



Family Functioning and Adolescent Adjustment: A Latent Class Analysis

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BACKGROUND

- ❖ Threats to adolescent health (Kann et al., 2016; Kessler et al., 2012):
 - internalizing symptoms: depression and anxiety
 - substance use
- ❖ Buffer: warm and supportive family functioning (Johnson, McBride, Hopkins, & Pepper, 2014; Yap, Pilkington, Ryan, & Jorm, 2014).
- ❖ Dimensions of family functioning captured in theoretical Olson's Circumplex model (Olson, 1999; Olson, Sprenkle, & Russell, 1979).
 - cohesion
 - adaptability
 - communication
- ❖ Empirically-derived categories of family functioning utilizing individual differences are largely absent from the literature (Amato, King, & Thorsen, 2016; Fosco & Grych, 2013).
- ❖ Applying latent class analysis (LCA) to theorized indicators of family functioning lets one to discern heterogeneous subgroups (McCutcheon, 1987).
- ❖ Accordingly, study aims were to:
 - 1) apply LCA to multiple indicators of family functioning
 - 2) examine class differences in associated internalizing symptoms and substance use

METHODS

Participants:

- ❖ 1,035 adolescents (53% female; 56% white; age = 16.14, SD = 0.75 years) from public high schools in the mid-Atlantic United States.

Procedures:

- ❖ Adolescents completed surveys in school during spring of 2007.
- ❖ Parental consent and adolescent assent were obtained.
- ❖ All procedures were approved by the University of Delaware IRB.

Measures:

- ❖ The Family Satisfaction Survey (Olson & Wilson, 1989)
 - cohesion and adaptability subscales assessed adolescents' reports of closeness within the family and flexibility with rules and structure
- ❖ The Parent-Adolescent Communication Scale (Barnes & Olson, 1992)
 - open and problem subscales assessed adolescents' ratings of parent-specific communication with both mother and father

METHODS

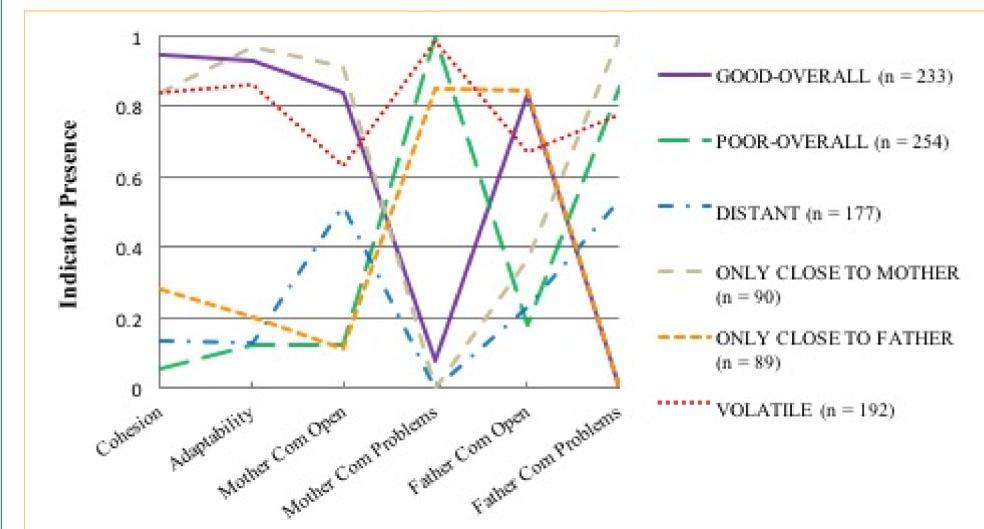
Measures:

- ❖ The Center for Epidemiological Studies Depression Scale for Children
 - past-week depressive symptoms (Weissman et al., 1980)
- ❖ The Screen for Child Anxiety Related Disorders (Birmaher et al., 1995)
 - anxiety symptoms during the past three months
- ❖ Alcohol use was assessed via questions about consumption quantity and frequency.
 - scores reflected an estimated total volume
- ❖ Drug use (marijuana, sedatives, stimulants, inhalants, hallucinogens, cocaine, "crack," and nonmedical opiates) within the past six months.
- ❖ Logarithmic transformation was used to correct for skewness for both alcohol and drug use.

RESULTS

- ❖ Fit indices (BIC, AIC, cAIC, LMR-LRT, BLRT, and entropy) converged to suggest that a 6-class solution provided the best fit.
- ❖ Average posterior probabilities suggested good classification accuracy (.75 – .93).

Figure 1. LCA revealed the presence of six classes



- ❖ Analyses of covariance (ANCOVAs) examined these subgroups in relation to internalizing symptoms and substance use. Bonferroni-corrected post hoc tests examined pairwise comparisons.

This research was supported by NIAAA K01 AA015059. Poster may be viewed at Adolescentadjustmentproject.org

RESULTS

- ❖ The poor overall, distant, only close to father, and volatile subgroups had significantly higher depressive symptoms relative to the good overall subgroup ($p < .01$).
- ❖ The poor overall and volatile subgroups also had significantly higher total anxiety scores relative to the good overall subgroup ($p < .05$).
- ❖ Group membership did not predict alcohol use; however, the distant subgroup reported significantly higher drug use than the good overall subgroup ($p < .05$).

Table 1. Family Functioning Subgroup Differences with Regard to Internalizing Symptoms and Substance Use

| Variables | Good Overall (n = 233) | | Poor Overall (n = 254) | | Distant (n = 177) | | Only Close to Mother (n = 90) | | Only Close to Father (n = 89) | | Volatile (n = 192) | | P-value |
|---------------------|------------------------|-------|------------------------|-------|-------------------|-------|-------------------------------|-------|-------------------------------|-------|--------------------|-------|---------|
| | M | SD | M | SD | M | SD | M | SD | M | SD | M | SD | |
| Depressive Symptoms | 30.19 | 8.21 | 41.16*** | 11.46 | 36.03*** | 10.71 | 33.67 | 9.80 | 39.03*** | 12.42 | 34.69** | 10.05 | <.001 |
| Anxiety Symptoms | 13.03 | 9.20 | 18.30*** | 13.39 | 14.86 | 11.61 | 16.72 | 11.18 | 19.12 | 13.58 | 18.13* | 15.00 | .001 |
| Total Alcohol Use | 4.23 | 11.04 | 5.21 | 13.86 | 5.95 | 15.60 | 3.23 | 8.29 | 5.26 | 13.38 | 4.85 | 12.95 | .40 |
| Total Drug Use | 0.52 | 1.81 | .98 | 3.00 | 1.65* | 5.05 | .71 | 1.92 | 1.45 | 4.35 | .52 | 1.80 | .003 |

Note: Subscripts represent significant differences between the subgroup and GOOD OVERALL family functioning subgroup. All p-values have Bonferroni-correction for multiple comparisons. All analyses adjusted for gender, age, and race/ethnicity.

CONCLUSIONS

- ❖ The distant subgroup parallels the Circumplex's disengaged family, and the volatile subgroup shares similarities with the enmeshed family, highlighting the theoretical value of extending LCA into the family functioning domain.
- ❖ Associations with adolescent adjustment suggest that lack of parental warmth and problem communication are differentially related to greater depression.
- ❖ Problem communication with both parents was associated with anxiety, suggesting that having at least one warm parental relationship may protect against anxiety symptoms.
- ❖ Only the distant subgroup reported more drug use than the good overall subgroup, perhaps through dint of less parental monitoring (Branstetter & Furman, 2013).
- ❖ Results emphasize that patterns of family functioning, beyond individual indicators, relate to adjustment, further highlighting the need for prevention to target multiple aspects of family functioning (i.e. cohesion, adaptability, and communication).