

Adolescent Children of Mothers with Serious Mental Illness

Outcomes and potential buffers for an urban sample

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Background

Surgeon General Report on Children and Mental Health (1999)

- Diagnosis of mental health problems in children can be challenging due to the ongoing process of development; children are often unable to verbalize thoughts and feelings; diagnosis may become more reliant on parents, teachers and other professionals
- Estimated that almost 21% of U.S. children ages 9 to 17 had diagnosable mental or addictive disorder with at least minimum impairment (MECA Study: Methodology for Epidemiology of Mental Disorders in Children and Adolescents, 1996)
- Risk factors for developing a mental disorder or experiencing problems in socio-emotional development include (but not limited to): prenatal damage from maternal substance abuse; low birth weight; difficult temperament or an inherited predisposition to mental disorder; external risk factors such as poverty, abuse and neglect; unsatisfactory relationships; exposure to traumatic events, and parental mental health disorder
- There is evidence that mental health/illness is influenced by age, gender, race and culture; diagnosis and treatment must take these characteristics into account

Present Research Agenda

- Explore the potentially protective effects of two factors that have been found to be beneficial in the context of other types of risk exposure, specifically *Father Involvement* and *Religiosity*
 - Applicable to the context of maternal mental health problems?
 - Applicable across a wide range of children and adolescent outcomes?
 - Applicable for racially-ethnically diverse, urban, low-income populations?

MMH: Describing the “risk exposure”

- When women with a serious mental illness become pregnant, their pregnancies are less likely to be planned, and marriage to the infant’s father is less likely to occur
- The fathers themselves are likely to have mental health problems and the mother-father unit is at increased risk of break-up (for a review, Mowbray, et al., 1995)
- Mothers with a serious mental illness are more likely to have a negative interaction style with their children and engage in poor parenting practices such as being more critical, guilt-inducing, and less task-focused (for a review, Oyserman, Mowbray, Allen-Meares, & Firminger, 2000)

MMH and Youth Outcomes

- Children and adolescents of mothers with mental health problems are more likely to have a variety of problematic outcomes of their own such as:
 - behavioral problems, aggression and delinquent behavior (externalizing symptoms)
 - depression, anxiety and social withdrawal (internalizing symptoms)

(Beardslee, Versage, & Gladstone, 1998; Downey & Coyne, 1990; Gelfand & Teti, 1990; Goodman & Gotlib, 1999; Goosby, 2007; Grant, Poindexter, Davis, Cho, McCormick, & Smith, 2000; Gross, Shaw, Burwell, & Nagin, 2009)

Father Involvement

- Emerging literature has demonstrated small but significant positive effects of father involvement on youth outcomes (in general, and in the context of risk exposure)
(for a meta-analysis see Amato & Gilbreth, 1999)
- Very little of this research, however, has assessed the possible impact of father involvement when mothers have a serious mental health problem (c.f., Chang, Halpern, & Kaufman, 2007)

Religiosity

- Research suggests that religiosity, particularly *adolescent's* religiosity, is generally linked to adaptive outcomes and can serve as a protective factor for youth in the context of risk exposure (for a review, see Joshi, Hardy, & Hawkins, 2009)
- MMH rarely included as one of the “risk factors,” however there is some evidence of positive effects of maternal and adolescent religiosity on youth’s mental health (direct but not moderating effects) (Miller et al., 1997; Horowitz & Garber, 2003)

Our work...

- Focusing on a racially-ethnically diverse, urban, low-income population
- Series of studies examining the independent and moderating effects of MMH, father involvement, maternal religiosity, youth church attendance, and perceived church-based social support on academic, behavioral, mental health and social outcomes for youth

Sample

- 168 mother-adolescent dyads; 60% African American, 32% White, 7% Hispanic
- Maternal diagnosis: 57% MDD, 23% bipolar, 20% schizophrenia
- Educational attainment: 37% did not complete HS, 26% HS or equivalent, 37% completed at least some college
- Teens: 52% male, mean age 15 years, SD 2.0
- Living arrangement: 13% included both biological mother and father, 76% had a father figure present in their life (not necessarily resident)

MMH Measures

■ Maternal mental health problems:

- *Depressive, psychotic symptomatology* in the last year: Colorado Symptom Index (Shern, Wilson, Coen, Patrick, Foster, & Bartsch, 1994)
- *Depressive symptoms* in the past week: 20-item Center for Epidemiology Scale for Depression, Revised scale (CESD-R, Radloff, 1977)
- *Hassles with functioning*: Hassles and Uplifts Scale (Lazarus & Folkman, 1984)
- *Functioning*: Self-Report Community Functioning Scale (Bybee, Mowbray, Oyserman & Lewandowski, 2003)
- Diagnosis of depressive disorder, bipolar disorder or schizophrenia disorder: DIS, version II-R, modified for DSM-IV criteria (Robins, Helzer, Croughan, & Ratcliff, 1981)

Father Involvement and Religiosity Measures

- **Father Involvement:** 3 items based on Social Support Microsystems Scales (Seidman et al., 1995) plus an additional item assessing the general quality of the relationship
- **Maternal religiosity:** 2 items based on Religious Self-Perception and Religious Comfort measure (Taylor, Mattis, & Chatters, 1999) plus an additional item assessing religious service attendance
- **Adolescent's church-based social support:** dummy coded item representing whether the adolescent reported that there was someone from church who was a part of their life
- **Adolescent's religious service attendance**

Outcome Measures

■ Adolescent's Academic Outcomes:

- *School records of core academic classes grade point average*
- Teacher rated *positive school-engaged behaviors* (Finn, PannoZZo, & Voelkl, 1995)
- Teacher rated *negative school-disruptive behaviors* (Finn, PannoZZo, & Voelkl, 1995)

■ Adolescent's Internalizing Problems:

- *Anxiety*: Revised Children's Manifest Anxiety Scale (Cole, Hoffman, Tram, & Maxwell, 2000)
- *Depressive symptoms* in the past week: 20-item Center for Epidemiology Scale for Depression, Revised scale (CESD-R, Radloff, 1977)
- *Internalizing symptoms* in the past six months: Achenbach Child Behavior Checklist, Youth self-report internalizing subscale (Achenbach, 1991)

Outcome Measures (continued)

■ Adolescent's Risky Behavior:

- *Delinquent behavior* in the past 12 months: Delinquency Questionnaire (Elliot, Huizinga, & Ageton, 1985)
- *Smoking/drinking behavior* in the past 12 months: 3 items from the National Longitudinal Study on Adolescent Health, ADD Health In-home Questionnaire (1999)

■ Adolescent's Social (Affiliating) Skills:

- 3 subscales (*Initiating Friendships, Empathy/Compassion, and Openness*) from the Adolescent Interpersonal Competence Questionnaire (Kuperminc et al., 1997, revision of Buhrmester et al., 1988)

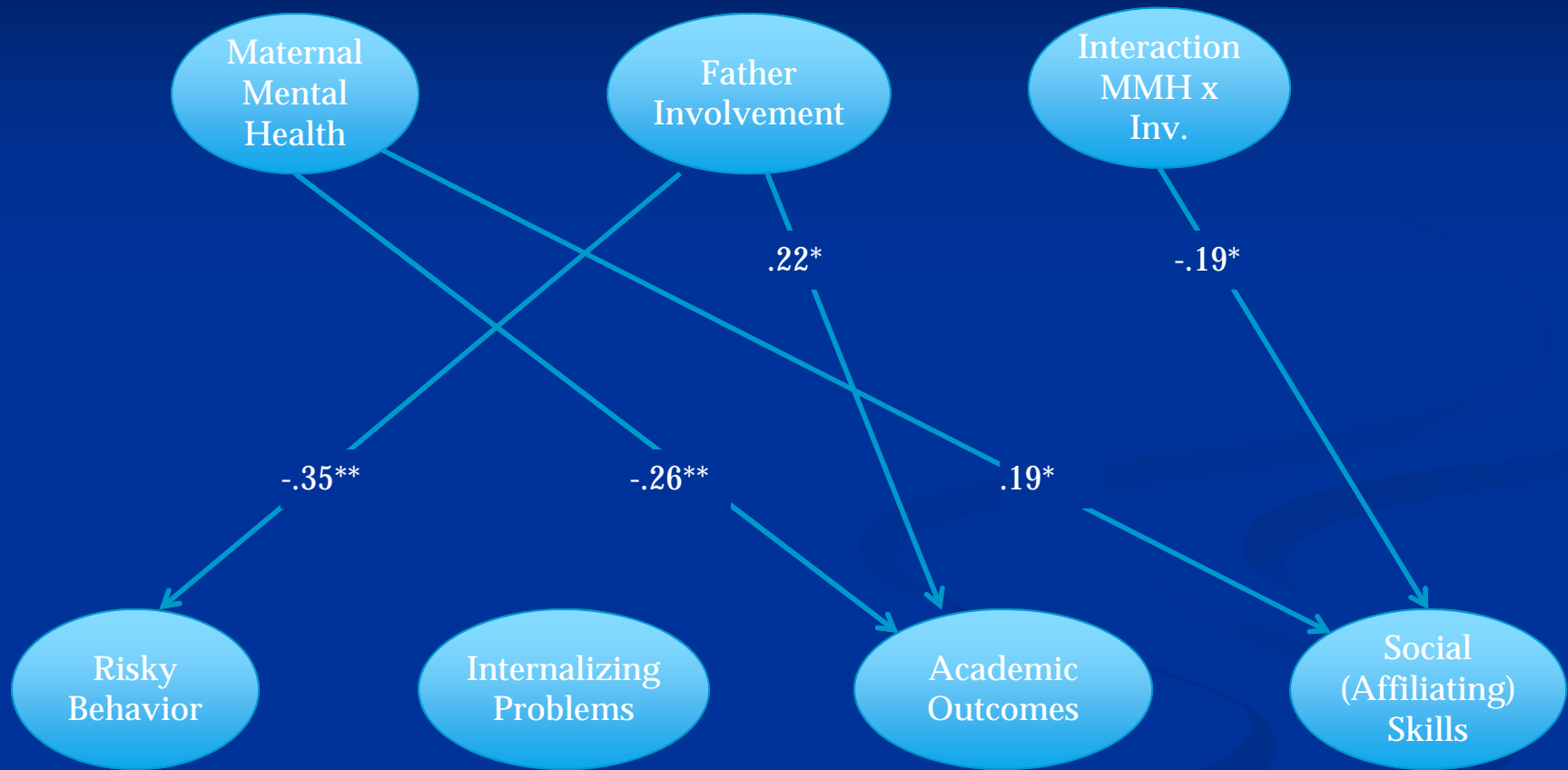
Analyses

- Analyses conducted using AMOS 7 structural equation modeling software
- Confirmatory Factor Analysis (CFA) was conducted to determine adequacy of measurement models including tests of factorial invariance by African American ethnicity (all latent constructs) and by caregiver status (father involvement construct only) using Byrne, Shavelson, and Muthen's (1989) multi-group CFA method
- Maximum Likelihood (ML) methods were used to estimate model parameters and assess model fit
- Latent interactions were modeled using the unconstrained approach as detailed by Marsh, Wen, and Hau (2004)
- Study of MMH & Father Involvement: single-group SEM with African American ethnicity and gender treated as covariates
- Study of MMH& Religiosity: two-group SEM in which the paths were estimated separately for African American participants and participants of other ethnicities (not African American); gender treated as a covariate

Father Involvement Study: Results

- Maternal mental health problems (MMH) was associated with poorer academic outcomes, and interestingly, with better youth social skills (perhaps as a way to attain other supports)
- Father involvement was associated with positive youth outcomes, specifically, better academic outcomes and less risky behavior
- Significant interaction between MMH and father involvement on adolescent's social (affiliating) skills

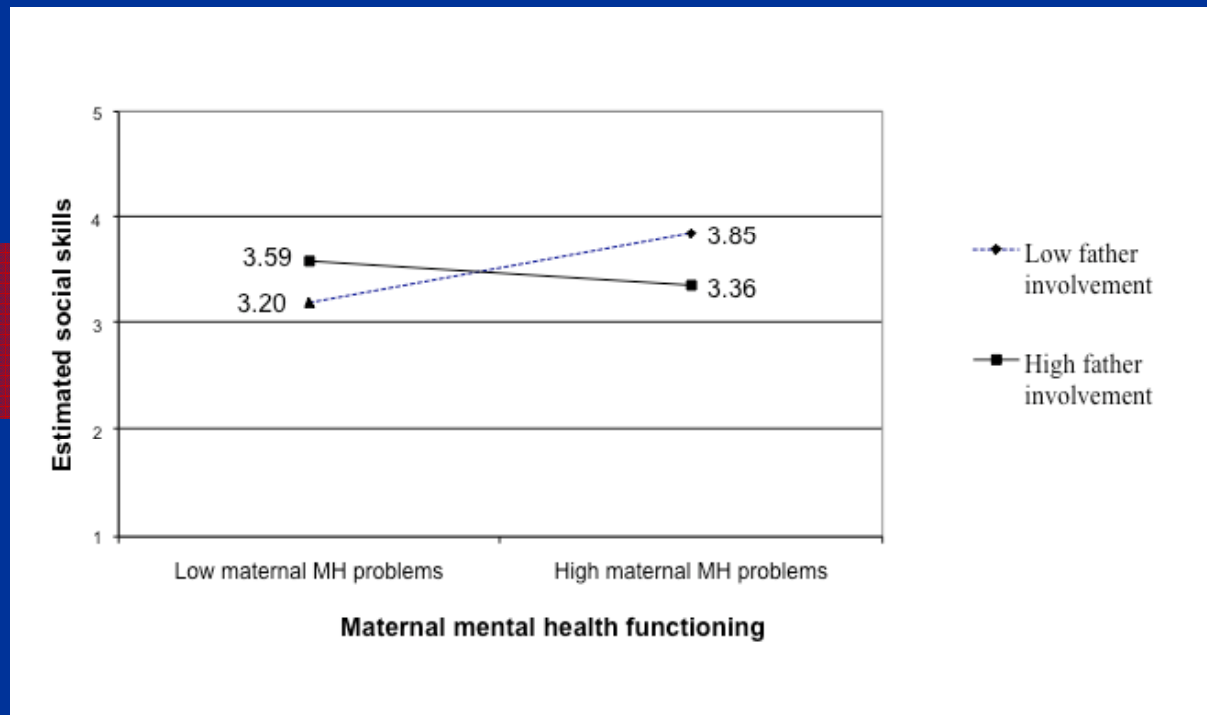
Father Involvement Study: SEM



Simplified model showing only significant paths among latent constructs.
 $\chi^2 = 424.710$, $df = 325$, $p = .000$; $RMSEA = .043$ ($N=168$).

Interaction Between MMH and Father Involvement

- Adolescent's social (affiliating) skills were higher when father involvement was low and maternal mental health problems high, perhaps because these youth actively needed to seek out other supports

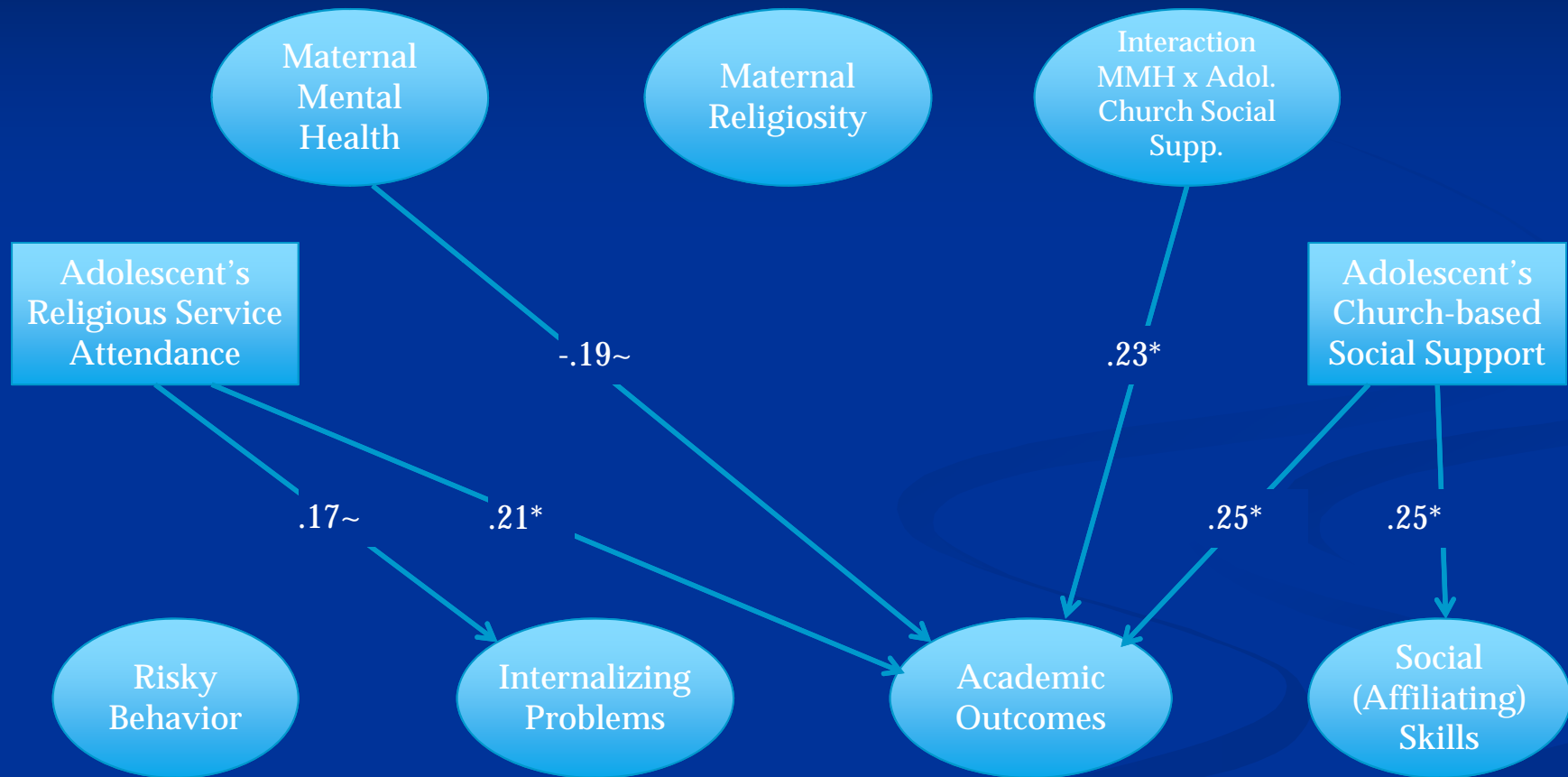


Religiosity Study: Results

- For African American adolescents
 - Church-based social support was associated with better academic outcomes and social skills
 - Church attendance was positively associated with academic outcomes
 - Significant interaction between MMH and adolescent's church-based social support
- For adolescents of other ethnic backgrounds (not African American)
 - Church-based social support and church attendance were associated with less risky behavior for youth
 - Church attendance was also positively associated with academic outcomes

Religiosity Study: Multi-group SEM

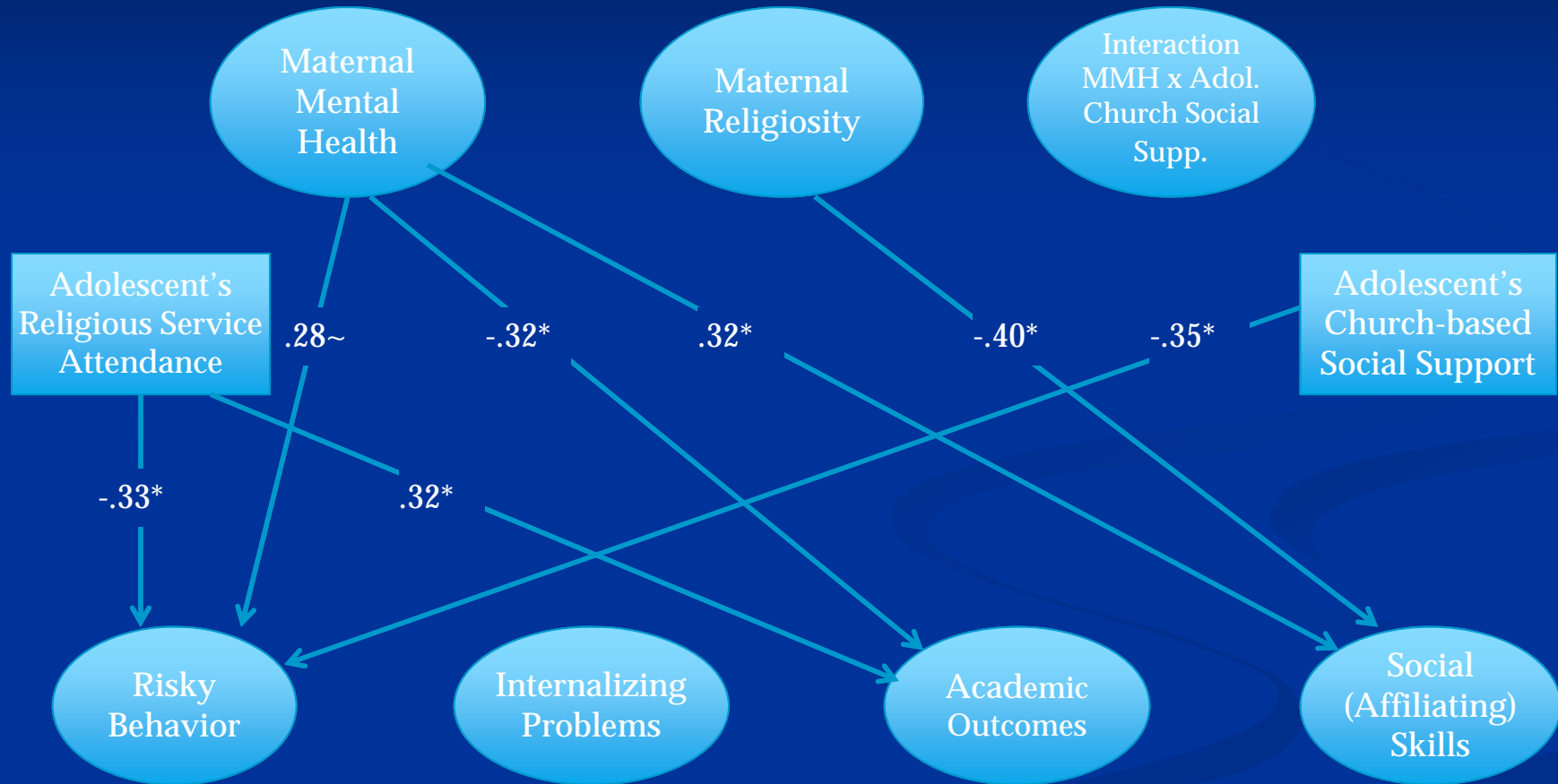
African American group



Simplified model showing only significant & marginally significant paths among key constructs. $\chi^2 = 814.127$, $df = 596$, $p = .000$; RMSEA = .047 ($N=104$).

Religiosity Study: Multi-group SEM

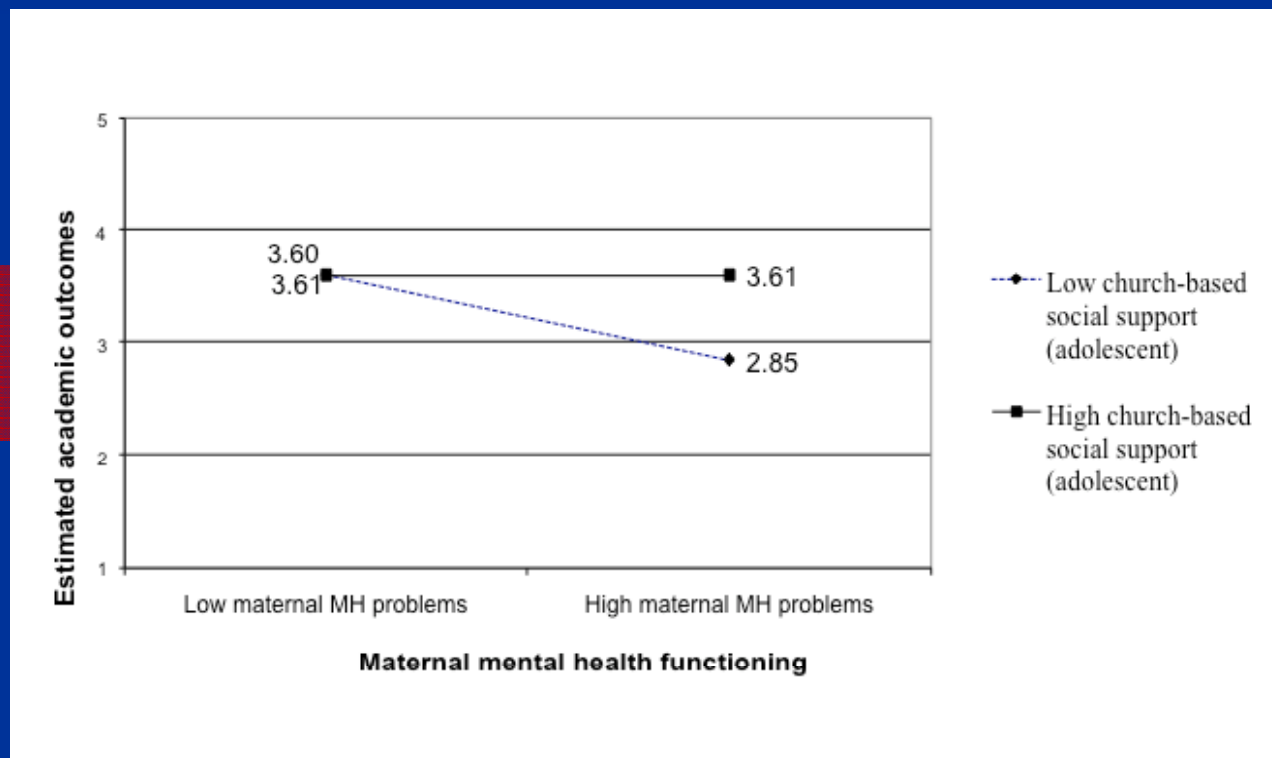
“Other Ethnicities” group (Not African American)



Simplified model showing only significant & marginally significant paths among key constructs. $\chi^2 = 814.127$, $df = 596$, $p = .000$; RMSEA = .047 ($N=64$).

Interaction Between MMH and Adolescent's Church-based Social Support

For African American adolescents, church-based social support buffered the effects of maternal mental health problems on academic outcomes (GPA and teacher-rated academic behavior such as paying attention and coming to class on time)



Key Findings & Conclusions

In our racially diverse, low-income, urban sample of mothers with serious mental health problems and their adolescent youth we found:

- MMH increased risk for poor academic outcomes (grades and school-related behaviors)
- Father Involvement decreased risk (better academic outcomes and less risky behavior)
- No evidence of protective effects of maternal religiosity for youth outcomes
- Adolescent religiosity (as measured by either church attendance or perceived social support) decreased risk across multiple outcomes although this varied somewhat by ethnicity
- Church-based social support may play a critical role in buffering the negative effects of maternal mental health problems on academic outcomes for African American youth

Revisiting our Research Agenda

Are the potentially protective effects of Father Involvement and Maternal / Youth Religiosity...

- **Applicable to the context of maternal mental health problems?** Yes, significant direct effects found for father involvement and youth religiosity and church-based social support
- **Applicable across a wide range of adolescent outcomes?** Yes, although most consistently found in relation to academic outcomes and risky behavior
- **Applicable for racially-ethnically diverse, urban, low-income populations?** Yes, full group and multi-group analyses identified significant direct effects. Some variables, such as church-based social support, may play a more critical role for African American youth

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