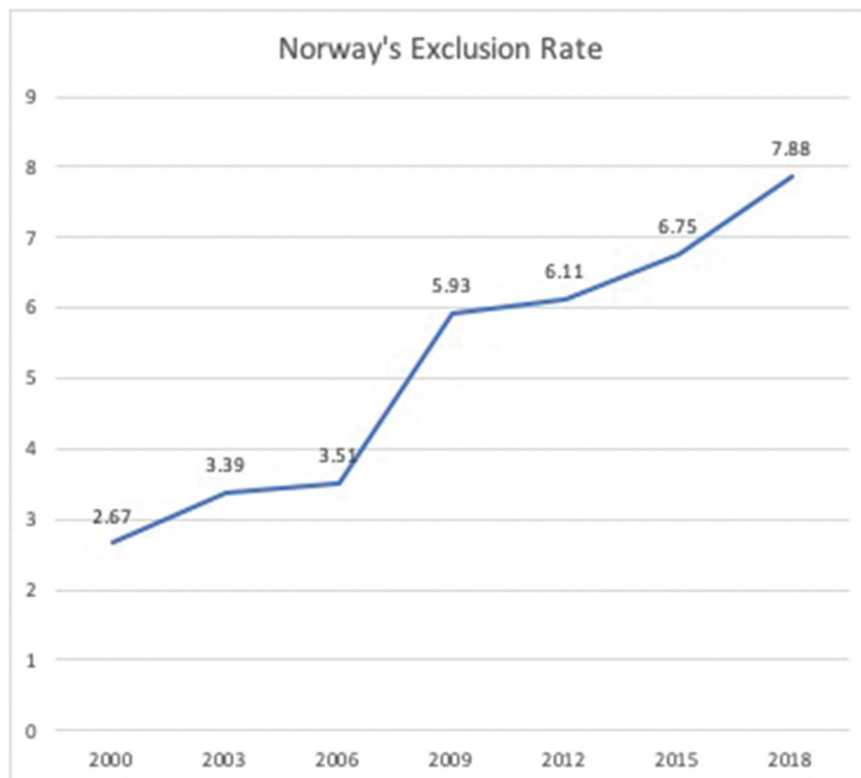


Figure 2. Norway's exclusion rate from 2000 to 2018.

possible reasons why Norway has seen among the largest increases of OECD countries. Specifically, through our interviews we hope to gain a better understanding of how exclusion rates in PISA are understood by a sample of educational leaders (principals, assistant principals, and department heads with 10th grade responsibility) in Norway and why students are ultimately excluded from the assessment. Although the PISA criteria for exclusion are set at the national level according to the OECD's guidelines, it is up to individual school leaders to interpret and apply them. With our case of Norwegian educational leaders in mind our research questions can be stated as follows:

- (1) How do school leaders interpret the PISA exclusion guidelines?
- (2) What reasons do school leaders provide for excluding students in PISA?
- (3) What reasons do school leaders provide for not excluding students in PISA?

In what follows we provide a brief discussion concerning what research has found as to possible reasons certain students are excluded from assessments. We then provide an overview of how exclusion criteria are communicated to Norwegian schools selected to participate in PISA. Finally, we present our study, its findings, and discuss how educational leaders in Norway interpret and apply the guidelines for exclusion in PISA during a hypothetical exercise.

Impetus for increased exclusion rates

Kamens (2013) argues that an ongoing search for international best practices highlights the 'winners' of PISA as superstars. This coupled with the threat of shame imposed upon 'losers' of PISA could make doing well on PISA increasingly important to national officials. While a country cannot quickly increase the number of high performers, it can take measures to exclude more of its lower performers, and thus, raise performance overall (Darling-Hammond, 2007). This pressure to perform might lead countries to try and increase their test scores 'at all costs' (Darling-Hammond, 2007) which could include a system where low-performing students are systematically excluded from the assessment.

To that end, research in the US has documented that there are various ways systems remove low-scoring students from being tested on high stakes tests in hopes of improving achievement gains (Darling-Hammond, 2007; Heilig & Darling-Hammond, 2008; Jacob, 2002). One tactic is by identifying high rates of students as special needs in order to exclude them from the sampling frame (Allington & McGill-Franzen, 1992; Figlio & Getzler, 2002). Although in Norway, PISA is not considered a high stakes test for the individual students (since results are never reported at the student level), PISA is a high stakes test for the government (Sjøberg, 2017). As Sjøberg writes, 'governments are blamed for low scores, and

governments are quick to take the honour when results are improving. Perceived bad rankings often create a crisis or panic, and governments are urged to do "something" to improve scores' (Sjøberg, 2017, p. 17).

Attempts to keep low-performing students from taking the tests are often referred to as 'gaming behaviour' and they are not foreign to PISA. In the past few years, concerns have been raised with selective sampling strategies in Malaysia (FMT Reporters, Figlio & Getzler, 2002) and China (Sands, 2017) in order to increase performance on PISA. Although there is no literature about exclusion rates in Norway's national test context, Vestheim and Lyngsnes (2016) studied how national tests are used in Norwegian schools. In their research, the authors alluded to the possibility of increased exemption rates to improve scores, however, the findings were only speculative.

Specific to Norway, another explanation for rising exclusion rates might lie with Norwegians adopting broader definitions of inclusion and special education since the inception of PISA in 2000. For example, Bliksvær et al. (2017) found that the rates of Norwegian students in special education services increased in recent years, despite a political commitment to inclusion and adapted instruction. By surveying primary school teachers, Bliksvær et al. posited a number of possible reasons for the higher rates in students identified for special needs, including an increased focus on student results and testing and more emphasis on student rights and diagnoses. It is possible that these reasons used to identify students as special needs also apply to explain higher rates of identifying students for exclusion on tests like PISA or national tests.

Additionally, Uthaug's (2011) research into inclusion and segregation in ordinary Norwegian schools might also be of interest here. By interviewing school leaders, Uthaug found that inclusion is seen as a right for students, but that at the same time, school leaders believe that segregating special education students is sometimes necessary to provide a more beneficial learning opportunity for all students. These values might also apply to determining test participation, although the current literature does not explore this.

About exclusion in PISA

Since its inception PISA has defined its population the same. Each cycle assesses students ranging from 15 years, 3 months to 16 years, 2 months who are enrolled in at least grade 7 (OECD, 2001). The PISA 2000 Technical Report boasts of the tests' coverage, claiming that:

All countries attempted to maximize the coverage of 15 year olds enrolled in education in their national

Table 2. Summary of all categories for allowed exclusion in PISA.

School level exclusion	Within school exclusion	Overall exclusion rate goal
<ul style="list-style-type: none"> • Geographic access/limitations of feasibility • ‘Non-covered’ areas of a country • Schools only for students with significant disabilities 	<ul style="list-style-type: none"> • Functionally disabled • Intellectually disabled • Limited proficiency in test language • ‘Other’ 	5%

Table 3. Summary of changes in written guidelines for exclusion, PISA Norway 2006–2017 field trials.

	2006	2009	2012	2015	2017 field trial
Formatting of exclusion criteria	Box with tightly wrapped text arranged in bullet points	Three-column table comparing ‘students who should be exempted’ and ‘students who nevertheless should participate’	Same as 2009	Same as 2009	Three-column table comparing ‘students who should participate’ and ‘students who can be exempted’
Extra words/phrases in bold	‘If you are in doubt, let the student participate’ above the table	Some extra phrases like ‘NOT’ and ‘ALL’ in the table descriptions	Same as 2009	Same as 2009	‘Let as many students with special needs as possible take the PISA test’ above the table in larger font.
Other changes from the prior version		Wording is more concise; the three criteria listed under ‘limited Norwegian skills’ are separated into bullet points; exempting students for low language skills has been described as exempting students who ‘do not have Norwegian as a mother tongue and have limited Norwegian skills’	In the second category of exclusion, the word ‘cognitive’ is added; ‘BUP’ has been added as an evaluatory agency; ‘such that they are not able to participate in the test’ has been replaced by ‘are not able to understand and follow instructions in the survey’	Two extra paragraphs are included: the first clarifies exemption and mentions that exemption criteria are uniform across countries. The second emphasizes participation when possible in a number of scenarios. Includes examples of how the criteria could be considered with hypothetical students	Sentences stating that some students are perhaps unable to participate in the survey, and that the criteria for exemption are uniform across countries have been removed. The directions are broken down into two steps. Examples of hypothetical students have been assigned names.

samples, including students enrolled in special education institutions. As a result, PISA 2000 reached standards of population coverage that are unprecedented in international surveys of this kind. (OECD, 2001, p. 231)

Despite this claim, PISA 2000 and all subsequent tests have allowed for exclusions in two different categories: (1) school-level exclusions, and (2) within-school exclusions, also referred to as exclusions at the student level (OECD, 2001, 2005, 2009, 2012, 2016, 2019). School-level exclusions are allowed if a school is ‘geographically inaccessible’ or ‘where the administration of the PISA assessment was not considered feasible’ (OECD, 2001, p. 232); these are called ‘a-priori exclusions’ and are usually not included in the national target population. School-level exclusions are also permitted for schools that only teach students in categories defined under ‘within-school exclusions,’ for example, a school for the blind (OECD, 2001). Within-school exclusions are permissible for four different categories of students; the decision to exclude students is made at the discretion of school officials for:

- (1) Students with physical disabilities (‘functional disabilities’) that prohibit them from completing the tests,
- (2) Students who are intellectually disabled (‘educable mentally retarded’) such that they are unable to complete the tests,
- (3) Students who are non-native speakers of the assessment language and have had less than one year of instruction in this language,
- (4) Students with ‘other stipulations’, as decided by qualified staff members (OECD, 2001).

All cycles of PISA have set a goal that the overall exclusion rate should be no higher than 5% in any given country (OECD, 2001, 2005, 2009, 2012, 2014, 2016, 2019). PISA 2000 justified this 5% threshold since it ‘ensures that the potential bias resulting from exclusions is likely to remain within one standard error of sampling’ (OECD, 2001, p. 232). Furthermore, PISA acknowledges in subsequent reports that efforts were undertaken to guarantee that exclusions, if unavoidable, were kept as small as possible (OECD, 2014). However, the findings of

Table 4. Reported exclusion rates from the exclusion exercise in interviews with six school leaders.

School Leader #	Number of students in 10 th grade	% of students to exclude on PISA
1	50–75	8.1
2	100–125	6.0
3	100–125	0.9–4.3
4	75–100	15.1
5	100–125	0.0
6	50–75	0.0

analysing the exclusion rates show a different story. Different forms of permissible exclusions and the overall exclusion rate goal are summarized in Table 2.

School leaders receive a packet on how to administer PISA including how students can be excluded several weeks before testing (Aursand, 2018). The OECD develops this packet, and it is translated at the national level and then approved by the international office. National adaptations are permitted but must be approved by the international testing office. Excerpts from these packets focusing on how to determine student exclusion are summarized in Table 3 for PISA 2006, 2009, 2012, 2015, and the 2017 field trials.

As can be seen in Table 3, over time a number of changes were made in formatting, emphasis, and explanation. Many of these changes attempt to clarify the guidelines. The formatting was also simplified so it was easier to interpret. Several phrases were also added to emphasize participation over exclusion. Many of the changes stress including students with special needs and students who may be excluded on national tests. In the latest version, the criteria for inclusion are presented before the criteria for exclusion.

Starting in 2006, the PISA Norway team also organized training sessions for school leaders in different cities around the country (Aursand, 2018). Seminars contain information about the manual and the logistics of administering the test, as well as a session about PISA. Part of each seminar includes a session focusing explicitly on student exclusion and the criteria. However, despite improved training, PISA exclusion rates continued to rise in Norway (Aursand, 2018). Guided by our research questions noted above, our study aimed to find how educational leaders make sense of and eventually implement these exclusion guidelines in Norway.

Methods

Data collection

For the remainder of this paper we use data collected from semi-structured interviews with 6 school leaders in Norwegian middle schools (grades 8–10). Individual emails were sent to every middle school principal,

assistant principal, inspector, and department head with 10th grade responsibility in one metropolitan area of Norway. Additionally, we drew on our professional network and used interview snowballing techniques to find school leaders that fit this sample criteria of being eligible for determining student participation in an actual PISA test. In real PISA administration, participation could be determined by principals, assistant principals, inspectors, or department heads with 10th grade responsibility. From these emails, six school leaders working at five schools responded positively. Two school leaders worked at the same school. Three school leaders were male and three were female. Some had participated in PISA before, some had not, and one was going to participate in PISA 2018.

The research was granted ethical clearance from the Norwegian Centre for Research Data (NSD) and upheld standards for ethical collection and management of personal data. All respondents were given and signed a written informed consent form in Norwegian, and also gave verbal permission at the start of the interview to be recorded.

Interviews of approximately one hour each were conducted in the fall of 2017. Interviews were semi-structured, to allow for a balance between structure and flexibility (Bryman, 2012). Interviews took place privately in the interviewee's office and all interviews were recorded, with the participant's permission. Interviews were conducted in Norwegian and translated into English after the interview.

School leaders were asked to bring a list of their current 10th grade students to the interview. During the interview, the school leader was provided with a copy of the exclusion rate guidelines from the PISA 2017 field trial, and asked to review these guidelines, consider their current 10th grade students, and describe which students s/he would exempt from PISA if the test were happening this year. After, follow-up questions were asked in order to explore the school leader's understanding of the exercise and guidelines, as well as their thought process during the activity.

Data analysis

We followed a grounded theory-based qualitative approach to analysing data (Charmaz, 2006). Although the interview questions were clearly focused on addressing the research questions and subsequently informed by research literature, when initially analysing the data we did not start with a preconceived hypothesis to test, but instead hoped to generate new concepts from the data (Bryman, 2012).

Four steps were taken in the analytical process: open/initial coding, contextualized coding, axial/focused coding, and theoretical coding. Interviews were first coded using open coding where data was

examined, broken down, and grouped into relevant categories (Strauss & Corbin, 1991). Here we also used Charmaz (2006)'s steps of initial coding remaining close to the data with short, simple, precise, and literal codes. We moved through the data, analysing words and lines of text to find categories.

Next, we compared and contextualized codes with each other, as well as checked for redundancy in the codes. We also wrote and sorted memos, where we kept notes alongside the coding with our reflections and considerations as we went.

Third, we adopted axial coding, where we drew connections between categories and reorganized codes into larger themes (Strauss & Corbin, 1991). As we coded, we attempted to move from literal interpretations of the data into larger, more abstract ones (Bryman, 2012). We also followed Charmaz (2006)'s model of focused coding where we synthesized the codes to find larger themes and ideas. The process allowed us to compare ideas and experiences across multiple interviews and worked to find patterns or trends in the data. During this step, the codes were sorted and organized according to which research question they related to: how the guidelines are understood by school leaders; the process of exclusion; reasons to exclude students on a PISA test. As this step was completed, we became aware of a fourth theme: reasons *not* to exclude students on the PISA test.

We developed our own analytical questions to examine the data, such as 'what topic is this data about?' 'what sort of question is answered by this data?' 'what does the interviewee say that they are doing (or not doing)?' 'how do the participants explain student participation?' 'how are the participants interpreting the directions?' and 'what words or phrases stand out?'. An advantage of using this method of coding is that it allows for the ability to explore and discover new findings, like the nuances in the terms 'exclusion' and 'exemption' that we found.

Finally, we connected the data back to the theoretical concepts found in the literature review. Table 5 shows the steps of grounded theory analysis with examples.

Findings

Four themes that were aligned to the literature emerged from the interviews: how the guidelines are understood by school leaders; the process of exclusion; reasons to exclude students on a PISA test; reasons not to exclude students on a PISA test. We will discuss each subsequently. A note on terminology: as the OECD uses the term 'exclude,' the authors will use this term whenever discussing the findings. However, when a quotation has been translated and transcribed from the interviewee's original statement, the word 'exempt' may be used if this is the word used by the interviewee. The difference between these the implications of these two words will be discussed in the next subsection.

How guidelines are understood

When presented with the PISA guidelines for exclusion, most school leaders interviewed stated that they were easy to interpret. Multiple interviewees described them as 'clear,' and several pointed to the tables and phrases in bold as particularly helpful. Phrases that stood out to interviewed school leaders included 'let as many students as possible with special needs take the PISA test' and 'some students who are exempted from the national tests can participate in this test anyways.'

Leader 5 reported being confused by the line 'who are not able to participate and follow instructions on the test' (which is a condition for exempting students under the 'cognitive, psychological, and/or emotional difficulties' criteria). This school leader questioned,

Table 5. Steps of grounded theory analysis, with examples.

Step	Description	Example
Open, initial coding	Examining data, grouping into categories: creating short, simple, precise, literal codes – word by word, line by line, or incident by incident	Initial codes were created, such as 'PISA thoughts' or 'participation selection process'
Contextualized coding	Comparing and contextualizing codes, checking for redundancy	Codes like 'exclusion' and 'removed from participation' were combined to reduce redundancy; codes like 'national test exclusion' and 'PISA exclusion' were put into context with each other
Axial, focused coding	Drawing connections between categories; reorganizing and synthesizing codes into larger, more abstract themes; analytically questioning the data	Codes like 'how PISA is used' and 'PISA shock' were synthesized and organized. Data was questioned using questions like 'what topic is this data about?' 'what sort of question is answered by this data?' 'what does the interviewee say that they are doing (or not doing)?' 'how do the participants explain student participation?' 'how are the participants interpreting the directions?' and 'what words or phrases stand out?' Codes were sorted and organized according to which research question they related to
Theoretical coding	Connecting the data back to concepts from the literature	Data was connected to concepts from the literature, such as relating one interviewee's thoughts on inclusion to Norway's value of the "enhetsskole" (school for all), from Imsen & Volckmar, 2014

'I'm unsure about this line ... does it mean the student could answer all the exercises without help? To what extent of understanding and following?' Because of this uncertainty, the leader spoke of having difficulty deciding whether certain students should be excluded or not. Most school leaders interviewed praised the guidelines for their clarity and strictness. School Leader 1 mentioned that 'there are some students with such significant challenges that it's not fair to include them. There needs to be very clear guidelines, and this here helps.' From these interviews, it appears that overall, the guidelines do not confuse most interviewed school leaders. Thus, the written guidelines alone probably cannot explain Norway's high exclusion rate.

School Leader 4 admitted that although the guidelines were clear, they did not agree with them because of the condition of students having less than one year of Norwegian instruction to be exempted for language proficiency. This interviewee felt that the rule was too strict, because there they know students who have had more than one year of Norwegian instruction, yet would still struggle to understand material on the PISA assessment.

During the interviews, all respondents used the word 'exempt' (*frita*) instead of 'exclude' (*ekskudere*) to describe the process of removing a student from the participation list. School Leader 1 even specifically called out the interviewer for mixing up the terms during the conversation: 'we don't use the word "exclude"; we use "exempt."' When asked why, interviewees saw a clear distinction between the two terms. All respondents saw exclusion as much harsher than exemption. School Leader 1 described the difference as: 'Exclude is to say, "you can't be with us, you're outside," while exemption is a right you have. It's more like, "if you want, you can be free because you deserve it."' Similarly, School Leader 3 compared the terms to social situations, saying, 'exclusion is used to shut someone out. That's why we use exemption.' School Leader 5 explained, 'for me, exempt is a more positive word—you don't need to. But exclude means you aren't allowed.'

This follows suit with how the PISA guidelines and the national test exclusion guidelines also use the term 'exempt'. This also reveals an interesting cultural nuance—by choosing to use the softer, more positive term of 'exempt', the discussion focuses on the rights of the students. Instead of seeing exclusion as a punishment, exemption is seen as more of a choice (i.e.: 'you don't need to'). To the interviewed school leaders, exempting a student is a gentler approach than excluding a student. This distinction might make the consequences of exemption seem less severe to a Norwegian than the consequences of exclusion might be to someone of a different background.

The process of exclusion

After receiving the guidelines, most interviewees took only a few minutes to look through them and begin making decisions based on their current class lists. Several interviewees mentioned that they would make a first guess themselves, but would also consult other staff before determining the final list. All interviewees reported not having a maximum number or percent in their minds for how many students they would exclude, but instead chose to review their current cohort and make decisions accordingly.

During the exercise, some school leaders interviewed thought aloud through the process of exclusion. School Leader 5 revealed an internal struggle as they considered their students: 'I have one student in this class who I'm not sure can ... but ... since he ... no, no exemption here.' School Leader 1 also reported changing their mind about which students to exclude during the process: 'I'd exempt four because of the low cognitive difficulties ... no, yes ... no, four students.'

School Leader 6 read through the criteria and acknowledged the subjectivity in making decisions about students: 'When I think about cognitive, psychological difficulties, I think it's a little hard to evaluate. I have one student who has a special plan, but I think regardless, he is capable of taking the test.' By admitting 'it's a little hard to evaluate,' School Leader 6 communicates that excluding students is not an objective science. Instead, it relies on school leaders to use their own discretion ('I think') as they make these judgement calls.

These decisions are not always easy; as School Leader 4 considered the criteria, they voiced their disagreement openly: 'there are many more that I wish I could have plucked out, but they [don't meet the criteria] ... but I'm very loyal to what I'm asked to do, so I would follow what I'm told.' Interestingly, the same school leader later admitted that they would exclude one student who did not meet the guidelines. During the PISA test administration, the school leader is the only one to check over the participation list and determine student exclusion; there is no supervision from PISA Norway that double checks this process. Instead, even though it technically is not allowed, school leaders do have the opportunity to exclude students outside of the guidelines.

The six interviews at five different schools presented the following results. Note that while School Leader 2 and School Leader 3 work at the same school and discussed the same students, they came up with different exclusion lists, as shown in [Table 4](#).

Here, the results varied widely. Exact numbers of students enrolled in the 10th grade and students

chosen for exclusion are hidden to protect anonymity. Instead, they have been replaced with ranges and percentages. Two school leaders chose not to exclude any students in their schools, while four leaders reported varying levels of exclusion ranging from 0.9% to 15.1%. Although this is a small sample and the results varied, they still average out to around the Norwegian average exclusion rate. Interestingly, two school leaders evaluating the same group of students came up with different results. School Leader 2 chose to exclude 6% of the group, while School Leader 3 decided to exclude somewhere between 0.9 and 4.3% of the same group. School Leader 3 came up with a range instead of an exact number of students to exclude, as there was interest in consulting with other teachers first.

School Leader 1 and School Leader 4 used the word ‘only’ when describing their exclusion number (i.e.: ‘I would only exempt X students’). This shows that some school leaders might not be familiar with the consequences of participation coverage for validity. If every school leader thinks that their individual school’s exclusion rate is not so high, they may not consider the part they play in the country’s overall exclusion rate. Training for school leaders could reinforce how important each individual student exclusion is for the test being representative of all of Norway, and thus, the validity of the PISA assessment.

Reasons to exclude

During interviews, four of the six school leaders reported wanting to exclude some students in their cohort on the hypothetical PISA exercise. The reasons given for choosing to exclude students will be explored in this section.

First, several school leaders mentioned that if they had students with significant physical handicaps, they would have considered whether these students were eligible for exclusion. However, all six school leaders reported not having any students eligible for exclusion based on these criteria. The majority spent time considering PISA’s second category of exclusion. They reported understanding that students in this category must also have been evaluated by professional services. However, School Leader 4 decided to exclude a student who did not meet this criterion explaining:

There’s one more student I would want to exempt—she doesn’t have a special plan and she hasn’t been assessed, but at the same time, she would do so poorly psychologically that she just wouldn’t be able to handle it.

Here the interviewer reminded the school leader that the official guidelines require the student to have been assessed by professional services. Despite this, the school leader acknowledged that even though it was not formally

allowed, they would exclude this specific student under the emotional/psychological/cognitive difficulties category anyways. They explained, ‘it should be the experience of the student that determines whether we should exempt him or not.’ Here the school leader prioritizes the experience of the individual student over than the conditions set by the test, opening up for a more subjective evaluation.

Most interviewees reported that it was easiest to apply the criteria for exclusion for limited language proficiency. These criteria are (1) that students do not have Norwegian as a mother tongue, (2) have limited Norwegian skills, and (3) have had less than one year with instruction in Norwegian. Leader 3 highlighted the third criterion as particularly objective: ‘that’s a great rule to have because it’s so rigid.’ However, this third criterion where a student must have had less than one year with instruction in Norwegian was initially skipped over by two school leaders at schools that offered reception classes, a special initiative to support new students with limited Norwegian skills. This reinforces what was noted by School Leader 4 previously, where this language criterion might be difficult for school leaders to implement if they do not readily agree with or understand it. According to Norwegian educational law, students are allowed two years of immersive Norwegian instruction before they need to join mainstream classes; it is possible that PISA’s more limiting threshold of one year causes confusion for school leaders who would expect that students could be excluded for up to two years.

Two of the four school leaders with reception classes expressed that they would exclude all students enrolled in the reception classes regardless of if they had received more than one year of Norwegian instruction. In one of these interviews, the researcher reminded the school leader of the third criterion, and the school leader revised the exclusion list to only omit the students with less than one year of Norwegian instruction.

Although some school leaders felt that the criteria for exclusion based on language proficiency were objective and clear, leaders working at schools with reception classes were more likely to struggle with these criteria. This might be because of the considerable overlap between PISA exclusion guidelines and national test exclusion guidelines. The guidelines for exclusion on Norway’s national tests are more generous in allowing school leaders to exclude students receiving special language instruction for up to two years, whereas PISA only allows for exclusion in the first year. As it is usually the same school leaders that determine participation in national tests (which occur every year) and PISA (which occurs much less frequently), it is understandable that school leaders might mistakenly exclude more students under the language criterion by applying national test criteria for exclusion instead of PISA criteria.

During interviews with school leaders, two additional themes emerged as reasons to exclude students. In the first, two school leaders justified excluding students in PISA by referring to a condition from the national test exclusion guidelines: that the test must also have meaning for students. School Leader 3 reported that ‘some students should be exempted. The reason is that if these students took the test, it would have been just meaningless for them.’ Leader 4 used similar language, explaining ‘We need to make sure that it [PISA] is meaningful for the student.’ Here, both leaders are mixing up the national test guidelines and the PISA guidelines, and applying a condition from exclusion in the national tests onto PISA. PISA does not allow for a student to be excluded if the results won’t be meaningful to him, but Norway’s national tests explicitly do.

A final theme that emerged was school leaders’ concern and compassion for students who would find PISA challenging. This phenomenon will be called the ‘Stakkars Deg Syndrome’ in this article. ‘Stakkars deg’ is a colloquial phrase that translates to ‘poor you’ in Norwegian; it is often used in situations where one feels sorry for someone else. One leader inspired this term by describing an experience in a prior building where teachers were too gentle towards their students: ‘they are part of the “poor you” generation, a generation of teachers that are like mother hens to their students. The problem with this is that students are too sheltered and receive too few challenges.’ The leader further explained, ‘Norwegians have a tendency to think that when something gets hard and you have to work a lot with it, it’s mean [to make you stay in that environment].’

These quotations summarize what the researcher found to be happening during many interviews: out of concern for certain students, school leaders chose to exclude them from PISA. Interviews revealed that decisions to exclude were made out of compassion and an attempt to shelter students from hardship. School Leader 1 reported choosing to exclude ‘the students who won’t be able to understand that which is presented to them. They are such low performing students that there’s no purpose, and it’ll be harmful for them. It’ll give them a feeling of failure.’ Here, the school leader expresses concern for what might be a ‘harmful’ experience for students and excludes students in order to protect them. Furthermore, the phrases ‘failure’ (*nederlag*) or ‘feeling of failure’ (*nederlagsfølelse*) were used by many interviewed school leaders to express a sense of defeat that they did not want their students to experience. When asked why so many students (15.1%) would be excluded in the hypothetical PISA exercise, School Leader 4 was quick to clarify intent:

It’s not that I want our school to look better! It’s just that it’s going to be a really difficult exercise for

them, and they have failure after failure after failure ... it’s just not right that they have to be forced in to this test and experience one more failure.

The desire to avoid making individual students feel failure appeared in almost every interview, even from a school leader who did not exclude any students in the hypothetical exercise. School Leader 6 described the current values and beliefs of Norwegian school leaders by saying: ‘there’s a high focus on a student’s individual subjective perception of their own school experience, independent of what everyone else around them sees, and that often becomes a steering tool.’ In this case, this ‘steering tool’ affects PISA participation, but it is possible it has other implications for Norwegian schools.

During interviews, Norwegian school leaders reported knowing their students well and spoke compassionately about students with extra difficulties. This aligns with the nuances reported in using the term ‘exempt’ because it is a gentler term that protects the rights of the student. Similarly, exempting students who might find PISA to be a difficult exercise is seen as a gift to the individual student. By framing exemption in this affirmative light and focusing on the individual rights of the student, it makes sense that school leaders might exclude higher numbers of students. If exemption is seen as positive, there might be less incentive to reduce it.

Reasons not to exclude

In addition to hearing reasons why school leaders would exclude some students in PISA, it was also interesting to understand the reasons not to exclude. Two school leaders reported not excluding any students on the practice PISA exercise. However, several other interviewed school leaders voiced ideological support for trying to minimize the number of student exclusions as much as possible. A number of reasons were provided ranging from practical to ideological.

Leader 3 saw practical reasons for minimizing the number of students that were excluded: ‘these criteria are so strict that there should be very few who are exempted.’ Another leader echoed this sentiment arguing that no student at their school could be excluded, according to the guidelines. The same leader reported that there were many they wished they could exclude, but that these students did not meet all of the requirements, and thus needed to be included.

Several other interviewed leaders saw the emotional value of including as many students as possible on PISA. Leader 6 remarked,

I think all students should participate in the test, regardless. Simply because hearing the message ‘you shouldn’t participate in this test’ can do something to that student’s view of himself ... plus that they can be part of the group,

sit in the room and do the same thing that everyone else does: it's not positive that some students get the message that they can't be with everyone else.

This leader emphasizes the value of inclusiveness, particularly so that a student does not see that he is treated differently than his classmates. Inclusion is also seen as an important value in Norwegian school system, where a core principle is the *enhetsskole* or a school for all students (Imsen & Volckmar, 2014). Norway's history has emphasized bringing all students together into the same school, regardless of ability (Imsen & Volckmar, 2014; Telhaug, 1994). This means that instead of isolating students with special needs in separate programmes, the Norwegian system of education is designed in a way to bring everyone together.

Several interviewed school leaders reported that including all students in PISA tests was important to ensure that the tests are representative. Leader 1 explained: 'if PISA is meant to reflect the skills and competencies of middle school students, we need to take everyone . . . otherwise, it gives a slanted picture.' Despite choosing to exclude certain students on the practice exercise, the leader acknowledged that there also could be justification for not allowing any students to be excluded. School Leader 6 also emphasized how the representativeness of the test outweighs the individual needs of students:

We have a lot of students with anxiety, you could say, yes, she's going to get stressed out, she's going to have trouble completing this, it might be a negative experience for her, but then I think: this is going to give a picture of a student group! And that picture is going to be completely distorted if you apply all of these exemption criteria.

This quote represents language used by other who chose to exclude students. These reflections provide another perspective about inclusivity and representativeness. In addition to wanting students to see themselves as included in a larger group by sitting in the test room with their peers, school leaders acknowledged the importance for students' responses to be incorporated in the data. It is only by including the results from students with difficulties that the PISA test can speak truthfully about all Norwegian students, aligning with Schuelka (2013) and Rutkowski and Rutkowski (2016)'s concerns about selective sampling and how it hides the performance of the omitted group of students. Schuelka (2013) argues that this has dire consequences when high-stakes assessments are used to influence policies that affect all students.

Discussion and conclusion

Although most of the literature suggests that high exclusion rates are a way to game the system and produce

higher test scores, this study found no evidence in support of this concern. Even with a small sample size, we can see that the story is much more complex. Throughout the years, the written guidelines have become stricter and clearer, and emphasize inclusion as much as possible. Therefore, reasons behind rising exclusion rates come from those making the decisions themselves – school leaders. The findings and possible explanations of why Norway's exclusion rates on PISA have risen are the main knowledge contribution to research in this field. For the first time we have evidence of how school leaders interpret and understand the guidelines given by PISA, as well as their process of determining exclusion with their students. In this paper, we also have presented the how exclusion rates have changed during 18 years of PISA administration in 31 OECD countries, demonstrating a concerning trend of rising exclusion in a number of countries, including Norway.

There are a number of ideas presented from these interviews that might suggest why Norway's PISA exclusion rates have increased, but none point to intent to cheat. First, the language used – both during interviews, but also in the Norwegian written guidelines – reflect a consistent and deliberate use of the softer term 'exemption' instead of 'exclusion'. If language accurately reflects culture, then it shows that there may also be a gentler perception of exempting students in Norway compared to the perception of excluding students in other countries. This lowers the stakes of exempting a student, as it is seen as gracious, not punitive. Since the act of exemption is seen as benevolent and not exclusionary, exempting students might be perceived as a good thing to Norwegian school leaders. This might be one reason contributing to a high exclusion rate in Norway.

Furthermore, some school leaders may be confused about the rules when excluding students in PISA. The national test guidelines for exclusion have many similarities to the PISA guidelines, although the national test guidelines are also less strict than in PISA. Norwegian school leaders encounter the national test guidelines much more frequently than they do the PISA guidelines, and many interviewed school leaders confused the two. In several scenarios, interviewed school leaders accidentally excluded too many students on the PISA exercise because of this confusion. Therefore, school leaders need more information about specific places where PISA guidelines are stricter than the national test guidelines. School leaders at schools offering reception classes might need extra guidance, given that they have larger numbers of students with low language abilities.

The interviews also revealed evidence that some interviewed school leaders did not think the number of students they were excluding in PISA was significant. Two school leaders reported they were 'only' excluding 8% and 15% of students. Although these numbers of excluded students might seem low to school leaders, it could lead to

Norway having a high exclusion rate if all school leaders feel the same way. Therefore, it might be useful to help school leaders understand how it is important to have high rates of participation in PISA to improve the validity of the test for the entire country. Some interviewed school leaders voiced concern about PISA's representativeness because of high rates of exclusion, and the implications that this has when PISA is used to justify policy decisions. PISA Norway training sessions could focus on these ideas and help school leaders see the value in having as many students as possible included.

Most interviewed school leaders spent time thinking through how the guidelines fit each of their students, which calls for a very personal and subjective approach at times. In one school, two school leaders applied the same guidelines for the same group of students differently. This confirms that there can be personal bias in using these guidelines with actual students. It would be difficult for a school leader to make decisions about PISA participation for a group of students that s/he did not know well. In knowing the students, feelings are introduced. This can complicate school leaders' abilities to apply rigid guidelines in a fair and objective manner.

Another possible explanation for Norway's high exclusion rates might be connected to how most interviewed school leaders focused more on the consequences of the test for the individual student than for the school or country as a whole. By choosing to exclude students, Norwegian school leaders are prioritizing a situation where the individual student will not face a potentially difficult experience. However, this comes at a cost for the validity of the results overall, as the test then omits the abilities of a group of Norwegian 15-year-olds.

Finally, an interest in prioritizing the individual student's needs might be because of a new emphasis on student mastery and self-efficacy in Norwegian school politics. The government has recently adopted a new section of principles for basic education that specifically highlight the importance of building mastery and self-efficacy in students (Regjeringen.no, 2017a). This has created a perception where school leaders see any experience that creates a feeling of failure as detrimental to the development of self-efficacy. Therefore, it makes sense that school leaders might shy away from subjecting students to challenging exercises (like PISA) that could negatively affect their feelings of mastery.

Rising exclusion rates in Norway are part of a complex story reflecting culture, nuance and interpretation. This research highlights how a sample of school leaders interpret and apply the guidelines issued by PISA and seeks to explain some reasons for why Norway's exclusion rates in PISA have risen in recent years. Although this study focused on exclusion in Norway, Norway is not the only Nordic country experiencing changing exclusion rates on PISA. It would be interesting to investigate why

PISA exclusion rates are increasing in countries like Sweden and Iceland, and why rates are not rising as dramatically in countries like Finland. It would also be useful to examine how Denmark was able to lower exclusion rates since 2009, and if there are any applicable practices that could be shared with Norway.

Limitations and future research

There are several limitations to this research. The research relied on a small sample size, using interviews from six school leaders in one metropolitan area in Norway. For privacy reasons, PISA offices are not able to give the outside research community information about which schools participate in a given cycle. Therefore, it is very difficult to gather information about the full sample of PISA participants. The only way to conduct research of this nature is by contacting schools directly, like was done in this study. Over 200 school leaders were contacted which resulted in the sample of six. Although obtained randomly, the sample did contain extreme cases – one interviewee excluded 15% of students, and two interviewees said they would not exclude anyone. As a qualitative study, this research does not aim to generalize about the entire population of PISA participants, but instead to illuminate some perspectives of school leaders who in a position to influence student exclusion on PISA.

Another limitation to the study is that the activity used in the interviews was a mock simulation of how school leaders determine exclusion; although there were many similarities to what happens in real PISA test administration, this activity was only practice. Future research could aim to replicate this activity and interview during the context of real PISA administration. Instead of giving school leaders a mock exercise, researchers could sit with them as they apply the exclusion guidelines to the actual selected group of students. In this way, interviews could capture how Norwegian school leaders make real – not hypothetical – decisions that determine which students do and do not participate in PISA.

Additional research could also focus on the Norwegian student population, and track how rates of students diagnosed with special needs or numbers of immigrant students have changed over the past few decades. It could then compare the changes in exclusion on PISA with these statistics to see if changing student populations mirrors the increase in Norway's exclusion rates. Finally, it would also be interesting to examine what terms other countries' national manuals use and if Norway is alone in changing the term 'exclusion' to a softer one.

Disclosure statement

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