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Chaos in schools and its relationship to adolescent risk behaviors

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Abstract

Objective: Chaos in the home is associated with worse childhood behaviors. We hypothesize chaos in the school environment might also be associated with teen risk behaviors.

Methods: We analyzed data from the Reducing Inequities through Social and Educational change follow up (RISE-UP) Study, a natural experiment designed to examine the impact of high performing schools on adolescent outcomes. Students reported the amount of noise, order, and control in their school environment and whether they engaged in substance use, fighting, school absenteeism and delinquent behaviors. We conducted cross-lagged panel structural equation modeling to examine the relationship between school chaos at 10^{th} grade with risk behaviors at 11^{th} grade while simultaneously examining the relationship between behaviors at 10^{th} grade with chaos at 11^{th} grade.

Results: Among a sample of 1114 teens, 90% were Latinx and 40% were native English speakers. Students reporting more school chaos in 10^{th} grade were more likely in 11^{th} grade to report recent alcohol and cannabis use, physical fighting, school absenteeism and delinquent behaviors in the last year. Cross-lagged structural equation model analyses indicate school chaos at 10^{th} grade is linked to alcohol use and absenteeism at 11^{th} grade, while fighting, absenteeism and any delinquent behaviors at 10^{th} grade are associated with more chaos at 11^{th} grade. School engagement was not a mediating factor.

Conclusions: Although causal relationships cannot be assumed, school chaos may be an important predictor of adolescent risk behaviors. Future studies should examine whether reducing school chaos leads to lower rates of adolescent risk behaviors.

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Declaration of interest: None.

Keywords

Schools; adolescent behavior; substance use; juvenile delinquency

Introduction

School environment, more commonly referred to as “school climate”, relates to school characteristics that influence students’ academic performance and college readiness.[1,2] School climate is thought to also influence social-emotional health and risk behaviors such as substance use and delinquency.[3,4] School climate characteristics include safety, teacher support for students, school connectedness, resources and supplies, student body demographics, teacher qualifications and physical aspects like size and location.[5]

While chaos in the home environment is strongly associated with worse childhood outcomes including greater distress and helplessness,[6] and more disruptive behavior,[7] chaos in schools, as a specific characteristic of school climate, has not been examined previously. Matheny and colleagues developed a measure of home chaos, the Confusion, Hubbub and Order Scale (CHAOS), to assess the amount of order, predictability, and structure within the home environment.[8] Given the importance of structure and consistency in all aspects of children’s lives, school chaos may be an important, previously unexplored aspect of school climate that is characterized by frequent disturbances, classroom interruptions, noisiness, and disregard for rules, reflecting a lack of orderly and effective classroom and school-wide management.

We recently developed a measure of school chaos to capture the amount of structure and order on campus,[9] but have not examined its relationship with adolescent risk behaviors. We hypothesize school chaos, similar to home chaos, may be linked to higher rates of adolescent risk behaviors. Furthermore, we hypothesize school chaos may result in lower student engagement and more negative social norms, making students less likely follow the rules and behave appropriately while on campus, as well as off campus.[10] Furthermore, if students are less engaged and disruptive in school, that could in turn lead to even greater chaos in the school environment, resulting in a feedback loop of disintegrating academic and risk behaviors. (see figure 1) Thus, the relationship between school chaos and adolescent risk behaviors may be bidirectional.

In the present study, we analyzed longitudinal data from a cohort of low-income, minority high school students in Los Angeles to examine the associations among school chaos, school engagement and adolescent risk behaviors, such as substance use and fighting. To explore the directional relationship of these variables, we used cross-lagged panel structural equation modeling.

Methods

Study design and sample

We analyzed data from the RISE-UP (Reducing Health Inequalities through Social and Educational Change Follow Up) study, which is a longitudinal, natural experiment designed to assess the effects of high-performing schools on health behaviors among low-income,

minority adolescents in Los Angeles. The study sampled students who applied for 9th grade admission for the fall of 2013 and 2014 to one of five high-performing public, charter schools in Los Angeles for which admission was determined by random lottery. Of the 1509 students eligible for the study, 1270 were enrolled and consented to participated in the study (16% refusal rate). Of these 1270 subjects, 55% attended one of the 5 high-performing charter schools and the remaining 45% attended 152 other high schools. Additional details of the study are published elsewhere.[11]

Data Collection

Bilingual research assistants administered a baseline, face-to-face, computer-assisted survey from April of 8th grade through October of 9th grade (baseline survey). Students completed similar follow-up surveys during the end of 10th grade and 11th grade. 1159 students completed the survey in 10th grade and 1114 students completed the survey in 11th grade for an 87.8% retention rate through 11th grade.

At baseline, students reported information on their demographics (gender, race/ethnicity, birthplace, native language), parental characteristics (birthplace, employment and education) and their parent's parenting style. Parenting style is based on two measures, involvement and strictness. Five categories of parenting style were created based on terciles of involvement and strictness: neglectful (lowest strictness tercile and lowest involvement tercile), indulgent (lowest strictness tercile and highest involvement tercile), authoritarian (highest strictness tercile and lowest involvement tercile), authoritative (highest strictness tercile and highest involvement tercile) and the remainder classified as average.[12,13]

At each survey, students also reported their use of alcohol and cannabis in the last 30 days,[14] whether they were in a physical fight in the last year, school absenteeism (cutting class) in the last year, participation in one or more delinquent behaviors in the last year, and their school engagement, which was measured using the High School Survey of Student Engagement.[15] Delinquent behaviors were derived from the delinquent behavior index from the National Longitudinal Study of Adolescent to Adult Health (ADD Health) and included: painting graffiti, damaging someone else's property, shoplifting or stealing, running away from home, driving a car without the owner's permission, burglary, armed robbery, selling illicit drugs, participation in a gang in the last year, and having ever participated in a gang fight.[16] A computer assisted self-interview (CASI) in English or Spanish was used during sensitive portions of the survey to encourage honest responses about engagement in risky behaviors.[17,18]

To assess chaos in schools, we adapted the Confusion, Hubbub and Order Scale[8,9] and asked students to rate the following nine statements with four response options, true all/most/some/none of the time: 1) There are few disturbances in our school; 2) Our school is orderly; 3) It's a real zoo in our school; 4) At school we can get through class without being interrupted; 5) It's so noisy, you can't hear yourself think in our school; 6) The atmosphere in our school is calm; 7) Students do whatever they want at our school; 8) No one is in control at our school; and 9) When someone breaks the rules at our school, the adults look the other way. We previously conducted exploratory and confirmatory factor analyses of these items and determined that a simple summated measure of items 3, 5, 6, 7, 8, and 9 (reversing the

direction of all items except 6 so that a higher score indicate more chaos) had the best goodness of fit and reliability with a Cronbach's alpha of 0.68.[9]

Data Analysis

We analyzed data for the 1114 participants who completed the 10th and 11th grade surveys because school chaos was not assessed in the baseline survey. We used chi-square statistics to examine the bivariate relationship between school chaos at 10th grade (categorized into quartiles) with student demographics, parental demographics and risky adolescent behaviors at 10th and 11th grade. Adolescent behaviors were 30-day alcohol use, 30-day cannabis use, physical fighting in the last year, school absenteeism in the last year, and any delinquent behaviors in the last year, which were dichotomized (yes vs. no). We used ANOVA to compare differences in mean school engagement across chaos quartiles. We conducted logistic regression models to examine the relationship between school chaos at 10th grade and behaviors at 11th grade, adjusting for student demographics, parental demographics and parenting style. We also adjusted for school-level fixed effects using an identifier for the school attended in the 11th grade. Chaos was categorized into quartiles, rather than kept as a continuous variable in the bivariate analysis and fixed-effects models, to examine whether the relationship with adolescent risk behaviors was monotonic and linear. We conducted a sensitivity analysis with school chaos as a continuous predictor variable, standardized so that a one-unit change equals one standard deviation.

We hypothesized that school chaos may increase school disengagement and adolescent risk behaviors, but also that adolescent risk behaviors and school disengagement might also increase the amount of chaos in the school environment.(Figure 1) Given this potential reciprocal relationship, we used cross-lagged panel structural equation modeling to examine the relationship between all of the measures at 10th and 11th grade for school chaos, school engagement, and each adolescent risk behavior. The cross-lagged model allows for an examination of the pathways by which these variables impact each other through the simultaneous modeling of autoregressive components (e.g. prior values predict future values), concurrent components (e.g. cross-sectional bivariate associations), and cross-lagged components (e.g. prior timepoints of one variable predicting later timepoints of another).[19,20] Diagrams of the cross-lagged models are shown in Figure 2. Model 1 just includes chaos and adolescent risk behaviors without school engagement, while model 2 includes school engagement in the model. Both structural equation model 1 and 2 were adjusted for student demographics, parent demographics and parenting style.

We used STATA (College Station, TX) for all analyses. The UCLA and RAND Institutional Review Board approved the study.

RESULTS

Of the 1114 participants who completed the 10th and 11th grade surveys, 46% were male, 90% identified as Latinx, 87% were born in the U.S., and 40% reported English as their first language. One-quarter reported having at least one parent born in the U.S., 88% had at least one parent who worked full time, and 52% had at least one parent who graduated from high school. Of the 147 high schools attended by students in our study, 79 (53.7%) were

traditional public schools, 41 (27.9%) were public charter schools; 17 (11.6%) were parochial schools; 4 (2.7%) were private schools; and 6 (4.1%) were other school types (continuation, alternative, or home school). Comparing the sample by chaos level (categorized into quartiles), no differences in student or parental characteristics were observed. (Table 1)

Table 2 shows the unadjusted relationship between school chaos and 10th and 11th grade adolescent risk behaviors. For each behavior reported at 10th and 11th grade, the frequency of the behavior was more common with increasing levels of school chaos at 10th grade. For example, 5.5% of students reported at 10th grade using alcohol in the last 30 days among those with the lowest school chaos compared to 17.8% among those with the highest school chaos ($p<0.001$ for comparison across 4 quartiles of chaos). The gradient was strongest for 30-day cannabis use at 10th grade. Those with the highest levels of school chaos were 4-fold more likely to use cannabis than those with the lowest level of school chaos (18.0 vs 4.5%, respectively). More school chaos at 10th grade was also associated with a decline in student's school engagement at 10th and 11th grade. However, the change in engagement was small with only a 0.41 standard deviation difference (9.29 vs 8.88, $p<0.001$) at 10th grade and 0.31 standard deviation difference (8.97 vs 8.66, $p<0.001$) at 11th grade comparing those in the highest and lowest school chaos groups.

After adjusting for student and parent characteristics, those in the highest quartile of chaos were more likely to report each of the risk behaviors compared to those in the lowest quartile. (Table 3) Compared to those in the lowest quartile of school chaos, the adjusted relative odds of using alcohol in the last 30 days in the 11th grade was 2.22 (95% CI: 1.33, 3.70) for those in the 2nd quartile of school chaos, 1.60 (0.90, 2.87) for the 3rd quartile, and 3.25 (1.88, 5.63) for the highest quartile of chaos. For most of the adolescent risk behaviors, only those with the highest quartile of school chaos reported statistically significant higher rates of behavior compared those in the lowest quartile. The rates of behaviors by increasing level of school chaos was monotonic for cannabis use, school absenteeism and any delinquent behavior, but not for alcohol use in the last 30 days or fighting in the last year. We conducted a sensitivity analysis including school chaos as a continuous variable predictor of adolescent risk behaviors. As a continuous measure, more school chaos at 10th grade was associated with a higher odds of engaging in each risk behavior at 11th grade (Appendix A).

Table 4 shows the primary results of interest from the cross-lagged panel structural equation models. While we cannot assume a causal relationship, pathway A examines the link between chaos at 10th grade and the adolescent risk behavior at 11th grade while simultaneously accounting for pathway B, which examines the link between adolescent risk behavior at 10th grade and school chaos at 11th grade. The structural equation model 1 suggests school chaos at 10th grade is linked to greater rates of 30-day alcohol use at 11th grade (OR 1.45, $p=0.02$) (Pathway A), but the reverse (Pathway B) does not appear to be true-- that alcohol use at 10th grade is linked to greater school chaos at 11th grade ($\beta=-0.003$, $p=0.94$). In contrast, for both fighting and any delinquent behaviors, behaviors at 10th grade were linked to more school chaos at 11th grade ($\beta=0.11$, $p=0.03$ and $\beta=0.07$, $p=0.04$, respectively) (Pathway B), but school chaos at 10th grade was not linked to higher

rates of fighting (OR=0.85, p=0.55) or any delinquent behaviors (OR=1.15, p=0.44) at 11th grade (Pathway A). The relationship between chaos and absenteeism appears bidirectional (Pathway A OR=1.89, p=0.002 and Pathway B β=0.08, p=0.04).

Structural equation model 2 was similar to structural equation model 1 but also included school engagement in the middle of the pathways that linked school chaos to behaviors and vice versa. Despite finding that school engagement was associated with school chaos in unadjusted analyses, including school engagement in the model had negligible influence on the structural equation model results for Pathway A or B for any of the adolescent risk behaviors (Table 4, structural equation model 2).

DISCUSSION

We recently developed a new measure of one aspect of school climate to capture the amount of order and chaos in the school environment,[9] and in the present study found that this new measure of school chaos is a strong predictor of a variety of risky behaviors including substance use, fighting, school absenteeism and delinquent behaviors. Specifically, among a sample of teens primarily from Latinx backgrounds, those who reported more school chaos in 10th grade were more likely in 11th grade to report participation in adolescent risk behaviors. In addition, cross-lagged structural equation model analyses indicate school chaos at 10th grade is linked to alcohol use and absenteeism at 11th grade, while fighting, absenteeism and any delinquent behaviors at 10th grade are associated with more chaos at 11th grade. Despite our hypothesis, school engagement was not a mediating factor.

These results add to a growing literature suggesting that chaos may be a risk factor for health and risk behaviors. Home chaos is associated with worse educational performance, cognitive development, self-control, psychological well-being, and risky behaviors.[7,21-25] Life chaos is also linked to inadequate health care use and worse health outcomes among persons living with HIV/AIDs.[26] The present study suggests that chaos experienced in schools might be another important environmental source of chaos for adolescents and a salient component of school climate.

While we cannot make conclusions about causality, earlier school chaos predicts later participation in some risk behaviors and for other risk behaviors, earlier participation predicts later school chaos. This relationship is not identical across all behaviors and is bidirectional for school absenteeism only, but taken in aggregate, the results do support our hypothesis that a reciprocal relationship between risk behaviors and school chaos may exist. Of note, a prior study about home chaos used data on twins and a similar analytic approach using cross-lagged statistical methods. The study concluded that home chaos appeared to lead to more disruptive child behaviors, but genetics did not seem to explain differences in chaos or the perception about chaotic home environments.[7]

We also hypothesized that school engagement may be a causal mediator between school chaos and adolescent risk behaviors. Specifically, we thought more school chaos might lead to the deterioration of the instructional culture of the school, causing students to become disengaged in school and ultimately leading to more disruptive and delinquent behaviors.

The cross-lagged structural equation model analyses did not support this assertion given that adding school engagement had no effect on the associations between school chaos and any of the adolescent risk behaviors.

While we do not know why school chaos is linked to adolescent risk behaviors, there may be several possible explanations. One possibility is that school chaos is the manifestation of how much control teachers and staff exert over the behavioral culture of the school and the influence of peers. More order and less chaos may result when school rules are clear, behavior is continuously monitored, and staff and teachers exert adequate effort to decrease or eliminate disruptive behaviors. This, in turns, leads to a more pro-social behavioral culture in the school and fewer delinquent behaviors outside of school apart from any effect on school engagement. Our prior work suggests that both strict disciplinary teaching style with a supportive environment is associated with fewer risky behaviors.[27] Alternatively, neighborhood, home and peer factors influence adolescent risk behaviors outside of school, and adverse behaviors may spill into the school environment, leading to more disruption and chaos in the classroom. Another possibility is that having structure and order in one's environment is important to student self-regulation and a sense of well-being. Matheny and colleagues, who originally developed the home chaos measure, hypothesized chaos may cause greater stress and developmental problems.[8] Both stress and impaired development could lead individuals to employ adverse coping mechanisms, e.g. alcohol use. Finally, our measure of school chaos is self-reported by the student, and students who engage in more risky behaviors may have different perceptions of their environment.

The current study was conducted using data from the RISE UP study, a natural experiment designed to examine the impact of exposure to academically high-performing schools on adolescent health, behaviors and other outcomes. We used the random admissions lottery of high performing charter schools as a way to identify comparable groups of students exposed to low- and high-performing schools. After 3 years of follow-up, we found that students exposed to high-performing school had lower rates of substance use and other adolescent risk behaviors.[11] We collected information on school climate factors, including school chaos, since they might be predictors of adolescent risk behaviors. Future studies will need to examine whether school chaos and other school climate factors explain why exposure to high-performing schools leads to lower rates of adolescent risk behaviors.

Limitations

Our study findings were based upon a sample of predominantly low-income, Latinx students in Los Angeles, and therefore may not be generalizable to all adolescents in the U.S. Although our enrollment and response rates (84% and 88%, respectively) are relatively high, it is possible that students not included and retained in our sample had different perceived school climate than those who dropped out of the study. Although we analyzed longitudinal data, we cannot draw conclusions about causality. We controlled for key contextual factors, but we cannot rule out the possibility that unmeasured confounders exist. For example, mental health problems could be a common cause for experiencing more school chaos and engaging in risk behaviors. We also do not know how the relationship between school chaos and health behaviors compares to that of other school environment measures included in

traditional school climate assessments. We only had two time points (10th and 11th grade) to examine the relationship between school environment, school engagement and adolescent risk behaviors. Ideally, we would have had more observation periods to better explore the role of school engagement as a mediator between school chaos and risk behaviors. Whether school chaos predicts other behaviors (such as sexual behaviors or vaping) or outcomes later in life is also unknown. All of our measures were based on self-report and thus we cannot exclude the possibility that reporting biases or other unmeasured factors influenced self-report of all of the variables in the study. Lastly, while school chaos is presumed to be a school climate characteristic, we only had student's perception of the school environment. It would be preferable to have had a comprehensive assessment of the school environment from a representative sample of students or perhaps an additional objective measure of school chaos with which to compare to the individual student's report.

Conclusion

There is increasing recognition that health is largely determined by factors outside the health care system, such as education and schools. Thus, public health efforts have increasingly been focused on these social determinants of health. To that end, understanding how to leverage schools and improve the school climate to nurture children, create resilience and improve educational, health and other life outcomes is critical. It might be possible to create school environments that are quieter, calmer and more organized. If so, school chaos could be a potentially salient target for future adolescent health interventions. Future studies will need to determine what causes school chaos and further investigate the mechanism by which school chaos is related to risk behaviors. Ultimately, it would be worthwhile to determine if reducing school chaos leads to better health over the life course.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

Acknowledgments

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WHAT'S NEW

School chaos is a new measure that may be an important component of school climate and is associated with teen risk behaviors. School chaos may be an important potential target for future school-based interventions to protect children.

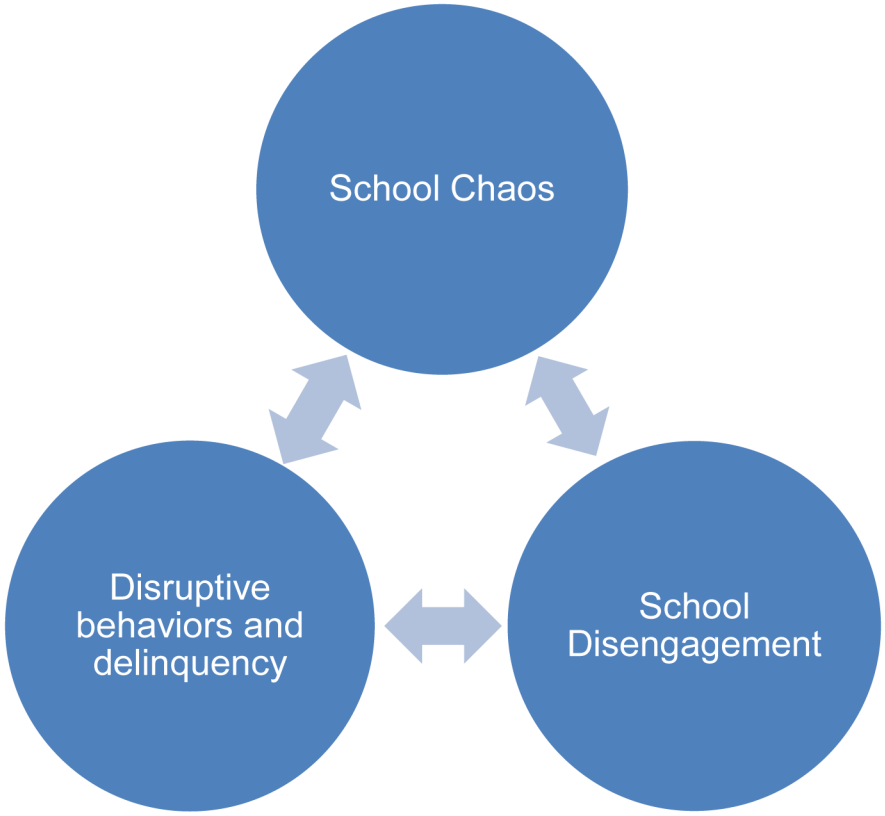

Figure 1. Conceptual model of the relationship between school chaos, school disengagement and disruptive behaviors and delinquency.

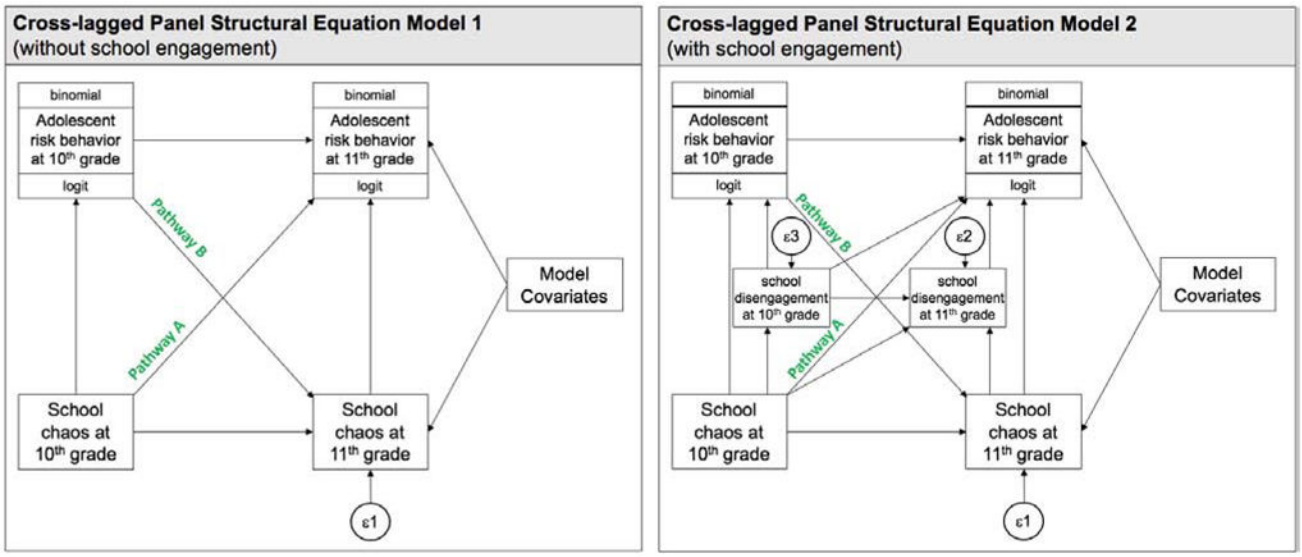

Figure 2. Diagram of the cross-lagged panel models

ε=error term

Table 1.

Demographics of 1114 participants in the RISE-UP study who completed the 10th and 11th grade surveys.

		School chaos at 10th grade (quartiles)				
	Overall N = 1114	**1st (lowest) N = 382**	**2nd N = 285**	**3rd N = 228**	**4th (highest) N = 219**	**p value**
Male (%)	46.3	46.1	44.9	44.3	50.7	0.51
Latinx (%)	90.3	90.6	89.8	89.5	91.3	0.91
Born in U.S. (%)	87.3	86.4	88.1	89	85.8	0.69
Native English Speaker (%)	39.7	40.8	36.8	40.4	40.6	0.73
≥ 1 parent born in U.S. (%)	25.1	26.4	20	26.8	27.9	0.14
≥ 1 parent works full-time (%)	88	87.9	89.4	86.8	87.7	0.83
≥ 1 parent graduated high school (%)						0.66
No	43.5	41.1	45.3	45.2	43.8	
Yes	51.6	53.7	51.6	48.7	51.1	
Don' know	4.8	5.2	3.2	6.1	5	
Parenting Style (%)						0.14
Average (normal)	50	53.1	63.6	59	59.5	
Neglectful	20.2	16	24	31.1	30.6	
Indulgent	9.4	11	12.4	9.8	9.8	
Authoritarian	8.9	6.5	10.5	9.2	10.5	
Authoritative	11.5	13.4	10.5	10.5	10.5	

Chi-square statistics were used to estimate p values for comparing student and parental characteristics by level of school chaos.

Table 2.

Bivariate relationships between school chaos at 10th grade with adolescent risk behaviors and student engagement at 10th and 11th grade

	School chaos at 10th grade (quartiles)					
	Overall N = 1114	**1st (lowest) N = 382**	**2nd N = 285**	**3rd N = 228**	**4th (highest) N = 219**	**P value**
10th grade						
Adolescent risk behaviors (%)						
Alcohol use in the last 30 days	11.0	5.5	12.1	12.6	17.8	<0.001
Cannabis use in the last 30 days	9.1	4.5	7.4	10.7	18.0	<0.001
Fight in the last year	12.3	6.0	11.6	16.3	20.3	<0.001
School absenteeism in the last year	19.3	12.0	16.8	25.0	29.2	<0.001
Any delinquent behaviors in the last year	20.4	15.7	20.0	21.1	28.3	0.003
Student engagement in school (mean) *	9.09	9.29	9.07	8.99	8.88	<0.001
11th grade						
Adolescent risk behaviors (%)						
Alcohol use in the last 30 days	15.3	10.3	16.4	14.4	24.1	<0.001
Cannabis use in the last 30 days	11.4	7.6	10.0	12.4	18.9	<0.001
Fight in the last year	10.7	7.9	10.7	11.1	15.1	0.06
School absenteeism in the last year	21.5	13.9	16.8	28.5	33.8	<0.001
Any delinquent behaviors in the last year	21.6	17.0	20.7	22.8	29.7	0.004
Student engagement in school (mean) *	8.80	8.97	8.76	8.72	8.66	<0.001

* Student engagement in school was standardized so that a 1-point difference equals one standard deviation

Table 3.

Multivariable relationship between school chaos at 10th grade with adolescent risk behaviors at 11th grade

	Adjusted Odds Ratios (95% CI)			
Adolescent risk behaviors	**1st Chaos Quartile (lowest chaos)**	**2nd Chaos Quartile**	**3rd Chaos Quartile**	**4th Chaos Quartile (highest chaos)**
Alcohol use in the last 30 days	1.0 (ref)	**2.22 (1.33, 3.70)**	1.60 (0.90, 2.87)	**3.25 (1.88, 5.63)**
Cannabis use in the last 30 days	1.0 (ref)	1.48 (0.79, 2.77)	1.75 (0.91, 3.36)	**2.83 (1.52, 5.28)**
Fight in the last year	1.0 (ref)	1.31 (0.70, 2.45)	1.10 (0.54, 2.20)	**2.04 (1.08, 3.86)**
School absenteeism in last year	1.0 (ref)	1.06 (0.65, 1.74)	**1.62 (0.99, 2.65)**	**2.16 (1.33, 3.49)**
Any delinquent behaviors in last year	1.0 (ref)	1.33 (0.86, 2.05)	1.41 (0.88, 2.25)	**1.83 (1.15, 2.90)**

Fixed effects logistic models are adjusted for clustering at the 11th grade school. Model covariates are student gender, Latinx ethnicity, primary language, 1 or more parents born in the U.S., 1 or more parents working full-time, 1 or more parents graduated from high school, and parenting style.

Table 4.

Cross-lagged panel structural equation model analysis examining the relationship between school chaos and adolescent risk behaviors

	Structural Equation Model 1 (without school engagement)		Structural Equation Model 2 (without school engagement)	
	Pathway A Chaos at 10th grade→ Variable at 11th grade	**Pathway B Variable at 10th grade→ Chaos at 11th grade**	**Pathway A Chaos at 10th grade→ Variable at 11th grade**	**Pathway B Variable at 10th grade→ Chaos at 11th grade**
Adolescent risk behaviors	**Odds Ratio (95% CI)**	**β (95% CI)**	**Odds Ratio (95% CI)**	**β (95% CI)**
Alcohol use in the last 30 days	**1.45 (1.07, 1.97)**	0 (−0.08, 0.08)	**1.44 (1.06, 1.96)**	0 (−0.08, 0.08)
Cannabis use in the last 30 days	1.34 (0.82, 2.16)	0.06 (−0.03. 0.15)	1.33 (0.83, 2.14)	0.06 (−0.03. 0.15)
Fight in the last year	0.85 (0.50, 1.45)	**0.11 (0.01, 0.20)**	0.83 (0.48, 1.42)	**0.11 (0.01, 0.20)**
School absenteeism in last year	**1.89 (1.26, 2.83)**	**0.08 (0, 0.17)**	**1.82 (1.20, 2.76)**	**0.08 (0, 0.17)**
Any delinquent behaviors in last year	1.15 (0.80, 1.65)	**0.07 (0, 0.14)**	1.08 (0.74, 1.57)	**0.07 (0, 0.14)**