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Adrienne Ingram '06
Illinois Wesleyan University

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High School Dropout Determinants: The Effect of Socioeconomic Status and Learning Disabilities

Adrienne Ingram

Considering the growing importance of higher education due to increased global competition, one might wonder why some students still opt to drop out of high school. Previous literature has focused on a number of determinants of high school dropouts, such as socioeconomic status and learning disabilities. However, this literature has not systematically explored the interaction between these two variables. Therefore, my research extends past literature by focusing on this interaction. A logit model is used to predict the dichotomous variable, high school dropouts, and to run simulations with varying values of the independent variables. The results show that low socioeconomic status, learning disabilities, and most importantly the interaction between these two variables increase the likelihood of dropping out of high school for students facing these challenges.

Professor Michael Seeborg, Faculty Advisor
Honors Research, Spring 2006
Economics Department
Illinois Wesleyan University

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I. Introduction

Child Trends Data Bank reports that for the year 2003 the high school dropout rate was 10%. Considering the growing importance of higher education, one might wonder why some students still opt to drop out of high school. Perhaps this phenomenon is merely a selection process, for Eckstein found that dropouts have a competitive advantage in jobs not requiring a high school diploma (Eckstein and Wolpin 1999). Moreover, assuming choices are not constrained, the Human Capital Theory suggests that these students determine that the cost of lost wages exceeds the gain received by investing in a high school diploma. However, instances arise when students are forced out of high school due to poor grades or bad behavior.

Until this time, the United States' labor market has incorporated these lower skilled workers, but today the U.S. faces a new challenge of increasing global competition and a loss of jobs, especially lower skilled jobs, to less expensive overseas operations. If this trend continues, the outlook for these high school dropouts appears to be bleak. Therefore, today's society needs to stress the importance of education. By studying the determinants of dropping out of high school, society can target the students most inclined to drop out and hopefully improve their chances of economic success in the future by encouraging them to complete high school.

Numerous studies have found determinants of high school completion. However, this research aims to study the impact of socioeconomic status (the combination of background factors such as family income, parent's occupation, parent's education, and social status). Additionally, this research studies the impact of learning disabilities (e.g. dyslexia or attention deficit disorder which limits school work). However, the most noteworthy factor this research

studies is the interaction between these two variables (socioeconomic status and learning disabilities). This study aims to determine if an interaction between these two factors exists, thereby causing an increased disadvantage of attaining a high school education for students possessing both of these characteristics. Additionally, this study will show the magnitude that these determinants have on dropping out of high school.

Section II of this paper explores past literature that studies the determinants of high school dropouts. Section III presents the Human Capital Theory and how it applies to the model estimated in this study. Section IV describes the empirical model estimated in this study. Section V presents the results of the estimated model in addition to the simulations run to predict the probability of dropping out of high school, given certain values of the determinants being studied. Finally, Section VI gives the conclusions, policy implications, and ideas for future research.

II. Literature Review

Considering the importance of educational attainment to society, researchers have conducted many studies focusing on this issue. In 1962, Bertrand studied the social interaction between the family and the school social systems and its effect on high school dropouts. The most important determinants of high school dropouts that he found follow:

1. Low socioeconomic status directly correlates with high school dropouts.
2. Students of parents with lower educational attainment are more likely not to complete high school.
3. Parents who place a low value on a high school education transfer this low value to their children, thereby increasing their [children's] chances of dropping out of high school.
4. Students who have lower GPAs and who have failed more classes possess a higher chance of dropping out of high school.
5. Students incompatible with the school social system tend to receive more ridicule from students and punishment from teachers and consequently drop out of high school at a higher rate. (Bertrand 1962)

The main finding centered on the effect that dysfunctions between family and school social structures cause. When they contradict each other, students aim to fit-in with their family social structure rather than their school social system, thereby affecting their decision to stay in school (Bertrand 1962).

Bertrand's findings prove useful in my study by showing that socioeconomic status (SES) has a negative effect on high school completion. Additionally, he stresses the impact of social structures, leading me to hypothesize that the independent effects of low SES and learning disabilities, in addition to the interaction between these two factors, may cause a student not to "fit-in" to the school social system, thereby increasing the likeliness of that student dropping out of high school.

In 2003, Coleman and DeLeire investigated the effect that locus of control has on a student's decision to complete high school. Those with external locus of control believe that external factors determine their destiny and therefore do not believe that their actions contribute to their life outcomes. However, those with internal locus of control believe the opposite—their actions do affect their destiny and therefore can overcome external factors affecting their life. They found that students with external locus of control place a lower value on a high school education and therefore tend to drop out of high school more often than students with an internal locus of control (Coleman and DeLeire 2003). This finding follows the Human Capital Theory which suggests that students with external locus of control are more likely to drop out of high school because they underestimate their earnings potential and therefore determine that the cost of lost wages exceeds the gain received by investing in a high school diploma (i.e. place a lower value on a high school education).

Similar to Bertrand's findings of parental values transferring to their children, studies show that parents affect their children's locus of control because nurturing, encouraging parents tend to raise children with internal locus of control. More specifically, "parental involvement, family environment, teacher warmth, and academic performance help determine the development of internal locus of control" (Coleman and DeLeire 2003). The common bond between these factors that influence locus of control development is harmony between the family and school social systems, which is outlined in Bertrand's study, thereby suggesting students with external locus of control tend not to "fit-in" with both of these social structures, which leads to higher dropout rates.

Coleman and DeLeire believe that students who experienced stressful events, especially during their youth, were more likely to have an external locus of control (2003). One might deem it reasonable to assume that students facing a lower socioeconomic status and/or a learning disability would also face stressful events in their life, perhaps leading them to miscalculate the value of a high school education. These stressful events could be experienced either independently or combined, thereby implying an interaction between these two factors might exist.

Dunn, Chambers, and Rabren (2004) conduct a study that helps to strengthen the validity of the findings of the previously discussed studies through dropout interviews, establishing the factors that would have convinced them to stay in school:

68% of the [dropouts interviewed] felt that there were changes that could have been made that would have helped them stay in school. These included changes in (a) attitudes and effort, (b) school attendance policies, (c) teacher behavior, (d) discipline policy, and (e) peers. (Dunn, Chambers, and Rabren 2004)

Additionally, students also claimed that they were more likely to stay in school if they believed that they were being effectively prepared for their future career plans (Dunn, Chambers, and Rabren 2004). This finding follows the Human Capital Theory perfectly.

The previous two studies establish the impact of SES, family background, social structures, and educational performance on high school completion. Not only does Dunn, Chambers, and Rabren's study reinforce these findings, but it also explores the impact that learning disabilities have on students and their decision to stay in school. They find that 58% of the students with learning disabilities in their sample were likely to drop out of high school (Dunn, Chambers, and Rabren 2004). These findings illustrate that learning disabilities have an impact on high school completion.

My study aims to determine if a relationship exists between SES and learning disabilities; however, arguments can be made that this relationship may be either causal or selective. SES causes learning disabilities, or learning disabilities create challenges that lead to a lower SES. Miech, Caspi, Moffitt, Wright, and Silva, in 1999, find that "mental disorders are overrepresented in the lower social strata," and therefore investigate this relationship between SES and mental disorders in order to determine the direction of the relationship (Miech et al. 1999). This study finds that "adolescent mental disorders were more likely to be found among youth in families with low SES than would be expected by chance alone" (Miech et al. 1999). These findings are especially robust for attention deficit disorder, a learning disability. Additionally, attention deficit disorder tends to affect educational attainment (Miech et al. 1999). Miech et al. used data collected in New Zealand, and their findings suggest that SES and learning disabilities are correlated, at least in New Zealand. My study aims to further this literature by

determining if similar interacting relationships between SES and learning disabilities exist in the United States.

III. Theory

According to Gary Becker's Human Capital Theory, wages differ because jobs differ and workers differ. Each worker brings a unique set of skills and abilities to the labor force (human capital) and therefore workers' human capital determines their compensation. Education, training, and medical treatment have been shown to contribute to the accumulation of human capital (Borjas 2000). Therefore, according to this theory, investments in human capital increase the chances for economic success.

As mentioned earlier, the U.S. labor market demands fewer blue-collar workers due to the shift of jobs to other countries. Therefore, the U.S. labor force and the future labor force need to recognize the necessity for increased human capital in order to successfully compete in the labor force. Essentially, the completion of a high school degree becomes the first step in starting the process of increased human capital investment. By earning a high school degree, workers gain skills that will help them either enter a higher level of education or better perform in the labor force.

Clearly, the Human Capital Theory emphasizes the importance of investment in human capital, such as a high school education, for economic success. This paper defines economic success as completing high school and therefore aims to determine the human capital investments that determine this "economic success." Since high school occurs during our youth, the majority of the human capital investments that would lead us to this achievement must be transferred from our parents to us. Therefore, our family socioeconomic class greatly impacts our human capital accumulation. Families from a lower socioeconomic class not only obtain less

resources but also less human capital to pass on to their children, thereby causing these children to automatically be disadvantaged. Therefore, this paper hypothesizes that lower familial investment in children's human capital, due to a lower socioeconomic class, would increase the chances of these students dropping out of high school.

However, this paper also focuses on the challenge that students with learning disabilities face. Education exists as one of the critical components of human capital; therefore, one would assume that if students had a learning disability, this obstacle could deter them from achieving an increased level of human capital, such as a high school education. Moreover, this paper hypothesizes that learning disabilities create extra barriers for students to overcome, and therefore increase the likeliness of them dropping out of high school.

Therefore, both lower SES and learning disabilities can decrease the probability of high school completion. However, there could also be an interaction between SES and learning disabilities in determining high school completion because SES impacts the treatment and prevalence of a learning disability. First of all, parents from a lower socioeconomic class, most likely, have less human capital to use to help their children overcome a learning disability. Additionally, they also have fewer resources to use towards medical treatment. However, due to these attributes, these parents might not realize their children have a problem, consequently causing fewer of these students in this social class to be diagnosed. Nonetheless, this paper hypothesizes that the independent effects of low SES and learning disabilities are intensified when the student faces both challenges. Moreover, students with a learning disability from a lower socioeconomic class have an even greater chance of dropping out of high school than those students with learning disabilities from higher socioeconomic classes.

Essentially, following from the literature and the theory, this paper aims to research three hypotheses:

1. Lower SES increases the probability of dropping out of high school.
2. Learning disabilities increase the probability of dropping out of high school.
3. The interaction between lower SES and learning disabilities further increases the probability of dropping out of high school.

IV. Empirical Model

This study uses the National Longitudinal Survey of Youth (NLSY) 1997 Cohort to test the proposed hypotheses. As of December 31, 1996, the approximately 9,000 youth interviewed were between the ages of 12 and 16. For Round 1 of this longitudinal survey, both the youth and one of his/her parents were interviewed. As of 2003, these youth were between the ages of 19 and 23; therefore, by this time, they had ample time to complete high school if they opted to do so.

In order to determine if the youth dropped out of high school, I extracted the data revealing the highest grade completed as of the survey date in 2003. Even though the majority of the youth should have had time to complete high school, some cases may exist where youth were held back a year or more and may still be working on their high school degree. In these rare cases, the data will show them as dropouts when in actuality they are still students, thereby adversely affecting the results. The variable high school dropout (DO) was created so that if the highest grade completed was below 12, DO=1 and if it was equal to or greater than 12, DO=0. Approximately 14.5 percent of the sample (1033 of 7109) dropped out of high school.

The first survey determined if the youth has or had a learning disability such as dyslexia or attention deficit disorder that “limits or has limited the kind of schoolwork or other daily

activities [he/she] can perform, the amount of time [he/she] can spend on these activities or [his/her] performance in these activities” (NLSY97 R06815). Moreover, if the youth suffers from such a condition, then the variable (learning disability) LD=1, and LD=0 otherwise. Approximately 7 percent of the sample (499 of 7109) suffered from a learning disability.

Several factors influence SES such as family income, parental education level, parental occupation, and social status in the community; however, this study uses the biological mother’s highest completed grade (MOM_ED) to proxy this variable. Essentially, “women’s educational attainment...influences women’s occupations and earnings, which are themselves indicators of women’s status. Also, it allows women to make better-informed decisions about affairs in their own household, their community, and their nation” (Socioeconomic Status 2005). Since educational attainment affects all factors of SES, this variable should be a good proxy for SES. Moreover, this study assumes that mothers with higher levels of education enjoy higher SES. Unfortunately, the data regarding the biological mother’s education may not be available for youth who were adopted, thereby skewing my results slightly.

Lastly, the interaction variable was created by multiplying the learning disability and the SES variable. See Table 1 for summary statistics concerning the average mother’s education for dropouts and graduates, along with the percentage of dropouts and graduates who face a learning disability. Table 1 shows that the dropouts from this sample tend to have mothers with less education, thereby suggesting they belong to a lower SES. Additionally, significantly more high school dropouts face a learning disability, compared to the graduates in the sample.

Table 1
Summary Statistics

	Average Mother's Education	Percent with LD
Graduate	12.78	5.89%
Dropout	10.74	13.65%

Previous studies (e.g. Bertrand (1962), Coleman & DeLeire (2003), Dunn, Chambers & Rabren (2004), and Miech, Caspi, Moffitt, Wright & Silva (1999)) of high school completion control for other variables in order to tease out the true effects of the variables in question (SES, learning disabilities, and the interaction between these two variables). This study controls for sex because literature suggests that males tend to suffer from learning disabilities more than females (MALE=1 when the student is a male, MALE=0 otherwise). Additionally, this model controls for race due to literature showing that African Americans tend to experience lower levels of socioeconomic status with greater frequency than other races (BLACK=1 when the student is African American, BLACK=0 for all other races).

Most studies of high school completion control for parents' educational attainment. As the Human Capital Theory suggests, people with less educational investment will not perform as well in the economy as those with more education. Additionally, as Bertrand found, parents transfer educational values to their children (1962). Assuming that parents with lower educational attainment place a lower value on education, their children will also place a lower value on education and are therefore more likely to drop out of high school than children of high school graduates. While using the mother's educational attainment as a proxy for SES, I am also controlling for parents' educational attainment.

Coleman and DeLeire studied the impact of locus of control on the decision to drop out of high school; therefore, I have included a variable to proxy for students possessing external locus of control, which according to literature increases their chances of dropping out of high school. To reiterate, those with external locus of control believe that outside factors (and not their own actions) determine their fate. The variable (external locus of control) EXT=1 if the

respondent responded in agreement or strong agreement with the following statement “I hardly ever expect things to go my way,” EXT=0 otherwise (NLSY97 R03578).

The main focus of this study is to determine the impact that SES (MOM_ED), learning disabilities (LD), and the interaction of these two variables (MOM_ED*LD) have on high school achievement. Table 2 defines the variables and shows the expected signs.

Table 2
Variable Definitions

Variable	Definition	Expected Sign
<i>Dependent Variable</i>		
DO	High School Dropout=1 High School Graduate=0	
<i>Independent Variables</i>		
MOM_ED	Biological Mother's Highest Grade Completed (Proxy for SES)	(-)
LD	Student faces a Learning Disability=1 Student does not face a Learning Disability=0	(+)
MOM_ED*LD	Interaction between the variables MOM_ED and LD	(-)
MALE	Male=1 Female=0	(+)
BLACK	Black=1 Other Race=0	(+)
EXT	Student possesses external locus of control=1 Student possesses internal locus of control=0	(+)

In order to see the robustness of my results for my variables of interest, I have estimated three models (one without the control variables, one with the control variables, and one including the locus of control variable). Since the dependent variable (DO) is a dichotomous variable, the logit model, which estimates a logistic curve, will be used because this model better estimates the probability of an event over an ordinary least squares (OLS) regression model, which estimates a linear curve. Since this model aims at estimating the probability of dropping out of

high school (a value between 0 and 1), the logit model is superior to the OLS model because it constrains the estimates between 0 and 1. OLS could potentially estimate a value outside of this range (i.e. a negative probability or a probability greater than 100%) neither of which would be a good estimate (Ramanathan 2002). Therefore, I chose the logit model as the best model for estimating high school dropouts. The following formulas represent the logistic curve that will be estimated, where P equals the probability of a student dropping out of high school:

Model 1:

$$\ln [P / (1 - P)] =$$

$$\alpha_1 + \alpha_2(\text{MOM_ED}) + \alpha_3(\text{LD}) + \alpha_4(\text{MOM_ED*LD}) + \varepsilon$$

Model 2:

$$\ln [P / (1 - P)] =$$

$$\alpha_1 + \alpha_2(\text{MOM_ED}) + \alpha_3(\text{LD}) + \alpha_4(\text{MOM_ED*LD}) + \alpha_5(\text{MALE}) + \alpha_6(\text{BLACK}) + \varepsilon$$

Model 3:

$$\ln [P / (1 - P)] =$$

$$\alpha_1 + \alpha_2(\text{MOM_ED}) + \alpha_3(\text{LD}) + \alpha_4(\text{MOM_ED*LD}) + \alpha_5(\text{MALE}) + \alpha_6(\text{BLACK}) + \alpha_7(\text{EXT}) + \varepsilon$$

By exponentiating both sides of the equation, I can solve for P, the probability of dropout rate (only shown for Model 3):

$$P = 1 / (1 + e^{-(\alpha_1 + \alpha_2(\text{MOM_ED}) + \alpha_3(\text{LD}) + \alpha_4(\text{MOM_ED*LD}) + \alpha_5(\text{MALE}) + \alpha_6(\text{BLACK}) + \alpha_7(\text{EXT}) + \varepsilon)})$$

V. Results

The results originate from a maximum likelihood estimation of the logit model. Not only was the regression equation significant, but also all of the variables were significant to at least the 10% level with the correct estimated sign. The results can be found in Table 3.

Table 3
Results

Variables	Model 1	Model 2	Model 3
<i>Dependent Variable</i>			
DO			
<i>Independent Variables</i>	<i>Coefficient (z statistic)</i>	<i>Coefficient (z statistic)</i>	<i>Coefficient (z statistic)</i>
CONSTANT	0.7902	0.5746	0.5755
MOM_ED	-0.2249 (-18.73)***	-0.2393 (-19.11)***	-0.2337 (-15.08)***
LD	2.4702 (4.06)***	2.0856 (3.41)***	2.1381 (2.82)***
MOM_ED*LD	-0.1178 (-2.34)**	-0.0888 (-1.75)*	-0.1043 (-1.65)*
MALE		0.3588 (4.98)***	0.3418 (3.87)***
BLACK		0.6184 (8.21)***	0.5128 (5.45)***
EXT			0.3261 (3.68)***
N	7109	7062	4350
Chi ² (degrees of freedom)	495.85 (3)	581.38 (5)	391.11 (6)
Prob. Value>Chi ²	0.0000	0.0000	0.0000

* indicates significance at the 10% level

** indicates significance at the 5% level

*** indicates significance at the 1% level

In regards to determining how well the logit model fits the data, the chi-squared distribution (the likelihood ratio statistic) is used. The higher the chi-squared statistic, the more significant the overall model; therefore, with chi-squared values of 496, 581, and 391, all three models overall are highly significant (Prob. Value < 0.0001).

Additionally, all of the coefficients proved to be statistically significant with the hypothesized signs. The robustness of the statistically significant variables of most importance in this study (socioeconomic status, learning disability, and the interaction) are further verified

by the minimal change in the coefficient values that occurs when the control variables (sex, race, and locus of control) were added in models two and three. Therefore, this finding signals that the coefficients of these variables of interest are truly measuring the intended impact versus including the impact of omitted variables. Moreover, the logit results show the statistically significant impact that SES and learning disabilities have on the dropout rate.

However, the variable of most interest in this study is the interaction between these two variables. Do these students facing both low SES and learning disabilities have an increased chance of dropping out of high school? This study found this hypothesis to be true. Not only was the hypothesized sign estimated, but also the coefficient was significant to the 10% level. Essentially, students from higher SES with learning disabilities have an increased chance of graduating than those facing a lower SES and a learning disability, even after controlling for the independent effects of SES and LD. This finding establishes that a similar trend occurs in the United States as was found in New Zealand by Miech, Caspi, Moffitt, Wright, and Silva (1999).

In order to see the magnitude of the effects of socioeconomic status (mother's educational attainment) and learning disabilities on the dropout rate, I ran simulations by using Model 3 (shown in Table 3) to calculate the probability of dropping out under alternate assumptions for values of SES, learning disabilities, sex, race, and locus of control. With the number of variables in this model, several different simulations can be run. Since the goal is to estimate the probability of dropping out of high school given different values of SES and the prevalence of a learning disability, two basic simulations were run. First, I ran the simulations under the best possible conditions thereby assuming a white, female with internal locus of control because these students have the best likelihood, according to literature and my results, to graduate. Second, I ran the simulations under the worst possible conditions thereby assuming a

black, male with external locus of control because these students tend to have the least likelihood of graduating high school, according to the literature and my results. As mentioned earlier, I solved the following equation to determine these probabilities by substituting values for the variables and by applying the coefficients from the estimated logit Model 3 (shown in Table 3).

$$P = 1 / (1 + e^{-(\alpha_1 + \alpha_2(\text{MOM_ED}) + \alpha_3(\text{LD}) + \alpha_4(\text{MOM_ED} * \text{LD}) + \alpha_5(\text{MALE}) + \alpha_6(\text{BLACK}) + \alpha_7(\text{EXT}) + \varepsilon)})$$

See Tables 4a and 4b for the results of the simulations.

Table 4a

Simulation 1 (Best Case Scenario--Assuming Female, White, and Internal Locus of Control)

Mom's Education	Probability of Dropout	
	LD = 0	LD = 1
9	17.8%	62.4%
10	14.7%	56.8%
11	12.0%	51.0%
12	9.7%	45.1%
13	7.8%	39.4%
14	6.3%	34.0%
15	5.1%	29.0%
16	4.1%	24.4%
17	3.2%	20.4%
18	2.6%	16.8%
19	2.1%	13.8%
20	1.6%	11.3%

Table 4b

Simulation 2 (Worst Case Scenario--Assuming Male, Black, and External Locus of Control)

Mom's Education	Probability of Dropout	
	LD = 0	LD = 1
9	41.4%	84.4%
10	35.9%	81.0%
11	30.7%	77.2%
12	26.0%	72.8%
13	21.7%	68.0%
14	18.0%	62.7%
15	14.8%	57.1%
16	12.1%	51.3%
17	9.8%	45.4%
18	7.9%	39.7%
19	6.4%	34.3%
20	5.1%	29.2%

The simulation results suggest that lower SES (lower maternal educational attainment) is an important determinant affecting students' decision to drop out of high school. From Table 4a and 4b, one can see that the probability of dropping out of high school significantly decreases as the mother's education increases. Assuming the best case scenario (worst case scenario), students with mothers who dropped out of high school have approximately a 12%-18% (31%-41%) chance of dropping out of high school, whereas those with mothers who have at least a college degree only have approximately a 2%-4% (5%-12%) chance of dropping out of high school. This finding illustrates that students from lower SES tend to drop out of high school more than students from higher SES. This finding also confirms Bertrand's findings that low SES is directly correlated and parents' education is inversely correlated with student dropouts (1962).

Additionally, this study illustrates that learning disabilities lead to a much greater likelihood dropping out of high school. Assuming the student's mother dropped out of high school and the best case scenario (worst case scenario), the student facing a learning disability has approximately a 51%-62% (77%-84%) chance over a student without a learning disability who has a 12%-18% (31%-41%) chance of dropping out of high school. Assuming the student's mother at least graduated from college and the best case scenario (worst case scenario), the student facing a learning disability has approximately a 11%-24% (29%-51%) chance over a 2%-4% (5%-12%) chance of dropping out of high school. Therefore, students with learning disabilities drop out of high school more than students without learning disabilities, which was also determined in Dunn, Chambers, and Rabren's study (2004).

VI. Conclusion

The results not only confirm previous studies' findings, but also verify the three-fold hypothesis established in this study:

- Lower socioeconomic status (SES) increases the probability of dropping out of high school.
- Learning disabilities increase the probability of dropping out of high school.
- The interaction of the two factors increases the probability of dropping out of high school, thereby illustrating an intensifying negative effect on students facing both challenges.

Since this study shows that certain students face specific challenges which deter them from completing high school, perhaps these students can be better helped and encouraged to complete high school.

Several programs already exist attempting to aid students from lower SES; however, the government, schools, and other education promoting organizations can identify these students fairly easily. Determining students with learning disabilities is not as easy, however. Therefore, by identifying characteristics of learning disabilities and distributing this information to schools and parents, perhaps these students can receive help earlier. Additionally, information concerning the treatments for these learning disabilities should be similarly distributed, especially to lower SES families. Assistance for these treatments should be given to lower SES families as well. Perhaps mentoring programs should be established for these lower SES students to not only give them good role models, but also to educate them about their career options. Essentially, these students facing learning disabilities and/or low SES need to be encouraged to stay in school and educated on the consequences of not graduating. Most

importantly, those facing both learning disabilities and low SES should be the object of public policy because of their high risk of dropping out of high school.

Even though the attitudinal locus of control variable was not the main focus of this study, it did pose interesting questions that future research could pursue. Are SES, learning disabilities, and/or the interaction of the two affecting students' locus of control? Future research could pursue the paths which SES and learning disabilities take to ultimately affect the decision to drop out of high school. Are these factors changing students' attitudes towards themselves? Are these factors causing students to make other decisions that consequently lead to a higher probability of dropping out of high school, such as drug and alcohol use, pregnancy, gang involvement, and/or criminal activity? My research shows that SES and learning disabilities do have a statistically significant impact on high school dropouts. Based on the literature and my results, I expect that future research would find that by targeting students exhibiting both low SES and learning disabilities, these intermediary effects (if they exist) can be reduced, thereby improving these students' odds of completing high school.

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