

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



**ILLINOIS STATE
UNIVERSITY**
Illinois' first public university

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](#) ►



ILLINOIS STATE
UNIVERSITY

Illinois' first public university

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



ILLINOIS STATE
UNIVERSITY

Illinois' first public university

**STUDY 2:
CROSS-SECTIONAL AND
LONGITUDINAL ASSOCIATIONS
BETWEEN FAMILY COHESION AND
ADAPTABILITY WITH ADOLESCENT'S
TOBACCO USE**

Ashley R. Adams
Laura J. Finan
Christine M. Ohannessian



**ILLINOIS STATE
UNIVERSITY**
Illinois' first public university

BACKGROUND

- Family systems theory highlights the importance familial relationships for positive adjustment outcomes (Cox & Paley, 1997)
- Poor relationship quality with parents has been positively linked with adolescent tobacco use (Picotte et al. 2006; Rajesh, Diamond, Spitz, & Wilkinson, 2015)



CURRENT STUDY

- Gaps in extant literature include
 - Examine longitudinal relationships
 - Novel family relationship constructs
- **Investigated whether adolescents' perceptions of closeness and flexibility within the family predicts concurrent and later tobacco use**



METHOD

- Data drawn from the Adolescent Adjustment Project (O'hannessian, 2009)
- Surveyed adolescents from Mid-Atlantic States in the Spring of 2007 and 2008
 - Mage=16.02; SD=.69; 41% female
- Adolescents' self-reported past six-month cigarette use frequency and perceptions of family cohesion and adaptability



RESULTS

- Family cohesion and adaptability were cross-sectionally associated with lower cigarette use

	Family Cohesion			Family Adaptability		
	IRR	SE	p	IRR	SE	p
White	3.42	0.62	0.000	3.36	0.60	0.000
Age	1.74	0.16	0.000	1.75	0.16	0.000
Female	1.24	0.17	0.116	1.18	0.16	0.220
Family Factor	0.93	0.01	0.000	0.92	0.01	0.000

Note. Results from Poisson regression analyses.



RESULTS

- Controlling for previous cigarette use, family adaptability, but not family cohesion, was associated with lower cigarette use one year later.

	Family Cohesion			Family Adaptability		
	IRR	SE	p	IRR	SE	p
Previous Tobacco Use	9.54	1.52	0.000	9.36	1.47	0.000
White	2.29	0.52	0.000	2.29	0.52	0.000
Age	1.32	0.13	0.006	1.34	0.14	0.004
Female	0.92	0.14	0.570	0.90	0.13	0.470
Family Factor	0.99	0.01	0.178	0.96	0.01	0.002

Note. Results of Poisson regression analyses. Previous tobacco use and controls were assessed at T2 whereas tobacco use outcome was assessed at T3.



DISCUSSION

- Supports past research and theory suggesting positive family relationships are protective for adolescents' adjustment outcomes
- Although perceptions of closeness and flexibility within the family were concurrently associated with lower tobacco use, only flexibility was associated with lower tobacco use one year later
 - Adolescents feel supported while searching for autonomy?
 - Family adaptations to developmental changes positively experienced by adolescents?



ILLINOIS STATE
UNIVERSITY

Illinois' first public university

IMPLICATIONS

- Extends extant research about links between family factors and adolescent tobacco use
 - Longitudinal associations
 - Novel family constructs
- Important information for family-based intervention programs



QUESTIONS?

- Contact
- Laura Finan
- ljfinan@ilstu.edu
- <https://about.illinoisstate.edu/ljfinan/>

Citation:

Adams, A. R., Finan, L. J., & Ohannessian, C. M. (2020, May). Cross-Sectional and longitudinal associations between family cohesion and adaptability with adolescent's tobacco use. In L. J. Finan (Chair), *Family predictors of adolescents' e-cigarette and tobacco use*. Symposium accepted for presentation to the annual meeting of the Association for Psychological Science, Chicago, IL. (Unable to deliver, meeting canceled due to COVID-19 outbreak.)



**ILLINOIS STATE
UNIVERSITY**
Illinois' first public university