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School staff's views on causes of early school leaving in regular secondary and adult education: Identifying the role of individual, job-related and school climate characteristics

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Abstract

Understanding early school leaving (ESL) remains a key issue on political and academic agendas. Most research focuses on the experiences of young people who intend to leave or have left school early without a qualification from secondary education. In addition, most studies focus on regular secondary schools. We aim to add to this literature by studying how school staff in regular secondary and adult education schools explain ESL, and to understand how both groups' views differ. We also study whether school climate has an effect on the explanations of ESL given by staff. We analysed survey data collected in Flanders (northern part of Belgium) among 780 staff members using exploratory factor analysis and multilevel modelling. Findings indicate that staff in adult education have moderate views on the causes of ESL compared to staff in regular education. Staff in adult education have a strong focus on student-focused explanations for ESL, rather than on contextual or systemic explanations. Future research could delve deeper into the impact of school characteristics, conduct more cross-comparative research and/or include more views on diversity. Policymakers could prioritise the follow-up of ESL, including feedback mechanisms to inform school staff on reasons why individual students decided to leave school early.

KEYWORDS

adult education, early school leaving, secondary education, teachers

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Key insights

What is the main issue that the paper addresses?

We study how school staff in regular secondary and adult education schools explain ESL, and aim to understand how both groups' views differ.

What are the main insights that the paper provides?

Findings indicate that staff in adult education have moderate views on the causes of ESL compared to staff in regular education. Staff in adult education have a strong focus on student-focused explanations for ESL, rather than on contextual or systemic explanations.

INTRODUCTION

Policymakers and scholars have increasingly focused on the reasons why students leave school 'early', that is, without a qualification from upper secondary education (Bradley & Renzulli, 2011; Lamb & Markussen, 2010; Rumberger & Lim, 2008). Ongoing studies in this field increasingly approach early school leaving (ESL) as the combined effect of student, school and system characteristics that accumulate in a process leading to ESL (Gitschthaler & van Praag, 2018). While most attention has been paid to students' experiences and perspectives (van Praag et al., 2020), the views of school staff should not be underestimated as they play a key role in students' educational trajectories (van Praag et al., 2017). Research often builds on the influential Pygmalion effect theory of Rosenthal and Jacobson (1968) to argue that higher teacher expectations of students have an important positive effect on student retention (while low expectations have a negative impact). However, next to this, it is also important to understand how teachers and school staff interpret the difficulties their students encounter and what teachers perceive as the main predictors leading up to ESL. Given the increasingly specialised staff that schools recruit to meet the needs of their students and to strengthen their school engagement and success, this study focuses on staff in two different types of educational institutions. We focus, on the one hand, on staff in regular secondary schools and, on the other hand, on staff in adult education schools (i.e., schools that consist of students who left secondary school without a qualification from upper secondary education). We aim to understand the views of school staff from these different educational institutions on the causes or predictors of ESL, and study to what extent these views are linked to individual, job-related and school climate characteristics.

This paper is innovative for three reasons, which prompts us to reframe them as our three main objectives. First, many so-called 'alternative learning arenas'-ranging from part-time vocational education to adult education—have emerged across European educational systems to prevent and/or compensate for the processes of ESL. These alternative learning arenas support disengaged students and early school leavers to attain their qualification of upper secondary education and aim to provide a different learning context for students who feel that they do not belong in regular full-time secondary schools (Macedo et al., 2018; Nada et al., 2020; Nouwen et al., 2016; Ryan & Lőrinc, 2018; Tarabini et al., 2018). They do so by offering more work-based learning, modular courses and greater attention to the special educational needs of students. Nonetheless, most studies on ESL tend to ignore these alternative learning arenas in their analyses, as these 'arenas' tend to be in the margins of educational institutions and their (much) more flexible approach to students' learning trajectories sets them apart, also in research. This paper centres on the staff working within the realm of adult education, which serves as a prevalent alternative learning environment across many countries. We aim to contrast their perspectives with those of staff in traditional education settings (van Praag, Nouwen, et al., 2018). Therefore, our first objective was to collect the views of staff in two different educational contexts. By including adult education, a learning context which is different from the rigid structures of regular secondary school systems and more attuned in dealing with (previously) disengaged students, we can assess if and how school staff of these different programmes vary in their views on the causes of ESL and how they reflect on various school climate factors.

Second, in the current state of the art on ESL, the views of the whole range of school staff (consisting of teachers, principals, care givers, counsellors and internship coordinators) are often missing (Gil et al., 2019; Macedo et al., 2018). This is important as it is to be expected that staff in adult education might have different views on (the causes leading up to) ESL, given the students they work with. Moreover, in adult education teams, more specialised staff (e.g., internship coordinator, psychologist, etc.) are included to engage and support students and to address specific needs (Nouwen et al., 2016; van Praag et al., 2017). Given their different position with regard to the phenomenon of ESL, their distinct positioning in the educational landscape (as 'different' or 'alternative') as well as to teaching and the functions of schooling in general (van Praag et al., 2017), our second objective was to analyse if there are different perceptions from school staff in the two contexts towards the causes or predictors of ESL.

Third, this study aims to test and validate the scale of perceived reasons for ESL, using a factor analysis on 24 items (Kaye et al., 2016). This study further develops insights regarding school staff's multidimensional views on ESL by adjusting this scale for future use. Given that most research on this topic is either qualitative in nature (van Praag et al., 2017) or approaches ESL from a student perspective (Lamb & Markussen, 2010; Rumberger & Lim, 2008), our third objective concerns the validation of the scale on perceived reasons for ESL among school staff.

In the following sections, we provide an overview of how the present study adds to the existing body of research. We conduct this study in the context of Flanders (the northern semi-autonomous region of Belgium, fully competent with its own public education system). This research setting is interesting as, at the time of data collection, Flanders had an overall ESL rate of 7.5%, which is below the European target aiming to keep ESL below 10% of the student population. However, large discrepancies still exist, with much higher rates in urban areas in Flanders (e.g., 24% in Antwerp and 19% in Ghent) and among people of lower socioeconomic status and ethnic minority families (van Landeghem et al., 2013). These disparities illustrate the relevance of studying school staff's perceptions on ESL.

Predictors of early school leaving

In most countries, a wide array of educational institutions co-exist, often including secondary schools and so-called 'alternative' learning arenas (e.g., adult education, work-based learning, etc.). While educational careers in secondary schools are often taken as the 'gold standard', other educational institutions are set up to deal with those students who do not feel included in secondary schools, have troubled educational school careers or have distinct needs and aspirations. Some learning contexts are seen as preventive of ESL, such as part-time vocational education (often institutionally embedded in regular education systems) while others are rather 'compensatory' in nature, such as adult education (often separate institutions from regular education) (Nouwen et al., 2016). Given the specific profiles of their

students, these settings may also be selective in terms of staff recruitment (e.g., with staff in alternative learning arenas more focused on specific students' needs or better trained in addressing the influence of precarious socioeconomic circumstances on learning processes), which could also result in how school staff in these different settings have different understandings and interpretations of the causes or predictors of ESL.

The specific early tracking system in Flanders and the absence of standardised tests provides teachers with a lot of freedom and power to assess students based on academic achievements, but also based on their behaviour, attitudes and motivations. Consequently, a selection process takes place over the course of secondary education. This results in a highly selective early tracking system with a clear hierarchical difference between the highly valued academic track and the more stigmatised (part-time) vocational track (Clycq et al., 2014), while adult education is perceived as a setting for those students unable to be successful in regular education. Thus, school staff in these settings might have different views on the causes of ESL due to students' different educational trajectories, academic achievements, motivation and behaviour (van Praag et al., 2015). Therefore, we argue that staff in regular secondary schools more strongly believe that the reasons for ESL are student-centred (e.g., motivation, effort and ability). We compare this to staff working in adult education, where the classrooms are generally smaller, a holistic approach to students is adopted and a more modular curriculum is the norm (Nouwen et al., 2016). Similarly, and concerning ESL in Portugal, Nada et al. (2020) argue that regular, mainstream schools could benefit from the anti-ESL measures taken by alternative learning contexts such as second-chance education. These measures focus more on addressing systemic inequalities and less on the so-called deficits of individual students. Crucial in such alternative learning contexts are the more engaged and emotionally supportive relations students have with their teachers, compared to teachers in mainstream schools (McGregor & Mills, 2012). While research in this field is still limited, earlier qualitative research collected in the same project indicated that staff in adult education generally perceive the causes for ESL to be more strongly related to factors that are situated outside the scope of the student, such as school and family factors, systemic causes and learning disabilities (Nouwen et al., 2016; van Praag, van Caudenberg, et al., 2018).

H1. School staff in secondary schools will be more likely to attribute early school leaving to student-related factors, while school staff in adult education will be more likely to attribute early school leaving to factors that are outside the scope of the student (school, family, system and learning disabilities).

School climate and staff expectations

One of the main arguments in comparing regular to adult education, next to the differences in student profiles and staff expertise, is the potential difference in general school climate. Most previous research assessing school climate or school culture in relation to school effectiveness focuses on objective measures of this school climate, including organisational characteristics and/or the personal characteristics of the people involved in the school organisation (see van Houtte, 2005; van Houtte & van Maele, 2011). These studies have shown that school differences exist in the number or share of students that leave school early (Marks, 2007; Rumberger, 1995). At the school level, teacher perceptions and specific school organisational features shape individual teachers' practices and attitudes towards ESL. In regular secondary schools in Flanders, van Houtte and Demanet (2016) found that teachers' shared expectations of students are related to the latter's intention to leave school early. There were also clear differences found across schools related to educational tracks

(academic, technical, arts and vocational). In vocational tracks, the beliefs of teachers on the teachability of the students was associated with students' intentions to leave school, regardless of perceived teacher support and students' sense of futility. In addition, how teachers view school-related matters and how they develop practices in school can be impacted by school features. For instance, how school teams handle multilingualism is found to be related to compositional school features such as ethnic and socioeconomic school composition (Strobbe et al., 2017). Although it would be relevant to include these measures, in this study we will not engage in school effectiveness research. Rather, we aim to understand if and how school climate variables are related to staff's perceptions of the causes of ESL. This follows a strand of research that mainly conceptualises school climate in terms of how a set of attributes is perceived by the school staff working in the organisation. In these studies, scholars also focus on how this organisation deals with its members and the surroundings (Hellriegel & Slocum, 1974, cited in van Houtte, 2005). Thus, in this study, we aim to better understand how school climates are perceived to contribute to ESL. This is relevant as the current state of the art generally assumes that the school climate is different in adult education, however, little research is available to understand whether school actors indicate this as well. Alternative learning arenas, such as adult education, often seem more focused on compensating earlier lack of support in students' trajectories and aim for a more holistic approach to the students and their various needs, by including this in students' evaluation criteria (e.g., learning attitudes, progress made), hiring more support staff (psychologists, student advisors, etc.) per student and teaching in smaller groups which allow more room for differentiation (Macedo et al., 2018; Nada et al., 2020; Ryan & Lőrinc, 2018; Tarabini et al., 2018). Therefore, we expect school climate differences with regular education schools and expect these differences to correlate with different perceptions on the causes of ESL.

H2. There will be a difference in effects of school climates on views of early school leaving among school staff in adult education compared to staff in regular secondary schools.

School staff characteristics

Little research has been done on the relation between school staff's background characteristics and their views on ESL (Christle et al., 2007; de Witte et al., 2013; Gonzalez-Rodriguez et al., 2019). However, several studies focused on the influence of teacher's gender on their perceptions of students and their attitudes towards diversity-related issues. The results paint a complex picture. Female teachers tend to be more strict towards students, show less trust in students (van Houtte, 2005) and are more focused on discipline and obedience (Schneider & Coutts, 1979) than male colleagues. However, they do tend to be more inclusive towards ethno-cultural diversity (Pulinx et al., 2017). Yet, with respect to including multicultural content in their curriculum, no gender difference is found (Agirdag et al., 2016). Teachers' experience is sometimes included as a background variable in studies on teacher beliefs. Experienced teachers seem to get along better with their students, even though the findings are not always conclusive (van Houtte, 2010) and they do not seem to hold more inclusive views with respect to ethnic diversity (Pulinx et al., 2017). What does seem to play a role is the teacher's level of education, which positively correlates with less ethnic prejudice (Vervaet et al., 2016).

While studies rarely focus on teacher's beliefs on ESL, some approach the topic from a different perspective. van den Berghe et al. (2022) show how support workers—professionals working in schools and out-of-school organisations—point to factors at the meso (e.g., complexity of school systems and choices) and macro (e.g., government policy and poverty)

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levels explaining ESL. However, other research shows that educators in second-chance education tend to focus on personal-level characteristics, often viewed as 'deficiencies', to address issues of disengaging from education and leaving education early (Papaioannou & Gravani, 2018). Even though one can assume that staff in alternative learning arenas have a more nuanced view on the causes of leaving school early, the current state of the art shows mixed results. Given the lack of studies covering the link between either teacher or job-related traits and the perceptions on the causes of ESL, for this aspect of our research we adopt an exploratory perspective in this study: To what extent are individual (RQ1a) and job-related characteristics (RQ1b) related to ESL views among school staff in Flanders?

METHODS

Sample

Data were collected from March to December 2015 as part of the FP7 European project RESL.eu, in which both qualitative and quantitative data on school staff's views on ESL were collected in regular secondary schools in Belgium, the Netherlands, Poland, Portugal, Spain, Sweden and the United Kingdom (Kaye et al., 2016). In this study, we focus on the Belgian online survey data because this is the only region where we collected data on a large sample of staff in adult education schools. In total, 780 school staff members participated in the survey in Flanders, based in Antwerp and Ghent, of which 76 were employed in adult education. For the regular secondary schools, schools were selected based on their individual characteristics and profile, with the aim of capturing students with a potential to become early school leavers in subsequent years, based on prior knowledge of the research teams in each country. The aim was to select as many schools as were deemed necessary to achieve the minimum sample size of 2000 students (Kaye et al., 2016). For adult education schools, additional surveys were conducted in the same region, including as many schools as possible within the same cities as the regular secondary schools. Despite the fact that the staff in our sample are selected based on the institutions they work in, teacher sample characteristics resembled the Flemish educational landscape in 2015, where 66% of all teachers were female, compared to 34% male staff members (Flemish Ministry of Education, 2015). The over-representation of adult educational institutions in our sample, compared to the Flemish educational landscape (in 2015: 106 adult education centres [9%] compared to 1058 regular secondary schools [91%]), resulted in a relatively higher number of non-teaching personnel in our sample, also consisting of more variety in educational backgrounds and skills.

Measures

The main dependent variables in this study were school staff's views on ESL. First, we presented a definition of ESL used by the Flemish government to ensure that all participants had a uniform understanding of this concept. Regular education staff were asked what they perceived to be the causes for leaving education without a qualification from upper secondary education. Adult education staff were asked what they perceived to be the causes for students leaving adult education schools without a qualification from upper secondary education. In particular, we asked to what extent they believed that each of the 24 items presented in a scale contributed to ESL in Flanders. These items were developed by the research team and based on the various causes of ESL found in the literature, in order to gauge different aspects of staff's views on ESL. Sample items are 'socioeconomic disadvantage in family context', 'insufficient resources for the school' and 'being a victim of

bullying by other pupils'. Each item was answered on a five-point scale ranging from 1 (not at all important) to 5 (extremely important). See Table A1 for an overview of all items.

We conducted an exploratory factor analysis with varimax rotation to determine the underlying factors. After removing five items due to low communality, we found six latent factors underlying school personnel's views on ESL with an eigenvalue >1: systemic-related causes (Cronbach's α =0.77), school-related causes (Cronbach's α =0.77), family-related causes (Cronbach's α =0.68), victimisation and health-related causes (Cronbach's α =0.68), teacher or peer-related causes (Cronbach's α =0.61). See the results below for an overview of all items and their factor loadings.

With regard to individual characteristics, we included age (measured in eight categories: 1=18-24 to 8=55 or older), gender (male/female), ethnicity (self-identified ethnic background/no ethnic background) and educational attainment (1=secondary education, 6=PhD). Job-related traits included participants' current position at the school (teacher/no teacher) and their years of experience as a teacher—regardless of whether they were currently still teaching—and whether they were active in regular or adult education. Finally, we included a number of school climate variables. These were used to assess teachers' views towards the relationship with their pupils, their job satisfaction, degree of involvement with their students, the extent to which they have access to certain means to improve their teaching and the degree to which their pupils present deviant behaviour. All school climate constructs were measured through internationally validated scales from the Teaching and Learning International Survey (TALIS) 2013 and from Wills et al. (1992). See Table 1 for a descriptive overview of the sample.

TABLE 1 Descriptive overview of the sample.

Percent:	Total	Regular	Adult education
Gender			
Male	35.1	35.8	28.9
Female	64.9	64.2	71.1
Ethnic background			
No ethnic minority	96.9	96.7	98.7
Ethnic minority	3.1	3.3	1.3
Position			
Teaching staff	77.9	82.7	34.2
Other	22.1	17.3	65.8
Mean (standard error in brackets)			
Age	4.93 (2.09)	4.92 (2.11)	4.95 (1.94)
Educational attainment	3.48 (1.34)	3.41 (1.33)	4.15 (1.25)
Years active in education	10.80 (9.40)	11.12 (9.59)	7.88 (6.78)
School climate variables			
Relationship teacher–student	4.12 (0.99)	4.09 (1.00)	4.37 (0.90)
Teacher involvement	3.21 (0.85)	3.19 (0.83)	3.38 (1.01)
Deviant behaviour	2.66 (0.87)	2.75 (0.85)	1.83 (0.63)
Access to means	3.40 (0.97)	3.37 (0.97)	3.71 (0.86)
Job satisfaction	3.61 (0.94)	3.62 (0.94)	3.50 (0.94)
N	780	704	76

Note: Age was measured in eight categories (1 = 18-24 to 8 = 55 or older).

Analytic strategy

To obtain an overview of school staff's views on ESL, we conducted the analysis in two steps. First, we ran an exploratory factor analysis with varimax rotation on the 24 items that we presented to determine which latent factors could be identified. Following the identification of six latent factors in the full sample, we tested for measurement invariance between school staff from regular secondary and adult education schools by comparing a sequence of three increasingly restricted factor models (Thielmann et al., 2020). The first model tests for configural invariance, which estimates a unique model for each group without invariance constraints. Next, metric invariance (also referred to as weak measurement invariance) follows and provides information on whether factor loadings are invariant across groups (i.e., whether indicators are similarly related to their corresponding latent factors). Here, factor loadings are restricted to be equal and the model is compared against the configural model. Thus, if the assumption of metric invariance holds, the latent construct has the same meaning across both groups because it is defined by the same indicators to the same extent. Finally, in addition to equal factor loadings, scalar invariance (also called strong measurement invariance) requires indicator intercepts to be invariant across groups. To test for scalar invariance, indicator intercepts (in addition to factor loadings) are constrained to be equal, and the resulting model is compared against the metric invariance model. If the assumption of scalar invariance holds, observed mean differences (in indicators) between groups can be attributed to corresponding differences in the latent construct. It should be noted that complete measurement invariance (especially scalar invariance) is hardly ever achieved (Davidov et al., 2014; Thielmann et al., 2020).

To address H1, which suggests that school staff in secondary schools are more likely to attribute ESL to student-related factors while staff in adult education are more likely to attribute ESL to external factors, we performed independent sample *t*-tests. These tests aimed to determine if there were significant differences in mean scores for each latent construct between the two groups of teachers.

After conducting the measurement invariance tests, we saved the regression coefficients of these factors and utilised them as dependent variables in multilevel analyses. These analyses aimed to answer research questions RQ1a and RQ1b by examining the impact of individual characteristics, job-related characteristics and school climate variables on these factors. Moreover, we included interactions between school climate variables and whether a respondent was active in regular or adult education to test H2, which suggests that school climate has a more significant effect on the views of ESL among staff in adult education compared to staff in regular secondary schools.

We selected multilevel modelling (MLM) because the 780 participants of this study were nested within 50 schools—surpassing the minimum required number of groups for MLM (Meuleman & Billiet, 2009). In addition, we calculated the intraclass correlation coefficient (ICC) for all six dependent variables, which ranged from 1.23% to 8.21%. Although the ICCs of two factors (victimisation and health and student-related causes) were below the 5% threshold for MLM, we opted for MLM in all models to maintain consistency. All continuous variables were z-standardised prior to analysis. Based on the results of these models, we identified consistent differences in views based on whether or not the individual was active in regular or adult education. With this in mind, we re-ran the regressions split between these two groups to identify if patterns of ESL views differed between them.

RESULTS

Following an exploratory factor analysis with varimax rotation (Table 2), we found six latent factors with an eigenvalue >1 among the 24 items included to gauge school personnel's

TABLE 2 Parameter estimates of the EFA model for causes of early school leaving.

Factor loadings	Systemic	School	Family	Student	Victimisation and health	Teacher/peer
1. Inadequate school curriculum	0.71					
2. Insufficient school resources	0.73					
3. Inadequate school policies or interventions	0.72					
4. Non-availability of financial assistance to continue studying	0.60					
5. A lack of coherent government policy	0.65					
6. Wrongfully motivated study choices of pupils		0.56				
7. A lack of good school career counselling by schools		0.54				
8. Pupils that change secondary schools too easily		0.79				
9. Schools that expel pupils too easily		0.63				
10. A lack of motivated teachers		0.42				
11. Family problems			0.75			
12. Family's socioeconomic background			0.76			
13. A lack of parental engagement with the school			0.72			
14. Low individual academic ability				0.85		
15. Low individual aspiration				0.84		
16. Physical or mental health problems among pupils					0.84	
17. Being victim of bullying among pupils					0.65	
18. Not getting on with teachers and school staff						0.81
19. Negative influence of peers						0.60
Cronbach's $lpha$	0.77	0.77	0.73	89.0	0.68	0.61

Note: Rotation method was Varimax with Kaiser normalisation.

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views on ESL. Due to low communality (<0.50), we removed five items. The resulting factor analysis explains a total of 64.6% of variance in the data. The Kaiser–Meyer–Olkin measure of sampling adequacy had a value of 0.85, while Bartlett's test of sphericity ($\chi^2[n=771]=4052.25$; p<0.001) indicated that the correlation matrix had significant correlations among some of its components. Both values indicate that the data were suitable for factor analysis.

Table 2 shows the six latent factors underlying school personnel's views on ESL based on the now 19 items. Systemic-related causes (Cronbach's α =0.77) include a combination of meso- and macro-level factors with regard to school structure (resources, curriculum) and educational policies (government policy, study financing). School-related causes (Cronbach's α =0.77) consist of factors at the within-school level (expulsion, teachers, career counselling by schools). Family-related causes (Cronbach's α =0.73) highlight the role of socioeconomic background and a lack of parental support or engagement with the school. Student-related causes (Cronbach's α =0.68) include aspects of academic ability and individual aspirations of students. Victimisation and health-related causes (Cronbach's α =0.68) highlight victimisation by bullying and physical or mental health problems. The final factor, teacher/peer-related causes (Cronbach's α =0.61), focused on the role of peers and teachers in ESL.

To test measurement (in)variance of these factors between staff from secondary school and adult education in the sample, we utilised multigroup confirmatory factor analysis (CFA) as our main approach. We compare models—and thus conclusions regarding measurement invariance—based on the differences in CFI (Δ CFI) and RMSEA (Δ RMSEA). Previous literature indicates that Δ CFI \leq 0.01 and Δ RMSEA \leq 0.015 imply that two models are sufficiently similar (Thielmann et al., 2020). The chi-squared test is also reported, but because it is known to be sensitive to sample size, it is not used in interpretation (Davidov et al., 2014).

Fit statistics for the three estimated models are summarised in Table 3. The configural invariance model (Model 1) fits the data well. This finding implies that the same model is valid in both groups; that is, the same components load on the same factors between staff members. We then estimated the metric invariance model by restricting each factor loading to be equal across groups. Corresponding to the higher parsimony compared to the configural model, the model fit remained virtually identical in terms of Δ CFI and Δ RMSEA, suggesting that the metric invariance model held between groups. Finally, we estimated the scalar invariance model (Model 3). Here, we observed a decrease in CFI, whereas the increase in RMSEA remained within acceptable parameters; scalar invariance was not achieved. These findings show that metric invariance was achieved and that latent factors were mostly similar for both groups.

Through independent sample *t*-tests we explored if and how staff from secondary education and adult education gave different weights to perceived ESL causes. Table 4 shows that for four causes, staff from secondary education and adult education had different views. In those cases, staff from adult education gave lower scores (i.e., believed these were less important in determining ESL) than secondary school staff. While family-related causes were highlighted by staff from secondary education, those from adult education placed a greater focus on student-related causes. Neither group believed strongly that either systemic or school-related causes played an important role in ESL. These results directly contradict H1, as student-related causes were highlighted most by those in adult education rather than in secondary education.

When analysing which factors were related to school staff's views on ESL (Table 5), the multilevel model indicated that individual and school climate-related factors had a clear link, while job-related factors were not or only weakly linked to ESL views.

With regard to individual characteristics, the results indicate that gender and educational attainment were most strongly linked to ESL views. Women were more likely than men to

Fit statistics of multigroup CFA testing measurement invariance of ESL factors between staff from secondary schools and adult education. က TABLE

	L.	df	CFI	RMSEA	SRMR	Model comparison	2,	∆df	∆CFI	△RMSEA
Model 1 (configural)	823.544	274	0.860	0.077	0.059	ı	λ diff _	ı	ı	ı
Model 2 (metric)	839.901	287	0.859	0.075	0.060	2 vs 1	16.357	13	-0.001	-0.002
Model 3 (scalar)	1012.819	300	0.818	0.084	0.068	3 vs 2	172.918	13	-0.041	0.008

Note: CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardised root mean square residual; $\chi^2_{
m off}$ = scaled χ^2 difference test; Δ df = difference in the degrees of freedom; $\Delta CFI = difference$ in the CFI; $\Delta RMSEA = difference$ in the RMSEA.

TABLE 4 Independent sample t-tests of ESL causes between groups.

			Mean scores	
	<i>t</i> -Score	p-Value	Secondary education staff	Adult education staff
Systemic	2.31	0.02	2.94	2.73
School	6.05	0.00	3.18	2.66
Family	6.53	0.00	3.85	3.35
Student	0.10	0.92	3.57	3.56
Victimisation and health	1.03	0.30	3.07	2.95
Teacher/peer	6.97	0.00	3.25	2.63

highlight systemic (β =0.21, p<0.05), school (β =0.25, p<0.001), family (β =0.22, p<0.01) and victimisation and health-related (β =0.33, p<0.001) factors as causes for ESL. For education, we noted that a higher educational degree was linked to lower beliefs that systemic (β =-0.11, p<0.05), school (β =-0.13, p<0.01), victimisation and health (β =-0.15, p<0.01) and teacher/peer-related (β =-0.18, p<0.001) causes affected ESL. However, higher education was linked to a greater belief that student-related causes (β =0.13, p<0.01) played a key part in ESL.

With regard to job-related factors, the type of education in which the individual was active played a role in three perspectives. Those active in adult education held lower beliefs than those in regular secondary schools that school-related (β =-0.55, p<0.01), family-related (β =-0.71, p<0.001) and teacher/peer-related (β =-0.73, p<0.001) causes were linked to ESL. Additionally, we found no difference in views between non-teaching school staff and those who taught in general, technical, vocational or part-time vocational education.

School climate-related factors presented a diverse picture. A strong relationship between participants and students was linked to lower beliefs that school-related causes (β =-0.18, p<0.05) were linked to ESL, but also to a greater belief that student-related causes affected ESL (β =0.16, p<0.05). The clearest relationship was found with the perceived frequency of deviant behaviour at school: a higher degree of perceived deviant behaviour was linked to a greater belief that school (β =0.10, p<0.05), family (β =0.13, p<0.01) and student-related (β =0.10, p<0.05) causes were associated with ESL. Greater access to means at the school was also linked to lower beliefs that systemic causes were linked to ESL (β =-0.15, p<0.01).

We added the interactions between school climate variables and whether or not participants were active in regular secondary or adult education in a separate model—but presented in a single table for ease of interpretation. None of the interactions were associated with views on ESL, thus providing no support for H2, in which we expected the effect of the school climate on ESL views to be stronger among staff in adult education than those in regular secondary schools.

DISCUSSION

Over the past decade, the reduction and compensation for ESL was given high priority in Europe, and consequently by national/regional (educational) policymakers (Lamb & Markussen, 2010; Rumberger, 1995; Rumberger & Lim, 2008; van Praag, Nouwen, et al., 2018). Increasingly, attention has been given to why students leave without an educational qualification and how (educational) policies can be used to reduce this number as much as possible. However, in doing so, less attention has been given to how school staff approach this topic (van Praag et al., 2017). Including school staff's views and understanding of the topic, as well as how they perceive their educational institution is coping with ESL, is crucial

Linear regression models on perceived ESL causes on individual, job-related and school climate variables. 2 TABLE

Dependent variables:	Systemic	School-related	Family-related	Student-related	Victimisation and health	Teacher/peer
Independent variables						
Sociodemographics						
Age	0.01	0.07	-0.05	0.10	90.0-	0.04
Gender (ref: Male)						
Female	0.21*	0.25**	0.22**	0.05	0.33***	0.15
Ethnicity (ref: no ethnic background)						
Ethnic background	0.12	0.02	-0.16	0.16	90.0-	-0.05
Educational degree	-0.11*	-0.13**	-0.03	0.13**	-0.15**	-0.18***
Job-related traits						
Position (ref: non-teaching staff)						
General secondary education	0.04	-0.07	-0.10	0.07	-0.00	0.01
Vocational secondary education	0.03	0.08	-0.04	0.08	0.00	-0.09
Part-time vocational education	-0.02	0.03	90.0	0.09	0.01	-0.08
Technical secondary education	-0.00	0.09	0.07	90.0	0.08	0.00
Years of experience in school	90.0-	-0.08	-0.09	-0.06	-0.01	-0.11*
Type of education (ref. regular)						
Adult education	-0.12	-0.55**	-0.71***	90.0	-0.07	-0.73***
School climate						
Relationship teacher-student	-0.03	-0.18*	0.14	0.16*	90.0-	-0.13
Teacher involvement	-0.02	90.0	-0.11	-0.12	0.08	-0.06
Deviant behaviour	0.07	0.10*	0.13**	0.10*	-0.02	90.0
Access to means	-0.15**	-0.01	-0.04	0.08	-0.01	0.03
Job satisfaction	90.0	-0.00	-0.01	-0.04	0.01	0.08
Interactions adult education $ imes$						
Relationship teacher-student	0.02	0.01	-0.15	0.01	-0.11	-0.04

(Continues)

Student-related 0.08 0.10 0.03 0.00						Victimisation and	
0.05 -0.03 0.05 0.08 0.03 -0.04 0.03 0.10 -0.04 0.09 -0.07 0.03 -0.06 0.01 0.00 0.00	Dependent variables:	Systemic	School-related	Family-related	Student-related	health	Teacher/peer
0.03 -0.04 0.03 0.10 -0.04 0.09 -0.07 0.03 -0.06 0.01 0.00 0.00	Teacher involvement	0.05	-0.03	0.05	0.08	0.02	-0.00
-0.04 0.09 -0.07 0.03 -0.06 0.01 0.00 0.00	Deviant behaviour	0.03	-0.04	0.03	0.10	0.03	0.02
-0.06 0.01 0.00 0.00	Access to means	-0.04	0.09	-0.07	0.03	-0.09	0.10
	Job satisfaction	90.0-	0.01	0.00	0.00	0.05	0.15

*p<0.05; **p<0.01; ***p<0.001.

as they are the key actors on the frontline of daily student interactions, play a pivotal role in alarming other actors and set up initiatives to prevent ESL (Gil et al., 2019; Knesting, 2008). Moreover, their views and expectations further shape classroom interactions and behaviours (Rosenthal & Jacobson, 1968). Hence, this study adds to the research body on ESL by including school staff's views on predictors of this phenomenon in distinct educational settings (regular secondary education and adult education), including not only teachers but also school staff, and validating a scale of reasons for ESL for the first time. Using quantitative data collected in Flanders (Belgium) in two different educational settings—regular education and adult education—our analyses provide interesting and important new insights.

In line with H1, we found significant differences in ESL views between school staff in regular versus adult education (McGregor & Mills, 2012; Nada et al., 2020; Nouwen et al., 2016). Staff in adult education had more moderate views of the causes for ESL, while the views of staff in regular education were more 'extreme'. However, rather unexpectedly, these moderate 'ratings' were found for almost all six causes of ESL we identified. What is clear is that staff in adult education did not point more to contextual, systemic or school causes to explain ESL. Interestingly, the individual student-related causes became more prominent in comparison to staff in regular education. This contradicts our hypothesis stating that staff in adult education would be less focused on individual causes and would be more attuned to the precarious circumstances their students have to navigate (McGregor & Mills, 2012; Nada et al., 2020; Nouwen et al., 2016). This could indicate that adult education staff are not necessarily more aware of or sensitive to these contextual explanations than staff in regular education. The reason for this may be that these teams are not as interdisciplinary as expected and/or that a student-focused view remains predominant, irrespective of the education context and the profiles of the students they cater for. However, it could also be related to the specific wording of the questions: we asked adult education staff to reflect upon students who leave adult education (rather than 'education in general' or 'regular education'). It is possible that these staff believe their schools are already more supporting of students and addressing their needs than regular secondary education, and that in such a context 'drop-out' or 'failure' becomes even more 'individualised'. Next to that, another explanation could be that due to students' specific profile—having left regular education early and having experienced other educational difficulties, being an adult and potentially not living with parents or already having their own family (McGregor & Mills, 2012)—adult education staff may be more focused on more individualised causes.

In our research, we controlled for the role of educational track on the views of staff in regular education. Often in the academic as well as policy literature, vocational and certainly part-time vocational education is proposed as an 'alternative' to full-time regular education and as a potential 'preventive' measure to keep students participating in regular education. It could be expected that staff in these tracks have different views than staff in more academically oriented tracks. Yet, our results show no significant differences.

Interestingly, we found that female staff generally referred more to contextual explanations (school, systemic or family causes) while higher educated staff generally referred less to such contextual explanations. Why this is the case is not clear-cut. Additional sociological perspectives could shed some light, arguing that social groups which generally face more inequalities in society—women and/or lower educated individuals—stress the importance of contextual rather than individual-centred factors, thereby recognising the influence of (inequalities in) social contexts on one's success (Gundelach, 2014).

The role of school climate in staff views of ESL causes is not as straightforward as expected. We do not find a significantly more positive climate among staff in adult education in comparison to regular education. Moreover, most school climate variables did not have a significant association with the causes of ESL. Interestingly, positive student—teacher relations had a negative association with school-related causes and a positive association with student-related causes. Staff who feel that these relations are more positive in their school believe that student-related causes (e.g., lack of motivation) play a more important role in ESL.

Limitations and future research

A limitation of this study is the limited number of schools and teachers included in each school, especially in the adult education schools (Macedo et al., 2018; Nada et al., 2020; Nouwen et al., 2016; Ryan & Lőrinc, 2018; Tarabini et al., 2018). Furthermore, by expanding the sample, it would be interesting to further assess differences between school staff members in terms of their exact positions and roles and how they look at the reasons for ESL, and how the set-up of a school team results in specific dynamics related to preventing and compensating for ESL (see also van Praag et al., 2017).

Future research should also include school effects and more alternative learning arenas (next to adult education) in school effectiveness studies focusing on this topic. In addition, more European comparative research is needed to understand how these alternative learning arenas matter in ESL views, as well as differentiation within this group, in terms of the types of educational programmes that alternative learning arenas have to offer and schools' vision regarding student support in school and applying a holistic approach to student learning and coaching. Future scales need to include more views on ethnic/racial diversity and migration background, and control for the effects of school socioeconomic and ethnic compositions, and how this interacts with views on ESL. Policymakers could work more on follow-up to ESL, including feedback mechanisms to inform school staff on the reasons why individual students decided to leave school early.

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CONFLICT OF INTEREST STATEMENT

The authors report no conflict of interest.

DATA AVAILABILITY STATEMENT

Data are available from the authors upon reasonable request.

ETHICS STATEMENT

We confirm that the research presented in this paper was carried out with due consideration to all relevant ethical issues and in line with BERA's Ethical Guidelines for Educational Research.

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REFERENCES

Agirdag, O., Merry, M. S., & van Houtte, M. (2016). Teachers' understanding of multicultural education and the correlates of multicultural content integration in Flanders. *Education and Urban Society*, 48(6), 556–582. https://doi.org/10.1177/0013124514536610

Bradley, C. L., & Renzulli, L. A. (2011). The complexity of non-completion: Being pushed or pulled to drop out of high school. *Social Forces*, 90(2), 521–545. https://doi.org/10.1093/sf/sor003

Christle, C. A., Jolivette, K., & Nelson, C. M. (2007). School characteristics related to high school dropout rates. Remedial and Special Education, 28(6), 325–339. https://doi.org/10.1177/07419325070280060201

Clycq, N., Ward Nouwen, M. A., & Vandenbroucke, A. (2014). Meritocracy, deficit thinking and the invisibility of the system: Discourses on educational success and failure. *British Educational Research Journal*, 40(5), 796–819. https://doi.org/10.1002/berj.3109

- Davidov, E., Meuleman, B., Cieciuch, J., Schmidt, P., & Billiet, J. (2014). Measurement equivalence in cross-national research. *Annual Review of Sociology*, 40, 55–75.
- de Witte, K., Cabus, S., Thyssen, G., Groot, W., & van den Brink, H. M. (2013). A critical review of the literature on school dropout. Educational Research Review, 10, 13–28. https://doi.org/10.1016/j.edurev.2013.05.002
- Flemish Ministry of Education. (2015). Onderwijsstatistieken 2015. https://data-onderwijs.vlaanderen.be/documenten
- Gil, A. J., Antelm-Lanzat, A. M., Cacheiro-González, M. L., & Pérez-Navío, E. (2019). School dropout factors: A teacher and school manager perspective. Educational Studies, 45(6), 756–770. https://doi.org/10.1080/ 03055698.2018.1516632
- Gitschthaler, M., & van Praag, L. (2018). Rethinking transition: What happens when young people leave school early? *European Journal of Education*, 53(4), 447–451. https://doi.org/10.1111/ejed.12301
- Gonzalez-Rodriguez, D., Vieira, M. J., & Vidal, J. (2019). Factors that influence early school leaving: A comprehensive model. *Educational Research*, 61(2), 214–230. https://doi.org/10.1080/00131881.2019.1596034
- Gundelach, P. (2014). Freedom or equality. In W. Arts & L. Halman (Eds.), Value contrasts and consensus in present-day Europe: Painting Europe's moral landscapes (pp. 143–161). Brill.
- Hellriegel, D., & Slocum, J. W., Jr. (1974). Organizational climate: Measures, research and contingencies. Academy of Management Journal, 17(2), 255–280.
- Kaye, N., D'Angelo, A., Ryan, L., & L\u00f3rinc, M. (2016). Attitudes of school personnel to early school leaving. Middlesex University Retrieved from www.uantwerpen.be/images/uantwerpen/container23160/files/Publication%202 revisedfinal.pdf
- Knesting, K. (2008). Students at risk for school dropout: Supporting their persistence. *Preventing School Failure: Alternative Education for Children and Youth*, 52(4), 3–10. https://doi.org/10.3200/PSFL.52.4. 3-10
- Lamb, S., & Markussen, E. (2010). School dropout and completion: An international perspective. In S. Lamb, E. Markussen, R. Teese, J. Polesel, & N. Sandberg (Eds.), School dropout and completion: International comparative studies in theory and policy (pp. 1–18). Springer.
- Macedo, E., Santos, S. A., & Doroftei, A. O. (2018). Alternative learning arenas in Portugal: Hope for young adults? In L. van Praag, W. Nouwen, R. van Caudenberg, N. Clycq, & C. Timmerman (Eds.), Comparative perspectives on early school leaving in the European Union (pp. 199–214). Routledge.
- Marks, G. N. (2007). Do schools matter for early school leaving? Individual and school influences in Australia. School Effectiveness and School Improvement, 18(4), 429–450. https://doi.org/10.1080/0924345070 1712528
- McGregor, G., & Mills, M. (2012). Alternative education sites and marginalised young people: 'I wish there were more schools like this one'. *International Journal of Inclusive Education*, 16(8), 843–862. https://doi.org/10.1080/13603116.2010.529467
- Meuleman, B., & Billiet, J. (2009). A Monte Carlo sample size study: How many countries are needed for accurate multilevel SEM? Survey Research Methods, 3(1), 45–58.
- Nada, I. C., Santos, S. A., Macedo, E., & Araújo, H. C. (2020). Can mainstream and alternative education learn from each other? An analysis of measures against school dropout and early school leaving in Portugal. *Educational Review*, 72(3), 365–385. https://doi.org/10.1080/00131911.2018.1508127
- Nouwen, W., van Praag, L., van Caudenberg, R., Clycq, N., & Timmerman, C. (2016). School-based prevention and intervention measures and alternative learning approaches to reduce early school leaving. University of Antwerp Retrieved from https://repository.uantwerpen.be/docman/irua/7c86af/136210.pdf
- Papaioannou, E., & Gravani, M. N. (2018). Empowering vulnerable adults through second-chance education: A case study from Cyprus. *International Journal of Lifelong Education*, 37(4), 435–450. https://doi.org/10.1080/02601370.2018.1498140
- Pulinx, R., van Avermaet, P., & Agirdag, O. (2017). Silencing linguistic diversity: The extent, the determinants and consequences of the monolingual beliefs of Flemish teachers. *International Journal of Bilingual Education and Bilingualism*, 20(5), 542–556. https://doi.org/10.1080/13670050.2015.1102860
- Rosenthal, R., & Jacobson, L. (1968). Pygmalion in the classroom. *The Urban Review*, 3(1), 16–20. https://doi.org/10.1007/BF02322211
- Rumberger, R. W. (1995). Dropping out of middle school: A multilevel analysis of students and schools. *American Educational Research Journal*, 32(3), 583–625. https://doi.org/10.3102/00028312032003583
- Rumberger, R. W., & Lim, S. A. (2008). Why students drop out of school: A review of 25years of research. University of California.
- Ryan, L., & Lőrinc, M. (2018). The opportunities and challenges of apprenticeships in England: Alternative learning arenas or sites of exploitation? In L. van Praag, W. Nouwen, R. van Caudenberg, N. Clycq, & C. Timmerman (Eds.), Comparative perspectives on early school leaving in the European Union (pp. 215–229). Routledge.
- Schneider, F. W., & Coutts, L. M. (1979). Teacher orientations toward masculine and feminine: Role of sex of teacher and sex composition of school. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, 11(2), 99–111. https://doi.org/10.1037/h0081587

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Strobbe, L., van der Wildt, A., van Avermaet, P., van Gorp, K., van den Branden, K., & van Houtte, M. (2017). How school teams perceive and handle multilingualism: The impact of a school's pupil composition. *Teaching and Teacher Education*, 64, 93–104. https://doi.org/10.1016/j.tate.2017.01.023

- Tarabini, A., Jacovkis, J., & Montes, A. (2018). Factors in educational exclusion: Including the voice of the youth. Journal of Youth Studies, 21(6), 836–851. https://doi.org/10.1080/13676261.2017.1420765
- Thielmann, I., Akrami, N., Babarović, T., Belloch, A., Bergh, R., Chirumbolo, A., Čolović, P., de Vries, R. E., Dostál, D., Egorova, M., Gnisci, A., Heydasch, T., Hilbig, B. E., Hsu, K. Y., Izdebski, P., Leone, L., Marcus, B., Međedović, J., Nagy, J., ... Lee, K. (2020). The HEXACO–100 across 16 languages: A large-scale test of measurement invariance. *Journal of Personality Assessment*, 102(5), 714–726.
- van den Berghe, L., Pouille, A., Vandevelde, S., & de Pauw, S. S. (2022). Looking beyond primary barriers: Support workers' perspectives on school dropout among students with a migration background. *Journal of Ethnic & Cultural Diversity in Social Work*. https://doi.org/10.1080/15313204.2022.2094519
- van Houtte, M. (2005). Climate or culture? A plea for conceptual clarity in school effectiveness research. School Effectiveness and School Improvement, 16(1), 71–89. https://doi.org/10.1080/09243450500113977
- van Houtte, M. (2010). So where's the teacher in school effects research? The impact of teachers' beliefs, culture, and behavior on equity and excellence in education. In K. van den Branden, P. van Avermaet, & M. van Houtte (Eds.), Equity and excellence in education. Towards maximal learning opportunities for all students (pp. 87–107). Routledge.
- van Houtte, M., & Demanet, J. (2016). Teachers' beliefs about students, and the intention of students to drop out of secondary education in Flanders. *Teaching and Teacher Education*, *54*, 117–127. https://doi.org/10.1016/j. tate.2015.12.003
- van Houtte, M., & van Maele, D. (2011). The black box revelation: In search of conceptual clarity regarding climate and culture in school effectiveness research. Oxford Review of Education, 37(4), 505–524. https://doi.org/10.1080/03054985.2011.595552
- van Landeghem, G., de Fraine, B., Gielen, S., & van Damme, J. (2013). Vroege schoolverlaters in Vlaanderen in 2010. Indeling volgens locatie, opleidingsniveau van de moeder en moedertaal. Rapport nr. SSL/2013.05/1.2.0. Leuven: Steunpunt Studie- en Schoolloopbanen. http://www.steunpuntSSL.be
- van Praag, L., Boone, S., van Caudenberg, R., Nouwen, W., & Timmerman, C. (2020). Long and winding roads: Educational decision-making of youngsters at risk of early school leaving in Flanders. *Educational Studies*, 46(5), 532–547. https://doi.org/10.1080/03055698.2019.1620690
- van Praag, L., D'hondt, F., Stevens, P., & van Houtte, M. (2015). Is the sky really the limit? Exploring the attitude-achievement paradox in the Belgian context. Sociology of Race and Ethnicity, 1(2), 225–238.
- van Praag, L., Nouwen, W., van Caudenberg, R., Clycq, N., & Timmerman, C. (2018). *Early school leaving in the European Union*. Routledge.
- van Praag, L., van Caudenberg, R., Nouwen, W., Clycq, N., & Timmerman, C. (2017). How to support and engage students in alternative forms of education and training? A qualitative study of school staff members in Flanders. *Journal of Education and Work*, 30(6), 599–611. https://doi.org/10.1080/13639080.2017.1319567
- van Praag, L., van Caudenberg, R., & Orozco, M. (2018). Age is more than just a number! The role of age and maturity in the processes leading to early school leaving in Flanders (Belgium). *British Educational Research Journal*, 44(4), 557–572. https://doi.org/10.1002/berj.3334
- Vervaet, R., D'hondt, F., van Houtte, M., & Stevens, P. A. (2016). The ethnic prejudice of Flemish teachers: The role of ethnic school composition and of teachability. *Cultural Diversity and Ethnic Minority Psychology*, 22(4), 552–562. https://doi.org/10.1037/cdp0000085
- Wills, T. A., Vaccaro, D., & McNamara, G. (1992). The role of life events, family support, and competence in adolescent substance use: A test of vulnerability and protective factors. *American Journal of Community Psychology*, 20(3), 349–374. https://doi.org/10.1007/BF00937914

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APPENDIX A

TABLE A1 Descriptive overview of early school leaving views.

	Regular education	Adult education	Comparison
Items	M (SD)	M (SD)	t-Value (p-value)
1. Inadequate school curriculum	2.82 (0.92)	2.47 (0.83)	2.96 (0.003)
2. Insufficient school resources	2.80 (1.00)	2.49 (0.99)	2.42 (0.016)
3. Inadequate school policies or interventions	2.84 (0.99)	2.10 (0.79)	5.99 (0.000)
Non-availability of financial assistance to continue studying	3.01 (1.05)	3.24 (0.91)	-1.81 (0.071)
5. A lack of coherent government policy	3.24 (1.05)	3.30 (0.94)	-0.46 (0.649)
Wrongfully motivated study choices of pupils	3.82 (0.87)	3.56 (0.90)	2.43 (0.015)
A lack of good school career counselling by schools	3.10 (0.98)	2.74 (0.95)	2.92 (0.004)
Pupils that change secondary schools too easily	3.33 (1.00)	2.74 (1.03)	4.63 (0.000)
9. Schools that expel pupils too easily	2.63 (0.99)	1.97 (0.74)	5.33 (0.000)
10. A lack of motivated teachers	3.00 (1.14)	2.26 (1.10)	5.19 (0.000)
11. Family problems	3.95 (0.79)	3.68 (0.77)	2.81 (0.005)
12. Family's socioeconomic background	3.94 (0.84)	3.97 (0.74)	-0.35 (0.723)
 A lack of parental engagement with the school 	3.85 (0.88)	2.62 (0.99)	10.90 (0.000)
14. Low individual academic ability	3.49 (0.81)	3.63 (0.82)	-1.43 (0.152)
15. Low individual aspiration	3.66 (0.81)	3.49 (0.94)	1.62 (1.06)
Physical or mental health problems among pupils	3.10 (1.02)	3.57 (0.91)	-3.69 (0.000)
17. Being victim of bullying among pupils	3.03 (1.04)	2.31 (0.95)	5.50 (0.000)
Not getting on with teachers and school staff	3.09 (0.95)	2.54 (1.01)	4.67 (0.000)
19. Negative influence of peers	3.68 (0.82)	3.09 (0.88)	5.67 (0.000)
20. Gender or gender socialisation	2.29 (0.85)	1.87 (0.64)	3.94 (0.000)
Non-participation in extracurricular activities	2.49 (0.94)	1.99 (0.85)	4.39 (0.000)
22. Minority cultural background	3.16 (0.94)	2.75 (0.93)	3.42 (0.001)
23. A lack of language proficiency	3.77 (0.99)	4.01 (0.87)	-2.03 (0.043)
24. Plentiful labour market opportunities	2.92 (1.06)	2.66 (0.88)	1.96 (0.051)

Note: Items were scored from 1 (not at all important) to 5 (very important).