

Social Competence of Preterm Infants at Age 17

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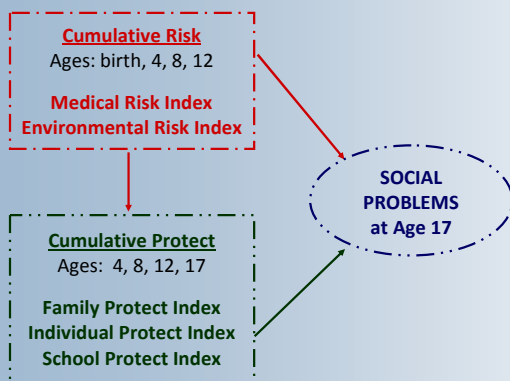
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BACKGROUND

Little is known about prematurity effects at late adolescence. Social competence is important for a successful adulthood. The presence of social problems in adolescence may signify difficulty in mastering social competence as an adult. Longitudinal studies investigating multi-level, mediating relationships among individual, family, and school protection and risk processes across childhood and adolescence are scarce.

THEORETICAL FRAMEWORK

The theoretical framework takes a developmental perspective to conceptualize risk and protection as contexts affecting social problems at age 17.



SPECIFIC AIMS

- 1 - Examine agreement between parent and adolescent report of social problems at age 17
- 2 - Test direct effects of risk and mediating effects of protection on social problems at age 17

STUDY DESIGN

Prospective, longitudinal, 5-group design.
N = 213 infants recruited at birth and followed at 18m, 30m, 4y, 8y, 12y, & 17y

SAMPLE AND MEASURES

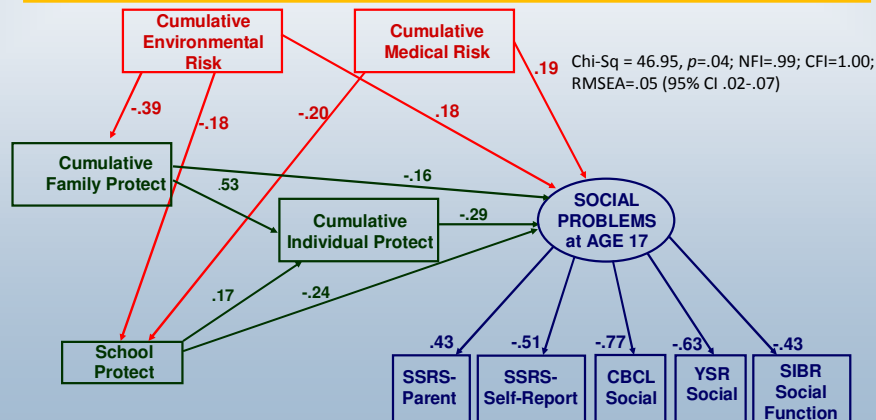
Perinatal Group	N=180	Grouping Criteria
Full Term Infants		>37 weeks gestation medically & neurologically healthy
Preterm Infants		<37 weeks gestation
Healthy Preterm		no medical/neurological complications
Medical Preterm		medical illness, BPD, NEC, Respiratory Distress Syndrome, sepsis
Neurological Preterm		neurological illness, Grade III & IV IVH, meningitis, shunted hydrocephalus
Small for Gestational Age		birth weight for gestational age below 10 th percentile

CUMULATIVE RISK: birth, 4y, 8y, 12y MEDICAL RISK INDEX $\alpha = .87$	CUMULATIVE PROTECT: 4y, 8y, 12y, 17y FAMILY PROTECT INDEX $\alpha = .83$
Neonatal Risk, IVH, NEC, Meningitis, BPD, Hydrocephalus, Duration of Oxygen, Medical Status, Neurological Status	Maternal Interaction Styles, Maternal Interaction Styles, Responsivity, Family Support, Cohesion, Parent-Child Relationship
ENVIRONMENTAL RISK INDEX $\alpha = .89$	INDIVIDUAL PROTECT INDEX $\alpha = .64$
SES, Mom/Dad Education, Occupation, Marital Status, Minority Status, Mom Depression, Psychological Distress, Life Stress, Family Resources	Mood, Persistence, Approach, Adaptability, Self-Confidence, Religiosity, Positive Life Events
	SCHOOL CONNECT INDEX $\alpha = .71$
	Close to Others, Happy and Safe at School

OUTCOMES at AGE 17

Social Skills Rating Scale (SSRS): Parent Report & Adolescent Self-Report. Standard score of *Social Skills* subscale.
Child Behavior Checklist (CBCL): Parent Report. Total standard score on *Social Competence* subscale.
Youth Self Report (YSR): Adolescent Self-Report. Total standard score on *Social Competence* subscale.
Scales of Independent Behavior-Revised (SIBR): Parent Report. *Social Interaction Functioning* subscale.

RESULTS



RESULTS (continued)

Results - Aim 1
Small to moderate agreement between parents and adolescents on social problems at age 17y, $r = .19-.50, p < .05$.

Results - Aim 2
Family and school protect indexes mediated environmental risk on social problems.

School protect mediated medical risk, including prematurity, on social problems.

Individual protect mediated family and school protect indexes on social problems.

CONCLUSIONS

Protect Indexes suppressed the effects of **Risk Indexes** and **Social Problems** at age 17 in formerly preterm infants.

- Long-term medical, including prematurity, and environmental risk, have direct effects on social problems at age 17.
- Cumulative protect indexes - individual, family, and school - are excellent predictors of social problems.
- Both family and school contexts protect against the effects of cumulative environmental risk. For example, for adolescents with few family resources and high levels of stress, a supportive family and safe school environment buffers the effects of risks on social problems at age 17.
- Individual protection refers to separate contributions of the adolescent such as temperament, positive self-confidence, and religiosity. As a mediator, the adolescent is 'filtering' the contextual factors of home and school in social behaviors.

IMPLICATIONS

- Findings suggest that interventions centered on enhancement of protective processes and their interactions with risk may reduce social problems in adolescence.
- Family-based interventions will maximize family cohesion and parent-child interaction. Schools that treat students fairly and create a favorable, safe environment will protect against cumulative risks. Individual-level interventions will teach and promote child resilience.¹
- If social problems are minimized during this developmental period through protection-based interventions, social competence in adulthood will be successful.

¹Lester, BM, Masten, A, McEwen, B. (2006). *Resilience in Children*. Annals of the New York Academy of Sciences, 1094. Boston, MA.