



PennState

Examining the Influence of Interparental Dynamics on Parenting

Behaviors and Adolescent Academic Outcomes

Keiana T. Mayfield, Gregory M. Fosco, Mark E. Feinberg



Introduction

- How families relate and respond to the context in which they are embedded is central to understanding how social advantage and disadvantage are perpetuated (Furstenberg, 2005)
 - Social capital represents resources (congruence of beliefs, shared meanings, and common expectation) gained through parent-youth interactions in the family system; social capital is beneficial in an academic context (Coleman, 1988; Furstenberg, 2005)
 - Families are complex systems, comprised of several interdependent, interacting subsystems (Minuchin, 1985)
 - Interactions occurring between parents characterize the functioning of the couple subsystem (Cox & Paley, 2003; Minuchin, 1985)
 - Interactions occurring between parent and adolescents represent parenting behaviors within the parent-adolescent subsystem (Minuchin, 1985)
 - Emotion transmission assumes that daily patterns in emotions can be transmitted between family members within and across subsystems via the spillover hypothesis (Erel & Burman, 1995; Larson & Almeida, 1999)
 - During adolescence, youth are more likely to engage in risky behaviors, academic performance begins directly influencing future success and wellbeing, and access to social capital within the family context is important across contexts (Coleman, 1988; Oswald, 1997; Steinberg, 2008)
- Families exert meaningful influence on adolescent academic achievement.

The Present Study

Aims:

- Evaluate the unique spillover process of interparental warmth and interparental conflict on adolescent academic achievement through two parenting behaviors using Structural Equation Models.

Hypotheses:

- Positive engagement will serve as a mediator between interparental warmth and adolescent academic achievement (GPA) while accounting for interparental conflict.
- Hostile parenting will serve as a mediator between interparental conflict and adolescent academic achievement (GPA) while accounting for interparental warmth.

Method

Participants and Procedure

- Randomly-selected subset of 6th graders and their families participating in PROSPER project (PROMoting School-community-university Partnerships to Enhance Resilience)
- Two-parent families were used for this analysis, including 768 families
- 80% retention rate across waves
- 94.9% of female caregivers were identified as “mother”, and 75.3 % of male caregivers were identifies as “father”
- 61% of families resided in Iowa, and 39% in Pennsylvania
- The median household income was \$52,000 at T1 (in 2003)

Demographic Information (T1)

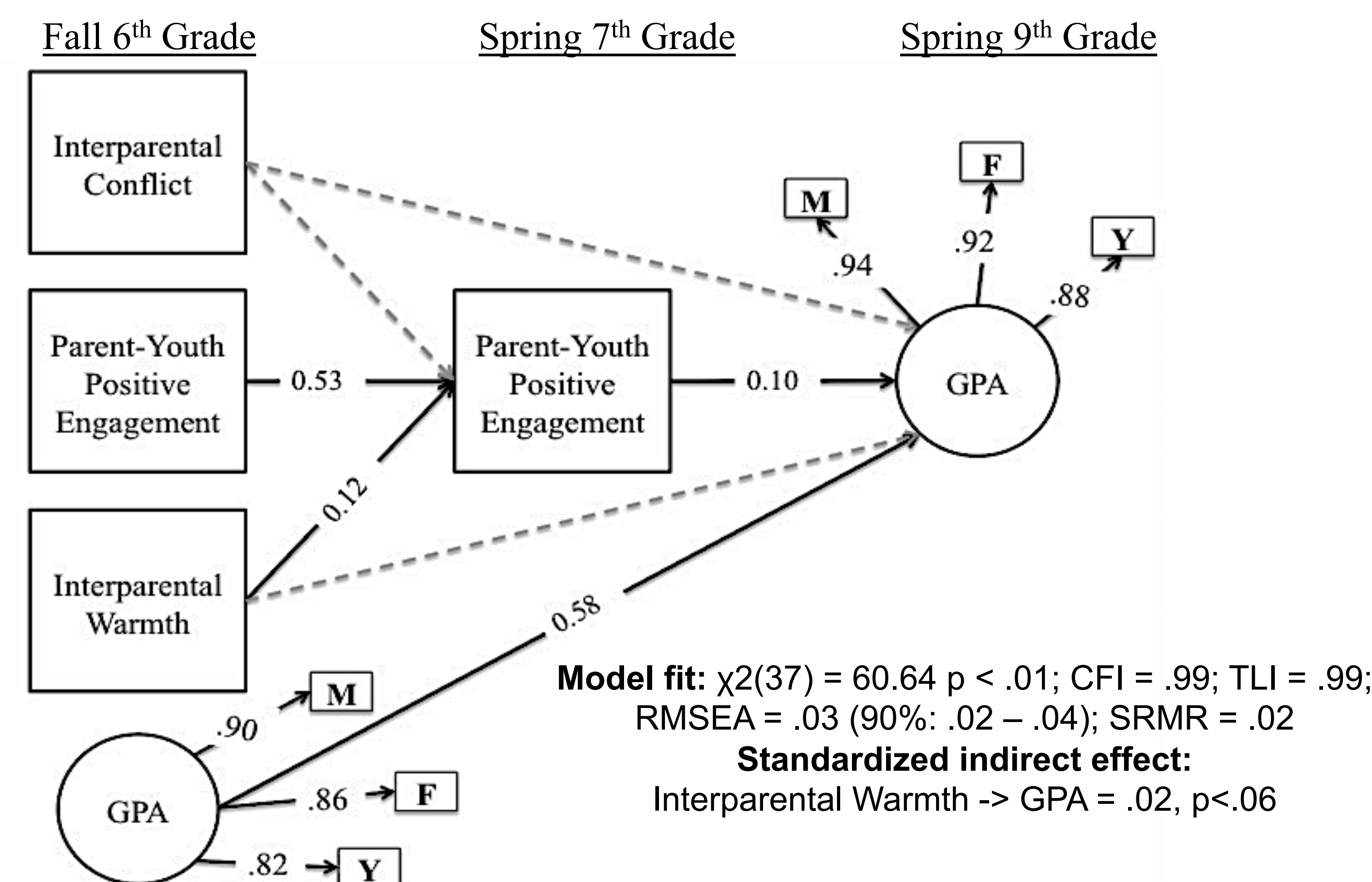
| N | 768 Families |
|------------------------------|------------------|
| Age: | |
| Adolescents | 11.3 (SD = 0.49) |
| Mothers | 38.7 (SD = 6.05) |
| Fathers | 41.2 (SD = 7.14) |
| Adolescent Ethnicity: | |
| White | 89% |
| Hispanic | 6% |
| African American | 1% |
| Asian | 1% |
| Other | 3% |

Measures (T1)

| Variables | Measures | α | Mean | SD |
|----------------------------------|---|----------|------|------|
| Interparental Warmth | Each parent responded to 4 items about their own behavior and their partner's behavior of warm, supportive, and affirmative behaviors over the last month. | .91 | 5.35 | 1.03 |
| Interparental Conflict | Each parent responded to 7 items about their own behavior and their partner's behavior of conflict behaviors over the last month. | .84 | 2.05 | .70 |
| Parent-Youth Positive Engagement | Youth responded to 3 items about their perception of warmth during interactions with each parent over the last month. | .80 | 5.96 | 1.22 |
| Parent-Youth Hostile Parenting | Youth responded to 3 items about their perception of hostility during interactions with each parent over the last month. | .78 | 5.84 | 1.00 |
| (GPA) Academic Achievement | Estimated as a latent variable using mother, father, and youth reports of GPA. Factor loadings for Figure 1 and Figure 2 (T1) are: M = .90, F = .86, Y = .82. | | | |

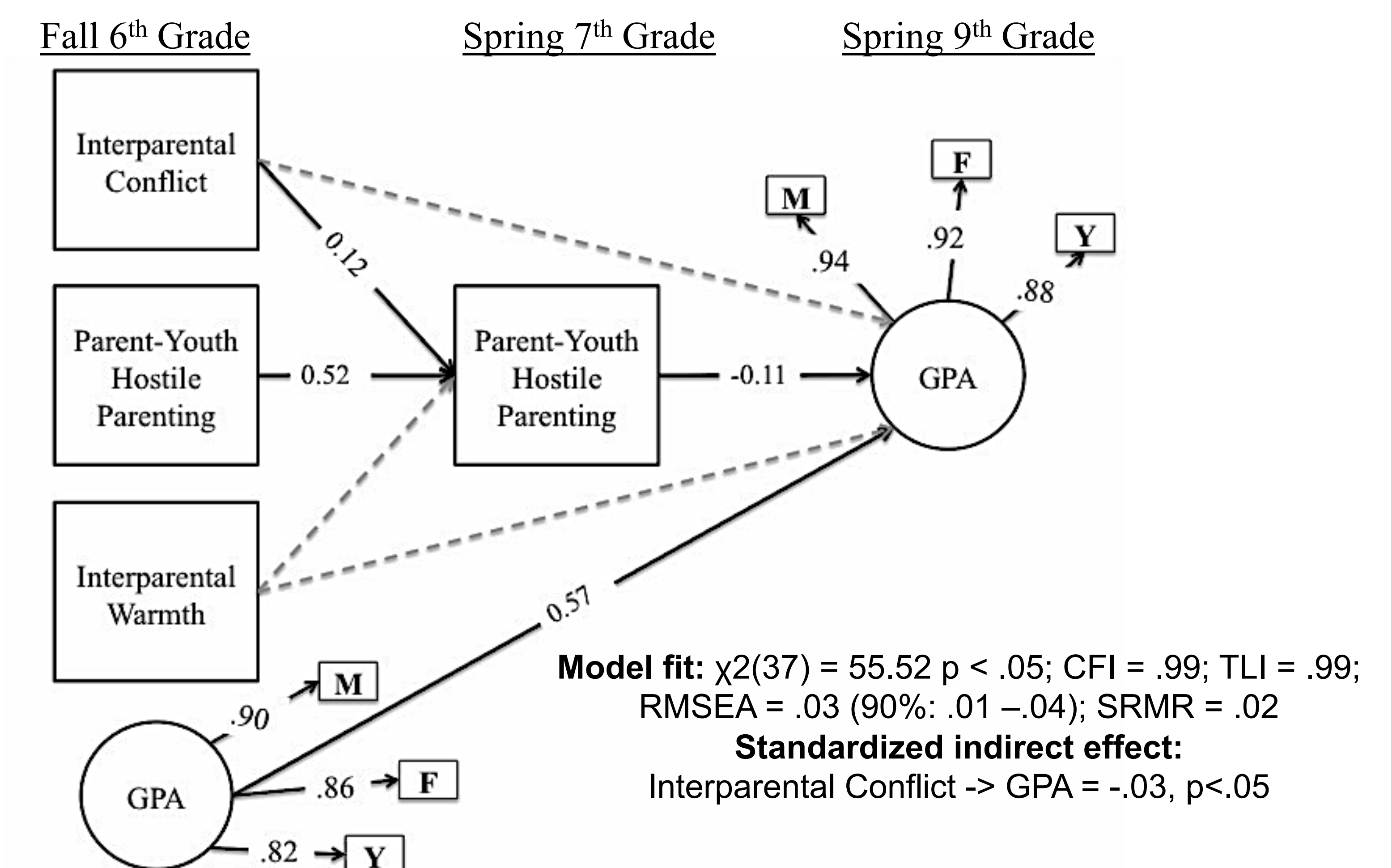
Results

Figure 1: A Mediation Model of Interparental Dynamics on 9th Grade Academic Achievement through Positive Engagement



Note. Path coefficients reflect standardized betas; solid lines reflect statistically significant paths ($p < .05$). Dotted lines are not statistically significant. Correlations and error terms were estimated, but are not displayed for ease of presentation. Covariates in each model includes: parent education, household income, and biological parent status.

Figure 2: A Mediation Model of Interparental Dynamics on 9th Grade Academic Achievement through Hostile Parenting



Discussion

- Parent-youth positive engagement mediated the association between interparental warmth and GPA across time while controlling for the presence of interparental conflict. On average, interparental warmth within the couple subsystem in 6th grade was associated with increased levels of parent-youth positive engagement in 7th grade, followed by increased GPAs in the spring of ninth grade.
- Hostile parenting mediated the association between interparental conflict and GPA across time while controlling for the presence of interparental warmth. Interparental conflict in 6th grade indirectly influenced decreased academic achievement two year later.
- Findings suggest that due to emotion transmission, emotional experiences in the couple subsystem can spillover, influencing how parents engaged with their adolescents. Figure 2 shows that the emotion transmission of conflict from the couple subsystem to parenting behaviors negatively influenced adolescent academic achievement outside the family context.
- Emotion transmission between subsystems has the potential to increase or decrease adolescent access to social capital. Increasing access to social capital requires parents to be physically present and engaged with their adolescent.
- Overall, these findings suggest that family-based interventions can indirectly target adolescent academic success by increasing the quality of time shared between adolescents and their parents.

Correspondence concerning this presentation should be addressed to Keiana Mayfield (kmayfield@psu.edu). For information on similar studies, visit www.gregfosco.weebly.com. This research was supported by grants from the National Institute of Drug Abuse (R01 DA13709-06A1; R03 DA038685), and the Karl R. and Diane Wendle Fink Early Career Professorship for the Study of Families.