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Sibling Experiences in Middle Childhood: Implications for Sibling Differences in College Graduation

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Introduction

- Siblings are central in the everyday lives of youth, and sibling dynamics, including sibling relationship qualities and their role in larger family systems processes, can engender both sibling similarities and differences (McHale, Updegraff, & Whiteman, 2012).
- Most research of family dynamics and youth achievement has targeted parent-youth relationships (e.g., Sun, McHale, & Updegraff, 2017), and focused on individual children within the family. We expanded on this literature to examine the role of sibling-related family processes in middle childhood as predictors of similarities and differences between siblings' education achievement in young adulthood.

Study Goals

We investigated the longitudinal links between sibling experiences in middle childhood and similarities and differences in siblings' educational achievement in young adulthood, about 15 years later. We focused on siblings' college completion due to its significant implications for well-being throughout adulthood, including for employment, family formation, and mental and physical health (IOM & NRC, 2015).

We made two predictions. First, grounded in a social learning perspective, we expected that sibling warmth and shared time would predict sibling similarities. Second, grounded in social comparison and nonshared family environment perspectives, we expected that parents' differential treatment may predict sibling differences.

Participants

- Data were drawn from three time points of a longitudinal study that followed a sample of first- and secondborns sibling dyads from 152 predominately white, working and middle class families (median family income at Time 1 = \$58,300; $SD = \$31,243$)
 - At Time 1, firstborns averaged 11.80 ($SD = .56$) and secondborns averaged 9.22 ($SD = .90$) years of age.
 - Times 2 and 3 were 14 and 16 years later, when firstborns and secondborns were about 26 years old.
- At Time 1, children (54% female) were interviewed in their homes and also completed 7 nightly phone calls during which they reported on their daily activities, including time spent with parents and siblings.
- At Times 2 and 3 firstborns and secondborns completed phone and online surveys.

Measures

- Sibling warmth and shared time (Time 1).** Warmth was measured with an 8-item, 5-point scale (Blyth & Foster-Clark, 1987); higher scores signify more warmth. Shared time was total minutes spent with the sibling (no one else present) across the 7 telephone interviews.

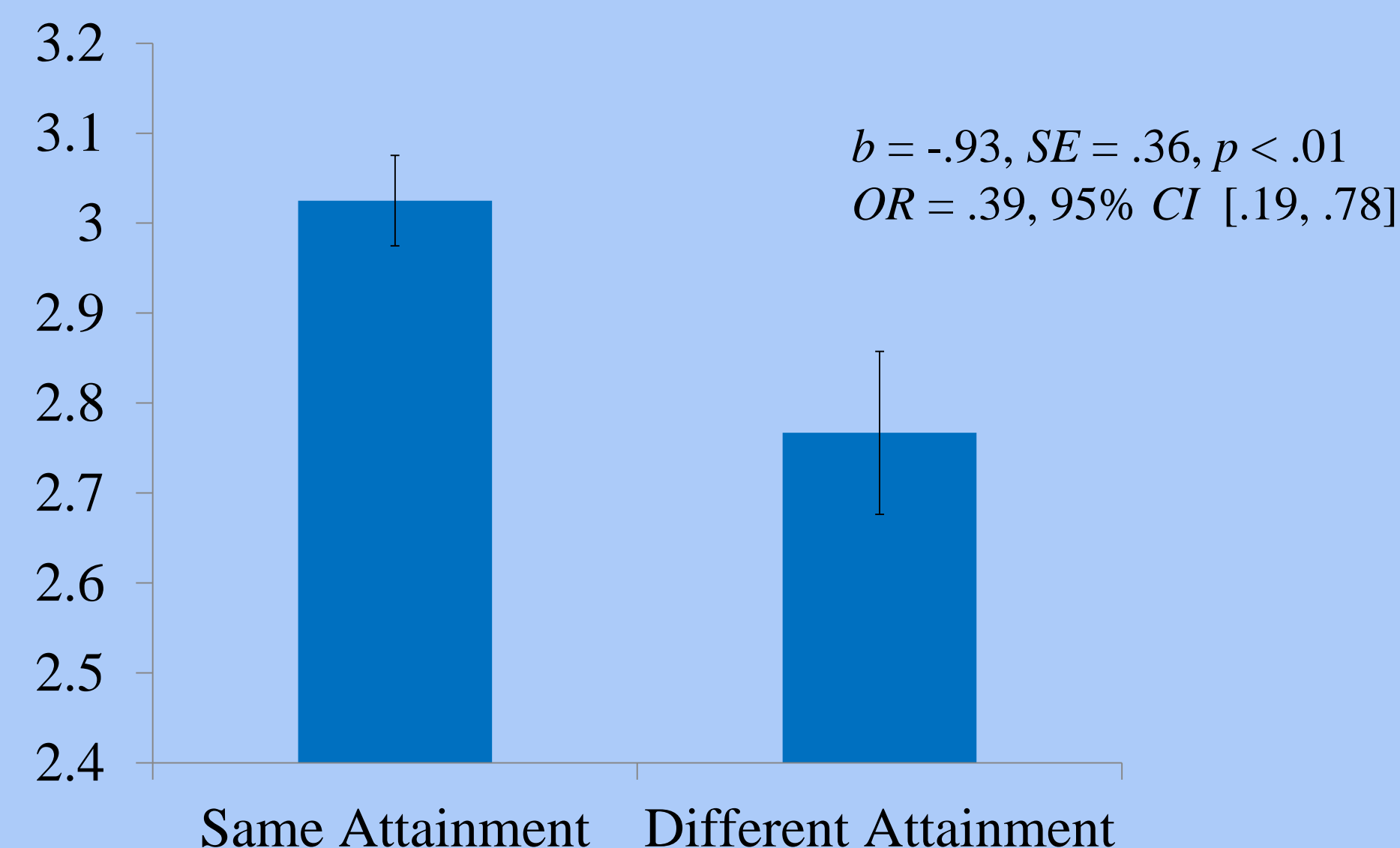
Measures, cont.

- Mothers' and fathers' differential warmth and time (Time 1).** We calculated the absolute value of the difference between first- and secondborns' ratings of maternal and paternal warmth using data from the home interviews (Blyth & Foster-Clark, 1987), and their reports of time spent with mothers and fathers (no one else present) across the 7 phone calls, such that higher scores reflected larger sibling differences in parental warmth and shared time, respectively.
- Fairness of PDT (Time 1).** Children rated their parents' fairness in 10 domains (e.g., allocation of privileges, chores, disciplines) on a 3-point scale (McHale et al., 2000); higher scores signify greater fairness.
- Educational attainment (Time 2/3).** Young adults reported their highest educational attained. Dyads were classified as: *Same Attainment* (both siblings had or had not graduated from college) and *Different Attainment* (one sibling graduated but the other had not).

Results

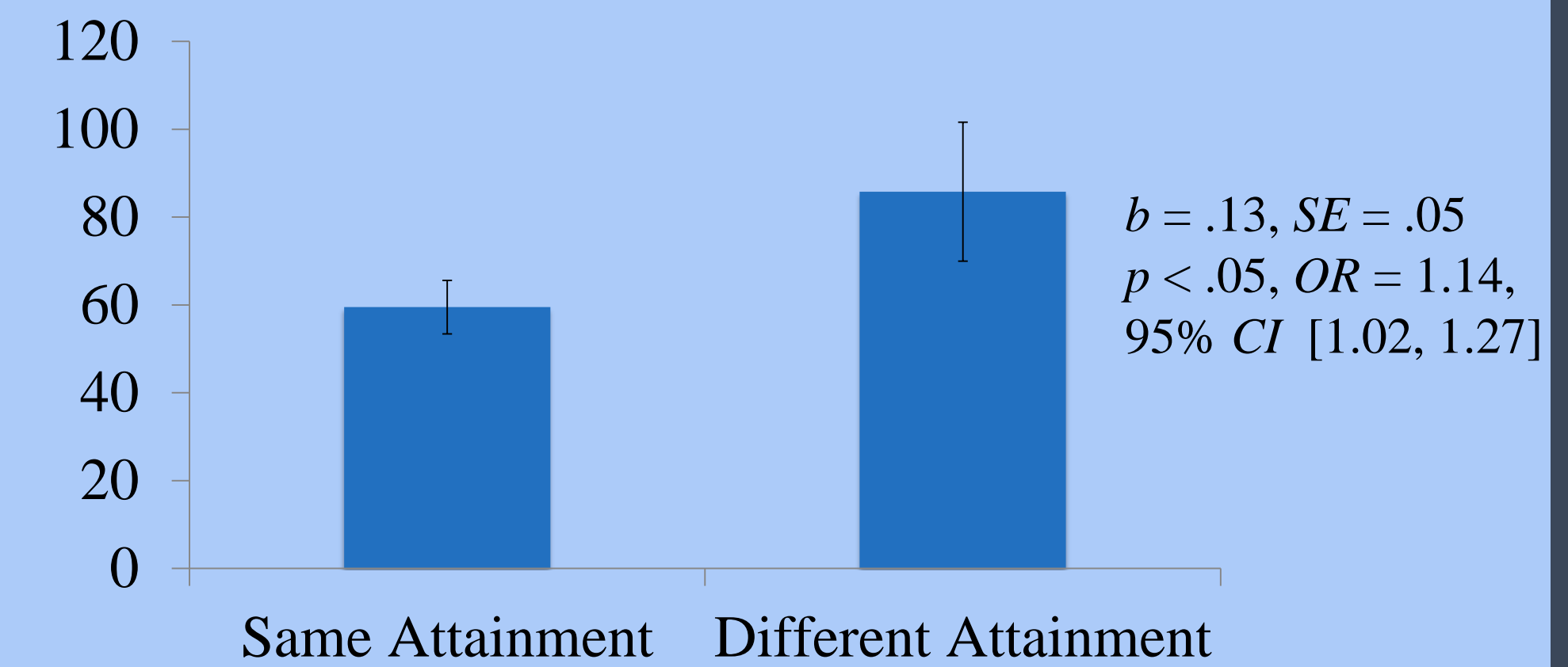
- Analysis plan.** Two sets of logistic regression models tested: (1) sibling relationship characteristics and (2) PDT dynamics as predictors of similarities and differences in siblings' college completion. Covariates included sibling dyad sex constellation (0=same-sex; 1=mixed-sex), parents' educational attainment and age at Time 1, siblings' cross-time mean GPA and absolute differences in GPA, and mean levels of parental warmth and dyadic time. Significant covariates were sibling GPA difference and sibling dyad sex constellation.
- Same Attainment $n = 111$, Different Attainment $n = 41$.
- Significant predictors were: sibling warmth, father's differential time and siblings' perceptions of the fairness of PDT.

Sibling Warmth

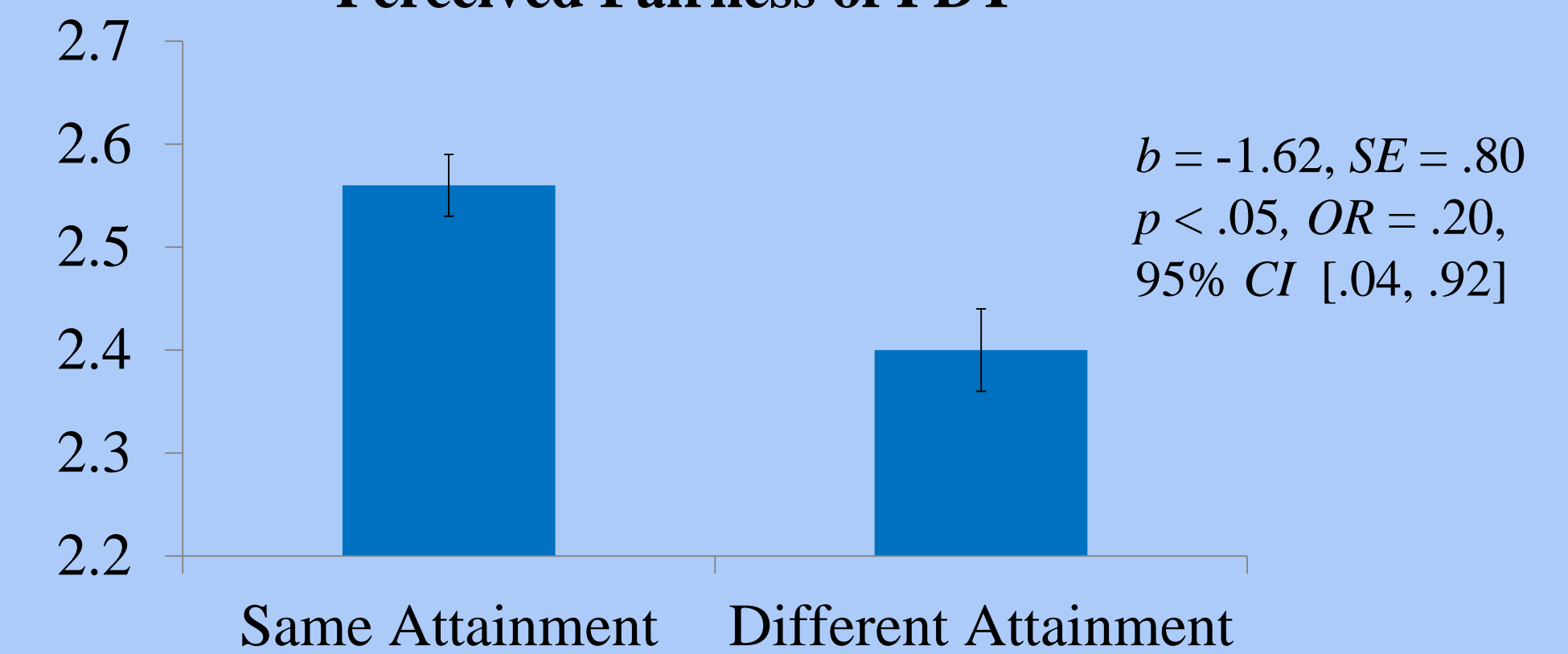


Results, cont.

Father Time Difference (min/7days)



Perceived Fairness of PDT



Discussion

Warm Sibling Relationships Promote Sibling Similarity

- Consistent with social learning theory, sibling warmth predicted similarity in siblings' college graduation status though shared time did not, possibly because sibling time in middle childhood is more obligatory than chosen (Crouter et al., 2004).

PDT Dynamics Promote Sibling Differences

- Consistent with nonshared family environment tenets, fathers' differential time predicted sibling differences in college graduation. Fathers may play an especially influential role in connecting their children to the world beyond the family.
- Consistent with social comparison theory, siblings' perceptions of the fairness of PDT predicted sibling differences in college graduation.

In Conclusion

In face of their centrality in family life, research on siblings' socialization influences remains limited. Our findings suggest that sibling-related family dynamics in childhood may have long-term educational implications.