Parents make a difference: Influences on adolescents' college graduation plans

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Abstract

During adolescence, individuals begin to make commitments to specific goals and pathways. During high school, adolescents make plans about whether or not they will graduate from college based on some combination of their academic ability and advice or support from their parents. The present study examined the roles parental expectations, values, and involvement play in adolescents' expectations for college graduation. The sample for the present study was drawn from the Grade 6 (Wave 1) and Grade 10 (Wave 5) data ($\underline{\mathbf{n}}$ = 394 females; $\underline{\mathbf{n}}$ = 354 males) from the Michigan Study of Adolescent Life Transitions (MSALT), an 8-wave, 13-year study. Path analyses were utilized to test mediational models, and indicated that regardless of the academic ability level or SES of the adolescent, the expectations and encouragement a parent demonstrated, as well as the adolescents' perceptions of parental values, contributed significantly to the college graduation goals an adolescent sets for herself.

Introduction

During adolescence, individuals begin to make commitments to specific goals and pathways. Making a choice to graduate from college is one means by which individuals from economically or socially disadvantaged backgrounds can build skills necessary for success (Panel on High Risk Youth, 1993). During high school, adolescents make plans about whether or not they will graduate from college based on some combination of their academic performance and advice or support from their parents (Hunter, 1985). Parents, for example, may convey expectations to their children regarding their children's abilities; previous research has indicated that parental expectations are related to children's academic self-concepts (Parsons [Eccles] et al., 1982). The present study will examine the roles parental expectations, values, and involvement play in adolescents' expectations for college graduation. Do parents make a difference for their adolescents' college graduation expectations?

<u>Method</u>

Sample. The sample for the present study was drawn from the Grade 6 (Wave 1) and Grade 10 (Wave 5) data from the Michigan Study of Adolescent Life Transitions (MSALT), an 8-wave, 13-year study. MSALT was designed to examine the influence of normative and nonnormative transitions during adolescence and young adulthood; data were collected from both adolescents and their mothers.

MSAIL

The sample included families from diverse socioeconomic backgrounds, and is representative of the communities in Michigan where the adolescents and their families lived. The sample for the present study was 748 adolescents (\underline{n} =394 girls; \underline{n} =354 boys) and their mothers.

Procedure and Measures. When adolescents were in 6th grade, their mothers were mailed a questionnaire and a post-paid return envelope. Measures of mothers' attitudes included mothers' achievement expectations, mothers' minimum standards for academic achievement, and encouragement for their adolescents. Adolescent questionnaire data were collected in schools when adolescents were in 10th grade at Wave 5. Measures of adolescents' perceptions of parents' beliefs included adolescents' perceptions of their parents' involvement in their academic endeavors, and adolescents' perceptions of their parents' advice and values. Adolescents' expectations of college graduation were also measured at Wave 5. Control variables included adolescent academic ability and family socio-economic status (SES). School records of scores on criterion-referenced verbal tests given in seventh grade were used as indicators of adolescent academic ability. Family SES was assessed by converting the mothers' occupation to a socio-economic index scale (Entwisle & Astone, 1994).

Mothers' minimum standards for achievement at Wave 1 were measured via two open endedquestions. Mothers were asked, "What is the lowest grade your child could get in English [Math] that you would be satisfied with?" Mothers' expectations for academic achievement were assessed with two open-ended questions: "What grade in English [Math] do you expect your child to get this term?" Answers to these four questions were coded along a 13-point scale, where "A+" = 13, "A" = 12, "A-" = 11, and "F" = 1. To form the minimum standards and expectations constructs, means were taken of both items in each construct. Mothers' encouragement was measured with the following question: "Would you encourage your child to go to college after high school" and coded along a 7-point Likert scale; 1 corresponded to "not at all," and 7 to "very definitely."

At Wave 5, parental <u>values</u> were measured via adolescents' reports. Adolescents were asked, "How important is it to your parents that you do well in school?" and "How important is it to your parents that you go to college after high school?" Adolescents responded along a 7-point Likert scale; I corresponded to "not at all important," 7 to "very important." Adolescents' perceptions of parental advice was measured with three items; "My mother and I talk about my future plans," where adolescents could answer on a 7-point scale, with I corresponding to "never," and 7 to "a lot;" "These talks with my mother have influenced my decisions about the courses I will take in school," where adolescents responded on a 7-point scale, from 1 (strongly disagree) to 7 (strongly agree); and "My parents and I talk a lot about what courses I should take in school and how they will prepare me for a job," which was scored from 1 (strongly disagree) to 7 (strongly agree). Parental involvement was measured with two items: "My parents encourage me to do my best on everything I do," and "Niy mother takes an interest in my activities;" these were coded from 1 (never) to 7 (a lot). All Wave 5 scales were formed by taking a mean of the two or three items in each construct.

Adolescent college graduation expectations were assessed with one item at Wave 5, "When you think about your future, how likely do think it is that you will graduate from college (four-year program)?" This item was coded along a 7-point Likert scale, from 1 (very unlikely) to 7 (very likely).

For some constructs, data were collected from or about mothers, and not fathers. Because many adolescents, for example in divorced homes, lived only with mothers, we felt in many cases mothers' reports and adolescents' reports of mothers' beliefs were effective proxies for parents' reports, or adolescents' reports of parents' beliefs.

Results

In order to test the mediational role of parental values and expectations on the link between SES and ability and adolescent college graduation expectations, a series of regression analyses was performed. To test a mediated model, first a relationship must be established between a predictor and a mediator (path a), between a mediator and an outcome (path b), and between the predictor and the outcome (path c). If relationship (c) decreases, and approaches zero when relationships (a) and (b) are controlled, relationship (c) can be said to be mediated (Baron & Kenny, 1986). The present study tested two separate mediational models. In the first, the exogenous variables (SES and verbal ability) were used as predictors. Wave 1 maternal minimum standards, expectations, and encouragement were mediators, and adolescent college graduation expectations were outcomes. The second model substituted Wave 5 adolescent perceptions of parental values, advice, and involvement as mediators.

Path analysis was used to test the mediational model. First, path c was examined, to determine if the family's SES and adolescent academic ability were related to adolescent college graduation expectations. College graduation expectations was regressed on verbal ability and SES. For this analysis, $\underline{R}^2 = .07$ (p < .001). both of the exogenous variables made separate contributions to the outcome (Beta_{SES} = .14, p < .05; Beta_{verbal} = .20, p < .001; see Figure 1). Thus, both exogenous predictors were utilized in subsequent analyses. The next set of analyses involved establishing which mediators were related to the exogenous predictor variables (path a). Two separate models were tested; for the first model, all mediators were related to at least one predictor (see Figure 2). For the second model, only two mediators were related to one predictor (see Figure 3); parental advice, then, was excluded from the final test for mediation.

The final analyses tested if the relationship between the exogenous predictors and outcome (path c) was significantly reduced when both paths a and b were controlled. For the first model, this was indeed the case. The direct relationships between SES and verbal ability and graduation expectations were reduced to non-significance (see Figure 2). For the second model (see Figure 3), only one relationship was partially mediated: that between verbal ability and graduation expectations. This relationship was partially reduced by the addition of parental values to the full model. SES and verbal ability, however, continued to have direct effects.

Discussion

The present study provides support for the idea that parents can and do make a difference in their children's college graduation expectations, even after controlling for the academic ability level of their children and family SES. The longitudinal nature of this study suggest that parental expectations, standards, and encouragement can have lasting effects on adolescents' educational expectations. Parents as expectancy socializers can influence their children's hopes for the future (Parsons [Eccles] et al., 1982); the messages they convey to their adolescents make a vital contribution to their adolescents' expectations. Regardless of the academic ability level or SES of the adolescent, the expectations, standards, encouragement a parent gives to or sets for his or her adolescent, as well as the adolescents perceptions of parental values, contribute significantly to the college graduation goals an adolescent sets for herself.

References

Baron, R., M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. <u>Journal of Personality and Social Psychology</u>, <u>51</u>, 1173-1182.

Entwisle, D., R., & Astone, N. M. (1994). Some practical guidelines for measuring youth's race/ethnicity and socioeconomic status. Child Development, 65, 1521-1540.

Erikson, E. H. (1959). Identity and the life cycle. NY: W. W. Norton.

Hunter, F. (1985). Adolescents' perceptions of discussions with parents and friends. <u>Developmental Psychology</u>, <u>21</u>, 433-440.

Panel on High Risk Youth (1993). <u>Losing generations: Adolescents in high-risk settin is.</u> Washington, DC: National Academy Press.

Parsons (Eccles), J. E., Adler, T. F., & Kaczala, C. M. (1982). Socialization of achievement attitudes and beliefs: Parental influences. Child Development, 53, 310-321.

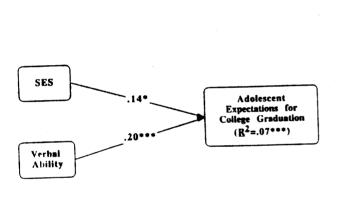


Figure 1. Direct effects of SES and verbal ability on adolescent college graduation expectations.

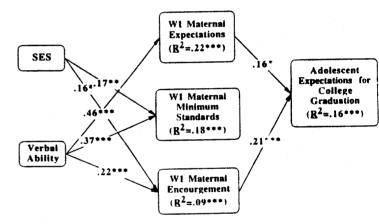


Figure 2. Mediational model with exogonous variables, Wave I predictors, and adolescent expectations for college graduation.

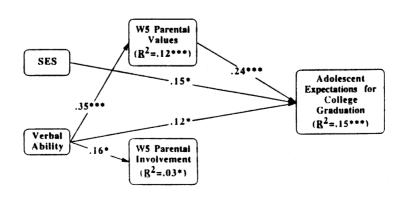


Figure 3. Partial mediational model: Relationship between verbal ability and expectations for college graduation partially mediated by Wave 5 parental values.