Supplementary Online Content

DeVille DC, Whalen D, Breslin FJ, et al. Prevalence and family-related factors associated with suicidal ideation, suicide attempts, and self-injury in children aged 9 to 10 years. *JAMA Netw Open*. 2020;3(2):e1920956. doi:10.1001/jamanetworkopen.2019.20956

eMethods. Imputation of Demographic Data for Propensity Weighting
eTable 1. Description of Each Suicide Domain Assessed in the K-SADS
eTable 2. Unadjusted Results for All Covariates and Predictors Regressed on Suicidal Ideation, Suicide Attempts, and Non-suicidal Self-injury (NSSI) From the Initial Dataset
eTable 3. Unadjusted Results for All Covariates and Predictors Regressed on Suicidal Ideation, Suicide Attempts, and Non-suicidal Self-injury (NSSI) From the Replication Dataset
eTable 4. Predictors of Suicidal Ideation, Suicide Attempts, and Non-suicidal Self-injury Using the Imputed Raked Propensity-Weighted Data for Population Estimates
eTable 5. Models With Pubertal Status Included as an Additional Covariate
eFigure. Pearson Correlations Between All Continuous Covariates and Predictor Variables

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

© 2020 DeVille DC et al. *JAMA Network Open.*

eMethods: Imputation of demographic data for propensity weighting

To allow for computation of raked propensity weights, missing data on demographic variables were imputed using the Multivariate Imputation by Chained Equations package in R (https://cran.r-project.org/web/packages/mice/mice.pdf). Prior to imputation, a total of 281 participants were missing data on household size, 1018 did not provide data on family income, 6 did not have data available for sex, and 21 were missing data on race/ethnicity. R code for imputation and raked propensity weighting in the ABCD study is available on github (https://github.com/ABCD-STUDY/abcd_acs_raked_propensity).

© 2020 DeVille DC et al. *JAMA Network Open.*

eTable 1. Description of each suicide domain assessed in the K-SADS [a]

Characteristic [b]	**NDA Item Identifier** [c]	**Description**
Passive suicidal ideation, present	ksads_23_946_t ksads_23_946_p	*Child endorses a current or previous wish to be dead or belief that they would be better off dead.*
Passive suicidal ideation, past	ksads_23_957_t ksads_23_957_p	
Active non-specific suicidal ideation, present	ksads_23_947_t ksads_23_947_p	*Child endorses a past or current desire to kill oneself or die by suicide.*
Active non-specific suicidal ideation, past	ksads_23_957_t ksads_23_958_p	
Active suicidal ideation with method, present	ksads_23_948_t ksads_23_948_p	*Child has considered what method they would use in order to enact a suicide attempt.* *Child endorses having suicidal thoughts or desires that they believe they may act on in the future, or child endorses a history of having suicidal thoughts that they once believed they would eventually act on. Children who experience suicidal thoughts with knowledge that they would never actually engage in suicidal behaviors do not have suicidal intent.* *Child has developed a specific plan to make a suicide attempt.*
Active suicidal ideation with method, past	ksads_23_959_t ksads_23_959_p	
Active suicidal ideation with intent, present	ksads_23_949_t ksads_23_949_p	
Active suicidal ideation with intent, past	ksads_23_960_t ksads_23_960_p	
Active suicidal ideation with plan, present	ksads_23_950_t ksads_23_950_p	
Active suicidal ideation with plan, past	ksads_23_961_t ksads_23_961_p	
Suicide attempt, present	ksads_23_954_t ksads_23_954_p	*Child reports that they have actually made a suicide attempt, or engaged in self-injurious behavior with the intent of dying from the behavior.*
Suicide attempt, past	ksads_23_965_t ksads_23_965_p	
Non-suicidal self-injury, present	ksads_23_945_t ksads_23_945_p	*Child endorses having engaged in purposeful behaviors (e.g., hitting, cutting, burning oneself, head banging) in order to experience physical injury for reasons other than dying by suicide (e.g., to feel better or relieve emotional pain).*
Non-suicidal self-injury, past	ksads_23_956_t ksads_23_956_p	

[a] K-SADS is the Kiddie Schedule for Affective Disorders and Schizophrenia. A print version of the KSADS is publicly available at https://www.pediatricbipolar.pitt.edu/resources/instruments. An adapted computerized version of this measure was used in the ABCD study.

[b] For all questions, answers for "past" and "present" timeframes were combined to reflect whether the child experienced the item in question at any point during their lifetime.

[c] NDA is the National Institute for Mental Health Data Archive. The ABCD data dictionary is accessible at https://nda.nih.gov/

© 2020 DeVille DC et al. *JAMA Network Open.*

eTable 2. Unadjusted results for all covariates and predictors regressed on suicidal ideation, suicide attempts, and non-suicidal self-injury (NSSI) from the initial dataset.[a]

Predictor	Ideation		Attempts		NSSI	
	Odds Ratio	*p*	Odds Ratio	*p*	Odds Ratio	*p*
Sex (Male)	1.43	<.001	1.10	.660	1.49	<.001
Financial Adversity	1.15	<.001	1.24	.003	1.15	<.001
Family History - Depression	1.56	<.001	1.81	.013	1.61	<.001
Family History - Suicide	1.67	<.001	2.54	<.001	1.72	<.001
Total Problems – CBCL [a]	1.07	<.001	1.08	<.001	1.06	<.001
Caregiver Acceptance	0.87	<.001	0.83	<.001	0.89	<.001
Parental Monitoring	0.92	<.001	0.87	<.001	0.92	<.001
Family Conflict	1.21	<.001	1.39	<.001	1.18	<.001

[a] Results displayed are fixed-effects of general linear mixed models (GLMM). Family and ABCD study site were included as nested random effects.
[b] CBCL = Child Behavior Checklist

eTable 3. Unadjusted results for all covariates and predictors regressed on suicidal ideation, suicide attempts, and non-suicidal self-injury (NSSI) from the replication dataset.[a]

Predictor	Ideation		Attempts		NSSI	
	Odds Ratio	*p*	Odds Ratio	*p*	Odds Ratio	*p*
Sex (Male)	1.40	.002	1.09	.795	1.24	.079
Financial Adversity	1.17	<.001	1.53	<.001	1.17	.002
Family History - Depression	1.64	<.001	3.23	.006	1.54	<.001
Family History - Suicide	1.71	<.001	7.01	<.001	1.54	<.001
Total Problems – CBCL [b]	1.07	<.001	1.08	<.001	1.07	<.001
Caregiver Acceptance	0.86	<.001	0.89	0.21	0.87	<.001
Parental Monitoring	0.92	<.001	0.91	.010	0.93	<.001
Family Conflict	1.24	<.001	1.22	.005	1.19	<.001

[a] Results displayed are fixed-effects of general linear mixed models (GLMM). Family and ABCD study site were included as nested random effects.
[b] "CBCL" refers to Child Behavior Checklist.

© 2020 DeVille DC et al. *JAMA Network Open.*

eTable 4. Predictors of suicidal ideation, suicide attempts, and non-suicidal self-injury using the imputed raked propensity-weighted data for population estimates [a]

Predictor	Suicidal Ideation		Suicide Attempts		Non-Suicidal Self Injury	
	Odds Ratio	*p*	Odds Ratio	*p*	Odds Ratio	*p*
Caregiver Acceptance	0.97	.210	1.04	.623	.95	.017
Parental Monitoring	0.97	.021	0.91	.002	.95	<.001
Family Conflict	1.13	<.001	1.20	.003	1.12	<.001

[a] Results displayed are generalized linear models weighted by raked propensity scores, with ABCD site as the primary stage sampling unit (PSU), after including financial adversity, family history of depression, family history of suicide, and total problem scores on the Child Behavior Checklist (CBCL) as covariates.

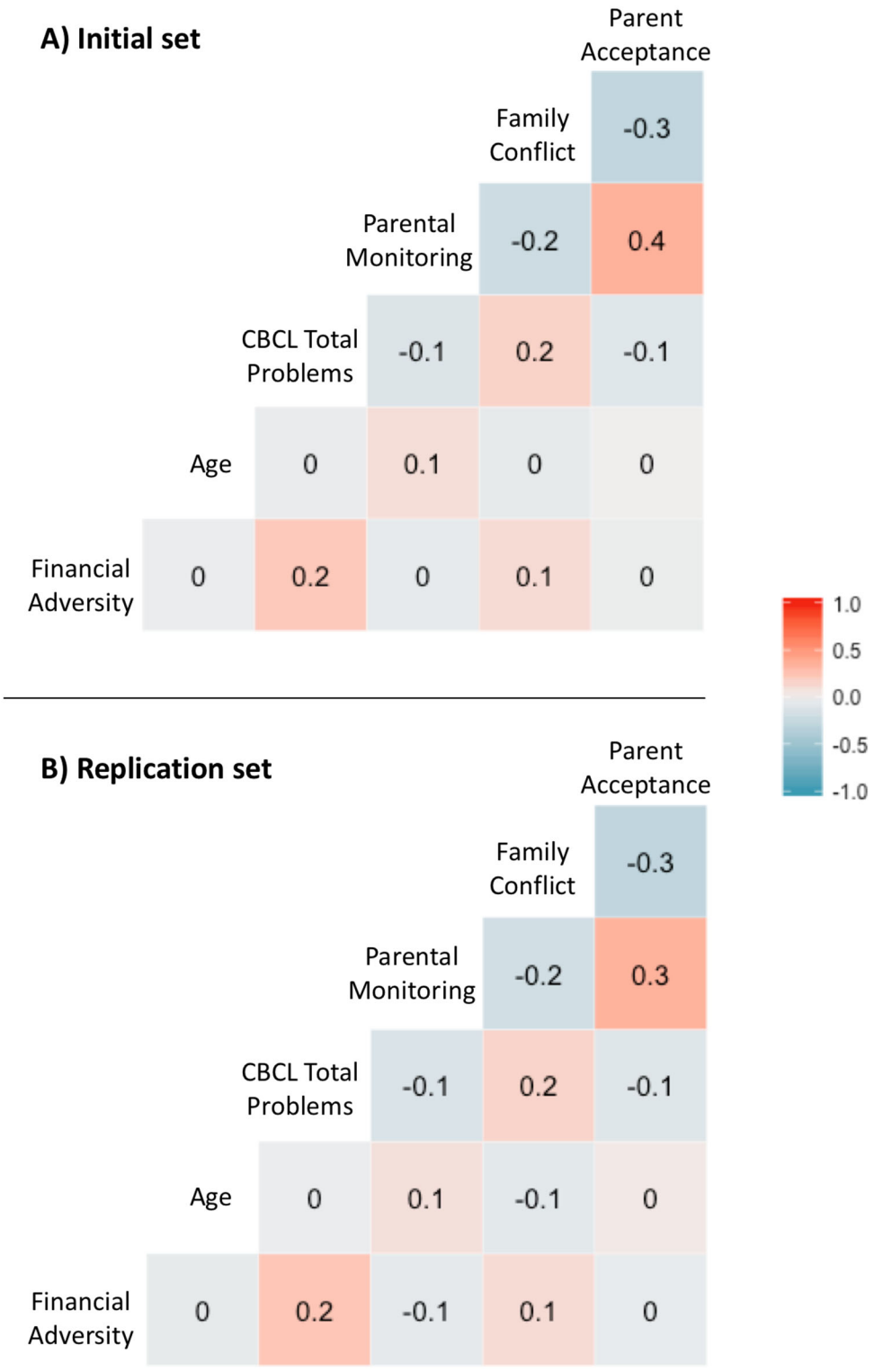
eTable 5. Models with pubertal status included as an additional covariate.[a]

Predictor	Suicidal Ideation		Suicide Attempts		Non-Suicidal Self Injury	
	Odds Ratio	*p*	Odds Ratio	*p*	Odds Ratio	*p*
Pubertal Status	1.13	<.001	1.35	.006	1.12	.005
Sex	1.21	.007	0.78	.271	1.29	.003
Financial Adversity	0.99	.710	1.16	.025	1.06	.075
Family History of Depression	1.21	.010	1.04	.870	1.19	.045
Family History of Suicide	1.12	.179	1.71	.025	1.03	.788
CBCL Total Problems [b]	1.06	<.001	1.08	<.001	1.06	<.001
Caregiver Acceptance	0.96	.073	1.10	.172	.95	.029
Parental Monitoring	0.97	.002	0.90	<.001	.96	<.001
Family Conflict	1.13	<.001	1.15	.005	1.10	<.001

[a] Results displayed are fixed-effects of general linear mixed models (GLMM). Family and ABCD study site were included as nested random effects.
[b] "CBCL" refers to Child Behavior Checklist.

© 2020 DeVille DC et al. *JAMA Network Open.*

eFigure. Pearson correlations between all continuous covariates and predictor variables.



© 2020 DeVille DC et al. *JAMA Network Open.*