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The Effects of Early Adolescent Peer Orientation on  
Academic Achievement and Deviant Behavior in High School

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Abstract

Approximately 1000 students who attended 6 predominantly white, lower-middle to middle-income school districts filled out questionnaires as part of a multi-wave longitudinal study of adolescent development. The analyses reported here were done using data collected in the springs of 7th and 10th grades. Results indicated that while adolescents' level of peer advice-seeking at 7th grade did not significantly influence the 10th grade outcomes, early adolescents high in extreme peer-orientation had significantly lower academic achievement and significantly higher involvement in deviant behavior at 10th grade than those low in extreme peer-orientation, even after controlling for 7th grade levels of these outcomes. Other analyses and results examine the role of later family relationships and the nature of adolescents' peer groups in the long term effects of early adolescent peer orientation.

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Introduction

Early adolescence is a critical period for the development of children's attachment to peers and their susceptibility to peer influence. Research has shown that susceptibility to peer influence rises and peaks during early adolescence (e.g., Berndt, 1979). Other studies have pointed to individual differences in the level of early adolescents' susceptibility to peer influence. For example, some investigations have found that the nature of parent-child relationships during early adolescence can influence adolescents' orientation towards peers (Bixenstine, DeCorte, & Bixenstine, 1976).

Whether an orientation towards peers is positive or negative for development during adolescence is a subject of great debate. One reason for the debate may be the absence of studies that have examined the long-term effects of an orientation towards peers. This study attempts to address this need by examining the effects of a high orientation towards peers during junior high school on later academic achievement and involvement in deviant behavior in high school. In addition, the roles of later peer association and family relationships in these long term effects are examined.

Method

Sample

Approximately 1000 students who attended 6 predominantly white, lower-middle to middle-income school districts filled out questionnaires as part of a multi-wave longitudinal study of adolescent development. The analyses reported here were done using data collected in the springs of 7th and 10th grades.

## Measures

### Peer Orientation

Two aspects of early adolescent peer orientation were measured at the seventh grade. To measure peer advice-seeking, three items asked students to indicate to whom they turned for personal and instrumental support. The items allowed for a range of the relative difference in the extent early adolescents turn to parents and peers for advice. Items also allowed subjects to indicate they rely on both equally. Students who reported turning to friends more than parents for advice were classified as high, the rest were classified as low ( $\alpha=.73$ ). To measure extreme peer-orientation, four items asked students to indicate whether they were willing to sacrifice developmentally positive aspects of their lives in order to make and keep friends. These aspects included following parents' rules and doing well in school. Students above the mean were classified as high, those below were classified as low ( $\alpha=.62$ ).

### Academic Achievement and Deviant Behavior

At both the seventh and tenth grades, students' grades in math and English were averaged to create a measure of academic achievement. Averages ranged from 1 (F) to 14 (A+). Also at both grades, five items asked students to indicate the frequencies they involved in a variety of deviant behaviors, such as skipping school, drinking alcohol, and using drugs ( $\alpha=.69$ ).

### Peer Association

At the tenth grade, association with achievement-oriented peers was measured using four items that asked students to indicate what percentage of their friends were ambitious, hardworking, doing well in school, and planning to go to college ( $\alpha=.72$ ). Also at the tenth grade, association with deviancy-oriented peers was measured with three items that asked students to indicate what percentage of their friends were regularly drinking alcohol, regularly using drugs, and likely to skip class ( $\alpha=.77$ ).

### Family Cohesion

At the tenth grade, three items from the cohesion subscale of FACES II (Olson, et al., 1979) was used to measure family cohesion ( $\alpha=.80$ ).

## Results

### Direct Effects of Early Adolescent Peer Orientation

#### Academic Achievement and Deviant Behavior

To test the effects of early adolescent peer orientation on later achievement and deviancy, a two-way multivariate analysis of covariance (MANCOVA) was conducted. Peer advice-seeking and extreme peer-orientation were treated as main effects, 7th grade achievement and deviant behavior were treated as covariates, and 10th grade achievement and deviant behavior as dependent variables. As shown in Figure 1, results indicated that early adolescents high in extreme peer-orientation had significantly lower academic achievement at 10th grade, even after controlling for 7th grade achievement. There was no significant effect of peer advice-seeking on later achievement. As shown in Figure 2, results indicated that early adolescents high in extreme peer-orientation also had significantly higher involvement in deviant behavior at 10th grade, even after controlling for 7th grade deviant behavior. Again, there was no significant effect of peer advice-seeking.

#### Peer Association and Family Cohesion

To test the effects of peer orientation on later peer association, a multivariate analysis of variance (MANOVA) was conducted in which to the two measures of peer orientation were treated as main effects, and measures of achievement-oriented peers and deviancy-oriented peers were treated as dependent variables. As shown in Figure 3, results indicated that neither aspect of early adolescent peer orientation had a significant effect on association with achievement-oriented peers at 10th grade. Both aspects, however, had significant effects on association with deviancy-related peers at 10th grade (Figure 4).

A univariate analysis of variance (ANOVA) was conducted to determine the effects of peer orientation on later family cohesion. As indicated in Figure 5 results suggested that early adolescents high in peer advice-seeking tended to report lower family cohesion at 10th grade. There was no significant effect of extreme peer-orientation.

### Mediating and Moderating Effects of Peer Association and Family Cohesion

In order to test whether peer association and family cohesion either mediated or moderated the long term effects of extreme peer-orientation on academic achievement and peer orientation, higher-order MANCOVA's were conducted. Measures of peer association and family cohesion were split at the mean in order to create two groups for each measure: high and low. A three-way MANCOVA was conducted to test the main and interactive effects of extreme peer-orientation and peer association on the 10th achievement and deviant behavior, while controlling for 7th grade levels of these outcomes. Results indicated that both aspects of peer association had significant effects on both 10th grade outcomes ( $p's < .05-.001$ ). Extreme peer-orientation retained a significant effect on academic achievement ( $p < .01$ ), but not on deviancy. None of the interactive effects were significant.

A two-way MANCOVA was conducted to test the main and interactive effects of extreme peer-orientation and cohesion on the 10th grade outcomes, while controlling for 7th grade levels of these outcomes. Results indicated that both cohesion and extreme peer-orientation had significant effects on both 10th grade outcomes ( $p's < .01-.001$ ). The interactive effect was not significant.

### Conclusions

Results suggested that relying more on friends than parents for advice during early adolescence does not have any long-term negative impact. However, turning to friends at the expense of many developmentally positive aspects of their lives does seem to have negative long-term consequences for early adolescents. Results suggested that even with positive peer association and family relations, an extreme orientation towards peers during early adolescence seems to have some negative consequences. Later peer association, however, may mediate the long-term effects of an extreme dependence on peers during early adolescence on later involvement in deviant behavior.

The interactive influences of parents and peers on adolescent development are extremely complex phenomena. In order to best appreciate this complexity, research should incorporate multi-dimensional measures of parent-child and peer relationships within longitudinal designs.

Figure 1

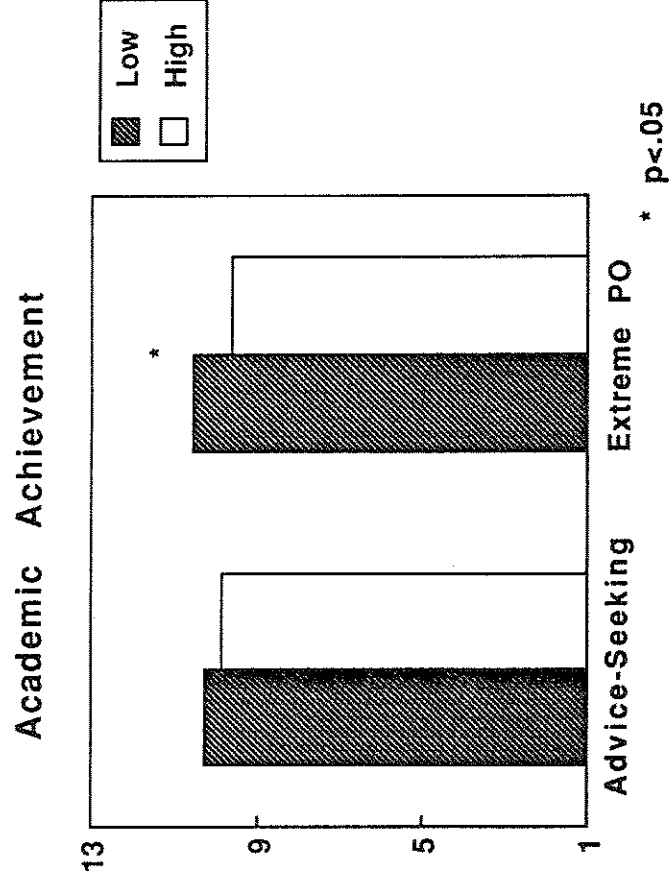


Figure 2

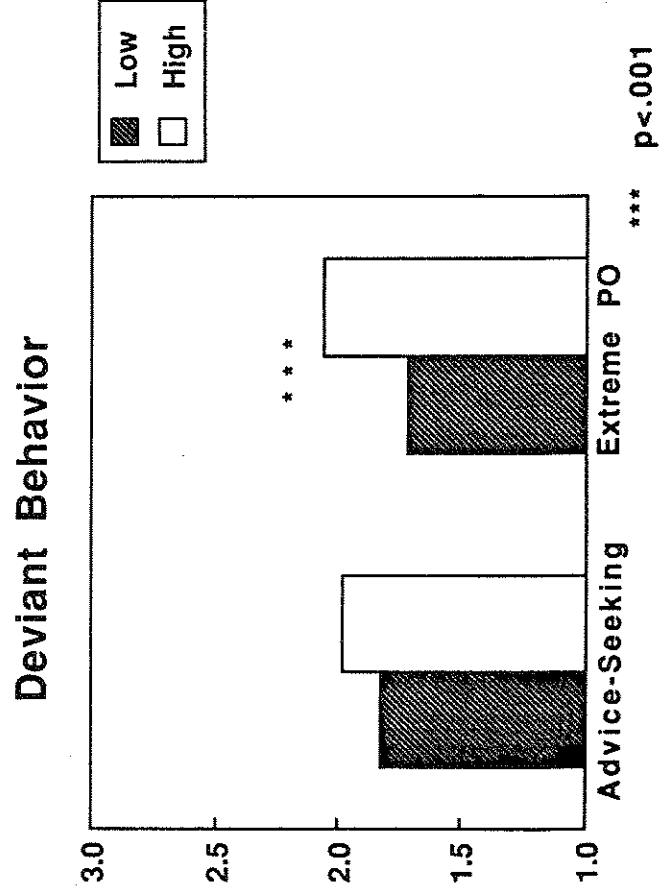


Figure 3

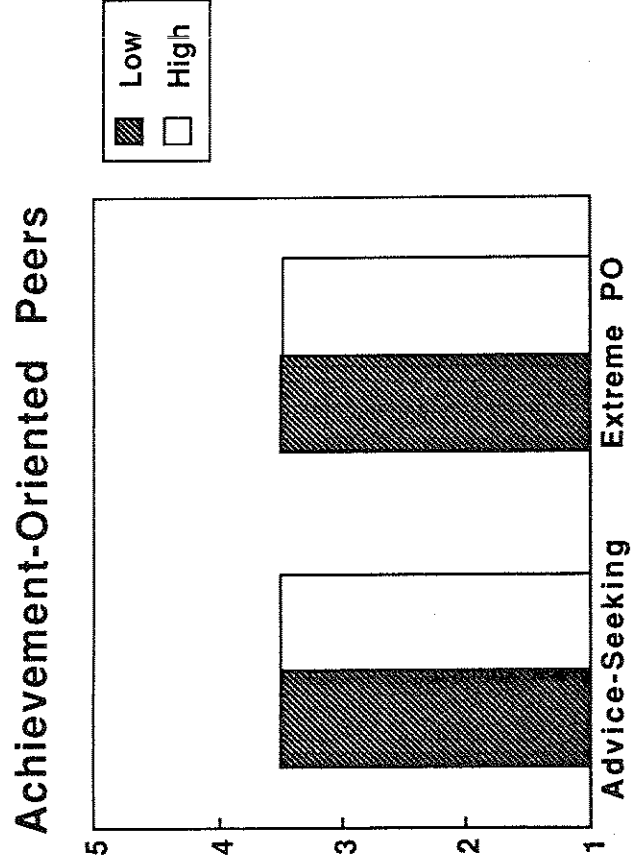


Figure 4

