

Sibling Relationships and Depression during Adolescence: A Growth Curve Analysis

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INTRODUCTION

- Adolescent depression is a prevalent internalizing disorder that has devastating effects on adolescents and their families.
- Given estimates suggest that 15% to 20% of the adolescent population has experienced depression (Cairns, 2014; Merikangas, 2010), understanding the factors that influence this pervasive disorder is imperative.
- Research has continually pointed to the importance of parents and other family factors in understanding depression (Ohannessian, 2012).
- However, one aspect of family life that has not been fully explored is the role of sibling relationships, despite research highlighting the importance of siblings across developmental and adjustment domains (Feinberg et al., 2012).
- Therefore, the purpose of this study was to explore how sibling relationship characteristics influence adolescent depressive symptom trajectories from middle to late adolescence.

SAMPLE

Sample

- 349 adolescents from the Adolescent Adjustment Project (Ohannessian, 2009).
- Surveys were completed in the Spring of 2007 (T1), 2008 (T2), and 2009 (T3).
- Time 1 adolescents were 16.02 (SD = .69) years old and 41% identified as female.
- Only adolescents who reported having one sibling were included. Siblings were 14.75 (SD = 2.16) years old and 53% identified as female.

Procedure

Surveys were administered to adolescents in public high schools from DE, MD, and PA in the Spring of 2007, 2008, and 2009. Parental consent and adolescent assent were obtained prior to data collection. Adolescents were informed that their responses would be kept confidential and they could leave the study at any time. The survey took approximately 40 minutes to complete and participants were compensated with a movie pass.

MEASURES

Depressive Symptoms (T1-T3)

The 20-item Center for Epidemiological Studies Depression Scale for Children (CES-DC; Weissman et al., 1980) was used to assess adolescents' depressive symptoms across waves $(\alpha_{range} = .90 - .91)$.

Sibling Warmth and Hostility (T1)

• The 12-item Sibling Relationship Questionnaire (Slomkowski et al., 2001) was used to measure adolescents' perceptions of warmth ($\alpha_{range} = .89$) and hostility ($\alpha_{range} = .87$) with their sister or brother.

Controls (T1)

• Sibling birth order (0 = younger sibling; 1 = older sibling), absolute value age-gap between siblings, and sibling gender (0 = male; 1 = female) were used as controls in this study.

RESULTS

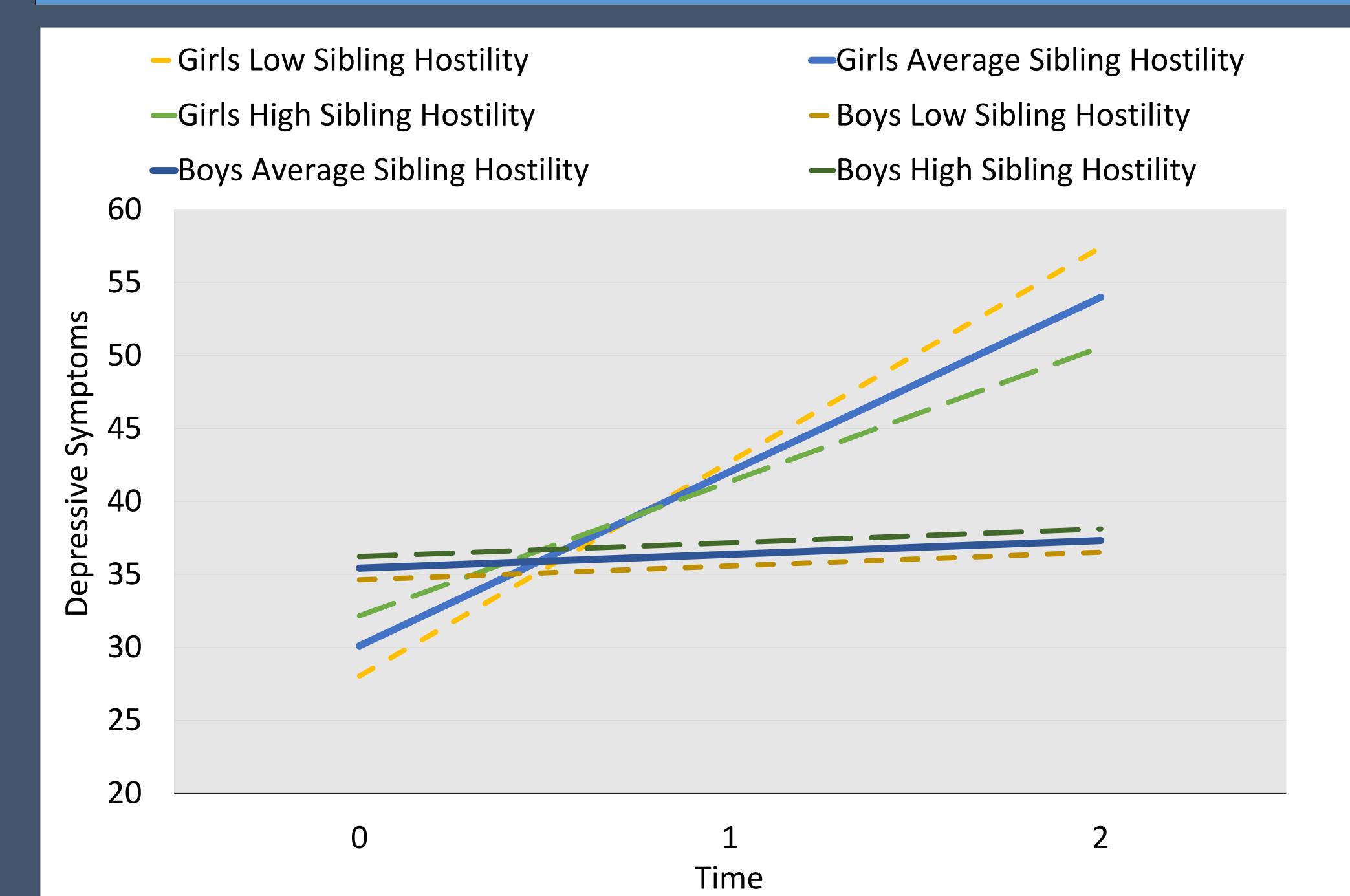


Figure 1. Estimated depressive symptom trajectories for girls and boys with low (-1 standard deviation), average, and high (+1 standard deviation) levels of sibling hostility.

RESULTS

Table 1. Growth Curve Model Re	sults	
Fixed Effects	b(SE)	
	Intercept	Linear Slope
Growth Parameter	35.43(.54)***	0.95(.42)*
Sibling Hostility	0.09(.10)	0.00(.08)
Sibling Warmth	-0.25(.10)*	-0.04(.08)
Adolescent Gender	-5.32(5.31)	11.00(4.05)**
Birth order	-1.40(1.17)	-0.68(.98)
Age Gap	0.73(.51)	0.05(.39)
Sibling Gender	-0.80(1.10)	0.61(.86)
Gender x Sibling Warmth	0.23(.14)	-0.18(.10)+
Gender x Sibling Hostility	0.15(.14)	-0.32(.11)***
Variance Components	b(SD)	
Within-person residual	71.25(8.44)	
Random Intercepts	36.73(6.06)***	
Deviance	4714.74869	
Note. ${}^{t}p < .10; *p < .05; **p < .01;$	***p < .001.	

Table 1 displays results from the growth curve model. The expected level of depressive symptoms for the average adolescent was 35.43 at T1 and depressive symptoms increased .95 units per year. Sibling warmth negatively predicted depressive symptom intercepts. Adolescent gender positively and the interaction between adolescent gender and sibling hostility negatively predicted depressive symptom slopes (see Figure 1).

DISCUSSION

This study sought to explore how sibling relationship characteristics influenced depressive symptom trajectories from middle to late adolescence. Findings suggested that sibling warmth negatively predicted initial levels of depressive symptoms and that sibling hostility interacted with adolescent gender to predict slopes. This interaction suggested that, overall, hostility from a sibling more strongly influenced girls' depressive symptom trajectories than boys. This finding is in line with past research which indicates that girls are more reactive to interpersonal family stress than boys and that this stress is related to experiences with depression (Shih et al., 2006). Findings have implications for intervention and prevention programs supporting youth with depressive symptoms.

