Supplementary. Sensitivity Analyses

To assess the robustness of our findings to alternative missing-data assumptions, we re-estimated the multilevel models under several stress-test scenarios: (a) imputing all missing family income values as low-income, (b) imputing all missing family income values as high-income, and (c) shifting imputed prior math achievement (AP_{T1}) scores by ±0.3 SD. Table A1 presents the results across these models.

Results were consistent with those in the main analyses. Prior math achievement and child age remained significant positive predictors, while organization management scaffolding was positively associated with achievement, and warmth responsivity was negatively associated. Instructional strategies remained nonsignificant. The estimated effect of family income was more sensitive, ranging from 0.19 to 0.81, depending on the applied assumption.

Table S1. Sensitivity analyses of multilevel models under alternative missing-data assumptions

Model	Income	AP_{T1}	Age	IS	MO	WR
(a) income → low	0.81*	0.57***	0.08*	–0.09	1.64*	–1.57*
(b) income → high	0.19	0.59***	0.08*	–0.11	1.61*	–1.44*
(c) AP_{T1} +0.3 SD	0.51	0.58***	0.08*	–0.09	1.62*	–1.51*
(d) AP_{T1} –0.3 SD	0.52	0.58***	0.08*	–0.09	1.63*	–1.50*

Notes. Entries are unstandardized coefficients. *p < 0.05; **p < 0.01; **p < 0.001.