

Parental Problem Drinking and Adolescent Substance Use: The Moderating Role of Sibling Relationships

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INTRODUCTION

- Families are complex systems with each member influencing all others (Cox & Paley, 1997).
- Family factors like parental problem drinking have been consistently shown to predict a range of adverse adolescent adjustment outcomes, including alcohol and other substance use (Caspi et al., 2018; Park & Schepp, 2014).
- Other family factors, such as sibling relationships, may serve as protective or additive risk factors in influencing adolescent behavior.
- Limited extant research has investigated the role of sibling relationship characteristics in the context of parental problem drinking (Rueter et al., 2015).
- The current study examined if hostility and warmth in sibling relationships served as risk or protective factors in the relationship between maternal and paternal problem drinking and adolescents' alcohol and drug use.**

METHOD

Participants/Procedure

- Data were drawn from the Adolescent Adjustment Project (Ohannessian, 2009), which surveyed adolescents from 7 public Mid-Atlantic high schools.
- Participants completed surveys in schools during fall 2007. Only adolescents who reported having one sibling were included in the current study.
- $N = 373$; $M_{age} = 16.08$; $SD = .69$; 55% female

Measures

- Drug use frequency was assessed by asking how often in the last 6 months adolescents used marijuana, sedatives, stimulants, inhalants, hallucinogens, cocaine/crack, and opiates.
- A quantity X frequency score was calculated to assess how much and how often adolescents drank beer, wine, or liquor in the past 6 months.
- The Short Michigan Alcoholism Screening Test measured adolescents' perceptions of maternal (MPD) and paternal (PPD) problem drinking (Crews & Sher, 1992).
- Sibling Relationship Questionnaire was used to assess perceptions of sibling warmth and hostility (Slomkowski et al., 2001).

RESULTS

- Regression analyses were used to examine associations between sibling relationship characteristics, parental problem drinking, and adolescents' substance use.
- Separate models were conducted for MPD and PPD, and structural elements of sibling relationships were controlled.
- In addition to main effects (Table 1), sibling hostility and PPD interacted to predict drug use ($B = .14, p < .05$). Probing this interaction with simple slope analyses indicated that adolescents in families with high PPD and high sibling hostility reported the greatest drug use (Figure 1).

Table 1. Sibling relationship characteristics and parental problem drinking as predictors of adolescent substance use

	Alcohol Use					
	MPD – Model 1			PPD – Model 2		
	b	SE	B	b	SE	B
Adolescent gender	0.37	0.25	0.09	0.18	0.25	0.04
Sibling gender	-0.54	0.25	-0.13*	-0.54	0.25	-0.13*
Sibling age gap	-0.01	0.11	0.00	0.03	0.11	0.02
Birth order	0.20	0.28	0.05	0.04	0.28	0.01
Sibling warmth	-0.01	0.01	-0.03	0.00	0.01	-0.02
Sibling hostility	0.01	0.01	0.02	0.00	0.01	0.00
PPD	--	--	--	0.28	0.08	0.22***
MPD	-0.14	0.24	-0.03	--	--	--

	Drug Use					
	MPD – Model 3			PPD – Model 4		
	b	SE	B	b	SE	B
Adolescent gender	0.03	0.15	0.01	-0.12	0.15	-0.04
Sibling gender	-0.09	0.15	-0.03	-0.01	0.14	0.00
Sibling age gap	0.05	0.06	0.05	0.07	0.06	0.06
Birth order	-0.37	0.17	-0.13*	-0.39	0.16	-0.145*
Sibling warmth	0.01	0.01	0.05	0.01	0.01	0.05
Sibling hostility	0.02	0.01	0.16**	0.02	0.01	0.12*
PPD	--	--	--	0.21	0.04	0.28***
MPD	0.33	0.15	0.12*	--	--	--

Note. Maternal (MPD) and paternal (PPD) problem drinking were abbreviated in this table.

* $p < .05$; ** $p < .01$; *** $p < .001$

RESULTS

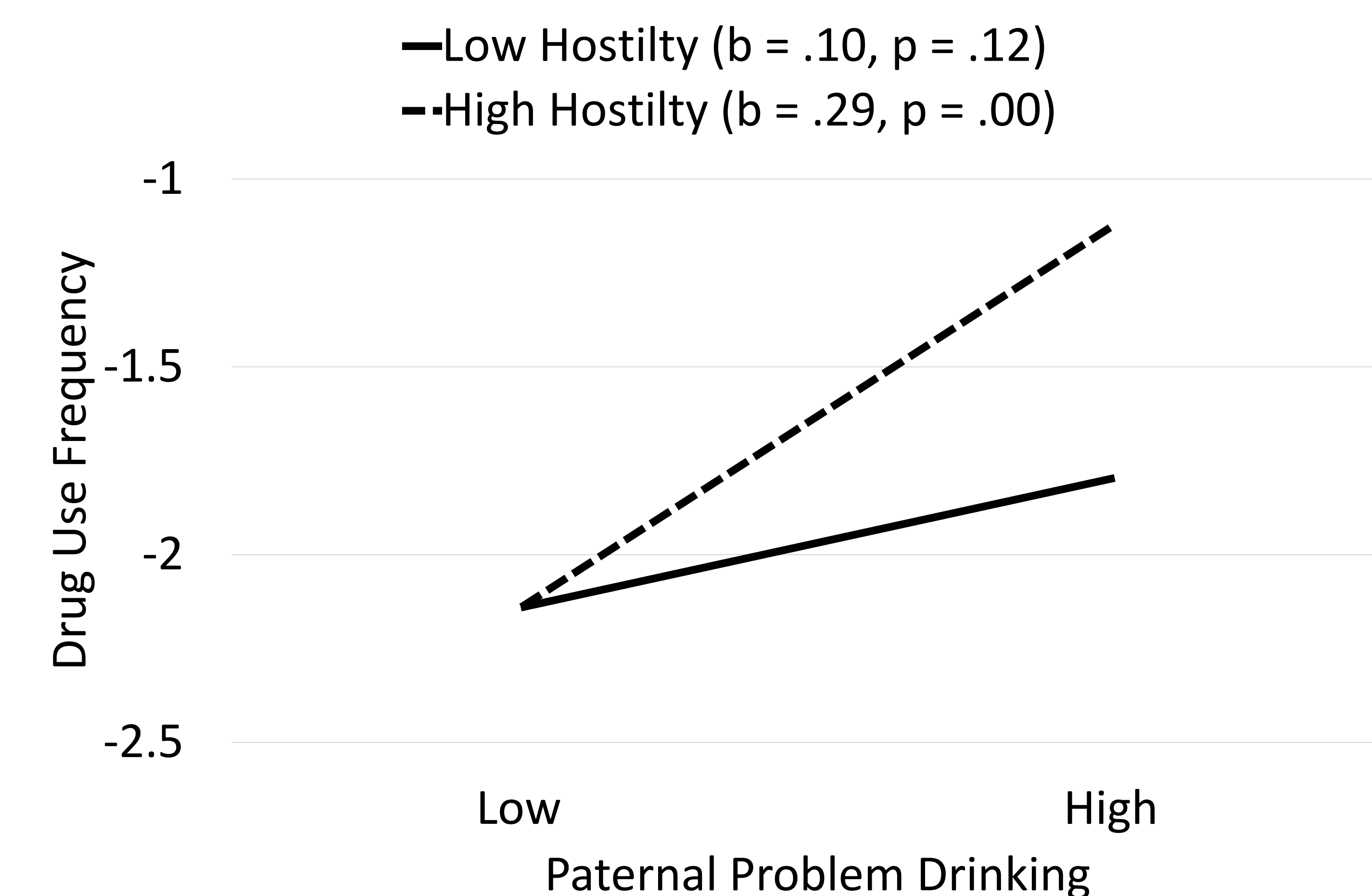


Figure 1. Plot of interaction between sibling hostility and PPD in predicting adolescent drug use.

DISCUSSION

- Current study findings suggest sibling hostility may be an additive risk factor for adolescent drug use in the context of paternal problem drinking.
- Results may help identify youth that are at the greatest risk for engaging in health risk behaviors and may be used to support substance use treatment efforts for adolescents by addressing family functioning and relationships.
- Treatment efforts for adolescents should aim to address complexities of interacting family dynamics across parental and sibling domains.

To obtain a copy of this poster, please visit adolescentadjustmentproject.org/ or contact Laura Finan at ljinan@ilstu.edu.



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