Supplementary Online Content

Roche KM, White RMB, Lambert SF, et al. Association of family member detention or deportation with Latino or Latina adolescents' later risks of suicidal ideation, alcohol use, and externalizing problems. *JAMA Pediatr.* Published online March 16, 2020. doi:10.1001/jamapediatrics.2020.0014

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods 1. Sampling Procedures and Response Rates

The sampling study procedures are illustrated in eFigure 1. To ensure sample heterogeneity with respect to family, school, and community context, the research team first grouped all middle schools within a large, suburban Atlanta, GA school district into clusters that, based on the distribution of values, indicated that the school had a "Low" (< 15%), "Moderate" (≤15% and <33%), or "High" (≥33%) concentration of Latino/a students. The research team then omitted 8.6% of "Low" schools due to having too few Latino/a students; 13.0% of "Low" schools due to school disinterest in participating; and 17.4% of "Moderate" schools because the percent Latino/a students was close to the cut point for the "Low" or "High" cluster, preventing clear distinctions between each concentration cluster. Among remaining schools, 29% had a "Low" (<13%) Latino/a student concentration, 43% had a "Moderate" (18 − 25%) Latino/a student concentration, and 29% had a "High" (>40%) Latino/a student concentration. Latino/a students listed on 2017-18 enrollment lists for these schools provided the sampling frame for the study. Within each concentration cluster, Latino/a students were selected at random from grade and gender strata using systematic interval sampling. The sampling interval was based on a probability proportional to the size of the school's Latino/a student population.

As shown in eFigure 2, 1,105 adolescents listed as "Hispanic" on school enrollment lists, were selected for screening. During screening for eligibility, conducted with parents and adolescents, the research team excluded adolescents who (a) had a severe emotional or learning disability indicated by an Individualized Education Plan (IEP), (b) were unable to read either English or Spanish, (c) self-reported or were reported by parents as not being Latino/a or a related term, (d) was a sibling of a previously selected adolescent, or (e) had an age that was outside the typical age range given the grade in school. Among the 1,105 adolescents selected for screening, the research team was unable to determine eligibility for 246 adolescents due to parent being unreachable. Among the 859 parents contacted, 14 adolescents were deemed to be ineligible, yielding 845 reachable parents with an adolescent still eligible for further screening. Among the remaining 845 parents, 658 (77.9%) provided IRB-approved written or oral permission (parental consent) for the adolescent to participate. Among the adolescents of these 658 parents, 78 were unreachable, vielding 580 (88%) reachable adolescents for confirming eligibility and obtaining assent. At this stage, an additional 6 adolescents were deemed ineligible, reducing the number of parents whose adolescent remained eligible for screening to 839. (One sibling pair was discovered at this stage; the younger sibling was omitted.) Among the 574 eligible and reachable adolescents, 25 did not assent and 2 dropped out after assent, resulting in a final sample of 547 adolescents. We report response rates among the reachable parents and adolescents due to the fact that eligibility cannot be determined without this contact. The response rate among eligible adolescents whose parents were contacted and consented was 65.2% (calculated by 547/839), and the response rate among eligible adolescents contacted was 95.3% (calculated as 547/574). The six-month follow up retention rate for adolescents who participated at baseline, was 81.5% (n=446).

The school district unexpectedly requested an end to in-school data collection and a temporary pause in recruitment by May 1, 2018. Thus, the final sample was comprised of a "main" sample (enrolled prior to May 1, 2018) and "lagged" sample (enrolled after September 1, 2018). The "main" sample (n=422, 77.1%) completed surveys from February through June 2018. Within the main sample, 92.6% had completed the baseline survey in-school by May 1, 2018, and 7.4% completed the survey on their own time during May and June 2018 (due to having been absent during in-school administration). For the "lagged" sample (n=125, 22.9%), parental permission, adolescent assent, and baseline survey administration occurred from September 2018 through January 2019. Follow up surveys occurred between September 2018 and very early January 2019 for the main sample and from mid-February through early July 2019 for the lagged sample.

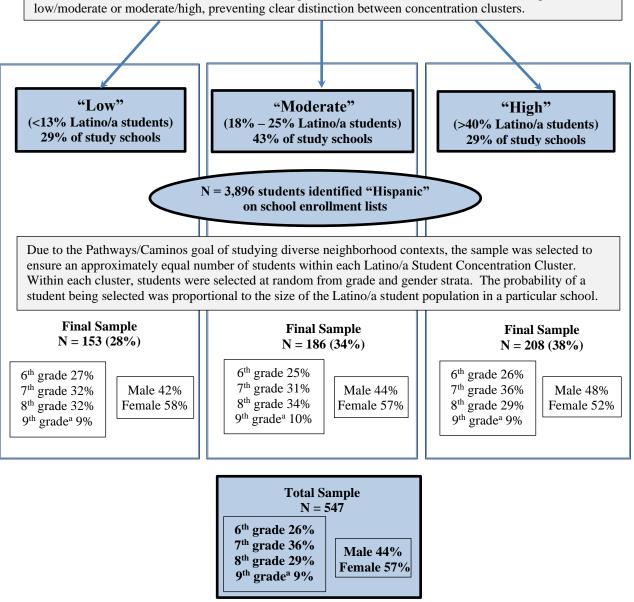
Prior to May 1, 2018, surveys were completed on electronic tablets provided to participants at school; after this date, surveys were completed on an electronic tablet, mobile phone, or computer after the research team mailed youth with electronic links to the online survey. The research team had not finished contact attempts prior to May 1, 2018 (at which point the school district requested a delay in further contact with families until August 2018). The response rate among eligible adolescents whose parents were contacted was 78.4% and 41.5% for the main and lagged samples, respectively. The response rate among

eligible adolescents contacted was 97.9% and 87.4% for the main and lagged sample, respectively. For the "lagged" sample, the research team continued to enroll participants using the sample of 6th through 8th graders, however, some of the listed 8th graders had started 9th grade in Fall 2018. Thus, the lagged sample was on average older (main: M=12.6, SD=.10; lagged: M=13.5, SD=.93). The lagged sample included a higher proportion of US-born adolescents (main: 86.5%; lagged: 93.6%). There were no significant sample differences in other characteristics or in follow-up survey attrition.

eFigure 1. Flow Chart Describing Sampling Design and Characteristics

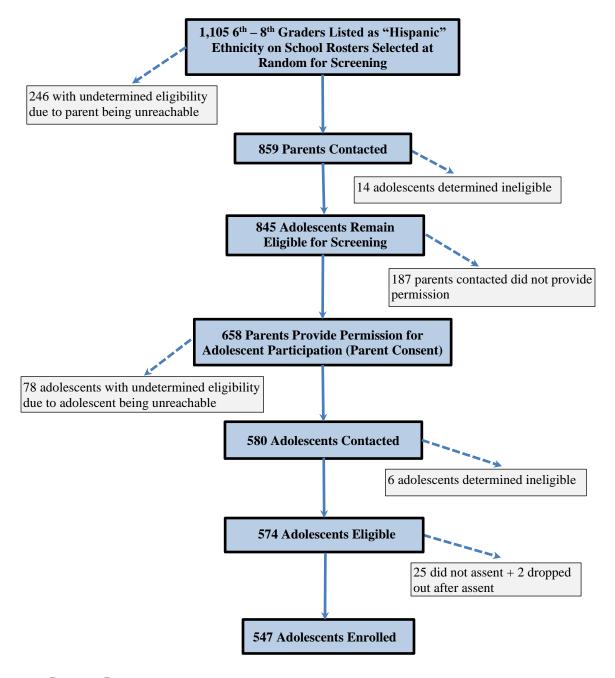
All middle schools in school district Grouped into three clusters Low (< 15%) Moderate (15-40%), High (≥40%) % Latino/a students

Among these schools, we omitted 8.6% in the "Low" cluster due to an insufficient number of Latino/a students for sampling; 13.0% in the "Low" cluster due to school principal/parent disinterest in participating; and 17.4% in the "Moderate" cluster because the percent of Latino/a students was near the cut point for low/moderate or moderate/high, preventing clear distinction between concentration clusters.



Note: a A small proportion of participants who completed the baseline survey in 9^{th} grade were enrolled in 8^{th} grade at the time of original sample selection

eFigure 2. Flow Chart Describing Response Rate



Response Rates

- 65.2% among adolescents whose parent was contacted & indicated that the adolescent eligible [547/(845 contacted 6 later determined ineligible)]
- 95.3% among eligible adolescents contacted [547/(580 contacted 6 ineligible)]

eTable 1. Demographic Characteristics of Latino/as: US, Metro Atlanta, and the Study Sample

Demographics	United States ^a (Ages 0 – 17)	Metro Atlanta ^a (Ages 0 – 17)	Study Sample ^b (Ages 11 – 16)
US born	94.3	94.0	88.1
Live in 2 parent household	69.3	75.1	67.3
At least 1 parent who			
Has at least Bachelor's degree	19.5	22.2	27.6
Foreign born	54.4	74.4	78.6
Born in Mexico	37.8	48.7	45.2

Notes:

a. Source: The Urban Institute. Data from the Integrated Public Use Microdata Series datasets drawn from the 2005 - 2017 American Community Survey. Data was filtered by year (2017), age (13-15 & 16 to 17), ethnicity (Hispanic), and region (Atlanta-Roswell-Sandy Spring).

b. Youth report only.

eMethods 2. Missing Data

Data missing due to attrition at follow-up was 18.5%. Data missing due to item non-response for study variables ranged from 1.5% to 4.5%, with the exception of mothers' educational attainment, which was missing for 16.1% of adolescents. There were no statistically significant associations between missing due to item non-response and study variables. In eTable 2, we provide results from attrition analyses using crosstabulations with Chi-square tests for categorical variables and comparison of means and Independent Samples t-tests for continuous variables. Differences in baseline characteristics for those who completed versus did not complete the follow-up survey were considered statistically significant at a p-value of less than .05 for the continuous variables and at a p-value less than .01 for the categorical variables, due to the sensitivity of the chi-square test for samples of approximately 500 or greater. Results indicated that a higher proportion of males (28.7%) compared to females (16.8%) and a higher proportion of adolescents reporting lifetime alcohol use (40.2%) compared to those who did not (18.2%) were lost to attrition. In addition, mean scores for externalizing symptoms and for parent-child conflict were significantly higher for adolescents lost to attrition as compared to those retained in the study. These associations indicate that the missing at random (MAR) assumption is warranted and, therefore, we created a MAR indicator for lost to follow-up.

For descriptive statistics and bivariate analyses, we used a multiply imputed (MI) grand mean dataset, which represented averaged estimates for imputed values of missing data across 200 MI data sets following the principal component auxiliary method. In multivariate structural equation models run using Mplus 8.15, missing data were handled using Full Information Maximum Likelihood (FIML) estimation. FIML estimation is not imputation; rather, it accounts for uncertainty as part of the model estimation process.² The MI data set and FIML are asymptotically equivalent beginning around 100 imputations of the MI data set (we relied on 200 imputations). FIML estimation was used in Structural Equation Models (SEM) because the standard errors are more robust than those obtained using the MI grand mean data set. FIML estimates used in our SEM accounts for uncertainty in parameter estimates. Clustering is included as covariate in the model and therefore its impact was included in the uncertainty of the parameter estimates. As an additional way to address the missing data due to attrition, the T2 survey indicator (0=lost to attrition, 1=retained in sample) was modeled as an "auxiliary" variable in SEM analyses. The "AUXILIARY" command represents lost to follow-up as a correlate of missing data. In addition, we ran additional sensitivity analyses that address concerns about imputation as well as additional possible threats to validity. We summarize results from sensitivity analyses in the manuscript and in eTable 5 in the supplemental online material.

- Howard WJ, Rhemtulla M, Little TD. Using principal components as auxiliary variables in missing data estimation. 2015;50:285-299.
- 2. Enders CK. Applied missing data analysis, 2010. New York: Guilford Press.

eTable 2. Baseline Study Variables by Participants Lost to Follow-Up^a

Baseline Study Variables	Lost to Attrition	Retained	95% C.I. for	P value
·	(n=101,	(n=446,	difference in	
	18.5% of 547)	81.5% of 547)	means, by lost to	
	No. (%)	No. (%)	attrition	
Adolescent Male Gender	70 (28.7)	174 (71.3)		.001
Adolescent Age in Years, M(SD)	12.88 (1.03)	12.75	134 to .311	.404
Adolescent US Born	102 (21.2)	380 (78.8)		.097
Mother ≥ High School Education	71 (21.5)	260 (78.5)		.357
Low % Latino/a Students in School	33 (21.6)	120 (78.4)		.472
Moderate % Latino/a Students in School	38 (20.4)	148 (79.6)		.284
High % Latino/a Students in School	50 (24.0)	158 (76.0)		.229
Family Member Detained or Deported	40 (29.4)	96 (70.6)		.014
Parental Support, M(SD)	3.93 (.85)	4.08 (.87)	285 to .089	.093
Parent-Child Conflict, M(SD)	2.83 (.80)	2.52 (.88)	.106 to .481	.001
Lifetime Alcohol Use	39 (40.2)	58 (59.8)		<.001
Past 6-Month Internalizing, M(SD)	13.18 (9.48)	13.86 (10.74)	-2.83 to 1.70	.531
Past 6-Month Externalizing, M(SD)	10.97 (8.36)	8.71 (6.92)	.404 to 4.04	.007

 $^{^{\}mathrm{a.}}$ Number (%) reported unless indicated otherwise. M=Mean

eMethods 3. Survey Items

A. Family member detention or deportation, Baseline Survey¹

In the past 12 months (past year), have any of the following members of your family been...

- 1. deported out of the US? You can mark more than one answer.
- 2. held in a U.S. detention center? You can mark more than one answer.

Response options:

No one in the family; Mother; Father; Stepmother; Stepfather; Brother; Sister; Grandparent; Aunt/Uncle; Other Relative

Responses recoded into 0 = family member not detained or deported and 1 = family member detained or deported.

B. Internalizing Symptomology, Baseline Survey [Item number for original instrument² provided]

Below is a list of items that describes kids. For each item that describes you *now or within the past 6 months*, mark 2 if the item is *very true or often true*. Mark 1 if the item is <u>somewhat or sometimes true</u> of you. Mark 0 if the item is *not true* of you.

Anxious / Depressed syndrome (Parcel 1, see Measurement Model, p. 9)

- 1. YSR14. I cry a lot
- 2. YSR30. I am afraid of going to school
- 3. YSR31. I am afraid I might think or do something bad
- 4. YSR32. I feel that I have to be perfect
- 5. YSR33. I feel that no one loves me
- 6. YSR35. I feel worthless or inferior
- 7. YSR45. I am nervous or tense
- 8. YSR29. I am too fearful or anxious
- 9. YSR52. I feel too guilty
- 10. YSR71. I am self-conscious or easily embarrassed
- 11. YSR91. I think about killing myself
- 12. **YSR112.** I worry a lot

Withdrawn / Depressed syndrome (Parcel 2, see Measurement Model, p. 9)

- 1. YSR15. There is very little that I enjoy
- 2. YSR42. I would rather be alone than with others
- 3. YSR65. I refuse to talk
- 4. YSR69. I am secretive or keep things to myself
- 5. YSR75. I am too shy or timid
- 6. YSR102. I don't have much energy
- 7. YSR103. I am unhappy, sad or depressed
- 8. **YSR111.** I keep from getting involved with others

Somatic complaints syndrome (Parcel 3, see Measurement Model, p. 9)

- 1. YSR47. I have nightmares
- 2. YSR51. I feel dizzy or lightheaded
- 3. YSR54. I feel overtired without good reason

Physical problems without known medical cause

- 3. YSR56. a. Aches or pains (*not* stomach or headaches)
- 4. YSR56. b. Headaches
- 5. YSR56. c. Nausea, feel sick

- 6. YSR56. d. Rashes or other skin problems
- 7. YSR56. e. Stomachaches
- 8. YSR56. f. Vomiting, throw up

C. Externalizing Symptomology, Baseline Survey

Below is a list of items that describes kids. For each item that describes you *now or within the past 6 months*, mark 2 if the item is *very true or often true*. Mark 1 if the item is <u>somewhat or sometimes true</u> of you. Mark 0 if the item is *not true* of you.

Rule-breaking behavior syndrome (Parcel 1, see Measurement Model, p. 9)

- 1. YSR26. I don't feel guilty after doing something I shouldn't
- 2. YSR28. I break rules at home, school, or elsewhere
- 3. YSR39. I hang around with kids who get in trouble
- 4. YSR43. I lie or cheat
- 5. YSR63. I would rather be with older kids than kids my own age
- 6. YSR67. I run away from home
- 7. YSR72. I set fires
- 8. YSR81. I steal at home
- 9. YSR82. I steal from places other than home
- 10. YSR90. I swear or use dirty language
- 11. YSR96. I think about sex too much
- 12. YSR99. I smoke, chew or sniff tobacco
- 13. YSR101. I cut classes or skip school

Aggressive behavior syndrome (Parcel 2, see Measurement Model, p. 9)

- 1. YSR3. I argue a lot
- 2. YSR16. I am mean to others
- 3. YSR19. I try to get a lot of attention
- 4. YSR20. I destroy my own things
- 5. YSR21. I destroy things belonging to others
- 6. YSR22. I disobey my parents
- 7. YSR23. I disobey at school
- 8. YSR37. I get in many fights
- 9. YSR57. I physically attack people
- 10. YSR68. I scream a lot
- 11. YSR86. I am stubborn
- 12. YSR87. My moods or feelings change suddenly
- 13. YSR89. I am suspicious
- 14. YSR94. I tease others a lot
- 15. YSR95. I have a hot temper
- 16. YSR97. I threaten to hurt people
- 17. YSR104. I am louder than other kids

D. Lifetime Alcohol use, Baseline Survey³

Now, we want to ask you about drinking alcohol, such as beer, wine, and liquor. The answers are private and will <u>not</u> be connected to your name. Please provide honest answers.

How many times have you had more than just a few sips of alcohol in your life time?

- 0 = never
- 1 = 1 to 2 times
- 2 = 3 to 5 times
- 3 = 6 to 9 times
- 4 = 10 to 19 times

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5 = 20 to 39 times 6 = 40 or more times
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Responses recoded into 0 = never and 1 = at least 1 to 2 times.

E. Parental Support, Baseline Survey⁴

Please mark how often each of the following statements are for true you. The parent who takes care of you the most...

Parcel 1, see Measurement Model, p. 9)

- 1. Sees your good points more than your faults
- 2. Speaks to you in a warm and friendly voice
- 3. Tells or shows you that she likes you just the way you are

Parcel 2, see Measurement Model, p. 9)

- 1. Cheers you up when you are sad
- 2. Is able to make you feel better when you are upset

Parcel 3, see Measurement Model, p. 9)

- 1. Makes you feel better after talking over your worries with him or her
- 2. Has a good time with you
- 3. Understands your problems and worries
 - 1 = almost never or never
 - 2 = not very often
 - 3 =sometimes
 - 4 = a lot of the time (frequently)
 - 5 = almost always or always

F. Parent-Child Conflict, Baseline Survey⁵

How often do you argue or disagree with your parent about the following things...

Parcel 1, see Measurement Model, p. 9)

- 1. what you do with your friends and where you go
- 2. how you spend your free time
- 3. who you hang out with
- 4. your schoolwork (homework, grades)

Parcel 2, see Measurement Model, p. 9)

- 1. how much time you spend using a computer or cell phone
- 2. your having social media (snapchat, instagram, twitter)
- 3. the messages and photos you send and receive through social media (snapchat, instagram, twitter)

Parcel 3, see Measurement Model, p. 9)

- 1. your talking back or being disrespectful to your parent
- 2. websites you visit on the internet
- 3. how much time you spend with friends
 - 1 = almost never or never
 - 2 = not very often
 - 3 =sometimes

```
4 = a lot of the time (frequently)
        5 = almost always or always
E. Suicidal Ideation, Follow Up Survey
    Below is a list of items that describes kids. For each item that describes you now or within the past 6
    months, mark 2 if the item is very true or often true. Mark 1 if the item is somewhat or sometimes
    true of you. Mark 0 if the item is not true of you.
    YSR91. I think about killing myself
    Responses recoded into 0 = \text{not} true and 1 = \text{somewhat} or sometimes true or very true or often true.
F. Clinical Externalizing symptoms, Follow Up Survey
    T-score of for Time 2 Externalizing Symptoms (items same as at Time 1) recoded into 0 = <64 and 1 =
    ≥64 to indicate clinical level of externalizing symptoms.
G. Alcohol use, Follow Up Survey
    Now, we want to ask you about drinking alcohol, such as beer, wine, and liquor. The answers are
    private and will <u>not</u> be connected to your name. Please provide honest answers.
    Since the last survey, how many times have you had more than just a few sips of alcohol in your life
    time?
    0 = never
    1 = 1 to 2 times
    2 = 3 to 5 times
    3 = 6 \text{ to } 9 \text{ times}
    4 = 10 \text{ to } 19 \text{ times}
    5 = 20 \text{ to } 39 \text{ times}
    6 = 40 or more times
    Responses recoded into 0 = \text{never} and 1 = \text{at least } 1 \text{ to } 2 \text{ times}.
H. Demographics
H1. Adolescent gender
    Do you identify as...
    ☐ Male
    ☐ Female
    ☐ Other: ___
H2. Adolescent age in years
    How old are you in years?
    □ 11 years old
```

H3. Adolescent nativity

☐ 12 years old☐ 13 years old☐ 14 years old☐ 15 years old☐ 16 years old☐ 17 years old☐ 17 years old☐ 17 years old☐ 18 years old☐ 19 years old☐ 10 years old☐

In what country were you born?

H4.

What is your best guess about the highest level of education your mother has had?

 $0 = 8^{th}$ grade or less

1 = some high school

2 = completed high school

3 =some college

4 = completed college

5 = graduate or professional school after college

6 = I do not know, and I am unable to guess

- 1. Roche KM, Vaquera E, White RMB & River MI (2018). Impacts of immigration actions and news and the psychological distress of US Latino parents raising adolescents. Journal of Adolescent Health, 62, 525-531.
- 2. Achenbach TM (1991). Manual for the youth self-report form and 1991 profile. Burlington, VT: Department of Psychiatry, University of Vermont.
- 3. Miech RA, Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE, Patrick ME. Monitoring the Future national survey results on drug use, 1975 - 2018: Volume 1, secondary school students. 2019. Retrieved from Ann Arbor: Institute for Social Research, The University of Michigan, 586 pp. http://monitoringthefuture.org/pubs.html
- 4. Schaefer ES. Children's reports of parental behavior: An inventory. Ch Dev, 1965;36:413–423.
- 5. Robin AL, Foster SL. 1989 Negotiating Parent-Adolescent Conflict: A Behavioral-Family Systems Approach. New York, NY: Guilford Press.

eMethods 4. Measurement Models: Analytic Plan

The construct validity for this study's three latent variables - parental support, parent-child conflict, adolescent externalizing symptoms, and adolescent internalizing symptoms - was determined using Confirmatory Factor Analysis (CFA), which corrects for item measurement error in relationships between survey items and the latent constructs. Parceling techniques were used in measurement models.^{1,2} Parcels, which represent the average score of two or more survey items, were included in measurement models as indicators predicted by a latent variable. When compared to single-item indicators of latent constructs, parceled indicators attain greater reliability, more communality, a higher ratio of common-tounique factor variance, fewer distributional violations, and less chance for correlated residuals or dual loadings. The scale for each latent construct was set using effects coding; factor loadings were constrained to have a value of 1 and intercepts were constrained to have a value of 0 on average. Effects coding facilitated obtaining factor loadings in the metric of the original variable.² Measurement models were deemed to fit underlying data adequately when the root mean square error of approximation (RMSEA) was less than .05 and the comparative fit index (CFI) was greater than .90.3 Fit statistics for the measurement model indicated strong measurement fit: $\chi^2 = 154.78$, df = 90, p < 0.001; CFI = 0.98; RMSEA = 0.05, 90% C.I: 0.04, 0.07). Table 1 displays results for latent variable means, standard errors, and standardized and unstandardized factor loadings.

Measurement invariance for each latent construct across adolescent gender was determined through the use of multiple group models. We examined the change in model fit statistics when proceeding from configural (no invariance in parameter estimates) to weak (invariant loadings) to strong (invariant intercepts) invariance. Evidence for measurement invariance was apparent if the change in CFI was less than .01, the value of the RMSEA remained within the confidence interval of the preceding model, and there was no statistically significant change in the chi-square value. Change in model fit statistics also were examined from multiple group models run to identify statistically significant gender differences in structural model pathways.^{3,6}

Little TD, Cunningham WA, Shahar G, Widaman KF. To parcel or not to parcel: Exploring the question, weighing the merits. Struct Equ Modeling. 2002;9(2):151-173. doi: 10.1207/S15328007SEM0902_1

Little TD, Gibson, Schoemann, & Rhemtulla, M. Why the items versus parcels controversy needn't be one. Struct Equ. Modeling. 2013;18(3), 285-300. doi:10.1037/a0033266

^{3.} Little TD. Longitudinal Structural Equation Modeling. New York, NY: The Guilford Press; 2013.

Browne MW, Cudeck R. Alternative ways of assessing model fit. In Bollen KA, Long JS, eds. Testing Structural Equation Models. Newbury Park, CA: Sage; 1993.

eTable 3. Measurement Model: Parameter Estimates

	b (SE)	β
Parental support (M=4.04, SE=0.05)		
Item responses: $I = almost \ never \ or \ never; \ 2 = not \ very \ often; \ 3 = sometimes; \ 4 \ (frequently); \ 5 = almost \ always \ or \ always.$	$t = a \ lot \ of \ the \ tine$	me
→ Parcel 1: sees your good points more than your faults+ speaks to you in a warm, friendly voice + tells/shows you that she likes you just the way you are	0.95 (0.02)	0.87
→ <u>Parcel 2</u> : cheers you up when you are sad + is able to make you feel better when upset	1.08 (0.02)	0.86
→ <u>Parcel 3</u> : makes you feel better after talking over your worries + has a good time with you + understands your problems and worries	0.97 (0.02)	0.92
Parent-child conflict (M=2.54, SE=0.04)		
Item responses: $I = almost \ never \ or \ never; \ 2 = not \ very \ often; \ 3 = sometimes; \ 4 \ (frequently); \ 5 = almost \ always \ or \ always.$	t = a lot of the tin	me
→ Parcel 1: what you do with your friends and where you go + how you spend your free time + who you hang out with + your schoolwork (homework, grades)	1.13 (0.04)	0.77
→ <u>Parcel 2</u> : how much time you spend using a computer or cell phone sad + having social media (snapchat, instagram, twitter) + the messages and photos you send and receive through social media (snapchat, instagram, twitter)	0.83 (0.04)	0.67
→ <u>Parcel 3</u> : your talking back or being disrespectful to your parent + websites you visit on the internet + how much time you spend with friends	1.04 (0.04)	0.84
Internalizing symptoms (M=0.48, SE=0.02)		
Item responses: $0 = not true$; $1 = somewhat or sometimes true$; $2 = very true or $	often true	
→ Parcel 1: anxious/depressive syndrome (12 items)	1.15 (0.03)	0.91
→ Parcel 2: withdrawn/depressed syndrome (8 items)	1.01 (0.03)	0.82
→ Parcel 3: somatic syndrome (9 items)	0.84 (0.03)	0.73
Externalizing symptoms (M=0.30, SE=0.01)	1	
Item responses: $0 = not true$; $1 = somewhat or sometimes true$; $2 = very true or $	often true	
→ Parcel 1: rule-breaking syndrome (13 items)	0.79 (0.03)	0.72
→ Parcel 2: aggressive syndrome (17 items)	1.21 (0.03)	0.90

eMethods 5. Structural Equation Models: Analytic Plan

Multivariate structural models were run using a logistic model in which the study's outcome variables—suicidal ideation, alcohol use, and a clinical level of externalizing symptoms—were regressed on baseline study variables. In the unadjusted model, outcomes were regressed only on baseline reports of a family member having been held in detention or deported in the prior 12 months. In the adjusted model, outcomes were regressed on control variables assessed at baseline—adolescent age, gender, and nativity; maternal education; the school's percent Latinx student concentration; parental support; and parent-child conflict. In addition, suicidal ideation was regressed on baseline internalizing symptoms; alcohol use was regressed on baseline report of lifetime alcohol use; and clinical externalizing was regressed on baseline externalizing symptoms. Structural models accounted for correlations among baseline reports of family member detention or deportation and adolescent internalizing, externalizing and alcohol use. Structural models included rescaling constructs for latent variables in order to estimate the constructs on a standardized metric; rescaling constructs are simple reparameterizations of model estimates that convert variances to standard deviations and covariances into correlational metric. The final model showed strong model fit (full set of results are shown in Table 2).

To confirm structural invariance across gender, a logistic model using the CLASSES option for group was run in Mplus 8.15. In those analyses, we conducted a Wald test of significant gender differences in parameter estimates. There were no statistically significant gender differences in the associations between family member detention or deportation and the three dependent variables (results available from authors upon request). Thus, a single group model was used as the final model.

^{1.} Little TD. Longitudinal Structural Equation Modeling. New York, NY: The Guilford Press; 2013.

Rindskopf D. Using phantom and imaginary latent variables to parameterize constraints in linear structural models. Psychometrika. 1984; 49:37-47.

eTable 4. Multivariate Logistic Structural Model Parameter Estimates

Unadjusted and Adjusted Odds Ratios for Adolescent Outcomes by Family Member Detention or Deportation at Baseline ab

Decelia - Venichtee	Adolescent Outcomes											
Baseline Variables	Past 6-Month Suicidal Ideation			Alc	Alcohol Use Since Baseline Survey				Past 6-Month Clinical Externalizing			
	OR	95% CI	AOR	95% CI	OR	95% CI	AOR	95% CI	OR	95% CI	AOR	95% CI
Detention/deportation	2.63	1.43 to 4.82	2.37	1.06 to 5.29	3.12	1.54 to 6.30	2.98	1.26 to 7.04	2.79	1.40 to 5.46	2.76	1.11 to 6.84
Past 6-Month Internalizing			3.58	2.36 to 5.42								
Lifetime Alcohol Use							10.32	4.47 to 23.80				
Past 6-Month Externalizing											4.36	2.39 to 7.95
Adolescent Male Gender ^c			0.98	0.44 to 2.15			0.92	0.41 to 2.05			1.73	0.74 to 4.01
Adolescent Age in Years			0.91	0.63 to 1.31			1.32	0.87 to 2.00			0.91	0.59 to 1.40
Adolescent US Born			1.07	0.33 to 3.48			2.55	0.51 to 12.74			0.98	0.23 to 4.17
Mother ≥ High School Education ^d			1.57	0.65 to 3.79			1.58	0.59 to 4.21			1.56	0.54 to 4.54
School % Latino/a - Lowe			1.19	0.46 to 3.07			0.91	0.28 to 3.02			1.70	0.52 to 5.59
School % Latino/a - Moderate ^e			1.44	0.62 to 3.35			1.58	0.63 to 3.97			2.13	0.78 to 5.79
Parental Support			0.75	0.53 to 1.07			0.85	0.57 to 1.26			0.83	0.54 to 1.28
Parent-Child Conflict			0.68	0.44 to 1.04			0.99	0.64 to 1.53			1.02	0.60 to 1.74

a. In adjusted structural model, suicidal ideation regressed on baseline internalizing and control variables; alcohol use since baseline regressed on baseline alcohol use and background variables; and clinical externalizing regressed on baseline externalizing and control variables.

b. Fit Statistics: Akaike (AIC): Unadjusted model = 800.592 Adjusted model = 13981.152; Bayesian (BIC): Unadjusted model = 824.762 Adjusted model = 14618.211; Sample-Size Adjusted BIC: Unadjusted model = 805.722 Adjusted model = 14148.399.

c. Reference group: Female

d. Reference group: Less than High School Education

e. Reference group: High

eTable 5. Sensitivity Analyses

Adjusted Odds Ratios for Adolescent Outcomes by Family Member Detention or Deportation at Baseline^a

Original Model shown in manuscript (N	N=547)			
Outcome Variable	AOR	95% Confidence Interval		
Clinical externalizing	2.76	1.11, 6.84		
Alcohol use	2.98	1.26, 7.04		
Suicidal ideation	2.37	1.06, 5.29		
Sensitivity Analysis Model 1: Excludes f	Foreign-born adolescents (N=482)		
Clinical externalizing	Clinical externalizing 2.30 0.88, 6.03			
Alcohol use	3.01 1.25, 7.27			
Suicidal ideation	3.20	1.32, 7.74		
Sensitivity Analysis Model 2: Excludes a	adolescents lost to follow-	up (N=446)		
Clinical externalizing	cal externalizing 2.87 1.16, 7.13			
Alcohol use	3.01	1.27, 7.12		
Suicidal ideation	2.32	1.03, 5.20		
Sensitivity Analysis Model 3: Measure o residual variable orthogonal to baseline re		etween baseline and follow up, measured as al independent variable (N=547)		
Clinical externalizing	Clinical externalizing 2.75 1.11, 6.81			
Alcohol use	2.96	1.25, 7.00		
Suicidal ideation	2.41	1.07, 5.43		