



Risky Behaviors at Late Adolescence in Infants Born Preterm



Robin June Miller, PhD, RN^{1,2}, Mary C. Sullivan, PhD, RN^{2,1}, Suzy Barcelos Winchester, MA¹

¹Brown Center for the Study of Children at Risk, Women and Infants Hospital, Providence, RI, ²College of Nursing, University of Rhode Island, Kingston, RI

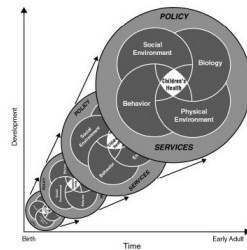
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Introduction

Little is known about the extent to which adolescents born preterm engage in risky behaviors. While experimentation in risky behaviors such as cigarette smoking, alcohol use, risky driving, and sexual activity are expected in adolescence, those born preterm may be less apt to engage in risky behaviors due to medical, social, and environmental influences.¹

Conceptual Framework

Guided by the Institute of Medicine's conceptual framework, adolescent risky behaviors were viewed as influenced by contextual factors encompassing biological, behavioral, social, and physical elements.



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Aims

The study aims were to:

1. Compare risky behaviors at age 17 in preterm infants classified by perinatal morbidity and a full term comparison group
2. Examine biological, behavioral, social, and physical contextual influences on risky behaviors at age 17.

Sample

A sample of 213 infants were recruited at birth and grouped by perinatal morbidity as:

- Full term (comparison group)
- Healthy preterm
- Preterm with morbidity
 - Medically ill preterms
 - Neurologically ill preterms
 - Small-for-gestational age preterms

180 participants were seen at age 17 (85% retention since birth)

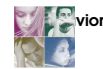
Methods

Adolescents completed standardized self-report measures at age 17 as part of a longitudinal follow-up study.

Contextual factors:



- Gender** - male/female
- Race** - white/non-white



- Psychological Illness** - diagnosed by health care provider - e.g., depression, anxiety, bipolar disorder



- Self-Control** - from the Social Skills Rating Scale (SSRS)² - Behaviors that emerge in conflict and in non-conflict situations

Total Problem Behaviors - Youth Self Report (YSR)³ -

- Behavioral, emotional, and social problems including withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent behavior, and aggressive behavior.



Parent Sanctions - Adolescent Health and Development Questionnaire⁴

- The degree to which an adolescent gets into trouble with their parents for smoking cigarettes, drinking alcohol without permission, and using marijuana or other drugs



Friends' Disapproval - Adolescent Health and Development Questionnaire⁴

- The degree to which the adolescents' friends disapproved of peer cigarette smoking, alcohol use, or marijuana use



Social Competency - Youth Self Report (YSR)³

- Frequency & competency in sports, hobbies/activities, chores/jobs and friendships



- environment** Socioeconomic status - Hollingshead Four Factor Index⁵

Dependent Variable⁴: Risky behaviors of: cigarette smoking, alcohol use/abuse, risk taking, risky driving, illicit drug use/OTC abuse, sexual activity risk $\alpha = .93$



Results

Aim #1 - The full-term group had more than the preterm groups in excessive alcohol use ($F(4,166) = 3.387$, $p = .011$), risky driving ($F(4,169) = 2.915$, $p = .023$), and risky sexual activity ($F(4,166) = 4.186$, $p = .003$) at age 17.

Aim #2 - Contextual influences on risky behaviors at age 17 differed for the full-term group versus the preterm groups.

Risky behaviors for the full-term group were predicted by adolescents' lack of self-control and lack of parental control.

Perinatal Group	Level	Variables	R ²	ΔR ²	Final Model β
Full-Term Group	Biological	∅			
	Behavioral	Self-control	.234	.234	-.460**
	Social	Parent sanctions	.514	.280	-.530***
	Physical environment	∅			

Results (con't)

For the healthy preterm group, risky behaviors were predicted by adolescent depression, however, when parent sanctions was added, the association of adolescent depression and risky behaviors was attenuated.

Perinatal Group	Level	Variables	R ²	ΔR ²	Final Model β
Healthy Preterm Group	Biological	∅			
	Behavioral	Depression			
	Social	Parent sanctions	.415	.415	-.644**
	Physical environment	∅			

$R^2 = .415$, $R^2 = .374$
 $F(1, 15) = ., p = .007$

For the preterm with morbidity group, risky behaviors were predicted by adolescent depression, lack of parental control, increased social activity, decreased friends' disapproval, and lower socioeconomic status.

Perinatal Group	Level	Variables	R ²	ΔR ²	Final Model β
Preterm with Morbidity Group	Biological	∅			
	Behavioral	Depression	.267	.267	-.138*
	Social - Parent	Parent sanctions	.461	.194	-.492***
	Social - friend	Social Competence	.588	.127	.182*
	Physical environment	SES	.617	.029	-.173*

$R^2 = .617$, $R^2 = .592$,
 $F(5, 84) = 25.403$,
 $p < .001$

Conclusions

- Unlike their peers born full term, adolescents born preterm did not engage in more risky behaviors at age 17 and there were different contextual influences.
- Some evidence suggests that formerly preterm adolescents have low social competence, due in part to a small social network. Isolation from peer networks may reduce their exposure to peer-influenced risky behaviors.
- Consistent parent sanctions decrease the incidence of risky behaviors such as cigarette smoking, alcohol and drug use, risky driving, and risky sexual behaviors.
- Adolescents with psychological illness should be assessed for risky behaviors.
- Understanding of how different contexts reduce risky behaviors can lead to development of health-promoting interventions.

References

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