

# The Association of Adolescent Academic and Athletic Involvement with Peer and Parental Relationships



Kriti Williams, Applied Data Analysis, Wesleyan University

## Introduction

- There are over 50 million students enrolled in K-12 schools in the United States alone, and over 50% of Americans from ages 6-17 play one or more sports (Black et al., 2022; NCES, 2023).
- The presence of fulfilling parental relationships and friendships has been associated with higher motivation for academic and athletic participation and achievement in adolescents (Nelson & DeBacker, 2008; Hellstedt, 1990).
- However, the relationship between peer relationship quality and academic participation can vary based both on one's values regarding academics and those of their peers (Masland & Lease, 2013; Rambaran et al., 2017).
- The association between parental relationships and academic and athletic participation may vary similarly based on personal and parental values.
  - For example, increased parental pressure to compete athletically can result in a decrease in intrinsic motivation or increase in motivation driven by parent approval (Hellstedt, 1990).

## Methods

### Sample

- Respondents (n=6392) were drawn from the first wave of the U.S. National Longitudinal Survey of Adolescent Health (ADDHEALTH), a nationally representative sample of children in grades 7-12 during the 1994-1995 school year .
- The majority (n= 6373) of these participants reported being in school, and a fraction reported being regularly engaged in athletic activity (n= 1816). A small portion (n = 19) of athletically engaged participants did not attend school.

### Measures

- Two-level variables (consisting of yes/no answers) were created in order to measure whether participants were academically and/or athletically engaged, whether or not one had good relationships with parents and peers, and whether or not parents were supportive of or interested in their child's academic/athletic pursuits.
- Participants' athletic and academic engagement was measured with combinations of questions about how many times in a week they played sports or exercised, what their most recent grades were, and how difficult it was for them to finish homework and other assignments. Relationships were measured based on feelings of closeness, caring, and acceptance, overall satisfaction with parental relations, and lack of trouble with peers.
  - "Athletically engaged" participants played sports or exercised 3 or more times a week, while "academically engaged" participants had grades at C or above and had little to no difficulty finishing their schoolwork.
- Parental athletic/academic values were measured based on their participation in sport with their child, discussion and help with schoolwork, and expectations for high school/college graduation.

## Research Questions

- Is it more likely for adolescents with supportive and/or involved parents to be athletically or academically engaged?
- Are adolescents with positive peer relationships more likely to display increased academic and athletic engagement?

## Results

### Bivariate

- Chi-Square analysis showed that adolescent athletic engagement was significantly associated with parental participation in such activities ( $p < 0.001$ ).
- There was a greater number of athletically engaged adolescents who played sports with their parents than there were those who did not (Fig. 1).
- Furthermore, Chi-Square analysis revealed similarly significant associations between athletic and academic engagement and having good parental or peer relationships ( $p < 0.05$ ).
- Chi-Square analysis also showed significant associations between academic engagement and parental interest and involvement in schoolwork ( $p < 0.05$ ), while there was no significant association observed between academic engagement and parental expectations for graduation ( $p = 0.3594$ ).

### Multivariate

- The interaction between parental athletic involvement and quality of parental relationships was found to be significantly associated with adolescent athletic involvement (Beta = 2.02 & 1.19, CI(1.67-2.43 & 1.04-1.36),  $p < 0.05$ ). Adolescents with good parental relationships and parents who played sports with them were more likely to be athletically engaged.
- Multiple Logistic Regression found that while controlling for the quality of parental relations, parental academic involvement was no longer significantly associated with academic engagement (Beta = 1.10, CI(0.99-1.23),  $p = 0.0757$ ).
- Analyses did continue to show significant associations between athletic/academic engagement and interaction between the quality of peer and parental relationships.

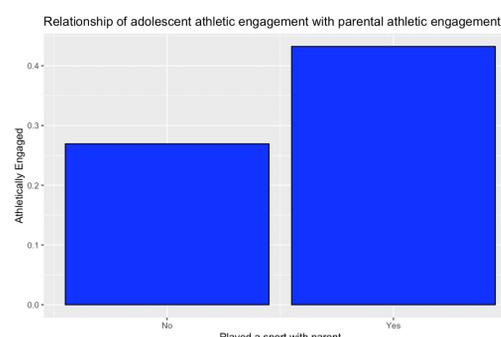


Figure 1. Relationship of Adolescent athletic engagement with Parental athletic engagement .

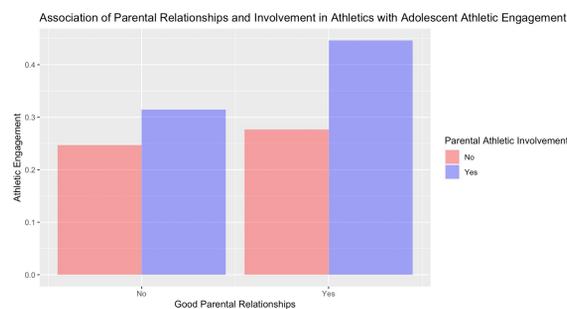


Figure 2. Association of Adolescent athletic engagement with both Parental athletic engagement and quality of relationship

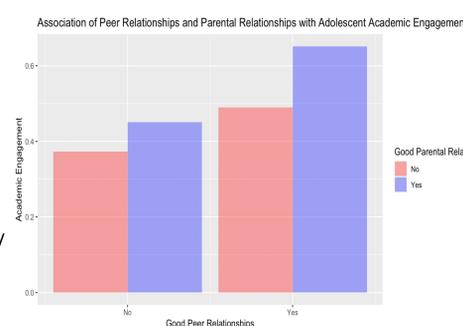


Figure 3. Association of Adolescent academic engagement with both Peer and Parental relationships

## Discussion

- The positive association between positive parental and peer relationships and academic and athletic engagement support findings from the existing literature (Nelson & DeBacker, 2008; Hellstedt, 1990).
- The significant increases in the likelihood of athletic and academic engagement provide evidence for statistically supported associations with both parental athletic involvement and relationship quality, and with both peer and parental relationships.
- The data shows increases in adolescent athletic and academic engagement when relationships with peers and parents are positive and when parents are also involved with their athletic pursuits. However, there is no significant relationship observed between academic engagement and parental expectations of graduation from high school or college, and when the quality of relationships was taken into account, parental academic involvement was also rendered non-significant.
- Limited options for variable questions and responses limit the accuracy of the results.
- Further studies could expand upon findings with the following:
  - Multi-level variables assessing positivity of relationships and degree of athletic/academic engagement on a scale (1 to 5)
  - More questions regarding peer and parental academic and athletic values
  - More questions and specific criteria for adolescent athletic engagement

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