Photo: *Ashraf Hendricks/GroundUp*

The effect of school climate:

How feelings of **safety** and **belonging** support learners' **achievement**

School climate can be thought of as the 'quality and character of school life' and has been positively associated with learners' social-emotional adjustment and self-esteem, which is strongly linked to academic achievement. Based on data from the 2019 Trends in International Mathematics and Science Study (TIMSS), *Lolita Winnaar* looks at how principals, teachers and learners perceive the climate of their schools and how this is associated with mathematics achievement.

School should be a place where learners feel safe and where they belong, so they can learn effectively and thrive academically.

'School climate' is a widely used term that generally refers to the quality and character of school life, not just for learners but for all members of the school. Researchers have found strong links between school climate and learner behaviour problems like absenteeism, bullying, aggression and victimisation. In recent years, school climate has been targeted for improvement for promoting learner well-being and thus academic success. Therefore, it is vital to understand school climate, not just as a concept but how it relates to learners' achievement.

School climate and academic achievement

Factors related to school climate are among the many predictors of achievement that can be directly affected by school policies and practices, and a school climate might be labelled positive or negative. A positive climate is said to be friendly and collegial and characterised by effective interpersonal communication between all members of the school. School climate has a significant positive impact on academic achievement in both primary and secondary schools, researchers reported in a 2019 study in the *Journal of School Health*.

School climate as measured by TIMSS

TIMSS assesses school climate using a collection of characteristics that have been shown to affect how schools function. This includes the schools' focus on academic achievement, a healthy and orderly atmosphere, school discipline and safety, teacher job satisfaction and learner perceptions of bullying.

Principal, teacher and learner perceptions of school climate

Figure 1 provides the responses of principals, teachers, and learners to the softer or intangible school climate constructs. There was little difference between the grades. Principals said that schools were very safe and orderly (86% in grade 5 and 76% in grade 9) and teachers in both grades seemed to be satisfied with their jobs (64%). However, much less than half of teachers and principals agreed that high emphasis was placed on academic success in their schools.

Figure 1: Principal, teacher and learner responses to the intangible school climate constructs

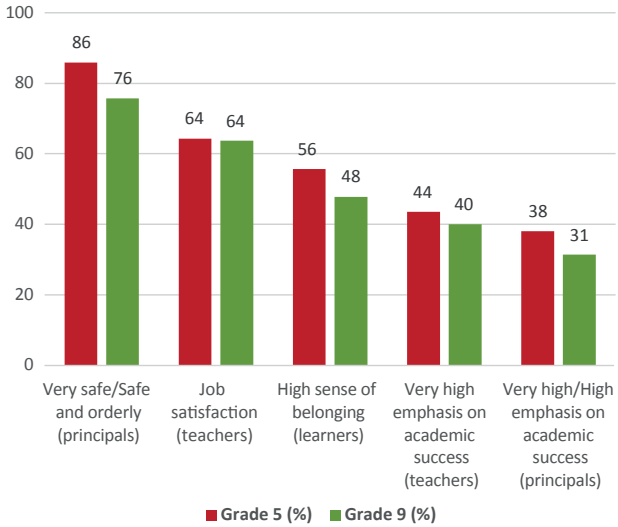
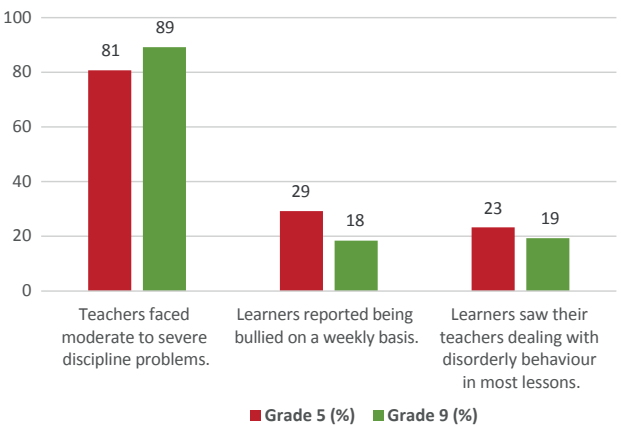


Figure 2 is focused on more tangible aspects of school climate related to learner behaviour, issues of discipline and incidences of bullying. More than 80% of teachers of grade 5 and grade 9 learners said that they were faced with moderate to severe discipline problems. Twenty-nine per cent of grade 5 learners and 18% of grade 9 learners reported experiencing some form of weekly bullying. At the grade 5 level, 23% of learners were taught by teachers who had to deal with disorderly behaviour in most of their lessons, compared with 19% of grade 9 learners.

Figure 2: Teacher and learner responses to the tangible aspects of school climate



School climate affects achievement

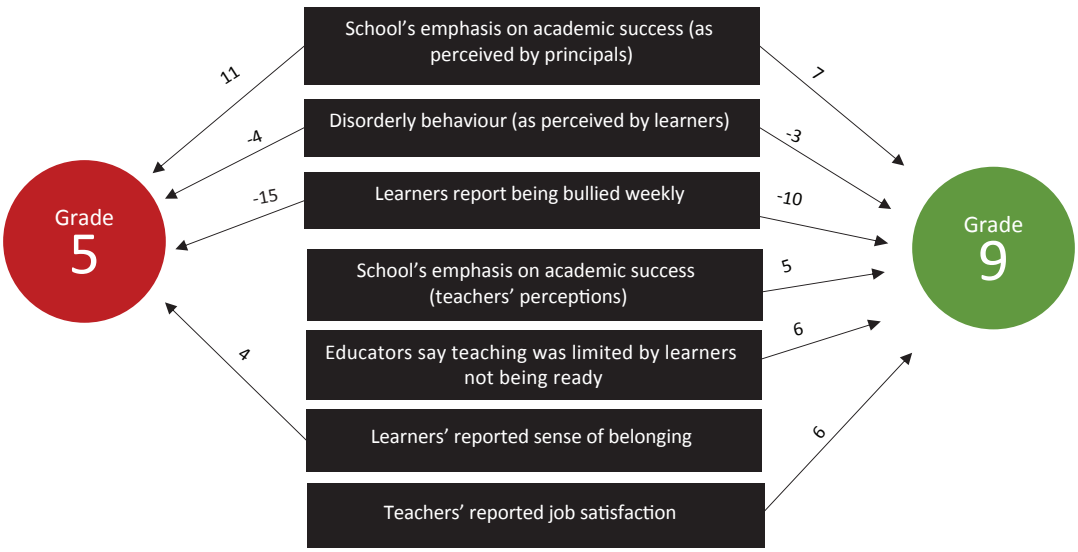
Analysis (Figure 3) shows that of the seven school climate constructs included in the models, four were significantly associated with achievement at the grade 5 level and seven in the case of grade 9.

The values in Figure 3 indicate the score difference in achievement between high and low values on each of the school climate constructs. A negative value is an indication of a negative association between achievement and the school climate construct.

At the grade 5 level, higher academic scores are linked to learners who attended schools that placed a high emphasis on academic success, where behaviour was not a problem, where learners were not bullied weekly and where learners felt they belonged.

At the grade 9 level, learners excelled when they attended schools where bullying was not a problem, where an emphasis was placed on academic success, where learners arrived at school ready to be taught, and where teachers were satisfied with their jobs.

Figure 3: Relationship between school climate and achievement (grade 5 and grade 9)



Conclusion

All school climate constructs had a significant effect on achievement and differed between primary and secondary school learners. Learner incidences of bullying had the strongest (negative) association with achievement for both primary and secondary schools. Interestingly, teacher job satisfaction was significant at the grade 9 level only. Research has shown that job satisfaction is strongly linked to intrinsic motivation and a safe and orderly environment. At the grade 5 level, teachers reported high levels of safety in schools where they taught.

The findings indicate that school climate is related to academic achievement in both primary and secondary schools. Correctly defining the key aspects of school climate by grade level can result in more effective and developmentally appropriate recommendations for the delivery of instruction and school-based interventions that promote positive school well-being and learner success.

Author: *Dr Lolita Winnaar, Chief Education Specialist at the National Assessment Directorate of the Department of Basic Education, previously a senior research specialist in HSRC's Inclusive Economic Development research division*

winnaar.l@dbe.gov.za