Family-Level Protective Processes Associated with Adolescent Aggression

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Introduction

• Overview of Adolescent Aggression
  1) Developmental-Ecological Model (Tolan, Guerra, & Kendall, 1992)
  • 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

Current Constructs Defined

• Demandingness Constructs:
  1) Parental Behavioral Control (Dishon & McMahon, 1998; Rogers, Buchanan, & Winchell, 2003; Stattin & Kerr, 2000)
  2) Parent-Adolescent Problem Solving (Reese et al., 2000)

• Responsiveness Constructs:
  1) Parental Warmth (Scaramella et al., 1999)
  2) Family Involvement (Stroul, 1996)
  3) 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 Equest 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.

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).

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
  • 66% European American, 34% 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

Measures

Aggression
Caregiver Report
- Child Behavior Checklist (CBCL, Achenbach, 1991) – utilized T-scores from the aggression subscale (20 item subscale)
  • “Physically attacks people,” and “Goes in many fights”
  • 4-point scale (0 = never, 1 = sometimes, 2 = often, 3 = very often)
  • Cronbach’s α = .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)
  • “Tense a lot,” and “Threatens people”
  • 4-point scale (0 = never, 1 = sometimes, 2 = often, 3 = very often)
  • Cronbach’s α = .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.

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

<table>
<thead>
<tr>
<th>Adjustment Measure</th>
<th>T1</th>
<th>P1</th>
<th>Com.</th>
<th>ICC</th>
<th>Var.</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression</td>
<td>.51***</td>
<td>.14*</td>
<td>.03</td>
<td>.23***</td>
<td>.14*</td>
<td>.03</td>
</tr>
<tr>
<td>Family Involvement</td>
<td>.32***</td>
<td>.21***</td>
<td>.11</td>
<td>.29***</td>
<td>.21***</td>
<td>.01</td>
</tr>
<tr>
<td>Problem-Solving</td>
<td>.54***</td>
<td>.01***</td>
<td>.11</td>
<td>.54***</td>
<td>.01***</td>
<td>.11</td>
</tr>
<tr>
<td>Communication</td>
<td>.25***</td>
<td>.10***</td>
<td>.01</td>
<td>.25***</td>
<td>.10***</td>
<td>.01</td>
</tr>
<tr>
<td>Behavioral Control</td>
<td>.52***</td>
<td>.04**</td>
<td>.02</td>
<td>.52***</td>
<td>.04**</td>
<td>.02</td>
</tr>
<tr>
<td>Warmth</td>
<td></td>
<td></td>
<td></td>
<td>.32***</td>
<td>.06</td>
<td></td>
</tr>
</tbody>
</table>

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

Notes: significant correlation among aggression, gender, ethnicity (African-American; European-American), and age.
Descriptive Statistics for Aggression Variables

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Early Adolescence Mean (SD)</th>
<th>Middle/Late Adolescence Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggression (T1)</td>
<td>70.65 (10.94)</td>
<td>66.96 (11.11)</td>
</tr>
<tr>
<td>Aggression (T2)</td>
<td>66.73 (9.54)</td>
<td>61.64 (9.12)</td>
</tr>
</tbody>
</table>

\* (80) = 3.33, \* (80) = .001.
\* (54) = 3.40, \* (54) = .001.

Descriptive Statistics for Demandingness Variables

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Early Adolescence Mean (SD)</th>
<th>Middle/Late Adolescence Mean (SD)</th>
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</thead>
<tbody>
<tr>
<td>Behavioral Control</td>
<td>3.10 (.34)</td>
<td>3.11 (.36)</td>
</tr>
<tr>
<td>Problem-Solving</td>
<td>2.79 (.36)</td>
<td>2.75 (.38)</td>
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</tbody>
</table>

Descriptive Statistics for Responsiveness Variables

<table>
<thead>
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<th>Indicator</th>
<th>Early Adolescence Mean (SD)</th>
<th>Middle/Late Adolescence Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family Involvement</td>
<td>7.94 (2.57)</td>
<td>7.56 (3.41)</td>
</tr>
<tr>
<td>Warmth</td>
<td>2.64 (.41)</td>
<td>2.61 (.42)</td>
</tr>
<tr>
<td>Communication</td>
<td>2.71 (.35)</td>
<td>2.73 (.29)</td>
</tr>
</tbody>
</table>

Hypotheses One and Two: The Shift

**EARLY ADOLESCENCE**
- "Demanding" Main Effects: none

**MIDDLE/LATE ADOLESCENCE**
- "Demanding" Main Effects:
  - Behavioral Control, \( r(112) = -2.78, p < .01, \beta = 0.29 \)
  - Problem-Solving, \( r(112) = 1.80, p < .05, \beta = 0.22 \)
- "Responsive" Main Effects:
  - Family Involvement, \( r(112) = -2.18, p < .05, \beta = 0.23 \)

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 = 50), 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, 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

- H_2 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**

- H_3: 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
Questions?