Turbo Leader Efficacy: SEL in Middle School

Kate E. Walton & Alea Thompson

The Turbo Leader program is part of Mosaic™ by ACT®social emotional learning curriculum. It is designed for middle school students and includes 17 web-based lessons covering student self-efficacy and agency, positive peer and adult relationships and conflict strategies, and growth mindset skills and tools (for more information on Turbo Leader, see Mawi Learning, 2020). As with any learning product, it is important to evaluate the efficacy of Turbo Leader; that is, it is important to evaluate the degree to which evidence supports the claim that Turbo Leader serves to improve students' SE skills (Mattern, 2019). This was our intent with the current study.
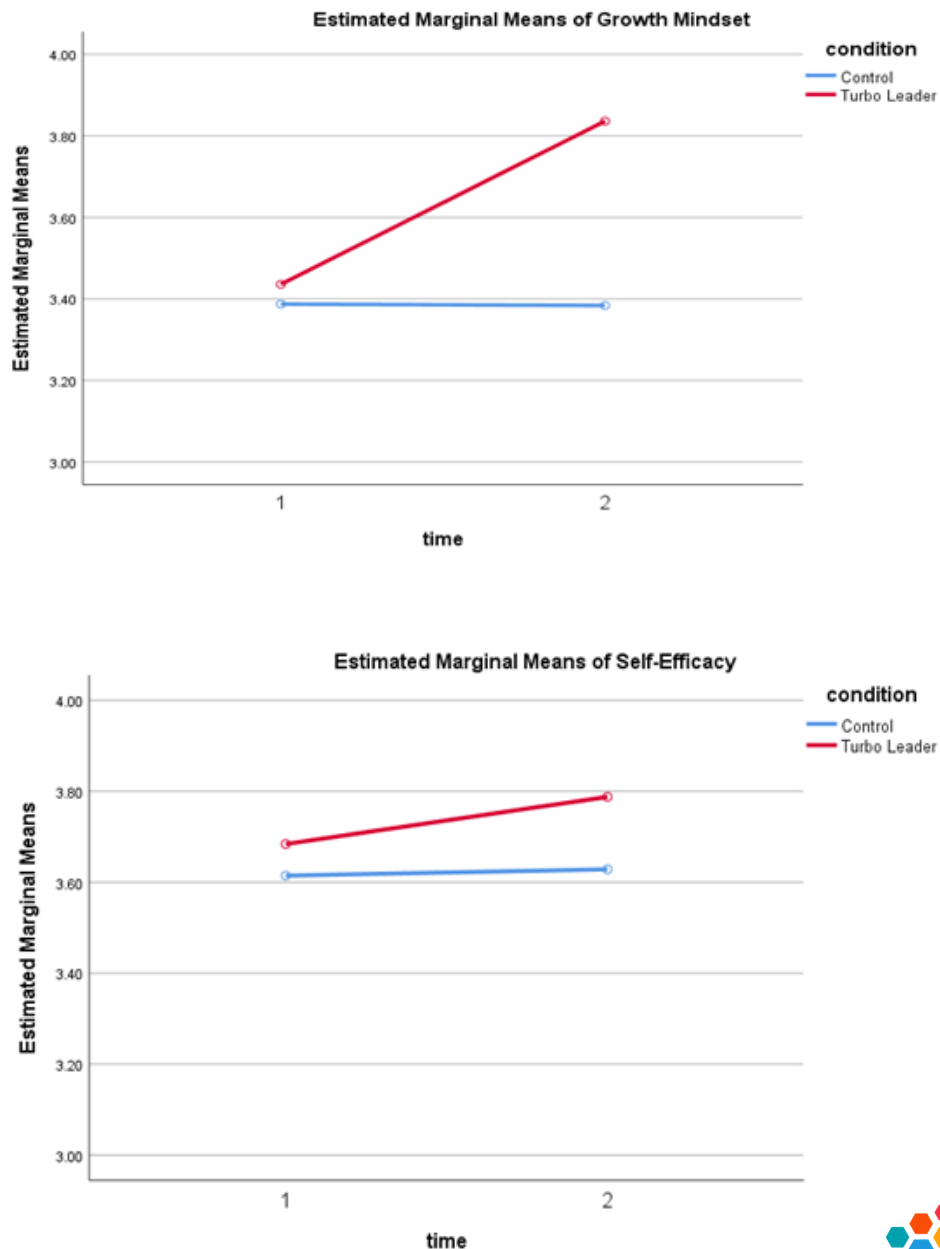
Method

Students in a suburban Illinois middle school took part in the study. A quasi-experimental design was used where students were divided into two groups, one serving as the experimental group and one as the control group, based on their teachers. There were 420 students in grades 6-8 in the control group and 329 students in grades 6-8 in the experimental group. Both groups of students took a 27-item survey, specifically, Panorama Education's Social Emotional Learning survey (Panorama Education, 2016), in September and the same survey again in January. Five SE skills, which align to CASEL's competencies, were assessed including grit, growth mindset, self-efficacy, sense of belonging, and emotional regulation. With the exception of grit (Cronbach's alpha = .58), the scales were internally consistent with alphas ranging from .76 to .81. Test-retest correlations ranged from .41 to .70. The experimental group engaged in the Turbo Leader lessons twice per week between the two survey administrations. The lessons were led by school social workers, classroom teachers, and administrators who displayed the lessons on smart boards, facilitated discussion, and collected assignments.

Analysis and Results

We carried out a two-way mixed design MANOVA to determine if there were group differences in SE skill development over time. There was a significant difference between groups on the SE competencies ($F_{5,736} = 6.88$, $p = .00$, $\eta^2 = .05$). Two of the univariate tests were statistically significant. Specifically, the experimental group saw greater gains in growth mindset ($F_{1,740} = 30.65$, $p = .00$, $\eta^2 = .04$) and self-efficacy ($F_{1,740} = 4.16$, $p = .04$, $\eta^2 = .01$) than the control group (See Figure 1).

Figure 1. Growth mindset and self-efficacy development over time: Turbo Leader vs. control

Note. Possible mean scores range from 1 to 5.

Conclusion

This study offers efficacy evidence for the Turbo Leader course and replicates meta-analytic findings documenting positive growth in students participating in SE learning programs (Mahoney et al., 2019). Students who engaged in the curriculum during a full term saw significant growth in growth mindset and self-efficacy, which are aligned with CASEL's self-awareness competency (ACT, 2019). Self-efficacy is associated with a host of positive outcomes, such as increased effort, persistence, and resilience (Pajares, 1997), and growth mindset interventions are reportedly effective for improving academic performance (Yeager & Walton, 2011), particularly among academically high-risk and economically disadvantaged students (Sisk et al., 2018). Therefore, student development of self-efficacy and growth mindset ought to be accompanied by positive growth in other associated areas.

References

ACT. (2019). *Social-emotional alignment to CASEL competencies.* https://success.act.org/s/article/Social-Emotional-Alignment-to-CASEL-Competencies

Mahoney, J. L., Durlak, J. A., & Weissberg, R. P. (2019). An update on social and emotional learning outcome research. *Phi Delta Kappan*, 100, 18-23.

Mattern, K. (2019). *ACT's efficacy framework: Combining learning, measurement, and navigation to improve learner outcomes.* https://www.act.org/content/dam/act/unsecured/documents/R1749-efficacy-framework-2019-06.pdf

Mawi Learning. (2020). *A comprehensive social emotional learning curriculum: Build critical skills for lifelong success.* https://www.mawilearning.com/social-emotional-learning-curriculum/

Pajares, F. (1997). Current directions in self-efficacy research. In M. Maehr, & P. R. Pintrich (Eds.), *Advances in motivation and achievement* (Vol. 10, pp. 1-49). JAI Press.

Panorama Education. (2016). *Reliability and validity of Panorama's social-emotional learning measures.* https://panorama-www.s3.amazonaws.com/files/sel/SEL-Validity-Report.pdf

Sisk, V. F., Burgoyne, A. P., Sun, J., Butler, J. L., & Macnamara, B. N. (2018). To what extent and under which circumstances are growth mind-sets important to academic achievement? Two meta-analyses. *Psychological Science*, 29, 549-571.

Yeager, D. S., & Walton, G. M. (2011). Social-psychological interventions in education: They're not magic. *Review of Educational Research*, 81, 267-301.