

Family-Level Protective Processes Associated with Adolescent Aggression

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Introduction

- Overview of Adolescent Aggression
- Possible Theoretical Explanations
 - 1) Developmental-Ecological Model (Tolan, Guerra, & Kendall, 1995)
 - Violence stems from inadequate development of pro-social skills as well as a lack of opportunity to express and practice these skills.
 - 2) Social Learning Model (Bandura, 1986)
 - Violence is learned from past experiences

Factors Versus Processes

- **Factors:** probability markers related to the likelihood of aggression (e.g., demographic factors) that can either increase or decrease the probability of a negative event.
- **Processes:** specific causal paths or mechanisms that describe how risk and protective factors operate.
- Although **factors** illuminate areas or populations to target for intervention, **processes** illuminate what variables might be key for interventions (i.e., how to intervene).

Parenting Practices as Family-Level Protective Processes

- Authoritative Parenting (Baumrind, 1991)
 - Demanding: efforts to ensure that adolescents behave appropriately through supervision, discipline, and maturity demands
 - Responsive: efforts to foster development of autonomy, individuality, and self-regulation by being supportive, caring, and sensitive

Optimal Balance?



Current Constructs Defined

- Demandingness Constructs:
 - Parental Behavioral Control (Dishion & McMahon, 1998; Rogers, Buchanan, & Winchell, 2003; Stattin & Kerr, 2000)
 - Parent-Adolescent Problem Solving (Reese et al., 2000)
- Responsiveness Constructs:
 - Parental Warmth (Scaramella et al., 1999)
 - Family Involvement (Stroul, 1996)
 - Parent-Adolescent Communication (Blum et al., 2003; Chandy et al., 1996)

Hypotheses

- H₁: The family-level protective processes categorized as **demanding** (i.e., parental behavioral control and parent-adolescent problem-solving) will be more strongly linked to aggression in **late adolescence** compared to early adolescence.
- H₂: The family-level protective processes categorized as **responsive** (i.e., parental warmth, family involvement, and parent-adolescent communication) will be more strongly linked to aggression in **early adolescence** compared to late adolescence.
- H₃: Adolescents who desist in levels of aggression will have higher levels of family-level protective processes compared to those adolescents who do not desist.

Method

Participants

- NC FACES (North Carolina Families and Communities Equals Success) grant communities, funded by the Center for Mental Health Services in 1997.

Eligibility

- 11-and 18-years-old at intake,
- A local county resident,
- A clinical diagnosis,
- Separated or at risk of being removed from the home, and
- Multiple agency needs.

Demographics

- **Cross-Sectional Study (T1 = baseline):**
 - 232 clinically-referred adolescents ages 11 to 17 years old, all had at least one clinical diagnosis
 - 65% male, 35% female
 - 60% European American, 36% African American 4% Hispanic or “other”
 - 72% in custody of at least one biological parent, 10% other relative, 4% adoptive or foster parent, 14% in state custody
- **Longitudinal Study (T2 = one year later):**
 - 134 participants available for longitudinal analysis (out of original 232 participants)
 - Attrition analysis shows only difference is level of aggression with longitudinal group showing higher levels of aggression

Procedures

- Evaluation component coordinated by ORC MACRO where children and caregivers are interviewed on a variety of instruments at baseline and at six-month intervals thereafter over a three-year period (current study uses baseline and one year data).
- 2-hour in-home interviews were conducted with the caregiver; 1-hour in-home interviews were conducted with youth.
- Monetary incentives are provided to the respondents (\$25.00 for baseline interviews; \$30.00 for follow-up interviews).

Measures

Aggression

Caregiver Report

- Child Behavior Checklist (CBCL; Achenbach, 1991) – utilized *T*-scores from the aggression subscale (20 item subscale);
 - “Physically attacks people,” and “Gets in many fights”
 - 3-point scale (0 = rarely/never, 1 = sometimes, 2 = often/always)
- Cronbach’s $\alpha = .86$ (Time 1) and .88 (Time 2)

Adolescent Report

- Youth Self-Report (YSR; Achenbach, 1991) - utilized *T*-scores from the aggression subscale (20 item subscale);
 - “Teases a lot,” and “Threatens people”
 - 3-point scale (0 = rarely/never, 1 = sometimes, 2 = often/always)
- Cronbach’s $\alpha = .84$ (Time 1) and .85 (Time 2)

- Adolescent and caregiver reports were correlated .45 ($p < .001$) at T1 and .52 ($p < .001$) at T2. Thus, reports combined to create an overall indicator of aggression.

Family Involvement

- Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1997)
- Family Involvement subscale - 10-items
 - 4-point scale (0 = the behavior was not at all like the child through 3 = the behavior was very much like the child)
 - “Participates in family activities”
 - (Cronbach’s $\alpha = .84$)

Warmth, Behavioral Control, & Communication

- Family Assessment Device (FAD; Epstein, Baldwin, & Bishop, 1983)
 - Utilizes averaged standardized subscale scores
 - Reported by both caregivers and adolescents
 - 4-point scale (0 = strongly disagree through 4 = strongly agree)
 - (Cronbach’s $\alpha \geq .87$ for each subscale across each reporter)
 - Adolescent and caregiver reports were combined to create overall composites

Zero-Order Correlations Among Adolescent Aggression, Family-Level Protective Processes, and Adolescent Age

<i>Adjustment Measure</i>	FI	PS	Com	BC	War	Age
Aggression	-.31***	-.15*	-.12*	.03	-.23***	-.19*
Family Involvement		.35***	.21***	.11	.26***	.01
Problem-Solving			.61***	.50***	.44***	.11
Communication				.52***	.50***	-.01
Behavioral Control					.42***	.02
Warmth						-.06

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

Non-significant correlations among aggression, gender, ethnicity (African-American, European-American), and sex.

Descriptive Statistics for Aggression Variables

Indicator	Early Adolescence ^a Mean (SD)	Middle/Late Adolescence ^b Mean (SD)
Aggression (T1)	70.65 (10.94)	66.96 (11.11)
Aggression (T2)	66.73 (9.54)	61.64 (9.12)

^a $t(80) = 3.33, p < .001.$
^b $t(54) = 3.46, p < .001.$


Descriptive Statistics for Demandingness Variables

Indicator	Early Adolescence Mean (SD)	Middle/Late Adolescence Mean (SD)
Behavioral Control	3.10 (.34)	3.11 (.36)
Problem-Solving	2.79 (.36)	2.75 (.38)

Descriptive Statistics for Responsiveness Variables

Indicator	Early Adolescence Mean (SD)	Middle/Late Adolescence Mean (SD)
Family Involvement	7.94 (2.57)	7.56 (3.41)
Warmth	2.64 (.41)	2.61 (.42)
Communication	2.71 (.35)	2.73 (.29)

Hypotheses One and Two: The Shift



EARLY ADOLESCENCE	MIDDLE/LATE ADOLESCENCE
<ul style="list-style-type: none"> • “Demanding” Main effects: <ul style="list-style-type: none"> – none • “Responsive” Main Effects: <ul style="list-style-type: none"> – Family involvement, $t(119) = -2.77, p < .001, \beta = -.25$ – Warmth, $t(119) = -2.24, p < .001, \beta = -.23$ 	<ul style="list-style-type: none"> • “Demanding” Main effects: <ul style="list-style-type: none"> – Behavioral Control, $t(112) = 2.78, p < .01, \beta = .29$ – Problem-Solving, $t(112) = -1.80, p < .10, \beta = -.22$ • “Responsive” Main Effects: <ul style="list-style-type: none"> – Family involvement, $t(112) = -2.19, p < .05, \beta = -.23$

- ### Hypothesis Three: Desistance Vs. Non-Desisted
- “Desistance” defined here as a drop in aggression *T*-score by at least one-half standard deviation
 - Collapsed age groups
 - 38% desisted ($n = 51$), 13% increased in aggression, 49% showed no significant difference in aggression
 - 63% of desisted group were age 13 or younger
 - Desisted: 33 boys, 18 girls
 - Examined group differences with all five family-level protective processes using independent samples *t*-tests
 - No significant group differences, suggesting that levels of family protective processes did not differ for adolescents who desisted in aggression over a one year period.

- ### Discussion
- Behaviors and needs of adolescents differ...optimal balance of parenting practices to protect against aggression differ.
 - H_1 regarding demandingness (behavior control, problem-solving) was marginally supported.
 - As adolescents get *older*, effective **problem-solving ability** between parent and youth becomes *more protective* against adolescent aggression.

- As adolescents get *older*, parental **behavioral control** becomes a significant factor for adolescent aggression, but in the *opposite* direction predicted. That is, *higher levels of parental behavioral control are linked with higher levels of aggression.*
- Desire for autonomy leads them to rebel against control? (Large percentage of youth in study with oppositional-defiant disorder and conduct disorder)
- Behavioral control efforts *in response* to increase in aggression, rather than *prior* to onset of aggression?
 - However, no evidence that parental control increased over the course of the study

- H₂ regarding responsiveness (warmth, family involvement, parent-adolescent communication)
 - Supported for warmth: *Higher warmth* linked with *lower aggression* in *early* adolescence, NOT related to aggression in middle/late adolescence
 - Supported for involvement: *More involvement* linked with *lower aggression* in BOTH early and middle/late, but the *magnitude* of the relationship was larger for *early* adolescence
 - Not supported for communication

Aggression Desistance

- H₃: sub-sample of adolescents who desisted compared with sample that did not desist (longitudinal)
 - Levels of family protective processes did NOT differ
- Relatively few adolescents desisted over the 1 year period
- Longer timeframe needed?

Strengths

- Further examination of *protective processes*
- Specific to adolescent stage (early vs. middle/late)
- Use of multiple reporters for protective processes and aggression

Limitations

- Attrition
 - Longitudinal study of desistance
- Clinically-referred sample vs. community sample
- Other types of protective processes not included (psychological control, discipline, absence of marital conflict, etc.)
- Potential variability in treatment

Implications and Future Directions

- Shift to Positive Psychology
 - Focus on strengths-based services
 - Are we really using them?
- Need for Intervention to Prevent Further Decompensation

