Predictive Risk Factors for Antisocial Behavior

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Data available from the meta-analysis

- 225 studies reporting 11,388 longitudinal correlations between a risk variable and an antisocial behavior variable measured later

- Sample characteristics
  - 67% primarily white, 18% primarily minority
  - 47% primarily low/working class, 24% primarily middle class
  - Mean proportion male = .57
  - Mean age at first wave = 10.1
  - Mean interval between waves = 32 mos.
- Major sources for the risk and outcome measures
  - Child reports: 43% or the risk measures and 38% of the outcome measures
  - Teacher reports: 11% of the risk measures and 24% of the outcome measures

Identifying the construct categories for antisocial behavior outcomes

- Antisocial behavior (ASB) measures inductively sorted into categories based on conceptual similarity

- MR models used to standardize cross-sectional correlations between different ASB measures for a consistent profile of sample and measurement characteristics
  - Age, gender, SES, ethnicity, risk
  - Source (child, parent, etc.), scaling (binary, continuous)

- Mean cross-sectional correlations across constructs examined to ensure that inclusion in the same construct category is empirically justified

Antisocial behavior outcome constructs

Constructs & construct categories	Mean cross-construct correlation	Constructs & construct categories	Mean cross-construct correlation
Delinquency/ Illegal Behavior	.30	*Problem Behavior*	
		Aggression & disruption	.33
		Disruptive behavior	.34
Violence/Aggression		School adjustment	.33
Violence	.41	Anger, hostility	.35
Aggressive behavior	.32	CBCL delinquency	.29

Number of Longitudinal Correlations in Major Risk Categories Predicting Antisocial Behavior Outcomes

	Antisocial Behavior Outcome		
Risk Variable Category	Delinquency/ Illegal Behavior	Violence/ Aggression	Problem Behavior
Prior antisocial behavior	793	559	1974
Substance use	154	62	28
Drug exposure & attitudes	185	49	28
School motivation & attitudes	320	84	386
Peer behavior & influences	343	90	35
Parenting behaviors	647	207	1264

Adjustments to the longitudinal correlation coefficients

- Step 1: MR models used to produce standardized longitudinal correlation coefficients for a consistent profile of measurement characteristics:
  - Scaling (e.g., dichotomous, continuous)
  - Reporting source (e.g., self vs. parent)
  - Form of data collection (e.g., standardized test, observation)
- Step 2: Second stage MR models used to predict the standardized correlation coefficients from age, age^2, interval between waves, and age*interval for each combination of risk-outcome categories
- Risk-outcome correlations for given Time 1 and Time 2 ages estimated from the second stage models

Mean correlations between major risk categories at age 11 and ASB outcomes at 16

| Risk Construct Category	Antisocial Behavior Outcome		
	Delinquency/ Illegal Behavior	Violence/ Aggression	Problem Behavior
Prior antisocial behavior	.32	.73	.19
Substance use	.54	.48	.27
Drug exposure & attitudes	.17	.12	.19
School motivation & attitudes	.33	.33	.34
Peer behaviors & influences	.18	.35	.37
Parenting behaviors	.18	.22	.40

[a] Estimated from weighted regression models that included age at Time 1, age^2, Time 1-Time 2 interval, and age*interval; means calculated from the models for age= 11 and interval= 5 (age 16).

Within a risk category, micro constructs have about the same risk-outcome correlations: E.g., Prior ASB and SU as predictors of Delinquency/Illegal Behavior

Risk Constructs & Categories	T1=11 T2=16	T1=16 T2=20	Nes (Nss)
Prior Antisocial Behavior			
Delinquency/illegal behavior	.33	.31	479 (106)
Violence/aggression	.30	.29	62 (15)
Low level problem behavior	.30	.29	188 (48)
Substance Use			
Alcohol use	.56	.28	51 (12)
Marijuana use	.55	.27	41 (6)
Mixed substance use	.51	.22	60 (14)

Risk age differences: For prior ASB, risk at later age is stronger predictor of delinquency
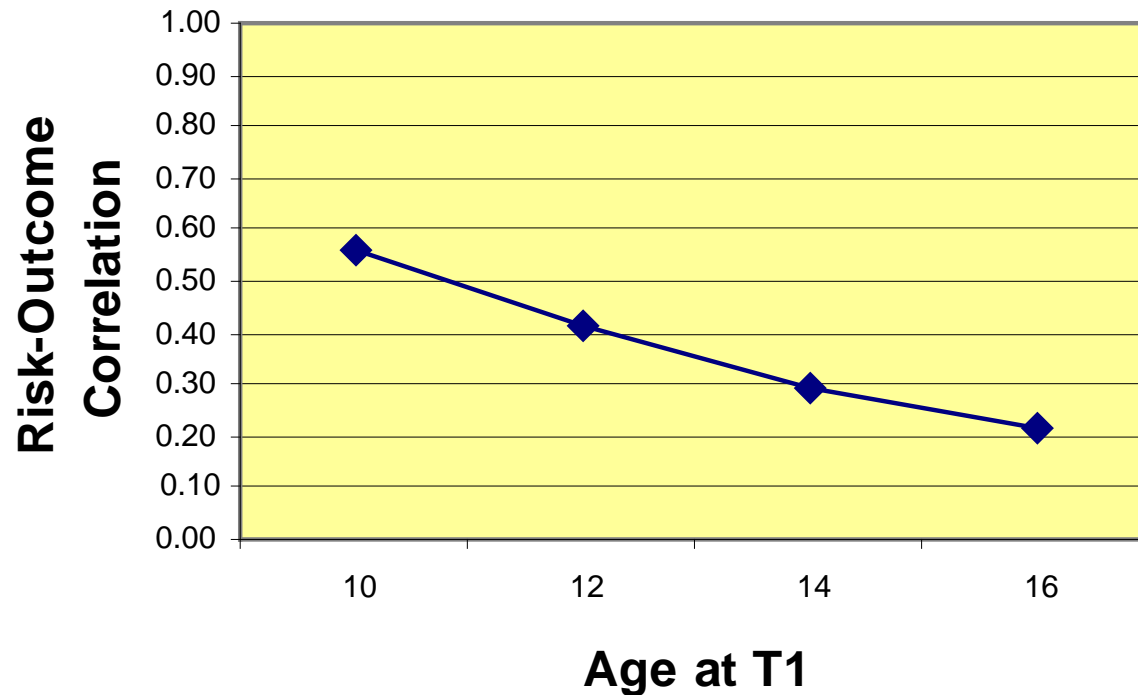
Prior ASB predicting delinquency at age 18
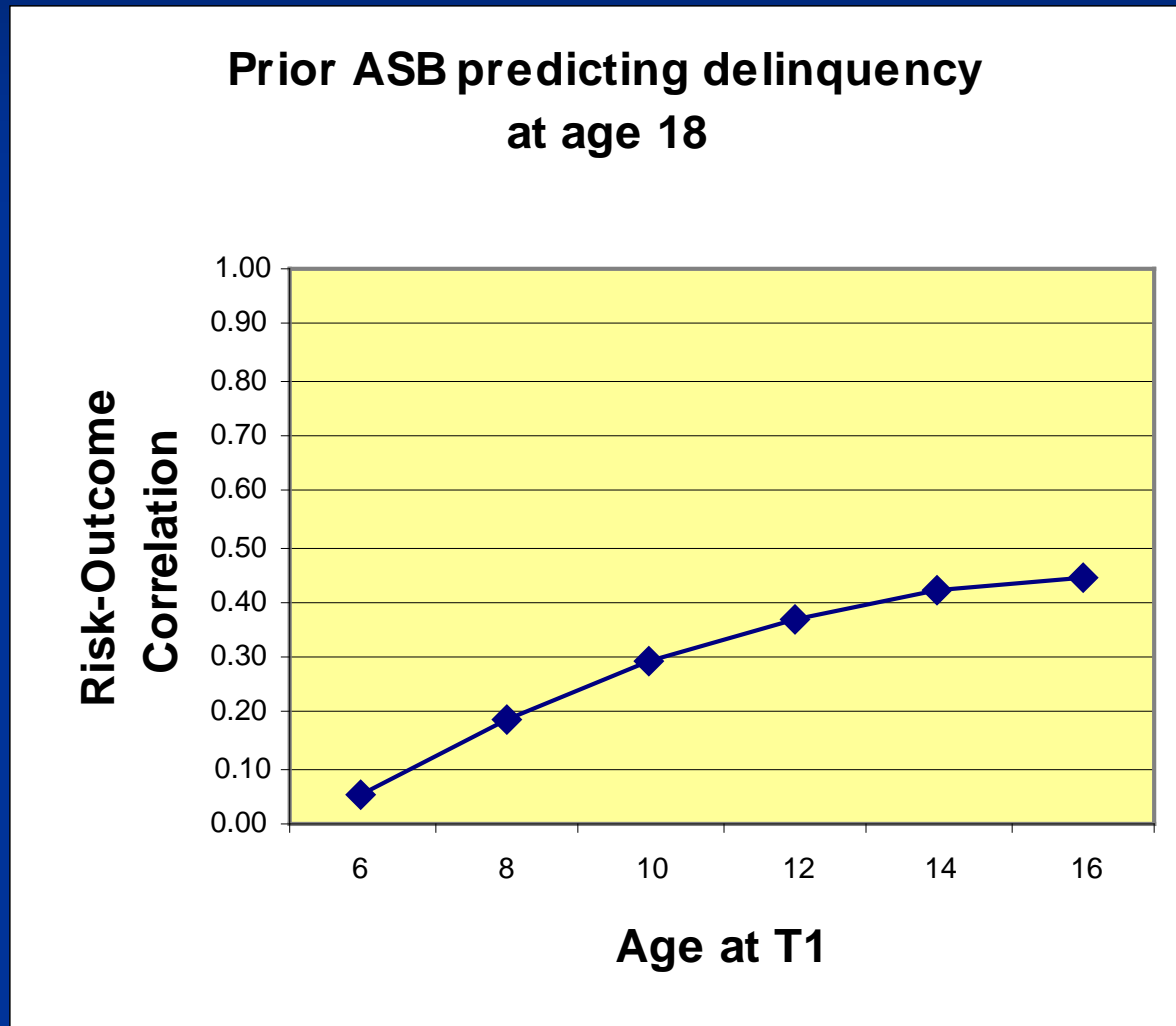
Peer influence at later ages is a stronger predictor of delinquency

Peer behavior/influences predicting delinquency at age 18
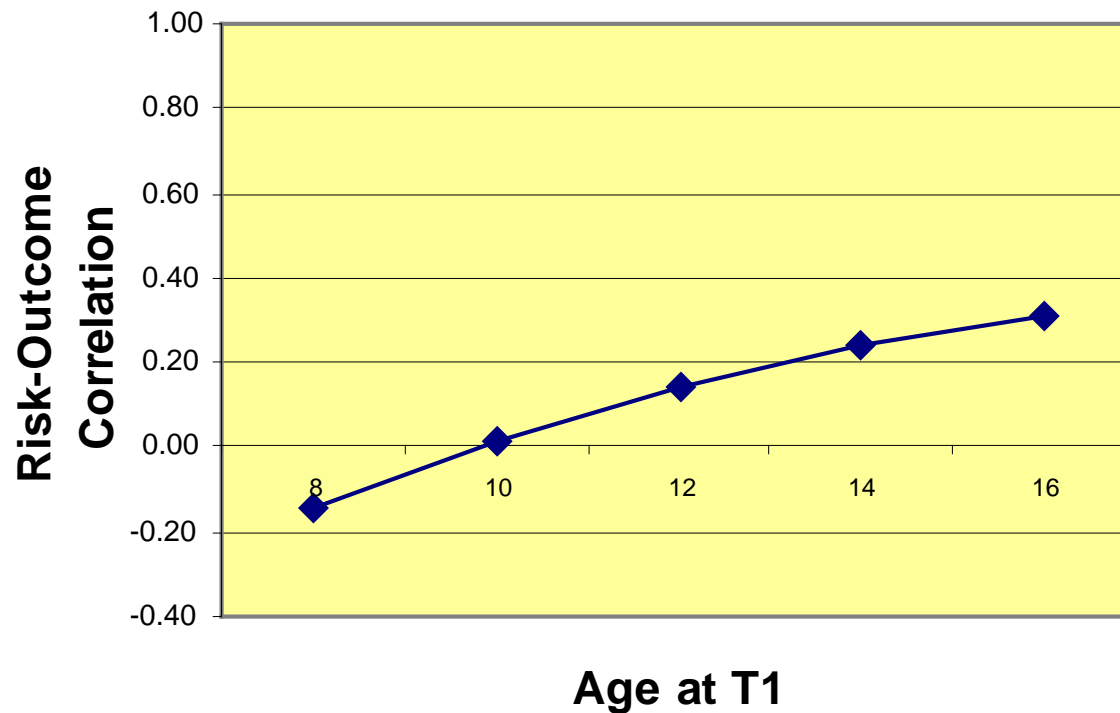
Substance use at earlier ages is a stronger predictor of delinquency

Substance use predicting delinquency at age 18

Parenting at earlier ages is a stronger predictor of delinquency

Parenting practices predicting delinquency at age 18