

Validation Study to Measure: Fidelity of Implementation



BACKGROUND

When evidence-based interventions (EBIs) are used more broadly (“scaled up”), they’re often not delivered as originally designed—reducing their impact. Tracking how closely a program is delivered as intended, or fidelity of implementation (FOI), helps support successful scale-up. But fidelity is hard to measure, and well-tested tools are rare.

WHAT WE MEASURED

Quality:

How well teachers delivered the lesson.

Responsiveness:

How engaged students were during the lesson.

SAMPLE

We tested a fidelity tool using data from a national project delivering Botvin *LifeSkills Training* (LST) for Middle Schools (grades 6-9).



14
states



379
schools



279
raters



1,626
teachers



6,219
observations

WHAT WE WANTED TO KNOW

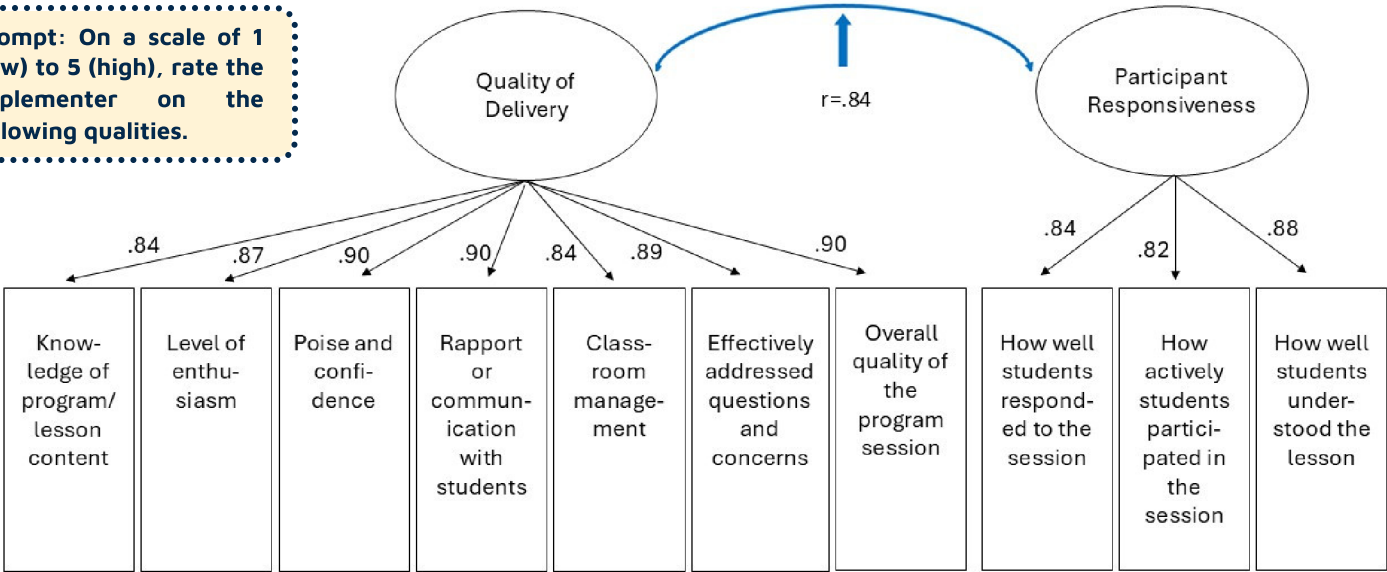
Research Question 1: Do items conform to the hypothesized 2-factor structure? In other words, do the items fit the two key areas (or constructs) that we expected (like the visual below)?

Yes! Confirmatory Factor Analysis showed that the 10 fidelity items conformed to two constructs (or factors): quality of delivery (7 items) and student responsiveness (3 items).

Research Question 2: Does this structure hold across different schools and grade levels?

Yes! Using Measurement Invariance tests, the structure illustrated below was consistent: (1) across schools with student populations from different economic backgrounds, and (2) across different grade levels.

Prompt: On a scale of 1 (low) to 5 (high), rate the implementer on the following qualities.



CONCLUSION

These findings offer early evidence that this observational tool is valid for measuring fidelity to LST (specifically quality of delivery and student responsiveness). Still, this study tested just one aspect of validity—there are four key areas of validity to consider, and more research is needed to build a full case.

See full published study for more details!

Buckley, P. R., Combs, K. M., Drewelow, K. M., Hubler, B. L., & Lain, M. A. (2025). Validity evidence for an observational fidelity measure to inform scale-up of evidence-based interventions. *Evaluation Review*, 49(2), 237–269. <https://doi.org/10.1177/0193841X241248864>



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