Youth group participation: A potential component of clinical care for behavioral difficulties

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INTRODUCTION

- Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD) account for 1/3-1/2 of all youth mental health referrals (Knock, Kazdin, Hirripi, & Kessler, 2006)
- Estimates of childhood conduct problems suggest 5%-10% of children, ages of 8 and 16 years, have persistent oppositional/aggressive behavior problems (Angold & Costello, 2001)

INTRODUCTION

- The behaviors that are associated with CD and ODD are broad, yet are regularly associated with:
 - sexual risk-taking
 - substance abuse
 - delinquent behaviors

INTRODUCTION

- Reviews of the treatment of ODD and CD disorders note several forms of clinical care are successful in reducing these behaviors
- However, disorders often fail to be reduced from clinical levels to non-clinical levels of impairment (Burke et al., 2002; Knock et al., 2006)

INTRODUCTION

- This suggests clinical care may benefit from other supplemental sources of mental health support that may enhance behavioral change
- These supplemental sources may enhance services and facilitate youth reaching the tipping point between clinical and non-clinical levels of CD and/or ODD

INTRODUCTION

- There has been a recent movement toward considering resources born of the community as a means to benefit youth mental health and behavioral outcomes
- Resources born of the community often reflect the values and needs of a specific community, which is recognized as a key to effective clinical care

OBJECTIVES

The current study examines participation in youth groups (which are often a resource born of the community) as a possible factor protective of youth behavioral difficulties that may warrant consideration as a supplement to clinical care

LITERATURE REVIEW

- Sparse number of studies
- Research has linked youth group participation with reduced liklihood of substance abuse (Kerestes, Youniss, & Metz, 2004)
- Research has linked youth group participation with increased levels of youth prosocial behavior (Reinders-Heinz & Youniss, 2006)

LITERATURE REVIEW

- However, studies used convenience samples of mostly private school children
- Did not make rigorous inquiry into a broad range of sexual risk taking, substance abuse, and delinquent behaviors
- Prior works did not control for a large number of risk factors that may explain behavioral difficulties and which youth may even opt to join youth groups

RESEARCH QUESTION

- Will youth who participated in youth groups be significantly less likely to engage in sexual risk taking, substance abuse, and delinquent behaviors?
- Controlling for demographic characteristics, the presence of school problems, youth mental health state, exposure to community violence, and protective factors

METHODS

Study Setting

- All data were taken from the National Longitudinal Study of Adolescent Health
- One of the nation's largest and most rigorous studies of adolescent behavior
- Study uses Public-use dataset (Wave I)
- 5,612 of the 6,504 in this dataset provided data on youth group participation and are included in the current study

METHODS

Sample

- 52% female (n=3356) and 48% male (n=3147)
- Average child age is 16 years (SD=1.62)
- 66% (*n*=4291) White, 25% (*n*=1601) African-American, 12% (*n*=743) Hispanic, 4% (*n*=236) Asian, 1% (*n*=73) Native American, and 5% (*n*=297) other
- 10% (n=657) of families received public assistance in the last year

METHODS

Measures

- Outcomes
- <u>Delinquent behaviors</u>. Youth reported on 15 delinquent behaviors over last year
- <u>Sexual risk-taking</u>. Single item where youth were asked if they ever had sex
- <u>Substance abuse</u>. Youth reported lifetime use of cigarettes, alcohol, and illegal drugs
- Joint occurrences. Youth reported if they combined alcohol, drugs, driving, and/or school attendance over last year

METHODS

Measures

Independent variable

Participation in youth groups. Youth indicate if they attended youth groups weekly, infrequently (<once per month), or never, over the past 12 months.

METHODS

Measures

Covariates (control)

- <u>Demographics</u>. Race, age, sex, and family SES
- <u>School problems</u>. 2 items: 1) repeated a grade; and 2) out of school suspension
- <u>Youth mental health state</u>. 19-items
- Exposure to community violence. 8-items
- Protective factors. 8-items

METHODS

Data analysis

tp<.10, *p<.05

Logistic regression was used to examine the association between youth group participation and behavioral outcomes, while controlling for various other behavioral difficulty risk factors

RESULTS

Descriptive data

| Independent variable | |
|---------------------------|-------------------|
| Youth group participation | (past 12 months). |
| | n (%) |
| Weekly | 1403 (25%) |
| Infrequently (<1 monthly) | 1788 (32%) |
| Never | 2421 (43%) |
| Total | 5612 (100%) |
| | |

| Table 1. Delin | quent beha | avior and youth groups |
|-------------------|--------------------|--------------------------------------|
| Group attendance | (last 12 month | ns) OR (95% CI) |
| 1) Shoplifted | No (<i>n; %</i>) | Yes (<i>n; %</i>) |
| Weekly (Reference |)1145 (82%) | 254 (18%) |
| Infrequently | 1390 (78%) | 391 (22%) 1.2 (.97-1.4) [†] |
| Never | 1829 (76%) | 573 (24%) <u>1.2 (</u> 1.0-1.4)* |
| 2) Used drugs | No (<i>n; %</i>) | Yes (<i>n; %</i>) |
| Weekly (Reference |)1335 (96%) | 63 (4%) |
| Infrequently | 1685 (95%) | 95 (5%) 1.0 (.71-1.4) |
| Never | 2197 (91%) | 209 (9%) <u>1.4 (</u> 1.1-2.0)* |
| 3) Stolen (<\$50) | No (<i>n; %</i>) | Yes (<i>n; %</i>) |
| Weekly (Reference |)1195 (86%) | 203 (14%) |
| Infrequently | 1469 (82%) | 313 (18%) 1.2 (.95-1.4) |
| Never | 1932 (80%) | 473 (20%) <u>1.2</u> (1.0-1.5)* |
| | | |

22nd Annual RTC Conference Presented in Tampa, March 2009

| Table 2. Sexu | ual risk-taking and youth groups (last 12 months) OR (95% CI) |
|-------------------|---|
| 1) Ever had sex | No (<i>n; %</i>) Yes (<i>n; %</i>) |
| Weekly (Reference | e)1003 (72%) 388 (28%) |
| Infrequently | 1078 (61%) 695 (39%) <u>1.6</u> (1.3-1.9)*** |
| Never | 1317 (55%)1075(45%) <u>1.7</u> (1.4-2.0)*** |
| | |
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| | |
| ***p<.001 | |

| Table 3. Subs | stance abu | use and yo | outh groups |
|---------------------|----------------------|---------------------|-------------------------|
| Group attendance (| last 12 mont | hs) | OR (95% CI) |
| 1) Smoked cigarette | e No (<i>n; %</i>) | Yes (<i>n; %</i>) | |
| Weekly (Reference) | 761 (55%) | 635 (45%) | |
| Infrequently | 823 (46%) | 967 (54%) | <u>1.2</u> (1.0-1.4)* |
| Never | 967 (40%) | 1441 (60%) | <u>1.4</u> (1.2-1.6)*** |
| 2) Smoked regularly | y No (<i>n; %</i>) | Yes (n; %)1 | |
| Weekly (Reference) | 223 (52%) | 207 (48%) | |
| Infrequently | 291 (41%) | 412 (59%) | <u>1.4</u> (1.1-1.8)** |
| Never | 426 (37%) | 722 (63%) | 1.5 (1.2-1.9)*** |
| 3) Liquor 2-3 times | No (<i>n; %</i>) | Yes (n; %) | |
| Weekly (Reference) | 833 (60%) | 563 (40%) | |
| Infrequently | 782 (44%) | 999 (56%) | <u>1.7</u> (1.4-2.0)*** |
| Never | 927 (39%) | 1478 (62%) | <u>1.9</u> (1.6-2.2)*** |
| | | | |

*p<.05, **p<.01, ***p<.001 10 log with who reported having smoked are included in these analysis

| 4) Used marijuana No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference)1177 (85%) 212 (15%) Infrequently 1338 (79%) 436 (21%) <u>1.3</u> (1.0-1.5) * Never 1605 (67%) 784 (33%) <u>2.1</u> (1.7-2.5)*** 5) Used cocaine No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference)1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) <u>1.5</u> (.94-2.53) [†] 6) Used other drug No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference)1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | Group attendance (| last 12 month | າs) | OR (95% CI) |
|--|--------------------|--------------------|------------|-------------------------|
| Weekly (Reference) 1177 (85%) 212 (15%) Infrequently 1338 (79%) 436 (21%) 1.3 (1.0-1.5) * Never 1605 (67%) 784 (33%) 2.1 (1.7-2.5)*** 5) Used cocaine No (n; %) Yes (n; %) Weekly (Reference) 1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) 1.5 (.94-2.53) [†] 6) Used other drug No (n; %) Yes (n; %) Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | 4) Used marijuana | No (<i>n; %</i>) | Yes (n; %) | |
| Infrequently 1338 (79%) 436 (21%) 1.3 (1.0-1.5) * Never 1605 (67%) 784 (33%) 2.1 (1.7-2.5)*** 5) Used cocaine No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference) 1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) <u>1.5 (.94-2.53)^+</u> 6) Used other drug No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | Weekly (Reference) | 1177 (85%) | 212 (15%) | |
| Never 1605 (67%) 784 (33%) 2.1 $(1.7-2.5)^{***}$ 5) Used cocaine No (n; %) Yes (n; %) Weekly (Reference) 1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) <u>1.5</u> (.94-2.53) [†] 6) Used other drug No (n; %) Yes (n; %) Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | Infrequently | 1338 (79%) | 436 (21%) | <u>1.3</u> (1.0-1.5) * |
| 5) Used cocaine No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference) 1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) <u>1.5</u> (.94-2.53) [†] 6) Used other drug No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) Novec | Never | 1605 (67%) | 784 (33%) | <u>2.1</u> (1.7-2.5)*** |
| Weekly (Reference) 1368 (98%) 22 (2%) Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) 1.5 (.94-2.53) [†] 6) Used other drug No (n; %) Yes (n; %) Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | 5) Used cocaine | No (<i>n; %</i>) | Yes (n; %) | |
| Infrequently 1731 (97%) 44 (3%) 1.2 (.68-2.00) Never 2288 (96%) 98 (4%) 1.5 (.94-2.53) ⁺ 6) Used other drug No $(n; \%)$ Yes $(n; \%)$ Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) Nover 2120 (00%) 245 (19%) 21 (1.5 2.0)**** | Weekly (Reference) | 1368 (98%) | 22 (2%) | |
| Never 2288 (96%) 98 (4%) 1.5 (.94-2.53) ⁺ 6) Used other drug No (n ; %) Yes (n ; %) Weekly (Reference)1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) Nover 1230 (09%) 245 (19%) 1.4 (1.5 - 2.0)**** | Infrequently | 1731 (97%) | 44 (3%) | 1.2 (.68-2.00) |
| 6) Used other drug No (<i>n</i> ; %) Yes (<i>n</i> ; %) Weekly (Reference)1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | Never | 2288 (96%) | 98 (4%) | <u>1.5</u> (.94-2.53)† |
| Weekly (Reference) 1341 (97%) 48 (3%) Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | 6) Used other drug | No (<i>n; %</i>) | Yes (n; %) | |
| Infrequently 1681 (95%) 93 (5%) 1.2 (.86-1.8) | Weekly (Reference) | 1341 (97%) | 48 (3%) | |
| Nov (07) 2120 (00%) 24E (10%) 2.1 (1.E.2.0)*** | Infrequently | 1681 (95%) | 93 (5%) | 1.2 (.86-1.8) |
| $(10\%) = \frac{2139}{2139} (\frac{90\%}{243}) = 243 (10\%) = \frac{2.1}{2.1} (1.3-2.9)$ | Never | 2139 (90%) | 245 (10%) | <u>2.1</u> (1.5-2.9)*** |

| Table 4. Joint occurrences and youth groups ¹ | | | |
|--|--------------------|---------------------|------------------------|
| Group attendance (| ast 12 mont | hs) | OR (95% CI) |
| 1) Alcohol w/drugs | No (<i>n; %</i>) | Yes (<i>n; %</i>) | |
| Weekly (Reference) | 142 (67%) | 69 (33%) | |
| Infrequently | 243 (65%) | 134 (35%) | 1.1 (.74-1.6) |
| Never | 395 (54%) | 341 (46%) | <u>1.5</u> (1.0-2.1)* |
| 2) Drive on drugs | No (<i>n; %</i>) | Yes (<i>n; %</i>) | |
| Weekly (Reference) | 222 (87%) | 34 (13%) | |
| Infrequently | 334 (79%) | 88 (21%) | 1.5 (.92-2.3) |
| Never | 615 (74%) | 220 (26%) | <u>1.6</u> (1.0-2.4)* |
| 3) High at school | No (<i>n; %</i>) | Yes (n; %) | |
| Weekly (Reference) | 194 (76%) | 62 (24%) | |
| Infrequently | 291 (69%) | 131 (31%) | 1.3 (.92-1.9) |
| Never | 511 (61%) | 324 (39%) | <u>1.6</u> (1.2-2.3)** |
| *p<.05, **p<.01, ***p<.001 ¹ Only youth who reported drug use are included in these analysis | | | |

DISCUSSION

- Data indicate a protective role, where youth who participate in youth groups are less likely to engage in CD and/or ODD related behaviors
- Additionally, a further protective role was evident where youth who already engaged in some risky behaviors, but also attended youth groups weekly, evidenced a reduced severity of engaging in these behaviors

DISCUSSION

- Youth that never attended youth groups were significantly more likely to have:
 - shoplifted
 - used drugs
 - stolen something worth <\$50

DISCUSSION

 Youth that infrequently/never attended youth groups were significantly more likely to have had sex

DISCUSSION

- Youth that infrequently/never attended youth groups were significantly more likely to have:
 - smoked a cigarette
 - smoked regularly
 - had a drink of beer, wine, or liquor more than 2 or 3 times in their lifetime
 - used marijuana, cocaine, or another illegal drug in their lifetime

DISCUSSION

- Of youth that had used drugs, youth that infrequently/never attended youth groups were significantly more likely to:
 - drink alcohol when using drugs
 - drive while high on drugs
 - have gone to school while high on drugs

DISCUSSION

More questions than answers

- Are youth groups protective of problem behavior or are prosocial youth simply more likely to become involved?
- Does the format of particular youth groups impact behavioral outcomes (e.g., sports, mapping out the future)?

DISCUSSION

More questions than answers

- Is there a point on the developmental trajectory of a child when youth group attendance may be most effective in influencing behavioral outcomes?
- Just before puberty, before youth determine how to "get their kicks"?
- Could youth groups serve as a replacement behavior?

DISCUSSION

More questions than answers

- Finally, could youth groups be introduced as a support of clinical care?
- Our plan to test, RCT involving urban youth diagnosed with ODD and/or CD who are receiving clinical services, where members of the experimental group attend youth groups

Limitations

- Current data were limited in examining if youth groups facilitated prosocial behavior or if more prosocial youth were more likely to join youth groups
- Non-clinical sample
- Data regarding youth group format was unavailable and could not be compared to outcomes

CONCLUSION

- Weekly youth group participation may be a factor protective of behaviors related to ODD and/or CD among youth
- These findings may offer preliminary evidence supporting the implementation of youth groups as an addendum to clinical care that may enhance therapeutic outcomes