Examining the Relationship Between School Climate and ACT Composite Scores

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A positive school climate is important for students' social and emotional wellness and ability to learn. For example, students with positive relationships with their teachers and who feel safe at school tend to show higher academic performance (Korpershoek et al., 2020). The purpose of the current study was to examine the relationship of school climate to ACT® test scores.

Mosaic[™] by ACT[®] Social Emotional Learning (SEL) assessment data was collected from 6,747 students (53% female, 47% male; 67% White, 12% Hispanic, 6% Black, 3% Asian; 74% 11th graders, 23% 12th graders at the time of the ACT test) and matched to their ACT scores. Their SEL assessment data were captured during the 2018–2019 and 2019–2020 school years, while the ACT tests occurred from 2018 to 2021. The assessment includes two measures of school climate, which are defined as follows:

- Relationships with School Personnel: the extent to which students relate to school personnel as part of their connection to school.
- School Safety: students' perception of the school qualities related to security at school.

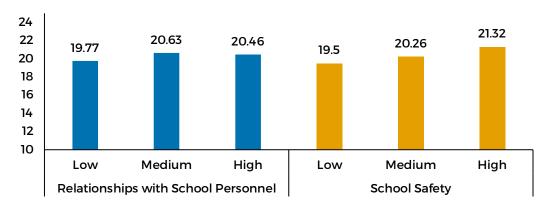
Students in the lowest quartile on a given scale were classified in the *low* category, while those in the top quartile were classified in the *high* category; the rest of the students were classified as *medium*.

Our data show that there is a positive relationship between perceived school climate and ACT scores. As shown in the figure below, students who perceive a safer school environment also have higher ACT Composite scores. Students who scored "Medium" or "High" on Relationships with School Personnel had higher ACT Composite scores than those who scored "Low."



Figure 1. Mosaic by ACT School Climate Scales and their Relationship to the ACT Composite Score





There is a positive relationship between perceived safety at school and ACT Composite scores, with a correlation of r = .12, and an average difference between low and high School Safety of 1.8 ACT Composite score points. The affinity between Relationships with School Personnel and ACT Composite score is not as strong (the difference between low and high is 0.7 ACT Composite score points, and the correlation is r = .04); however, it shows that students who have low ratings of their relationships with school personnel also tend to have lower ACT Composite scores as compared to those who rate their relationships as medium or high.

Prior research has indicated that one month of schooling is related to an average ACT Composite score increase of .22 points (Allen, Matter, & Camara, 2020). Students who report higher levels of overall School Climate (taking the average of Relationships with School Personnel and Safety scores) have ACT Composite scores 1.26 points higher, on average, than students who have low levels. A difference of that magnitude is comparable to the effect of five months of schooling.¹

References

Camara, W. J., & Allen, J. (2017). Does testing impact student scores on the ACT? lowa City, IA: ACT.

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Korpershoek, H., Canrinus, E. T., Fokkens-Bruinsma, M., & de Boer, H. (2020). The relationships between school belonging and students' motivational, social-emotional, behavioural, and academic outcomes in secondary education: a meta-analytic review. Research Papers in Education, 35(6), 641-680.

Notes

¹ The study presents descriptive and correlational results-more research is needed to understand the causal effects of school climate on ACT Composite scores.