

# Parental Involvement in Planning for College and Students' Likelihood of Dropping Out of Four-Year Colleges

Kailey White, Sociology PhD Graduate Student,  
University of Chicago Department of Sociology

## Introduction

Researchers have long established that family background factors, like socioeconomic status or parent involvement, are predictors of college attendance (Plank and Jordan, 2001; Sandefur, Meier, and Campbell, 2006). However, less studied, and the focus of this paper, is how parental involvement in college planning during the high school years can impact students' later drop out behavior from four-year college, emphasizing how the timing of drop out matters. Thus, in this study, I use event history models, which are commonly used in Sociology, but less often applied to the study of educational decisions, despite the fact that they could provide new information on the timing aspect of students' drop out during the college years. Failing to account for the temporal nature of this decision can lead to analytical problems and bias, since key variables, like parental involvement, could have different effects over time. Using this type of model to study student drop out can also better take into account the timing of when students are most likely to drop out (DesJardins et al., 1998; Ishitani and Snider, 2006; Radcliffe et al., 2006).

There are many theoretical reasons why parental involvement should matter for drop out behavior. First, students whose parents were more involved in the years prior to college may benefit by being more prepared for college, both in terms of their academic achievement, which is a fact many researchers have documented, and also in terms of their understanding of

what the college experience would be like. Second, students whose parents were more involved may be set up better to finance their college education, either because their parents saved for their college education or helped them access key resources to finance their education through loans and scholarships (Grodsky and Jones, 2006). Third, students whose parents were involved in the college planning process may be able to choose a school that is a good fit for them, by doing research on their options prior to choosing a school (Hossler and Gallagher, 1987). Finally, students whose parents were involved may be more dedicated to their college education as a result of being surrounded by college expectations early on and developing a college-going mindset, or because they could fear disappointing their parents by dropping out.

## **Methods**

To adequately study this research question, I use data from the restricted version of the Education Longitudinal Study (ELS), which contains both student- and parent-level data useful to study parental involvement and college outcomes over time. ELS is a nationally representative, longitudinal study of 10<sup>th</sup> grade students in the United States, starting in 2002, and ending in 2012, about 8 years after students' expected high school graduate. My analytic sample includes only students who entered four-year colleges when they first started post-secondary schooling. Further, I used multiple imputation on the independent variables to account for missing data.

The key dependent variable for this study is whether students dropped out of a four-year college at least one time, which I created using a series of dichotomous variables from the student transcript data in 2012, which shows whether students were enrolled in a four-year

college during each month following high school. I only consider students' first drop out in this study, and do not analyze students who dropped out and then went back to a four-year college after. The key independent variables in this study include three time-independent parental involvement measures from when students were in 12<sup>th</sup> grade, including parental expectations for college attendance, a scale measuring parent-child discussion of college planning, and the amount of money parents had saved for their child's college education.

To most adequately answer this research question, I will use discrete-time logit models, using time-independent covariates of parental involvement during the high school years. I also will include a time-dependent covariate of the number of years to dropout. I am only able to consider students' drop out within the first four years of them starting college, because to look at a longer time period would be difficult given that many students would start to graduate, and would thus be leaving for a reason other than dropout, which is not easy to take into account with event history models. I will produce nested models including different combinations of the independent variables and different interaction effects. I will start by looking at the results of proportional odds models, and then gradually add in the interaction effects to look at the non proportional odds models.

### **Expected Results**

It is expected that parental involvement in college planning during the high school years would influence influence the likelihood of drop out from a four-year college, and my preliminary results confirm that this is the case as shown in the table included below. Ongoing analysis will likely confirm this and I will work to tease out why there is a spike in the third year.

**Table 4. Dropping out of Four-year College (Odds ratios)**

<i>Covariates</i>	Model 1	Model 2	Model 3	Model 4	Model 5
<b>Year (Ref: Year 1)</b>					
Year 2	0.72***	0.72**	0.75*	0.57***	0.59***
Year 3	1.02	1.08	1.18	0.82	0.87
Year 4	0.61***	0.68**	0.74*	0.53***	0.57***
<b>Time-Independent Covariates</b>					
<b>(1) Highest parent aspirations (ref: No PSE)</b>					
Some PSE	----	1.5	1.53	1.54	1.42*
College graduation	----	0.68**	0.83*	0.84	0.89
Graduate school	----	0.46**	0.63**	0.63***	0.65**
<b>(2) Parent-child discussion of school scale</b>					
	----	0.92***	0.91***	0.91***	0.93***
<b>(3) Amount of money saved for R's education (ref: None)</b>					
\$1-5,000	----	0.86	0.95	0.73	0.75
\$5,001-20,000	----	0.47***	0.65***	0.29***	0.31***
\$20,000+	----	0.44***	0.83*	0.10***	0.11***
<b>(4) Parent education (Ref: No PSE)</b>					
Some PSE	----	----	0.89	0.88	0.84
Four-year degree	----	----	0.70**	0.70**	0.69**
Graduate degree	----	----	0.52***	0.52***	0.53***
<b>(5) Family income (Ref: \$0-34,999)</b>					
\$35,000-49,999	----	----	0.8	0.81	0.81
\$50,000-74,999	----	----	0.77*	0.78*	0.77*
\$75,000-99,999	----	----	0.76	0.76	0.80
\$100,000+	----	----	0.53***	0.53***	0.53***
<b>(6) Male (Ref: Female)</b>					
	----	----	1.29**	1.29**	1.25**
<b>(7) Race (Ref: White)</b>					
Black	----	----	1.11	1.12	1.19
Hispanic	----	----	0.91	0.90	0.94
Asian	----	----	0.402***	0.40***	0.45***
Other	----	----	1.28	1.28	1.29
<b>(8) High school test scores</b>					
	----	----	0.95***	0.95***	0.96***
<b>(9) Time lag between HS grad and college (Ref: No)</b>					
	----	----	----	----	2.79***
<b>(10) Year by amount of savings interaction</b>					
2#\$1-5,000				1.04	1.07
2#\$5,001-20,000				2.67*	2.60*
2#\$20,000+				12.15***	11.87***
3#\$1-5,000				1.76	1.8
3#\$5,001-20,000				3.13**	3.00**
3#\$20,000+				12.08***	11.55***
4#\$1-5,000				1.56	1.61
4#\$5,001-20,000				2.94**	2.80*
4#\$20,000+				11.77***	11.33***

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