Appendix B: Sensitivity Analysis for School-Level Clustering

Predictors		Model derived using lasso regression	
Individual (Demographic)			
1	Gender		
	Male	-0.15	
	Female	Х	
2	Gender Minority Status		
	Cisgender	-0.3	
	Transgender	Х	
3	Sexual Minority Status		
	Heterosexual	-0.38	
	Non-Heterosexual	х	
Individual (Behavioral)			
4	Academic Performance	-0.1	
5	Lifetime use of Alcohol	0.01	
6	Lifetime use of	0.11	
	Cigarettes	0.45	
7	Lifetime use of Vapes 0.15		
8	Lifetime use of Cannabis x		
9	Lifetime use of other	0.1	
	Drugs		
Emotional-Social			
10	Foster Care Placement		
No		-0.01	
Yes		Х	
11	Parent Education Level	0.08	
12	Positive Substance Use Education	-0.2	
13	School-Based Victimization	0.38	

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14	Access to Drugs Alcohol	and 0.13		
Mental-Political				
15	Depressive Symptoms			
	No	-1.15		
	Yes	Х		
Physical-Economic				
16	Homeless			
	No	0.12		
	Yes	Х		
17	Breakfast Consu	mption		
	No	0.1		
	Yes	х		
Intercept		-2.23		
	al number of pred lined from the 17 del			

Table 3 – Penalized Regression Coefficients of Predictors Retained in the Lasso Model (Adjusted for School-Level Clustering)

APPENDIX

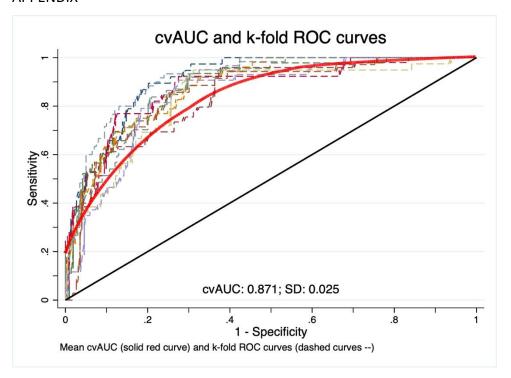


Figure 5 – Model Discrimination: ROC Curve Showing Mean Cross-Validated Area Under the Curve (AUC), Adjusted for School-Level Clustering

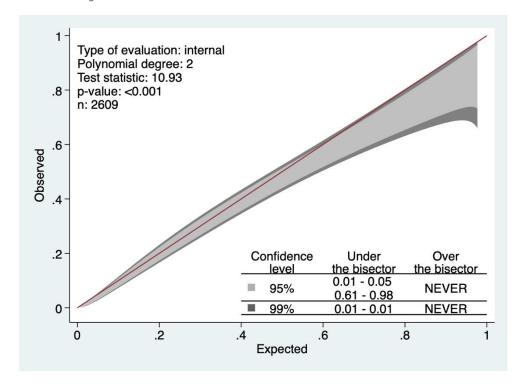


Figure 6 – GiViTI Calibration Belt Showing Deviations from the Bisector (45° Line of Perfect Calibration) at the 95% (Inner Belt: Light Grey) and 99% (Outer Belt: Dark Grey) Confidence Levels, Adjusted for School-Level Clustering