Teacher Satisfaction And Grade 4 Reading Literacy Achievement: An Austrian Perspective Using International Large-Scale Assessment Data

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The complexity of the teaching environment requires now more than ever a satisfied and fulfilled teacher population. This study uses the Austrian Progress in International Reading Literacy Study (PIRLS) 2021 data to uncover those factors specifically associated with the school environment when controlling for school socio economic status as predictors of teacher dissatisfaction. Results show that the current model explains 22% of the variance, yet school emphasis on academic success, teaching being limited by a number of lacking elements and school safety were found to be of no statistical significance. The study provides two important points to consider, namely the role of short cycle teachers in producing reading literacy scores well above those of their degreed counterparts, and the significant role of socio-economic status and its effect on achievement. The study concludes that a systems perspective that considers the shared beliefs and values, relationships and social interactions, leadership, and physical environment may shed more light on the underlying dynamics that can be associated with those less than satisfied teachers.

Keywords: teachers' satisfaction, Austria, PIRLS 2021, quantitative study, reading literacy, school climate

INTRODUCTION

The current international shortage of teachers as well as the drop-out of teachers and the associated additional workload for teachers in the teaching profession are increasingly placing the issue of teacher professionalism and satisfaction at the centre of attention (Skaalvik & Skaalvik, 2011). Political measures to combat the shortage of teachers and the exodus of teaching staff must be complemented by measures at micro level that promote teacher satisfaction (Ingersoll, 2012; Worth & De Lazzari, 2017). Zong (2016) argues that a high job satisfaction of teachers will assist a high level of passion and enthusiasm for their profession. Nevertheless, studies point out that the satisfaction of teachers is often overlooked and should receive more research attention (Liang &

Akiba, 2017). Teachers' satisfaction has a high impact on the well-being of teachers, their own teaching quality, and the way in which they support student learning. It also contributes to the well-being of students and their learning outcomes (Collie, Shapka & Perry, 2012; Farooqi & Shabbir, 2016; Crawford, 2017). This satisfaction in turn leads to increased resilience to overload and burn-out of teachers (Skaalvik & Skaalvik, 2011) and, as a result of resilience, having a smaller teacher turnover (Smet, 2022). International studies show that 50% of teachers leave the teaching profession within the first five years (Boyd et al., 2008; Ingersoll, 2012). It is therefore critical that teachers must experience genuine job satisfaction to effectively impart essential knowledge and skills for the development of students. Indeed, school climate is recognised as an important factor influencing teacher satisfaction. According to Rudasill et al. (2018), school climate encompasses a number of components, including shared beliefs and values, relationships and social interactions, safety, teaching and instruction, leadership, and the physical environment. Collectively, these components shape the overall atmosphere and culture of a school, which has a direct impact on teacher well-being and job satisfaction. Borah (2016) argues that the quality of education may suffer if there is a lack of teacher job satisfaction, potentially resulting in lower educational standards. Satisfied teachers are therefore one of the keys to high quality education.

The Progress in International Reading Literacy Study (PIRLS) 2021 is the latest in the International Association for the Evaluation of Educational Achievement (IEA´s) studies on reading literacy. As an international comparative study involving 66 countries, PIRLS is undertaken in five-year cycles to provide participating countries with information about the state of Grade 4 reading literacy achievement (Mullis et al., 2023; Schmich et al., 2023). PIRLS 2021 makes use of Grade 4 reading achievement tests and contextual background questionnaires that are administered to school principals, teachers, parents of Grade 4 students and Grade 4 students themselves to gather information on the reading behaviours and attitudes that shape reading literacy achievement. Based on the PIRLS 2021 Austrian data, this study aims to uncover specific school climate factors of safety, teaching and instruction that can be associated with dissatisfied teachers in the PIRLS 2021 teacher questionnaire data and its association with reading literacy achievement. PIRLS 2021 places Austrian Grade 4 student achievement at 530 (SE=2,2), a score well above the PIRLS scale centerpoint of 500. While these overall results for Austria are encouraging, a drop of 11 score points between PIRLS 2016 and PIRLS 2021 is noted. This decline may be due to the effects of Covid-19, since PIRLS 2021 administration took place at the hight of pandemic school disruptions and closure.

Literature Review

Satisfaction in different professions based on humanistic thinking and the concept of lifelong-learning has increased (Hoque et al., 2023). It is described as one factor, which affects the efficiency of job performance and the job identity (Bota, 2013). Nui et al. (2023) points out that research has indicated that job satisfaction encompasses both a psychological state and an emotional experience, which individuals undergo, mirroring aspects such as the nature of the work, remuneration, career advancement, job pressure, and interpersonal dynamics with supervisors and colleagues within the workplace. In

teacher education exists a lot of studies about teacher satisfaction. This satisfaction has a direct influence on teachers' enthusiasm and commitment to their profession (Ihueze et al., 2018) and is conducive to higher job performance (Hayati & Caniago, 2012). It serves also as a crucial avenue for augmenting teachers' sense of identity and belonging within the school, ultimately elevating their professional allure and attractiveness (Hoque et al., 2023). Teachers' job satisfaction is described as "teacher's overall emotional experience and cognitive expression of their occupation, working conditions, and state" (Hoque et al., 2023, p. 2). Different studies point out potential predictors of teacher's satisfaction. Shi et al. (2011) divide the influencing factors into four different levels: individual level, school level, work and other levels. The individual level is characterized within objective factors like the teachers' educational background, teaching experiences, gender, professional title, monthly income, workload and subjects. Subjective individual elements are occupational preferences and work engagement. The main influencing factors at the school level are students and management. Examples of workplaces are the professional growth environment, work pressure and learning exchange possibilities. Other relevant factors can be the location of the school (urban or rural). Research by Armstrong (2009) emphasise the essential importance of teachers' attitudes. Consequent research, also in the Austrian context, underlines the relevance of individual factors like teacher's self-efficacy, classroom discipline and school climate, student engagement and achievement, several stress factors (such as workload, time stress), professional collaboration, access to professional development and point out further important elements like the teacher-student relationship (Klassen & Chiu, 2010; Skaalvik & Skaalvik, 2011; Schmich & Itzlinger-Bruneforth, 2019; Torres, 2019; Wang et al., 2020; Toropova et al., 2021).

Research shows that the more teachers believe that teaching is a valuable occupation, the more satisfied they are. Control variables which are often used to assess teachers' satisfaction are age, gender, race, minority, school location, school and class size, number of special needs students, and public vs. private school (Skaalvik & Skaalvik, 2011; Liu & Bellibas, 2018; Hee et al., 2019). In this study, the effects of socio-economic status is added as an additional school level control variable, since socio-economic status serves as a major driver of academic achievement (Liu et al., 2020; Tan et al., 2020; Doyle, 2020). The significance of some correlations were strongly emphasised in various studies, but then again argued to be unimportant in others. For example, there are studies that do not link salary or class size to teacher satisfaction (Toropova et al., 2021). Conley and You (2016) found that more experienced teachers are more satisfied than less experienced teachers. On the other hand, a Chinese study argues that teachers with less than five years of experience are the most satisfied teachers, whereas the satisfaction of teachers after 16 to 20 years was relatively low (Chen, 2017). The factor age shows for example in general a weak correlation with teachers' job satisfaction (Shi et al., 2011). Other studies on urban versus rural areas have presented mixed results. Studies show that teacher satisfaction is higher in urban areas (Chen, 2017), while other studies argue the opposite (Shen et al., 2012). Liu et al. (2023) point out that there is generally no correlation between teacher satisfaction and school location. What makes these disputing findings interesting is perhaps the physical

and policy context in which these studies took place, and the methods used to reach these conclusions.

Many studies stress the importance of professional development for satisfaction (Liu & Bellibas, 2018; Toropova et al., 2021). A study by Rutkowski et al. (2013), which was based on 81 elementary school teachers, and later by Nyunt & Ye (2019) couldn't find relations between the professional development like attending seminars, coaching, participation in a network of teachers, exchange with other schools, attending formal qualification programs and teacher satisfaction. The most effective factor was related to the classroom equipment, which helps to perform teaching tasks more actively. The more active they are in their lessons, the more satisfied they are. This indicator also correlates with student performance. Ejimosfors (2015) and Perera et al. (2022) underline that effective and satisfied teachers affect directly the student learning and their performance. Satisfied teachers are able to provide more pedagogical support, which has an impact on the better outcome of students' achievements.

Toropova et al. (2021) analyzed the relationship between teacher job satisfaction, school working conditions and teacher characteristics based on the Trends in Maths and Science Study (TIMSS) 2015. The results indicate a statistically significant relationship between working conditions and teacher satisfaction. In this context, workload, cooperation and teachers' perceptions of student discipline at school are crucial factors. In terms of gender, the study also found that female teachers have more access to professional development and that teachers with more access tend to have higher levels of job satisfaction. Another study, based on the Teaching and Learning International Survey (TALIS) 2013/2015, focuses directly on teacher job satisfaction in relation to school climate (Niu et al., 2023). School climate is defined by interpersonal relationships, teaching and learning, and safety concerns (Thapa et al., 2013; Liu et al., 2023). Nui et al. (2023) and earlier on Sims (2017) showed that professional collaboration and social support enhance teacher satisfaction. Shared values, autonomy and belonging contribute to collaboration (Skaalvik & Skaalvik, 2021). In terms of safety concerns, school crime and violence have a significant impact on teacher satisfaction (Kapa & Gimbert, 2018). Dissatisfied teachers often work in a violent and unsafe environment, which correlates with psychological distress. The various studies show that teachers need to experience genuine job satisfaction in order to ensure quality education. According to the OECD Teaching and Learning International Survey (TALIS) in 2019, 96% of teachers in Austria are overall satisfied with their work, and 84% would choose the profession again. However, only 16% of teachers believe that their profession is valued by society (Schmich & Itzlinger-Bruneforth, 2019). What the central role playing factors for satisfied teachers are is an area of much debate. It is also evident that the factors have different effects on individual teachers. Individual teachers, together with the school management have to focus on the improvement of teachers' job satisfaction for maintaining a high level of passion and enthusiasm and for increasing and ensuring consistent teaching quality (Zong, 2016). So, for example, is leadership a crucial element in dealing with different factors that gives shape to school climate (Liu et al., 2021). The attitudes and actions of leaders, such as school headmasters, have a significant influence on school culture as well as teaching and learning (Wang et al., 2020).Unhappy teachers, often resulting in teacher turnover, has a high negative

influence for the collegiality, relation between students and teachers, and student learning motivation (Toropova et al., 2021).

Conceptual Framework

For purposes of the current study, the work of Rudasill et al. (2018) is used. These authors acknowledge school climate as a multifaceted construct that has arisen largely from empirical and theoretical means. School climate takes the form of three traditions: organizational, school effects, and psychological, each generating somewhat varied definitions and models of school climate. Organizational literature is rooted in scholarship on the psychological climate of business organizations and dates back to the work of Taguiri (1968). The organizational tradition describes the perceptions of role players of the school and the effects on their behavior, most often measured through teachers' perceptions of the school environment. In contrast, scholars in the school effects research tradition view school climate as school-level characteristics within the wider school culture that differentiates effective and ineffective schools. Here, Rudasill et al., (2018) refer to the work of Moos (1979) and Stringfield et al. (2008) among others. Finally, research from the psychological tradition refer to those instruments that measure the perceptions of students and teachers, often referencing a definition or model from another research tradition, for example the work of Bear et al. (2011) whose focus was on the factor structure, concurrent validity, and reliability of a school climate survey, but without explicitly testing a theoretical model. According to Rudasill et al. (2018) closer examination of this extant literature reveals six broad themes that are useful in broadly describing how school climate has been conceptualized: shared beliefs and values, relationships and social interactions, safety, teaching and instruction, leadership, and physical environment. For purposes of the current study, the focus is on teaching and instruction (as measured by the school´s emphasis on academic success and teaching that is limited by a number of lacking elements), and school safety, specifically for those teachers who were less than satisfied with the teaching profession as evidenced by PIRLS 2021 in Austria. In providing evidence of safety, teaching and instruction, the current study conceptualizes school climate from an organizational tradition that describes the perceptions of role players of the school and the effects on their behavior, most often measured through teachers' perceptions of the school environment (Rudasill et al., 2018). While a broader, systemic definition could have applied, the current study aims to uncover those factors specifically associated with the school environment when controlling for school socio-economic status as predictors of teacher dissatisfaction from a developed education system perspective. This overall question is operationalized (and elaborated in the Methods section) as follows:

- Who are the less than satisfied teachers in the PIRLS 2021 Austrian study in terms of experience, formal education and location of the schools in which they teach?

- To what extent are Austrian teachers who are less than satisfaction in their jobs affected by the school´s emphasis on academic success?

- To what extent can student reading achievement of less than satisfied teachers be explained by the extent to which teaching is limited by students who lack basic needs and skills?

- How much are less than satisfied teachers affected by unsafe and disorderly schools?

METHOD

This study takes the form of a further quantitative analysis of the PIRLS 2021 Austrian data that was collected between February and July 2021. As an international large-scale assessment (ILSA), the PIRLS survey is administered every five years and aims to test Grade 4 reading literacy (Mullis et al., 2023).

Sample

In Austria, the PIRLS 2021 sample was explicitly stratified by urbanization and achievement level, and implicitly stratified by its nine regions. Whenever possible, two Grade 4 classrooms per school were tested (Almaskut et al., 2023). A total of 160 Austrian schools participated in PIRLS 2021, where 4 806 Grade 4 students were assessed. From the sampled classes, a total of 305 teachers completed the Teacher Questionnaire. Of these teachers, a total of 159 indicated on the teacher satisfaction index that they were less than satisfied in their jobs as teachers. A vast majority of these teachers were female (96%), yet it can be expected that at Grade 4, most students are taught by female teachers. In terms of age of teachers, the spread is even with 27% between the ages of 25 and 29, 23% between the ages of 30 and 39, 29% between the age of 50 to 59 and 21% aged 60 years or older. The middle group aged 40 to 49 are not represented among dissatisfied teachers. For purposes of the current study, the focus of data analysis is on this group of less than satisfied teachers in attempts to uncover school climate factors associated with safety, teaching and instruction, that may explain reading achievement for students of these teachers.

Data collection instruments

PIRLS 2021 consists of Grade 4 achievement data and contextual background data as collected from teachers of Grade 4 classes that were sampled for participation in PIRLS 2021. Reference is made in each instance to teachers of Grade 4 students, since results are representative at the student level, not the teacher level. For purposes of the first research question, less than satisfied teachers were identified from the sample based on their responses to the Teacher Satisfaction Index that asked questions about how happy they were as teachers, how much they perceived their work as inspiring, important and meaningful, how proud they were of their work and the extent to which they were satisfied as teachers. Descriptive results are then presented for these teachers in terms of their years of experience, their highest level of formal education and the location of the school in which they teach (urban, suburban, small town or village).

For purposes of addressing research questions 2, 3 and 4, reading achievement data, in the form of overall Plausible Values from 4 806 Austrian Grade 4 students, are used in conjunction with contextual background data of three school climate scales from the

Teacher Questionnaire data. These scales that appear in the international database are firstly the school´s emphasis on academic success (variable name ATBGEAS), and consisted of Likert scale questions that ranged from very high, high, medium, low and very low. Teachers ranked their understanding of the school's curricular goals, their degree of success in implementing the school's curriculum, teachers' expectations for student achievement, teachers' ability to inspire students, collaboration between school leadership and teachers to plan instruction, parental involvement in school activities, parental commitment to ensure that students are ready to learn, parental expectations for student achievement, parental support for student achievement, students' desire to do well in school, students' ability to reach school's academic goals -and students' respect for classmates who excel academically. In research question 3, teachers were asked the extent to which their teaching was affected by students with a range of limitations on a Likert scale that included response options ´Not at all´, ´some´ and ´a lot´. This scale (variable name ATGSLI) was created in the international database to indicate the extent of students lacking prerequisite knowledge or skills, students suffering from lack of basic nutrition, students suffering from not enough sleep, students absent from class, disruptive students, uninterested students, students with mental, emotional, or psychological impairment, and students needing extra support in reading. In order to address research question 4, the international database contains a scale that enquired about teachers being in safe and orderly schools (variable name ATBGSOS). Questions ranged in response options from agree a lot, agree a little, disagree a little, and disagree a lot and made statements including: This school is located in a safe neighbourhood, I feel safe at this school, this school's security policies and practices are sufficient, the students behave in an orderly manner, the students are respectful of the teachers, the students respect school property, this school has clear rules about student conduct, this school's rules are enforced in a fair and consistent manner, and the students are respectful of each other. To control for school socio economic status, data from the School Questionnaire, which was completed by the school principals, was used. Specifically, school principals of Grade 4 students were asked what percentage of the school´s population came from economically disadvantaged areas (0-10%, 11-25%, 26-50% and more than 50%).

Analysis

All data was analyzed by using the International Database (IDB) Analyzer, software that was specifically developed to analyze international large-scale data with SPPS as operating platform. For purposes of addressing the first research question, descriptive statistics were calculated to form an idea of the profiles of less than satisfied Austrian teachers in the PIRLS 2021 study in terms of their years of teaching experience, highest level of formal qualification and location on schools in which they were teaching. For purposes of addressing research questions 2, 3 and 4, linear regression was performed on data from less than satisfied teachers, using school emphasis on academic success, teaching that is limited by a number of lacking elements, safe and orderly school scales as predictors of Grade 4 reading achievement as outcome variable. The model controls for socio economic status. The aim of these analyses was to find evidence of the extent of selected school climate factors that could have a possible effect on teachers of Grade 4 students who were less than satisfied with their teaching jobs.

FINDINGS

Figure 1 illustrates overall teacher satisfaction reports for teachers who responded to the PIRLS 2021 Teacher Questionnaire:

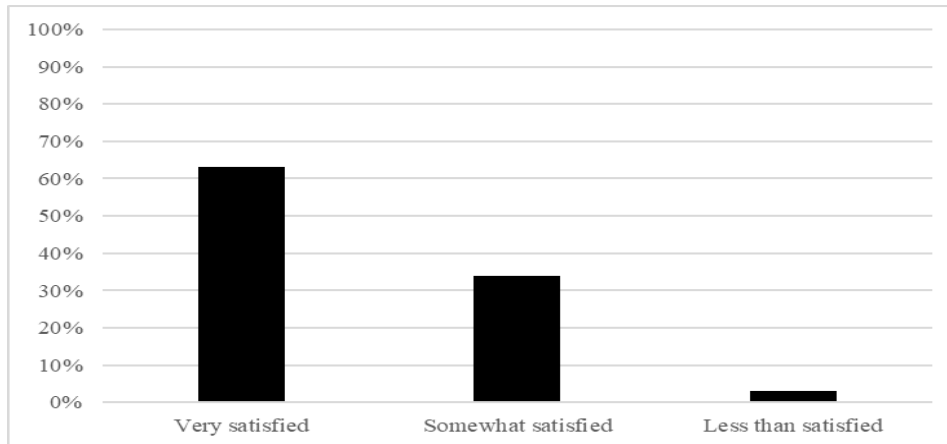

Figure1
Austrian teacher satisfaction based on PIRLS 2021

Overall, the majority of teachers of Grade 4 Austrian students indicated that they were very satisfied with their jobs (63,3%, SE=3,3), followed by 33,7% (SE=3,4) who indicated that they were somewhat satisfied. The focus of the current analysis is on the remaining 3% (SE=1,0) of teachers of Grade 4 students who indicated that they were less than satisfied with their jobs.

Table 1
Less than satisfied teachers´ years of experience

	n	Percent	SE
0-5 years experience	40	21,9	16,8
6-10 years experience	34	26	17,2
11-20 years experience	1	0,6	0,6
More than 20 years experience	83	51,5	22,5

Table 2 provides detail on teachers´ highest levels of education and the effect of these on Austrian Grade 4 reading achievement scores in PIRLS 2021:

Table 2
Less than satisfied teachers´ highest levels of formal education

	n	Percent	SE	Mean Achievment	SE
Short-cycle tertiary education - ISCED Level 5	95	61,9	19,3	516,6	13,2
Bachelor's or equivalent level - ISCED Level 6	41	30	18,8	482,3	27,2
Master's or equivalent level - ICSED Level 7	15	8,2	8,2	424,6	

Interestingly, table 2 indicates that more than two thirds of less than satisfied teachers of Grade 4 students in the Austrian sample have a short-cycle, tertiary education background. For these teachers´ students, reading achievement can be expected to be 516,6 points (SE=13,2), a considerably higher score than for those students who are taught by teachers with Bachelor´s or equivalent degrees (482,3, SE=27,2) and Master´s or equivalent degrees (424,6). Most of the group of less than satisfied teachers come from small towns or villages (59,3%, SE=17,9). However, these numbers should be interpreted with caution because of large standard errors.

Table 3 presents the linear regression results that address research questions 2, 3 and 4. Acceptable Cronbach Alpha reliability coefficients were established for each of the scales, with the school´s emphasis on academic success at .79, teaching limited by a number of lacking elements at .8, and safe and orderly school scale at 0.6.

Table 3
Regression results for less than satisfied teachers of Grade 4 students on selected school climate scales

	b	b.se	SE	t-value
(CONSTANT)	524,6	223,3		2,34
Emphasis on academic success	4,4	23,1	0,4	0,2
Teaching limited by a number of lacking elements	5,5	6,5	0,2	0,8
Safe and Orderly schools	-7	32,8	0,4	-0,21
>50% students come from economically disadvantaged backgrounds	-97,6	78,6	0,5	-1,2

Table 3 provides the results of the regression analysis when controlling for school socio-economic status. The current model explains 22% of the variance in the data, yet none of the school climate scales provide statistically significant evidence for their effect on reading achievement for the group of less than satisfied teachers of Austrian Grade 4 students specifically. Statistical significance would be indicated by t-values larger than 1.96 at the 0,05 level of significance. The implication of these findings is that, when the focus is on less than satisfied teachers, the school environment seems to be of little statistical consequence. Complex relationships and underlying systemic mechanisms, for example the shared beliefs and values, relationships and social interactions, leadership, and physical environment may shed more light on the underlying dynamics that can be associated with those less than satisfied teachers in the system. In terms of school socio-economic status, more than 60% of Grade 4 students of less than satisfied teachers are in schools where lees than 10% and between 11 and 25% of students come from economically disadvantaged backgrounds. It has to be noted that a description and extent of economic disadvantage is not provided in the School Questionnaire and school principals were merely asked to indicate an estimation of what percentages of students they judge to come from poorer backgrounds. Where more than 50% of students in schools come from economically disadvantaged backgrounds, it can be expected that their reading achievement scores are lower by as much as 97,6 score points when compared to schools where less than 10% of Grade 4 students are from economically disadvantaged backgrounds. However, these coefficients are not

statistically significant and should be interpreted with caution in the presence of large standard errors.

DISCUSSION

Overall, the majority of teachers of Grade 4 Austrian students indicated that they were very satisfied with their jobs. While this heartening evidence points to systemic stability, the question remains: to what extent can the school climate, in terms of the emphasis on academic success, teaching being limited by a lack of certain elements and school safety explain overall reading literacy achievement scores? This question is asked of the remaining 3% (SE=1,0) of teachers of Grade 4 students who indicated that they were less than satisfied with their jobs. The current study provided evidence that more than half of the group of less than satisfied teachers seem to cluster around young and old teachers and not teachers in the middle group (i.e. aged between 40 to 49 years), as also found Chen (2017) and Boyd et al. (2008). Noteworthy is that more than two thirds of less than satisfied teachers of Grade 4 students in the Austrian sample have a short-cycle, tertiary education background. While this evidence is surprising, it is even more so in light of reading achievement for students of these teachers which can be expected to be higher than for those students who are taught by teachers with Bachelor´s or equivalent degrees and Master´s or equivalent degrees.

Toropova et al. (2021) or Lui and Bellibabas (2018) stress the importance of professional development for satisfaction. However, the results are based on the understanding of Rutkowski et al. (2013) and Nyunt and Ye (2019), who did not investigate a correlation between professional development and teacher satisfaction. In previous studies that have identified the factors influencing teacher satisfaction, the socio-demographic effect of students could not be determined (Skaalvik & Skaalvik 2011; Toropova, 2021; Alfuraith et al., 2022). In this study too, the effect of school climate factors could not be determined. The current model explains 22% of the variance in the data. None of the school climate scales provide statistically significant evidence for their effect on reading achievement for the group of less than satisfied teachers. In the absence of significant school climate factors, evidence shows the effect when socio economic status is added as a control variable into the model. Where more than 50% of students in schools come from economically disadvantaged backgrounds, it can be expected that their reading achievement scores are lower by as much as 97,6 score points when compared to schools where less than 10% of Grade 4 students are from economically disadvantaged backgrounds. The effect of socio-economic status is undisputed as a driver of academic success. In terms of PIRLS measurement, 40 score points represent one year of schooling (see Araújo & Costa, (2023), therefore the dire effect of low socio-economic status is illustrated in this study, even on a relatively small sample of student achievement data for less than satisfied teachers and in communities where the definition of low socioeconomic status is relative to the broader context in which the school functions and operates.

CONCLUSION

The current study made use of the PIRLS 2021 Austrian data to investigate school climate factors related to safety, teaching and instruction. In doing so, the current study

aims to uncover those factors specifically associated with the school environment when controlling for school socio economic status as predictors of teacher dissatisfaction from a developed education system perspective. Evidence from the study provides two important points to consider, namely the role of short cycle teachers in producing reading literacy scores well above those of their degreed counterparts, and the undisputed role of socio-economic status on achievement in the absence of significant school climate factors. Those less than satisfied teachers who have a short cycle teaching qualification and were still able to produce students with higher reading literacy achievement results begs the question whether current under-graduate and graduate teacher training opportunities in Austria perhaps fail to provide essential, critical skills needed for classroom-based support. It is perhaps not the length of teacher training but the quality of training that affects the competence and professionalism of teachers that could see improved learning outcomes. The question of quality and the possible acquisition of competences should also be continuously reflected upon formal education institutes like the universities, especially in teacher education. The effect of socio-economic status remains a concern, even for stable, developed education systems that are increasingly confronted with diverse student populations. Dealing with language barriers, migrant students and students from low-income families have a significant impact on teacher satisfaction. Teachers need to be trained in how to deal with diversity in the classroom in a professional manner and what knowledge and skills are required. Specific training contexts and opportunities play a key role. It is also clear that teachers' willingness to engage with the issue is an important factor in the professional management of diversity. Leadership and professional learning communities can support this process. The regression in the current model did not result in any statistically significant predictors. If school climate, from a safety, teaching and instruction perspective, does not make a difference to less than satisfied teachers, what does? While the current predictors in the model were not statistically significant, they may still be of educational significance on a larger sample, or in other contexts. It has to be kept in mind that the PIRLS 2021 data was collected at the time of Covid-19 disruptions when schools and teachers were not functioning in a normal way. It may therefore be that teachers' recollections and perceptions of issues of safety, teaching and instruction (as asked in the PIRLS background questionnaires) were less pronounced, faded or even distorted by the challenges that were faced during the time of Covid-19.

Developed education systems, like the Austrian system, may well be in the more fortunate position that school safety, teaching and instruction (as measured by the school´s emphasis on academic success and teaching that is limited by a number of lacking elements) play a less pronounced role in ensuring quality education, since these basic conditions for schooling has largely been met. The current study investigated school climate from an organizational tradition that describes the perceptions of role players of the school and the effects on their behavior, most often measured through teachers' perceptions of the school environment. Suggestions for future research in this area suggests a focus on those affective and cognitive appraisals that point to relationships within schools: issues such as the influence of shared beliefs and values, and the relationship between social interactions and leadership. The significant social dimension of parents, teachers and school leadership (when controlling for background

factors) in predicting increased reading literacy achievement scores has been established (Bergbauer & van Staden, 2018; Al-Zoubi et al., 2023). For educators or policy makers, future research may be of interest in understanding what professional development and relational environments can support teacher satisfaction and, in turn, quality education.

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