Supplementary Material

The full sample in the data set comprised 3,404 classes. However, the majority of classes participated only once (n = 2,048 classes) and were therefore unsuitable for a longitudinal analysis. A total of 1,356 classes participated in at least two data waves. From these, three had no neighboring time points, 29 had fewer than five participants per class, and 16 did not report academic achievement, which was needed as a covariate. These 48 classes were excluded from the analysis. Only 29 % ($n_{classes} = 394$) participated in all three waves, which means that 71 % of the classes had one missing measurement point. Since recent simulations of approaches to deal with missing data in multi-level settings do not even consider such high rates (e.g.; Enders, Mistler, & Keller, 2016; Lüdtke, Robitzsch, & Grund, 2016), we decided against using these approaches and used only two measurement points.

	Variance Inflation Factors				
	Model 1	Model 2	Model 3		
(Intercept)					
Gender	1.02	1.03	1.66		
Age	1.28	1.28	1.28		
Migration background ²	1.02	1.02	1.02		
Academic performance T1	1.10	1.10	1.10		
School track	1.20	1.20	1.20		
Individual deviant behavior T1	1.03	1.60	1.68		
Class-level deviant behavior T1	2.20	2.21	2.27		
Class-level variability T1	1.93	1.94	2.02		
Class-level deviant beh. x Class variability	1.20	1.21	1.25		
Class level x Individual deviant beh.		2.03	2.12		
Class variability x Individual deviant beh.		1.75	1.88		
Class level x Class variability x		2.17	2.29		
Individual deviant beh.					
Individual deviant beh. x Gender			2.04		
Class level x Gender			1.98		
Class variability x Gender			2.12		
Class level x Individual deviant beh. x Gender			2.65		
Class variability x Individual deviant beh. x Gender			2.48		
Class level x Class variability x Gender			1.79		
Class level x Class variability x			3.17		
Individual deviant beh. x Gender					
Condition index (kappa)	8.99	8.44	10.60		

Multicollinearity Diagnostics

Model without covariates

	Model 1 Model 2		Aodel 2	Model 3		
	est	CI	est2	CI2	est3	CI3
(Intercept)	1.61*	[1.59,1.63]	1.61*	[1.59,1.63]	1.61*	[1.59,1.63]
Class-level deviant	0.50*	[0.44,0.56]	0.50*	[0.45,0.56]	0.51*	[0.45,0.56]
behavior TI	0 15*	[0.26 0.04]	0 17*		0 10*	[0.20, 0.07]
Class-level variability	-0.15*	[-0.26,-0.04]	-0.1/*	[-0.28,-0.07]	-0.18*	[-0.29,-0.07]
l I Individual deviant	0.42*	[0 4 0 44]	0.50*	[0 47 0 52]	0.50*	[0 47 0 52]
halvior T1	0.42	[0.4,0.44]	0.50	[0.47,0.55]	0.50	[0.47,0.32]
Gender	0 00*	[0.08.0.1]	0.00*	[0.08.0.1]	0.10*	[0.08.0.11]
Class-level deviant	-0.86*	[-1 17 -0 56]	-0.91*	[-1 21 -0 62]	-0.90*	[-1 21 -0 61]
pehavior T1 x Class-	0.00	[1.17, 0.50]	0.91	[1.21, 0.02]	0.90	[1.21, 0.01]
evel variability T1						
Class-level deviant			-0.14*	[-0.22, -0.05]	-0.13*	[-0.22,-0.05]
ehavior T1 x						
Individual deviant						
behavior T1						
Class-level variability			-0.95*	[-1.13,-0.77]	-0.98*	[-1.16,-0.79]
Γ1 x Individual deviant						
behavior T1						
Class-level deviant					0.00	[-0.05,0.04]
Schavior TT x Gender					0.02	[0 0 0 0 1 1]
Class-level variability					0.02	[-0.06,0.11]
I I X Genuel Individual deviant					0.01	[001003]
hehavior T1 x Gender					0.01	[-0.01,0.05]
Class-level deviant			0.26	[-0.28.0.81]	0.37	[-0.17.0.93]
ehavior T1 x Class-						[]
evel variability T1 x						
ndividual deviant						
behavior T1						
Class-level deviant					-0.27*	[-0.49,-0.03]
behavior T1 x Class-						
level variability T1 x						
Gender					0.01	[0.00.0.07]
Lass-level deviant					-0.01	[-0.08,0.05]
behavior II x						
hebayior T1 y Condor						
Class-level variability					0.03	[_0 12 0 17]
T1 x Individual deviant					0.05	[-0.12,0.17]
behavior T1 x Gender						
Class-level deviant					-0.05	[-0.46,0.38]
behavior T1 x Class-						[]
level variability T1 x						
Individual deviant						
behavior T1 x Gender						
sigma	0.58*	[0.58,0.59]	0.58*	[0.58,0.59]	0.58*	[0.58,0.59]
sig01.idclass	0.08*	[0.06,0.09]	0.06*	[0.05,0.07]	0.06*	[0.05,0.07]
sig01.idclass.1	0.02*	[0.02,0.03]	0.02*	[0.02,0.03]	0.02*	[0.02,0.03]
sig01.idsch	0.00*	[0.00,0.01]	0.00*	[0.00,0.01]	0.00*	[0.00,0.01]

JN-Charts





Figure 2:









