

Gender Differences in the Impact of Peer Influences and Peer  
Orientation on African-American Adolescents' School Value and  
Academic Achievement

Erika D. Taylor  
&  
Carol A. Wong

University of Michigan

Poster presented at the Sixth Biennial Meeting of  
the Society for Research on Adolescence  
Boston, Massachusetts  
March 7-10, 1996

This research was funded by a grant from the Mac Arthur Foundation Research Network on Successful Adolescent Development Among Youth in High-Risk Settings awarded to Jacquelynne S. Eccles. We would like to thank the following people for their assistance in collecting and processing the data for this project: Elaine Belansky, Nick Butler, Diane Early, Jacquelynne Eccles, Kari Fraser, Ariel Kalil, Linda Kuhn, Sarah Lord, Karen McCarthy, Arnold Sameroff, Sherri Steele, Cindy Winston, Leslie Morrison, Oksana Malanchuk, Alice Michaels, Kate Rosenblum, Todd Bartko, Dairia Ray, Steve Peck.

## Introduction

According to Sebald (1989), peers become an increasingly salient force as adolescence continues, such that they are as important as the adolescent's family. Adolescents begin to turn to their peers, in addition to their parents as a significant reference group, depending upon the situation. Since peers are so important in the life of the adolescent, then they must have some influence over the individual, especially those who comprise the primary peer group. A number of studies have indicated that there may be gender differences in the degree to which, as well as the way in which adolescents are influenced by their peers (i.e., Steinberg & Silverberg, 1986; Brown, 1982). For example, Brown (1982) found that males and females differed in the overall strength they assigned to specific pressures, as well as their ranking of these pressures.

Additionally, several studies (see Ide, et. al, 1981 for a review) have indicated that peer influence is a small but consistent correlate in educational outcomes. One of the main concerns about peer influences in the school context is that the group's overall attitude toward achievement may have an impact upon their motivation to achieve.

For African-Americans specifically, research pertaining to peer influences in the school context has commonly involved investigations of "oppositional orientation" (i.e., Ogbu, 1978, 1991; Fordham & Ogbu, 1986), which posits that African-American students view doing well in school as "acting White". Interestingly, while it is believed that there is a pressure not to achieve, African-Americans have a high value of education and academic achievement (Steinberg, et. al, 1986; Graham, 1994).

## Rationale for Study

We chose to conduct our study with an African-American sample because there is little research pertaining to African-Americans' peer group formation, identification, or their perceptions of these groups, for most of the work that has been conducted within the peers domain has utilized samples that are predominantly, if not entirely Caucasian. Moreover, those studies that include African-Americans are traditionally of a comparative nature and tend to employ a "deficit approach" toward behaviors and values that deviate from the established norm. Therefore, we sought to investigate the effects of peer influence on educational outcomes, with a normative African-American sample. To this end, we decided to ask the following questions:

- Are there gender differences in the way that African-American adolescents perceive their peers?
- Are there gender differences in peer orientation?
- Are there gender differences in the relationship between peers' influences, academic values and grade point average?

Additionally, we formulated the following hypotheses:

- Gender differences in peer influence will be more evident for unconventional or negative behaviors for boys, and lean toward more positive behavior for girls.
- Therefore, peers should have a more negative impact on academic values and achievement for boys, in comparison to girls.
- Peer orientation should have a significant effect upon educational outcomes, such that boys are more highly affected.

## Methods

### *Participants*

The participants in this study were taken from the Maryland Adolescent Growth in Context Study (MAGICS), a larger longitudinal investigation of adolescent development. Principal Investigators: Jacquelynne Eccles & Arnold Sameroff. The sample used in this study was comprised solely of African American adolescents (N=620), 287 (46%) of whom are girls, and 333 (54%) of whom are boys. All of the participants in the sample were in the ninth grade at the beginning of data collection. One of the interesting qualities of this sample is that it was drawn from an area known for its economic diversity. Median family income is approximately \$42,500.

## Measures

### Predictors

#### *Conventional Peer Characteristics*

Describes peer behaviors that are considered positive or socially acceptable (e.g., How many of the friends that you spend most of your time with do well in school?; How many of the friends that you spend most of your time with think it is very important to be respectful of teachers?) (6 items; Alpha=.74).

#### *Unconventional Peer Characteristics*

Includes peer behaviors that are considered to be negative or socially unacceptable (e.g., How many of the friends that you spend most of your time with are in youth or street gangs?; How many of the friends that you spend most of your time with put pressure on you to drink?) (8 items; Alpha=.81).

#### *Unconventional Peer Values*

Describes unconventional values that adolescents' peer group may possess (i.e., Would your friends think it was cool or uncool if you did risky things? Would your friends think it was cool or uncool if you talked back to teachers?) (8 items; Alpha=.82).

#### *Conventional Values*

Captures peers' value of socially acceptable activities that are associated with well-roundness (i.e., Would your friends think it was cool or uncool if you got a sports scholarship; Would your friends think it was cool or uncool if you went to a lot of parties?) (6 items; Alpha=.76).

#### *Extreme Peer Orientation*

Assesses adolescents' susceptibility to certain behaviors, particularly those of socially unconventional nature (e.g., How often is it okay to break some of your parent(s) rules in order to keep your friends?; How many of your friends think it's okay not to do their homework if their friends want to do something else instead?) (4 items; Alpha=.67).

## Outcomes

### *GPA*

Grade point average from the adolescents' school records.

### *Utility Value of School*

Four-item variable that assesses how important the adolescent thinks school is for the future (i.e., I have to do well in school if I want to be a success in life) (Alpha=.69).

### *Intrinsic School Motivation*

Three-item variable that addresses reasons why adolescent believes it is important to go to school (i.e., I go to school because I like what I am learning; I go to school because I enjoy my classes) (Alpha=.75).

### *Importance of Academics*

Two-item variable that asks how important (1=much less important to me than other kids; 7=much more important to me than other kids) academic skills are to the adolescent (i.e., Compared to other kids your age, how important is math to you?) (Alpha=.81).

## Analyses

In order to answer the questions, "Are there gender differences in the way that African-American adolescents perceive their peers?" and "Are there gender differences in peer orientation?", we conducted t-tests. The results of this analysis are found in Table 1. The gender variable was dummy coded, and all variables in this analysis were centered.

To answer our third question, "Are there gender differences in the relationship between peers' influences, their academic values and grade point average?", we conducted hierarchical regression with four different outcome variables: GPA, Intrinsic Value of School, Utility Value of School and Importance of Academics. We controlled for socioeconomic status, gender and ability, by including these variables in the regression equation. The ability covariate was created by taking the mean of the students' total CAT scores for the seventh and ninth grade, and then standardizing them. The control variables and main effects comprised the first two blocks in each equation, followed by each interaction variable.

## Results

- Gender differences do exist in African-American adolescents' perception of peers and peer orientation: *see Table 1.*
- There are also gender differences in the relationship between peer influences, academic value and grade point average: *see Table 2*
- The strong, negative relationship between GPA and Negative Peer Orientation suggests that adolescents who have a high level of conformity to unconventional peer behaviors tend to have lower GPA than those who have a lower level of conformity. Or, these individuals have peer groups who do not have a large amount of unconventional values or behaviors. In addition, there is a significant gender difference, such that boys' grades are more strongly affected by peer orientation than girls.
- The utility value of school seems to be impacted by both conventional and unconventional behavior, as well as peer orientation. The Gender by Unconventional Characteristics interaction (see Figure 1) indicates a much stronger relationship for boys than for girls. Therefore, the more friends who exhibit negative behaviors the male adolescent has, the lower his utility value for school.
- Intrinsic motivation is most strongly impacted by Conventional Peer Characteristics. Moreover, the conventional value by gender interaction (see Figure 2) suggests that the positive relationship between intrinsic value and conventional values is stronger for girls than for boys. Thus, girls who have peer groups that hold these values in high esteem are more positively affected by peer groups who have a high level of conventional values than are boys.
- Peer characteristics and values do not seem to significantly affect African-American adolescents' perceptions of the importance of academics.



Table 1  
Mean differences in Peer Characteristics, Values and Negative Peer Orientation

|                                     | Girls<br>(n=298) |      | Boys<br>(n=339) |      |
|-------------------------------------|------------------|------|-----------------|------|
|                                     | M                | SD   | M               | SD   |
| Peer Unconventional Characteristics | -.039*           | .283 | .038*           | .361 |
| Peer Conventional Characteristics   | .113**           | .644 | -.101**         | .622 |
| Peer Unconventional Values          | -.049            | .749 | .049            | .741 |
| Peer Conventional Values            | .343             | 4.73 | -.298           | 5.14 |
| Extreme Peer Orientation            | -.053**          | .343 | .054            | .343 |

Note: All variables have been centered around the mean, and gender variable was dummy coded (1=female, 0=male).

\*  $p < .01$ . \*\*  $p < .001$ .

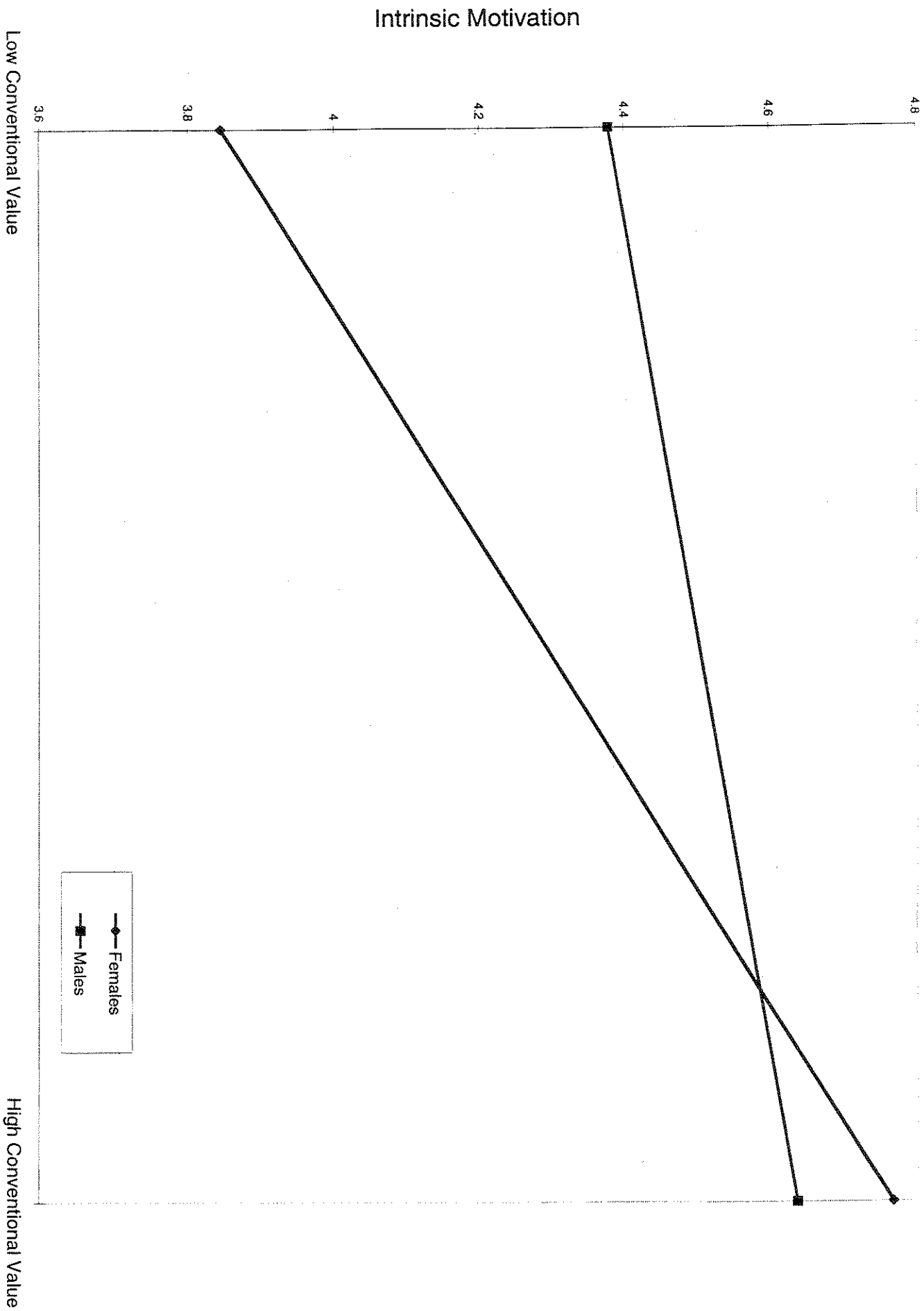
**Table 2**  
**Gender Differences in the Relationship between Peer Characteristics and Values and Academic Outcomes**

| Predictor                           | Outcome |               |                      |                      |
|-------------------------------------|---------|---------------|----------------------|----------------------|
|                                     | GPA     | Utility Value | Intrinsic Motivation | Importance of School |
| Socioeconomic Status                | .189*** | -.108*        | -.101                | -.034                |
| Gender                              | .218*** | .006          | -.063                | -.134**              |
| CAT Score                           | .283*** | .142**        | -.126*               | .047                 |
| Peer Conventional Values            | -.017   | .083          | .086                 | .090                 |
| Peer Unconventional Values          | .072    | .046          | -.065                | -.042                |
| Peer Conventional Characteristics   | .069    | .133**        | .321**               | .238***              |
| Peer Unconventional Characteristics | -.063   | -.211**       | .026                 | -.024                |
| Negative Peer Orientation           | -.158** | -.399**       | -.077                | -.257***             |
| R <sup>2</sup>                      | .299    | .418          | .185                 | .216                 |

Note: Predictor values are Beta coefficients. All variables have been centered around the mean.

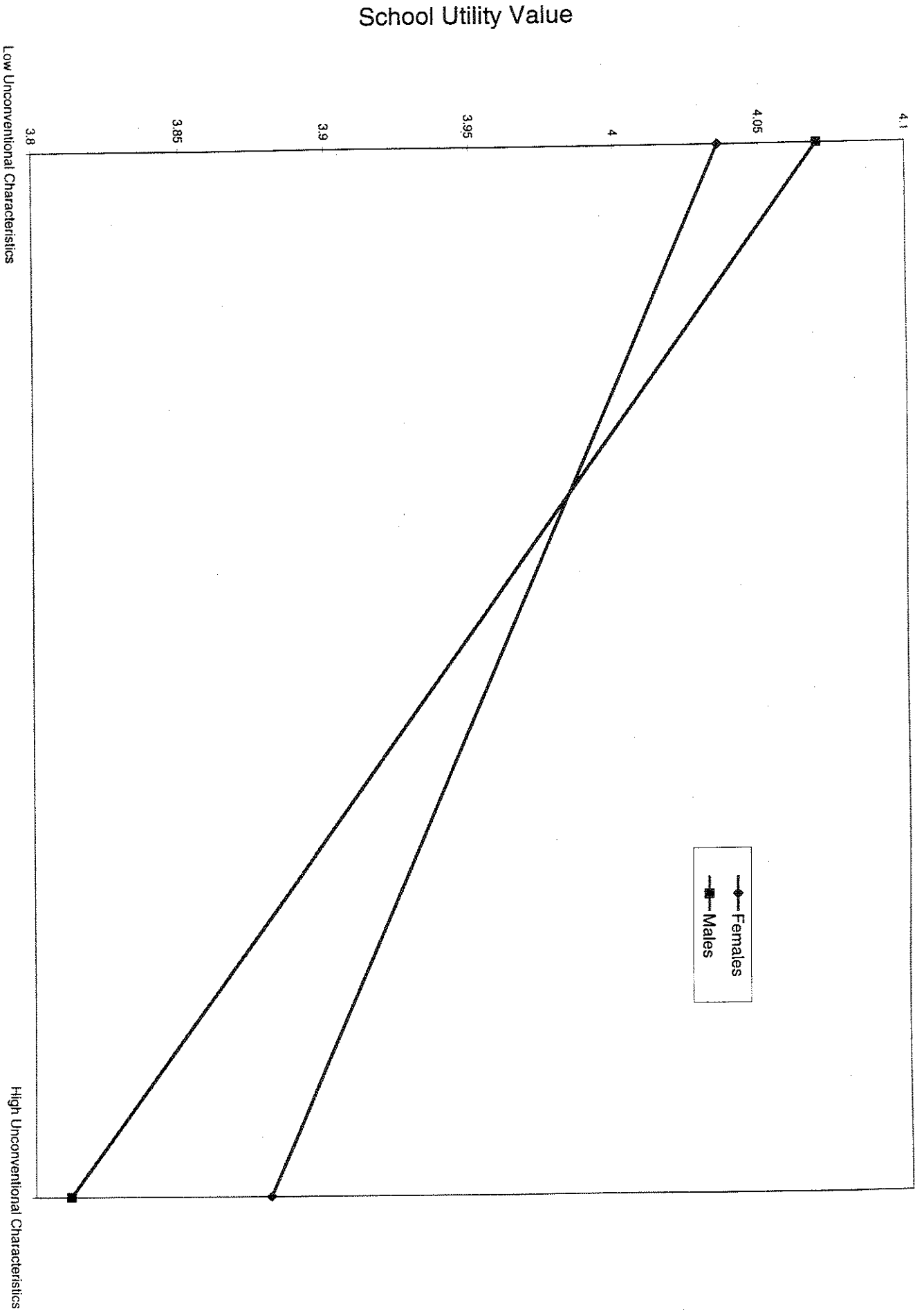
\*p<.05. \*\*p<.01. \*\*\*p<.001.

Peers' Conventional Values  
by Gender on Intrinsic Motivation



◆ Females  
■ Males

Peers' Unconventional Characteristics  
by Gender on School Utility Value



## Discussion

- Peer behaviors and values seem to have a marked effect upon at least three school outcomes for African-American adolescents.
- The gender differences in peer influences may be related to social and behavioral pressures to conform to gender role norms.
- For example, the more girls perceive their friends to value having boyfriends, going to parties, and other things that may be associated with popularity, the higher their intrinsic motivation. For boys, the extent to which their friends hold these values does not impact their intrinsic motivation.
- However, the more friends boys have who engage in unconventional behavior, the less they view school as useful for the future.
- The present findings are in accordance with the work of Brown (1982) and Berndt (1979).
- Investigating gender differences and the dynamics of adolescent peer groups can be instrumental in understanding differences in educational outcomes.

## References

- Berndt, T. J. (1979). Developmental Changes in Conformity to Peers and Parents. Developmental Psychology, 15(6), 608-616.
- Berndt, T. J., Laychak, A. E. & Park, K. (1990). Friends' Influence on Adolescents' Academic Achievement: an Experimental Study. Journal of Educational Psychology, 82(4)
- Berndt, T. J. & Keefe, K. (1995). Friends' Influence on Adolescents; Adjustment to School. Child Development, 66, 1312-1329.
- Berndt, T. J. & Miller, K. (1990). Expectancies, Values and Achievement in Junior High School. Journal of Educational Psychology, 82(2), 319-326.
- Brown, B. B. (1982). The Extent and Effects of Peer Pressure Among High School Students: a Retrospective Analysis. Journal of Youth and Adolescence, 11(2), 121-133.
- Brown, B. B. (1990). Peer Groups and Peer cultures. In S. S. Feldman & G. R. Elliot (Eds.) At the Threshold: the Developing Adolescent (pp. 171-196). Cambridge: Harvard University Press.
- Cairns, R. B., Cairns, B. D., Neckerman, H. J., Gest, S. D. & Garipey, J. (1988). Social networks and aggressive behavior: peer support or peer rejection? Developmental Psychology, 24, 815-823.
- Eccles, J. S. (1983). Expectancies, Values and Academic Behaviors. In J.T. Spence (Ed.) Achievement and Achievement Motives. San Francisco: Wit Freeman and Company.
- Ford, D. Y. (1991). Self-Perceptions of Underachievement and Support for the Achievement Ideology Among Early Adolescent African-Americans. Journal of Early Adolescence, 12(3), 228-252.

Ford, D. Y. (1993). An Investigation of the Paradox of Underachievement Among Gifted Black Students. Roeper Review, 16(2), 78-84.

Fordham, S. & Ogbu, J.U. (1986). Black students' school success: Coping with the burden of "acting White". Urban Review, 18(3), 176-206.

Fulgini, A. J. & Eccles, J. S. (1993). Perceived Parent-Child Relationships and Early Adolescents' Orientation Toward Peers. Developmental Psychology, 29(4), 622-632.

Graham, S. (1994). Motivation in African Americans. Review of Educational Research, 64, 55-117.

Hartup, W. W. (1983). Peer Relations. In E. M. Hetherington (Ed.), P. H. Messen (Series Ed.) Handbook of child psychology: Vol 4. Socialization, Personality and social development (pp. 103-196). New York: Wiley.

Kindermann, T. (1993). Natural peer groups as contexts for individual development: The case of children's motivation in school. Developmental Psychology, 29(6), 970-977.

Landsbaum, J. & Willis, R. (1971). Conformity in Early and Late Adolescence. Developmental Psychology, 4(3), 334-337.

O'Brien, S. & Bierman, K.L. (1988). Conceptions and perceived influence of peer groups" Interviews with preadolescents and adolescents. Child Development, 59, 1360-1365.

Ogbu, J. U. (1991). Minority Coping Responses and School Experience. Journal of Psychohistory, 18(4), 433-456.

Purcell, J., Gable, R. K. & Caillard, F. (1994). Attitudes of suburban high school students toward behaviors associated with high achieving peers: Development and validation of the peer assessment scale. Educational and Psychological Measurement, 54(2), 383-393.

Sebald, H. (1989). Adolescents' peer orientation: Changes in the support system during the past three decades. Adolescence, 24(96), 937-946.

Senior, A. M. & Anderson, B. T. (1993). "Who's Who Among African-American Student Groups in High School" an Exploratory Investigation on Peer Subcultures. The Urban Review, 25(3), 233-249.

Steinberg, L., Dornbusch, S. M. & Brown, B. B. (1992). Ethnic differences in adolescent achievement: An ecological perspective. American Psychologist, 47(6), 723-729.

Steinberg, L. & Silverberg, S. (1986). The Vicissitudes of Autonomy in Early Adolescence. Child Development, 57, 841-851.

Thomas, R. M. (1992). (3rd ed.). Comparing Theories of Child Development. Belmont: Wadsworth Publishing Company.

Wigfield, A. (1994). Expectancy-value theory of achievement motivation: A developmental perspective. Educational Psychology Review, 6, 49-77.