

FAMILY PREDICTORS OF ADOLESCENTS' E- CIGARETTE AND TOBACCO USE

Symposium accepted to be presented at the Association
for Psychological Science (May 2020)

Conference cancelled due to COVID-19 pandemic



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TOBACCO USE

- Smoking tobacco is the leading cause of preventable death worldwide
- Most adult smokers begin smoking during adolescence
- New surge of adolescent e-cigarette users (NIDA, 2020)

Monitoring the Future Study: Trends in Prevalence of Various Drugs for 8th Graders, 10th Graders, and 12th Graders; 2019 (in percent)*

Drug	Time Period	8th Graders	10th Graders	12th Graders
Any Vaping	Lifetime	24.30	[41.00]	45.60
	Past Year	20.10	35.70	40.60
	Past Month	12.20	[25.00]	[30.90]
JUUL	Lifetime	18.90	32.80	-
	Past Year	14.70	28.70	-
	Past Month	8.50	18.50	16.30

* Data in brackets indicate statistically significant change from the previous year. [Previous MTF Data](#) ►



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PREVENTION

- Understanding factors that contribute to adolescents' tobacco use has both short- and long-term individual and public health implications
- Family processes can either serve as risk or protective factors for tobacco use



SYMPOSIUM

- Three empirical studies that investigate relationships between diverse family factors and adolescents' tobacco use
 1. Study 1 - bidirectional longitudinal associations between adolescents' vaping and family conflict
 2. Study 2 - timing of vape initiation during adolescence as a function of parent's marital status
 3. Study 3 - cross-sectional and longitudinal relationships between cigarette use and family cohesion and adaptability



STUDY 1: BIDIRECTIONAL ASSOCIATIONS BETWEEN FAMILY CONFLICT AND ADOLESCENTS' VAPING

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BACKGROUND

- Family systems theory highlights the importance of familial relationships for positive adjustment outcomes (Cox & Paley, 1997)
- Family conflict has been positively linked with adolescent tobacco use (Rajesh, Diamond, Spitz, & Wilkinson, 2015)
- Research also suggests female and male adolescents receive different levels of parental monitoring (Svensson, 2003)



RESEARCH QUESTION

- Gaps in extant literature include
 - Examination of e-cigarette use
 - Testing directionality between family conflict and e-cigarette use
- **Investigated whether family conflict predicts later e-cigarette use or whether e-cigarette use predicts later family conflict among adolescents**



METHOD

- Data were drawn from the Predictors of ANxiety and Depression during Adolescence (PANDA) Project (O'hannessian & Vannucci, 2018)
- Surveyed New England adolescents every six months starting in the fall 2016 through the spring of 2019 (T6)
 - T1: Mage=12.74, SD=.70; 52% girls; 61% non-Hispanic White
- This study used two waves (T2-T3)
- Adolescents' self-reported lifetime vaping and perceptions of family conflict were used



RESULTS

- Family conflict predicts later e-cigarette use

	OR	SE	OR	SE
Ever E-cig Use T2	37.23***	15.76	40.74***	18.00
Age T3	1.76**	0.29	1.73**	0.29
White T3	1.26	0.36	1.25	0.36
Parent education T3	1.12	0.15	1.11	0.15
Female T3	0.93	0.25	0.88	0.23
Family conflict T2	1.42**	0.19	1.47*	0.29
Female*Family conflict	--	--	1.00	0.27

Note. Results from logistic regression analyses



RESULTS

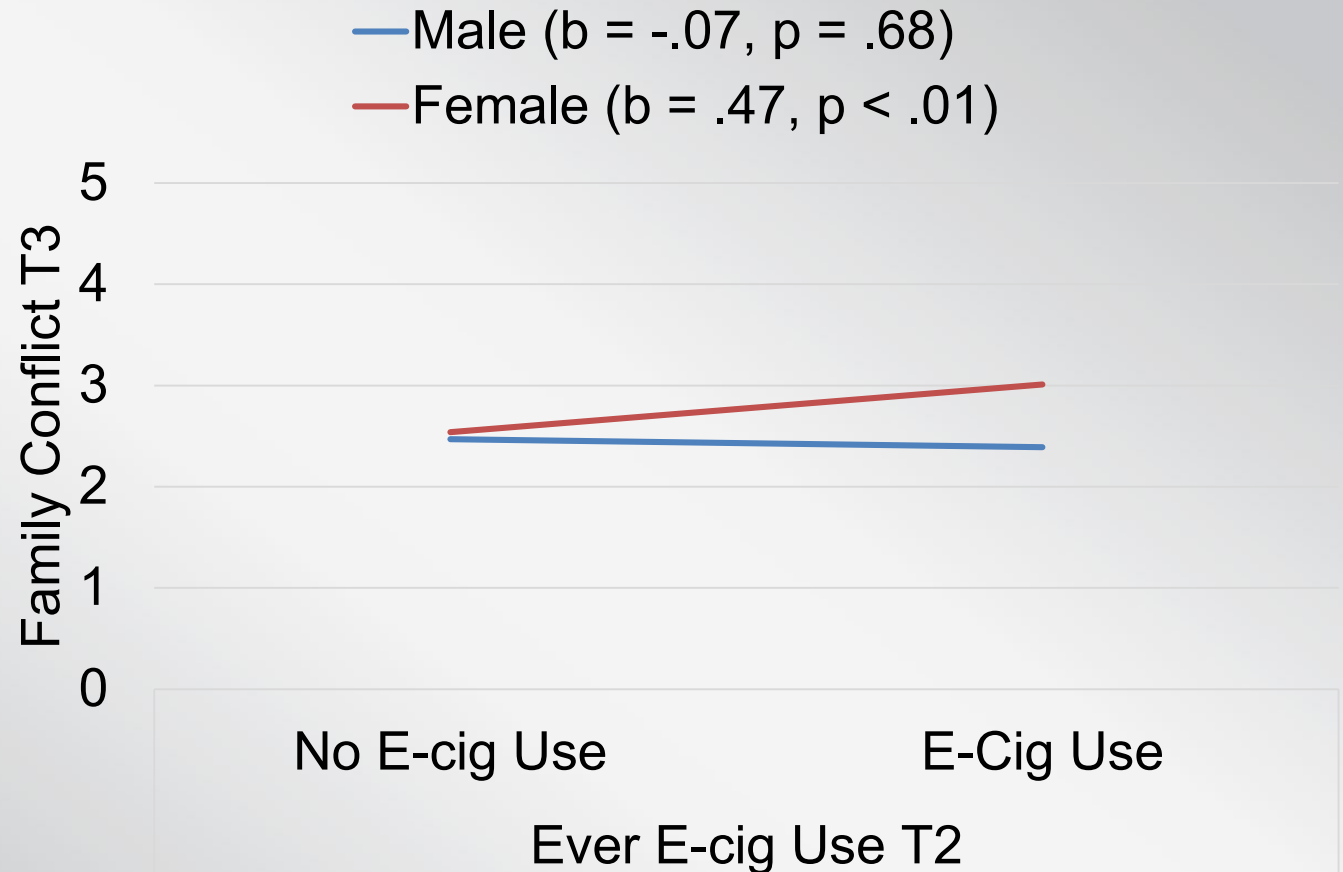
- E-cigarette use predicts later family conflict, particularly for girls

	b(SE)	B	b(SE)	B
Family conflict T2	0.55(.03)	0.58***	0.54(.03)	0.57***
Age T3	0.03(.04)	0.02	0.03(.04)	0.02
White T3	0.01(.07)	0.01	0.02(.06)	0.01
Parent education T3	-0.03(.03)	-0.03	-0.03(.03)	-0.03
Female T3	0.12(.06)	0.06t	0.07(.07)	0.04
Ever e-cig use T2	0.24(.11)	0.07*	-0.07(.18)	-0.02
Female*Ever e-cig use			0.54(.23)	.12*

Note. Results from OLS regression analyses



RESULTS



DISCUSSION

- Supporting family systems theory, family conflict was linked with later e-cigarette use
 - Method for coping with stress?
 - Movement away from family influence toward peer influence?
- In line with research on parental monitoring, e-cigarette use was linked with later family conflict, especially for girls
 - Use causes conflict between adolescent and parents?



IMPLICATIONS

- Extends extant knowledge about links between family conflict and adolescent tobacco use
 - E-cigarettes
 - Bidirectional nature
- Important information for family-based intervention programs, especially given surge in e-cigarette use



QUESTIONS?

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