THE PENNSYLVANIA STATE UNIVERSITY
SCHREYER HONORS COLLEGE

DEPARTMENT OF SOCIOLOGY

UNDERSTANDING HIGH SCHOOL DROPOUT: THE IMPLICATIONS OF STUDENT EMPLOYMENT ON EDUCATIONAL ATTAINMENT

LAURA GATES
SPRING 2018

A thesis
submitted in partial fulfillment
of the requirements
for a baccalaureate degree
in Sociology
with honors in Sociology

Reviewed and approved* by the following:

Jeremy Staff
Professor of Criminology and Sociology
Thesis Supervisor

Stacy Silver
Associate Professor of Sociology and Human Development and Family Studies
Honors Adviser

* Signatures are on file in the Schreyer Honors College.

ABSTRACT

The purpose of this study is to better understand why some students drop out of high school. More specifically, I focus on whether student employment during the school year has a significant effect on the likelihood of high school graduation. I used data from a nationally representative survey collected by the National Center of Education Statistics, which follows more than 23,000 9th grade students in the United States throughout high school and beyond. After analyzing the data, it was found that after-school employment during the school year can be either a positive or negative influence on school completion, depending on the number of hours worked per week. For instance, working moderate hours (i.e., averaging about twenty hours a week or less) was positively associated with graduating from high school, whereas more intensive hours (i.e., more than twenty five hours a week) was negatively associated. Additionally, for those who worked more intensive hours, other influences, such as GPA, parents'/guardians' highest level of education, and total family income were more significant in determining the risk of dropout. I also found that the effect of intensive work hours on high school dropout greatly contrasts with other extracurricular activities, such as sports or music. Students who spend intensive hours in sports or music did not have the same increased risk of dropout. In this way, although employment is positively correlated with dropout, it is more so a symptom of greater socioeconomic issues that can also affect a student's likelihood of dropout. With these findings, suggestions are made that can improve school environment and potentially increase graduation rates, especially among working students. In particular, several suggestions are later made to address these societal problems, further supporting previous research in educational policy.

TABLE OF CONTENTS

LIST OF TABLES

ACKNOWLEDGEMENTS

First, I'd like to thank Dr. Jeremy Staff and Dr. Stacy Silver for their support and guidance throughout the thesis process; without them, my thesis would not be as successful, let alone possible, as it was. I'd also like to thank Madhu Prakash, who sparked my initial interest in the philosophical and sociological aspects of education, ultimately inspiring further study on the topic. Lastly, I also would like to thank friends and family who have listened to me talk endlessly about my topic and continued to enthusiastically cheer me on to the end of the thesis journey.

Chapter 1

Introduction

In the United States, getting a degree has become one of the most important and impactful decisions a person can make to have success in their future. Only a few decades ago, the job prospects that may have been realistic directly after high school are now requiring at least bachelor's degrees, and the trend keeps growing. Students, who have spent endless resources to complete a college program in hopes of a brighter, more prosperous future are falling back into entry level positions that hardly keep them out of poverty (Nightingale, 1995). In this way, there is considerable risk involved in not pursuing a postsecondary diploma, and even more risk in not finishing high school. Although rates of high school dropout have been steadily decreasing over the years, the consequences have even higher stakes (See Appendix A for dropout statistics over time). In order to combat this, it is important for educators to understand the factors and causes that might increase the likelihood of dropping out. My thesis will address recent high school dropout rates and identify the factors that are most highly correlated with whether or not a student has dropped out of school or had a dropout episode (i.e., a stopout).

Prior research shows that there are many risk factors that have a significant effect on the risk of high school dropout. For instance, it has been found that gender, race/ethnicity, parents'/guardians' level of education, family income, student's educational aspirations, and GPA all have a significant influence on high school dropout (Jimerson, 2000; Suh, 2007). Although I will address these variables and compare their current influence with that in past research, the primary focus is on a different independent variable: student employment during the school year. Essentially, I will be asking the question: do employed students have an inherently higher risk of dropout? For this study, employment will be measured by hours worked per week during the school year. I will also look at student-reported data on their educational and career aspirations and compare employment data to that of other out-of-

school extracurriculars, such as organized sports or music, to ensure all aspects of employment are considered.

Of course, employment, and extracurricular involvement in general, can be heavily influenced by other factors, many of which were mentioned before as indicators of dropout (e.g., social class background, educational aspirations). I will also try to identify the most influential of these variables and control them to better understand the influence of my key independent variable. In sum, I would like to look at the issue holistically and understand the connections between each factor better. This is important to do for many reasons, but especially to conceptualize new approaches in improving school communities and decreasing the number of dropout episodes students have each year. For example, it has been increasingly common to defund vocational and apprenticeship programs, as well as guidance counseling and other extracurricular activities in schools, so providing new research on the subject can offer a stronger argument for keeping (or dropping) them and re-prioritizing school budgets (Boyd, 2014). Similarly, it can shed light on the influence of student employment on grades, student involvement, and ultimately their success in achieving a degree.

To answer these questions, I will use nationally representative data collected by the National Center for Educational Statistics. This data set follows more than 23,500 students longitudinally, offering insight into the intricacies of academic success and performance through graduation. I will use various methods to test my hypotheses, such as using cross tabulations and correlation analyses, to study the different dimensions of dropout, employment, and other extracurricular involvement.

Chapter 2

Literature Review

Dropout rates

By the mid twentieth century, the United States entered a new era in education. Following events like the Civil Rights Movement and Sputnik, new dialog occurred about the goals of schooling and how it can improve. In 1900, only 4% of first graders would graduate from high school. By 1975, that number increased to nearly 67% (Bickel 1988). In order to succeed on a global scale, policymakers made an effort to not only increase overall performance, but also inclusivity and equality from district to district. This began with new legislation from the federal government, such as the National Defense Education Act of 1958, with the purpose of promoting secondary education.

However, there was also an overarching belief that students have total control over their educational outcome. With discipline and hard work, anything can be achievable. By the virtue of early educational researchers such as James Coleman, this was found inaccurate. The Coleman Reports concluded that outside factors, such as family and peers, play a larger role in determining achievement than the quality of a school (Coleman 1975). The findings have been replicated several times with similar results. For example, the Blau-Duncan and Wisconsin models of social mobility, education, and career outcomes (Sewell, 1992). The Blau-Duncan model draws a relationship between a person's career and educational outcomes with that of their father's; suggesting that a well-educated person also has a well-educated, and ultimately successful, father. The Wisconsin model is similar, but includes more variables such as mental ability and educational aspirations. By including more variables, this model better addresses the complex nature of achievement and how emotional and intellectual competence also influence educational attainment.

These models reveal a complex process of educational achievement, and highlight many factors that are not within a student's control. Similarly, there is a lot of research on the relationship between dropout rates and gender, race, and socioeconomic status. For example, black and Latino students are more likely to drop out than their white peers. In 2009, the rate of high school dropout among Latino students was 17 percent, which is almost double the rate for black students (9%) and nearly three times the rate of white students (6%) (Rumberger, 1987; Lewitt, 1992; Bradley, 2011). Socioeconomic status, family structure, and parental background also have proved to be primary determinants (Lareau, 1987; Bradley, 2011; Jimerson et al., 2000; Kearney, 2016). In Kearney's research, for example, it was found that students from the lower-socioeconomic class, especially boys, were increasingly likely to leave school as the income inequality gap increased among their peers. In this way, boys are much more sensitive to family and economic disadvantages than girls (Kearney, 2016).

However, the likelihood of dropping out is not solely determined by characteristics such as gender, race, and social class, as these variables are often interconnected. For example, due to decades of racism and blatant discrimination in the United States, average and median incomes between white and racial minority households are incredibly unequal (See Appendix B). Similarly, cultural norms from population to population can change drastically, leading to differences in perspective on educational attainment and ultimately dropout if there is not early intervention from the student's school. Bradley suggests that one of the possible explanations for low graduation rates among black students is oppositional culture. When racial barriers in success are perceived, there is a tendency to respond with embracing an identity that is not defined by predominately white institutions (Harris 2006; Bradley, 2011).

In addition, Coleman found that the significant factors within schools are also tied to culture and environment. For example, it is important for teachers and administrators to have high academic and disciplinary standards. A failure to reach academically struggling students can be detrimental (Coleman, 1975; Elder, 1992). In a study done by Suhyun and Suh, having a low GPA increases the probability of

dropout by 115.9%. Although rates of likelihood are about the same for academic risk, socioeconomic status and behavioral risk, low GPA is the most harmful if combined with another factor (Suh, 2007). Desegregation was also noted as a significant factor in student achievement, in that learning in a diverse classroom positively affected a child's ability to learn and grow (Coleman, 1975). This can be especially helpful for marginalized populations such as black or latino students or students with low-socioeconomic status.

Employment, extracurricular activities, and dropout

In terms of addressing the two independent variables, there is less literature to give insight into possible outcomes. Especially for student employment, many studies have divided results. Some believed that employment was very beneficial and had a positive effect on a child's education, and others disagreed (Mortimer, 1996; Ruhm, 1997). For example, student employment is more prevalent in lower-income families. Although some scholars suggest that employment can negatively affect a child's likelihood of graduation, others found that the financial support is beneficial (Lee and Staff, 2007). In particular, some studies emphasized time as an important factor; the students who were juggling school with a full time work schedule were more likely to do poorly in school (D'Amico, 1984; Warren, 2002). However, working part time had no negative effect. Many other studies that were related, such as one studying the relationship between graduation rates and minimum wage, showed no significant correlation (Warren, 2010).

A number of studies also suggest that a student's perceived extrinsic and intrinsic values to school and work are large indicators of how well they succeed in each position (e.g., Mortimer, 1996). There are many ways researchers have approached the topic and reached a conclusion, however, I found that most of the research on employment and student achievement is based on older cohorts of teenagers

(i.e., from the 1980s and early 1990s). Since then, the United States has gone through somewhat of an economic shift, where cost of living and the cost of education has skyrocketed and unemployment rates are high (Trombley, 2003). According to Bickel, labor markets tend to pull students out of high school when the unemployment rate is exceptionally low, so understanding dropping out in these conditions can be incredibly high-stakes (Bickel 1989). In this way, there is a likely chance that these trends will change among contemporary cohorts of teenagers.

As for extracurricular involvement, findings are relatively consistent and positive (McNeal, 1995; Lewit, 1992). The more extracurricular activities a student is a part of, the more likely they are to stay in school. However, the correlation does differ between types of activity, such as athletics versus the arts, and between different races, socioeconomic classes, and by gender (McNeal, 1995). I hypothesize that this relationship is caused by many reasons, many of which were listed earlier as established influencers on graduation rates. For example, extracurricular activities often serve a very different purpose to students than employment. They often also cost money but can strengthen a student's peer network and promote positive characteristics, such as resilience and discipline, that are important in succeeding in school (McMillan, 1994).

Theoretical Perspective

Although literature is limited on student employment and extracurriculars, there is a strong theoretical background to my hypotheses. For example, employment and extracurriculars can be forms of capital (Lareau, 1987, Bourdieu, 1986). Bourdieu explains culture capital as a person's attitudes, preferences, formal knowledge, behaviors, goods, and credentials that can be used for social and cultural mobility. The sole purpose of extracurriculars, for example, is to gain more experience and knowledge beyond the classroom; whether that be mastering a technical skill or learning to better understand other

cultures and people. Cultural capital can also be gained through employment, although it is not always the primary reason people work. For example, working in the service industry can be beneficial in strengthening one's interpersonal and communication skills, as well as their ability to work and make decisions in a fast-paced environment. Studies have shown that certain areas of employment, such as babysitting, have much lower rates of dropout than others (McNeal, 1997).

Another form of capital, social capital, can also can give some important insight. It represents a person's network of acquaintances and social recognition (Coleman, 1988). The more connections and visibility a person has, the easier it will for them to be successful. Both independent variables can be conducive to increasing social capital. For example, by participating in many extracurricular activities, a child will gain a greater peer network with a diverse range of people. These people can be beneficial to a person's sense of belonging in a community, and similarly, can be a great source of support if needed. Employment does this as well, as most jobs require people to work with a diverse range of individuals, further increasing a student's social circle. However, the social capital gained through employment may be less conducive to educational achievement. For example, there is a good chance that a student will consider dropping out if his or her peers had done the same and still have jobs. Similarly, some employers might put more emphasis on the value of their job more so than finishing school if it greater benefits them or the business.

In fact, this positive perspective on capital is called the human capital theory. This theory basically states that the more human capital a person has, the more likely they will be generally successful (Becker, 1994). In this way, with an increase in extracurricular involvement or employment, the more likely the student is to not have a dropout episode. However, we do know that this model is inherently flawed because relationships are never that simple and spuriousness is possible. For example, educational attainment is not perfectly correlated with intelligence, and there is a myriad of reasons why a student may leave school for an extended period of time. Nevertheless, it does give some baseline insight into the nature of human capital and how it can positively affect the high school dropout rate.

Lastly, it is also important to consider the control and functional perspectives on why students dropout. We cannot always assume that dropping out was a decision made by the student, and there are many reasons why they might choose to do so, some of which are not controllable. Current research has called this phenomenon “pushing out” and “pulling out,” suggesting the factors could internally and externally driven. Is there any particular circumstances or a specific threshold that needs to be reached before correlation changes or becomes more or less significant? According to control theory, students’ full potentials are often cut short because of difficult external situations like these, which is an important occurrence to consider if we are looking to improve high school graduation rates (Collins, 1988).

In this way, there is plenty of previous research on educational outcomes and a strong theoretical background to hypothesize the results of this study. In particular, the work of Coleman and others, as well as Bourdieu and Becker’s theories of capital, can give clear insight into the independent and dependent variables’ relationships. However, many factors play into why a student may have a dropout episode, and some have most likely shifted in more recent years.

For these theoretical perspectives, I will test the following two hypotheses regarding the relationship between work, extracurricular activities and dropout: for one, I hypothesize that the trends for employment and extracurricular involvement will be different. Although both have a similar amounts of time and effort commitment, I think that there will be something inherently different with employment that can negatively affect graduation rates, especially when youth spend a lot of time in after-school jobs. However, I also hypothesize that although employment’s influence will be complicated and negative after a certain threshold, the most integral reasons for these outcomes will also be largely impacted by other factors such as socioeconomic status and academic achievement. As mentioned prior, I will test these hypotheses by examining cross tabulations of the datas and correlation analyses to analyze employment, extracurricular involvement, dropout rate, and other variables such as family income, GPA, and parents’/guardians’ highest level of education.

Chapter 3

Data and Methods

Data for this study was obtained through the National Center for Education Statistics' High School Longitudinal Study of 2009. This study has multiple parts, including information on both schools and their students. The student file, which was used in this analysis, includes different surveys from students, parents, administrators, counselors, and student transcript information. This national study surveyed 23,503 students at 944 schools, spanning ten different states and include both public and private institutions. The students were chosen at random, averaging only about 25 per school to ensure a representative sample. There were two follow up surveys to this initial survey, in Spring 2012 and Spring 2013, regardless of whether or not the student has dropped out of school. A third follow up, which is not yet available, was taken in Fall of 2016 and a fourth is planned for 2025. Transcripts were released in June 2015. However, only the first and third surveys, as well as the transcripts, will be used in this research.

The overall goal of the HSLS:2009 study was to understand student trajectories as they move through high school and beyond, with a strong focus on STEM education, the changing cultural background of high schools, and perspectives on postsecondary education. The final follow up, scheduled for sixteen years after the first, will help researchers better understand the relationships between aspirations, effort, and outcomes. The constructs highlighted in the survey, as mentioned, are students, parents, teachers, administrators, and counselors.

The purpose of my thesis is to determine what matters when it comes to predicting high school dropout. The dependent variable will be whether students in this sample experienced a known dropout episode before Spring 2013. The primary independent variable addressed is student employment, however other variables will be analyzed, such as sex, race/ethnicity, parents'/guardians' highest level of

education, total household income, students' educational aspirations, GPA, and extracurricular involvement. Student employment will primarily be measured by the number of hours worked on average per week. Extracurriculars will be measured based on the number of activities the student has been involved with since the start of the study in 2009. I am especially interested in this relationship between employment and other extracurricular involvement, so I will compare trends between the two to get a better understanding of the role out-of-school engagement plays in keeping a student in the classroom. Education aspirations will be measured based on how far the student thinks they will get in school, ranging from not finishing high school to completing a Ph.D/M.D/Law/other higher level professional degree. Lastly I will analyze student-reported data on the reason for their dropout episode and compare it to the previous findings.

In this way, I will start by creating descriptive crosstab tables of the independent and dependent variable data and computing percentages to see general trends in the relationships between the three variables. Employment will be primarily examined based on number of hours worked per week. Once the general trends have been identified, the data will be analyzed inferentially, drawing possible conclusions that can be reached from the findings. However, because of the variables' complex nature, it is also important to consider spuriousness, as well as severity of spuriousness, due to the influential nature of the secondary variables.

For example, literature has suggested that sex, race, parent's education, total household income, educational aspirations, and GPA all have some degree of influence on a child's academic success. To test for spuriousness, matrix crosstabs will be created in which these variables are controlled. If the trends remain constant throughout each response bracket, there is no statistical significance. I will also include an updated diagram outlining the relationships between each variable to visualize which ones are the most influential. In this section, educational aspirations will be measured using a question in which subjects were asked, in the baseline study, how sure they felt that they were going to graduate. By controlling

these factors, I will then determine if the relationship between dropping out and employment is significant.

Because the sample is large and the study is longitudinal, there is some missing data in the more recent data sets. Similarly, there are a few variables with high numbers of missing values, suggesting not everyone was given, or chose not to finish, the complete survey. In order to alleviate this issue, the data sets will be computed to leave out these respondents from the sample. I will also opt to use items that have more responses if possible. Lastly, due to the nature of the mode of data collection, it must be addressed that there is a possibility students did not answer questions truthfully.

Chapter 4

Results

Table 1 shows that 11% of the 23,503 students surveyed had at least one dropout episode during high school. During the Spring 2013 semester alone, 1660 teenagers were reported as dropouts; 721 of which had left school in that semester. This accounts for 9% of students.

Table 1: X3 Ever dropout frequency descriptives

	Frequency	Percent
No known dropout episode	20927	89.0
At least one known dropout episode	2576	11.0
Total	23503	100.0

Out of the percentage of dropouts, 3.1% of survey takers indicated that they are finishing schooling alternatively, such as with a GED program. 4.3% of students had an unknown status as of Spring 2013, inferring that this subgroup did not complete the follow up surveys. This data is shown in table 2.

Table 2: X3 U13 dropout status frequency descriptives

		Frequency	Percent
Valid	Not dropout/alternative completer	15535	83.7
	Spring term 2013 dropout	721	3.9
	Alternative completer	556	3.0
	Student/parent/prior school report of dropout episode	939	5.1
	Status unknown	807	4.3
	Total	188558	100.0
Missing	System	4945	
Total		23503	

Many variables can influence likelihood of a dropout episode, such as sex, race, parents/guardians highest level of education, total family income, and overall computed GPA. Past research has established these as known significant factors. As shown in Tables 3 and 4, the likelihood of having a dropout

episode is higher for some students. For instance, 56.1% of dropouts are male and 55.7% were white. However, these percentages are very close to the percentages of male students and white students in the overall survey, which are 51% and 55.1% respectively.

Table 3: X3 Ever dropout * X2 Student's sex crosstabulation

			X2 Student's Sex		Total
			Male	Female	
X3 Ever dropout	No known dropout episode	Count	10529	10398	20927
		% within X3 Ever dropout	50.3%	49.7%	100.0%
	At least one known dropout episode	Count	1446	1130	2576
		% within X3 Ever dropout	56.1%	43.9%	100.0%
Total		Count	11975	11528	23503
		% within X3 Ever dropout	51.0%	49.0%	100.0%

In Table 4, I show how the percentage of dropouts varies by race/ethnicity. The percentages of dropouts who are non-Hispanic Asian is relatively low at 4.3%. Asian and non-Hispanic white students were the only subgroups which had lower percentages of dropout compared to the size of their population within the sample.

Table 4: Ever dropout * X2 Student's race/ethnicity-composite crosstabulation

			X2 Student's race/ethnicity-composite								
			Amer. Indian/ Alaska Native, non-Hispanic	Asian, non-Hispanic	Black/ African-Amer., non-Hispanic	Hispanic, no race specified	Hispanic, race specified	More than one race, non-Hispanic	Native Hawaiian/ Pacific Islander, non-Hispanic	White, non-Hispanic	Total
X3 Ever dropout	No known dropout episode	Count	146	1810	2080	191	3145	1793	100	11662	20927
		% within X3 Ever dropout	0.7%	8.6%	9.9%	0.9%	15.0%	8.6%	0.5%	55.7%	100.0%
	At least one known dropout episode	Count	35	112	368	59	467	228	18	1289	2576
		% within X3 Ever dropout	1.4%	4.3%	14.3%	2.3%	18.1%	8.9%	0.7%	50.0%	100.0%
Total		Count	181	1922	2448	250	3612	2021	118	12951	23503
		% within X3 Ever dropout	0.8%	8.2%	10.4%	1.1%	15.4%	8.6%	0.5%	55.1%	100.0%

As expected, highest level of parent's/guardian's education, total family income, and overall unweighted GPA were significant indicators of dropout. Table 5 present a correlation matrix showing how dropout is related to GPA, parents'/guardians' education, and family income. GPA had the highest degree of correlation, -.365, suggesting that students who dropout are to some extent struggling academically. However, it is important to address that all these variables are interdependent to some extent. For example, Table 5 also shows a correlation of .366 between GPA and parents'/guardians' highest level of education and a correlation of .340 between GPA and family income. Family income and parents'/guardians' highest level of education had the strongest correlation coefficient at .585.

Table 5: X3 Ever dropout * X1 Parents'/guardians' highest level of education * X1 Total family income from all sources 2008 * X3 Overal GPA computed correlation table

		X3 Ever dropout	X1 Parents'/ guardians' highest level of education	X1 Total family income from all sources 2008	X3 Overall GPA
X3 Ever dropout	Pearson correlation	1			
	Sig. (2-tailed)				
	N	23503			
X1 Parents'/ guardians' highest level of education	Pearson correlation	-.159	1		
	Sig. (2-tailed)	.000			
	N	16782	16782		
X1 Total family income from all sources 2008	Pearson correlation	-.165	.585	1	
	Sig. (2-tailed)	.000	.000		
	N	16761	16759	16761	
X3 Overall GPA	Pearson correlation	-.365	.366	.340	1
	Sig. (2-tailed)	.000	.000	.000	
	N	21876	15787	15769	21876

Another interesting finding was that only 93 students out of 23,503 indicated that they predicted to drop out of high school, based upon their educational expectations in the 9th grade. This accounts for .4% of responses, suggesting that the majority of students who drop out had not intended to do so; either their future aspirations were unclear or they were negatively influenced by factors out of their control. In

fact, many students were very ambitious about their academic future, 20.8% expecting to complete a Ph.D, M.D, Law, or other professional degree and 19.9% expecting to complete a Master's degree. As previous findings suggest, students may be pulled out of school for many reasons, including poor school performance and related issues such as low socioeconomic status, which can be interpreted as income and parents/guardians highest level of education. This data can be found in table 6.

Table 6: X1 How far in school 9th grader thinks he/she will get frequency descriptive

		Frequency	Percent
Valid	Less than high school	93	0.4%
	High school diploma or GED	2619	12.2%
	Start an Associate's degree	140	0.7%
	Complete an Associate's degree	1195	5.6%
	Start a Bachelor's degree	115	0.5%
	Complete a Bachelor's degree	3505	16.3%
	Start a Master's degree	231	1.1%
	Complete a Master's degree	4278	19.9%
	Start a Ph.D/M.D/Law/other prof degree	176	0.8%
	Complete a Ph.D/ M.D/Law/other prof degree	4461	20.8%
	Don't know	4631	21.6%
	Total	21444	100.0%
Missing	System	2059	
Total		23503	

In table 7, 9,659 students indicated that they worked for pay at some point during high school. This accounts for 47.8% who answered the survey item, indicating that some level of employment is fairly commonplace and many students have learned to balance work and school without having any drop out episodes.

Table 7: S2 F08 Ever worked for pay during high school year * X3 Ever dropout crosstabulation

			S2 F08 Ever worked for pay during high school year		Total
			No	Yes	
X3 Ever dropout	No known dropout episode	Count	9445	8751	18196
		% within X3 Ever dropout	51.9%	48.1%	100.0%
	At least one known dropout episode	Count	1122	908	2030
		% within X3 Ever dropout	55.3%	44.7%	100.0%
Total		Count	10567	9659	20226
		% within X3 Ever dropout	52.2%	47.8%	100.0%

According to Table 8, there is also some level of significance between the two variables. Of the students with a known dropout episode, a smaller percentage were employed than their classmates without one. This suggests that, generally speaking, there is a positive correlation between employment and the likelihood of staying in school.

However, data shows that an overwhelming amount of students only work part-time. Of the 9,259 students who reported the number of hours worker for their last job during the school year, only 430 indicated that they worked for forty hours or more. This accounts for only 4.6% of employed students. Nearly 80% of them worked less than twenty five hours a week. This suggests that only a very small amount of students are affected by long work hours that could potentially affect grades, school involvement, and ultimately likelihood of dropping out.

In this way, although employment has a generally positive influence on whether or not a student stays in school, there is a threshold where this trend starts to reverse. Table 8 shows that after twenty hours a week, the percentages within the variable X3 Ever dropout exceed the total percentages of all students, regardless of dropout episode. This means that likelihood of having one increases dramatically for those who work more than twenty hours a week. Fortunately, this only affects a very small percentage of students today.

Table 8: S2 F09 Hours per week working spring 2012/most recent school year job * X3 Ever dropout crosstabulation

			S2 F09 Hours per week working spring 2012/most recent school year job										Total
			0 hours	1-4 hours	5-9 hours	10-14 hours	15-19 hours	20-24 hours	25-29 hours	30-34 hours	35-39 hours	40+ hours	
X3 Ever dropout	No known dropout episode	Count	41	1118	1662	1491	1223	1298	556	499	175	333	8396
		% within X3 Ever dropout	0.5%	13.3%	19.8%	17.8%	14.6%	15.5%	6.6%	5.9%	2.1%	4.0%	100.0%
	At least one known dropout episode	Count	4	68	133	120	93	151	73	97	27	97	863
		% within X3 Ever dropout	0.5%	7.9%	15.4%	13.9%	10.8%	17.5%	8.5%	11.2%	3.1%	11.2%	100.0%
Total		Count	45	1186	1795	1611	1316	1449	629	596	202	430	9259
		% within X3 Ever dropout	0.5%	12.8%	19.4%	17.4%	14.2%	15.6%	6.8%	6.4%	2.2%	4.6%	100.0%

Because employment can be related to other factors, such as socioeconomic status and academic achievement, it is important to consider the correlations between hours of employment, parents'/guardians' highest level of education, total family income, and GPA. Table 9 shows that the likelihood of a dropout episode has a .123 correlation with employment. Although this is significant, the correlation coefficients for the three other variables in the table are higher; -.235, -.195, and -.261 respectively. This suggests that the effect employment has on dropout rate is more so an indirect outcome or side effect of these other three variables. Although it is a significant indicator, especially when considering hours worked, there are other more effective factors to consider.

Table 9: S2 F09 Hours per week working spring 2012/most recent school year job * X3 Ever dropout * X1 Parents'/guardians' highest level of education * X1 Total family income from all sources 2008 * X3 Overall GPA computed correlation table

		S2 F09 Hours per week working spring 2012/most recent school year job	X3 Ever dropout	X1 Parents'/ guardians' highest level of education	X1 Total family income from all sources 2008	X3 Overall GPA
S2 F09 Hours per week working spring 2012/most recent school year job	Pearson correlation	1				
	Sig. (2-tailed)					
	N	9259				
X3 Ever dropout	Pearson correlation	.123	1			
	Sig. (2-tailed)	.000				
	N	9259	23503			
X1 Parents'/ guardians' highest level of education	Pearson correlation	-.235	-.159	1		
	Sig. (2-tailed)	.000	.000			
	N	6946	16782	16782		
X1 Total family income from all sources 2008	Pearson correlation	-.195	-.165	.585	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	6940	16761	16759	16761	
X3 Overall GPA	Pearson correlation	-.261	-.365	.366	.340	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	8760	21876	15787	15769	21876

This being said, the survey also gives some insight on student-reported reasons for dropout, many of which were related to the variables in this study. The two highest reported reasons, which were indicated by 62.0% and 60.1% of subjects respectively, were 'Left high school because easier to get a GED/alternative high school credential,' and 'Left high school because getting behind/poor grades.' Both of these are highly related to a student's GPA.

Likewise, 17.4% indicated that they dropped out because they could not balance work and school, 18.9% indicated that their career aspirations did not require a high school diploma, 24.2% of them indicated that they left high school to financially support or take care of their family, and 21.5% indicated that they left high school for early admission to college or occupational training. However, because these

findings are student reported, it is possible that the items were not answered truthfully. Similarly, there is no options such as ‘unsure’ or ‘partially.’ These fidnings are shown in table 10.

Table 10: Frequency descriptives for items S2 A19A-I; Student-reported data on reasons for leaving HS

		No	Yes	Total
S2 A19A Left HS because could not work and go to school at the same time	Frequency	503	106	609
	Percent	82.6%	17.4%	100.0%
S2 A19B Left HS because did not like school	Frequency	302	311	613
	Percent	49.3%	50.7%	100.0%
S2 A19C Left HS because getting behind/poor grades	Frequency	244	367	611
	Percent	39.9%	60.1%	100.0%
S2 A19D Left HS because easier to get GED or alternative HS credential	Frequency	232	379	611
	Percent	38.0%	62.0%	100.0%
S2 A19E Left HS because suspended or expelled	Frequency	492	116	608
	Percent	80.9%	19.1%	100.0%
S2 A19F Left HS because friends had dropped out of school	Frequency	531	76	607
	Percent	87.5%	12.5%	100.0%
S2 A19G Left HS because no need to complete HS for what he/she wants to do	Frequency	493	115	608
	Percent	81.1%	18.9%	100.0%
S2 A19H Left HS because had to take care of/financially support family	Frequency	464	148	612
	Percent	75.8%	24.2%	100.0%
S2 A19I Left HS for early admission to college/school for occupational training	Frequency	476	130	606
	Percent	78.5%	21.5%	100.0%

When considering employment as a possible factor in whether or not a student has a dropout episode, it is also important to address similar forms of engagement, such as extracurricular activities, that have similar levels of consistent time commitment and effort. Assuming the same trend occurs with extracurricular activities, we can assume that dropout can be directly affected by high levels of participation in out-of-school activities. If the trend is significantly different, it can be assumed that other factors, such as why a student might partake in a certain activity over another, is a more direct indicator.

As seen in table 11, most students participate in some form of extracurricular activities. Involvement in sports is the most popular, with 49.5% reporting that they have taken part since Fall of 2009. The next most popular activity was music or dance, at 36%. A majority of students also partake in more than one; table 12 shows that 31.5% reported doing one, 22.9% reported doing two, and 13.4% reported doing three, and 9.5% reported doing four or more. 22.8% of surveyors indicated that they do not partake in any form of organized out of school extracurricular.

Table 11: Frequency descriptives for items S2 F02A-G; Types of extracurricular activities student has participated in since 2009.

		No	Yes	Total
S2 F02A Participated in music or dance outside of school	Frequency	12857	7246	20103
	Percent	64.0%	36.0%	100.0%
S2 F02B Participated in art outside of school	Frequency	15966	4075	20041
	Percent	79.7%	20.3%	100.0%
S2 F02C Participated in theater/ drama outside of school	Frequency	17338	2686	20024
	Percent	86.6%	13.4%	100.0%
S2 F02D Participated in organized sports outside of school	Frequency	10141	9953	20094
	Percent	50.5%	49.5%	100.0%
S2 F02E Participated in scouting/ group/club outside of school	Frequency	15642	4320	19962
	Percent	78.4%	21.6%	100.0%
S2 F02F Received academic instruction outside of school	Frequency	17481	2581	20062
	Percent	87.1%	12.9%	100.0%
S2 F02G Participated in college preparation camp	Frequency	18650	1367	20017
	Percent	93.2	6.8%	100.0%

Table 12: S2 Number of extracurriculars student is involved in frequency descriptives

		Frequency	Percent
Valid	0 Extracurriculars	4429	22.8%
	1 Extracurricular	6119	31.5%
	2 Extracurriculars	4447	22.9%
	3 Extracurriculars	2615	13.4%
	4 or more extracurriculars	1839	9.5%
	Total	19449	100.0%
Missing	System	4054	
Total		23503	

The crosstabulation of these variables in table 13 shows that there is a significant correlation in the number of extracurriculars a student partakes in and the likelihood of having a dropout episode. When looking at students who are involved in extracurriculars, there is a consistent percentage of those involved who do not have a known dropout episode compared to those who do. In fact, 37.8% of those who have had a dropout episode are not involved in any out of school activities, compared to the 21.1% who have not had one. This suggests that students who are highly involved in extracurricular activities are less likely to dropout. Unlike employment, however, there is no threshold where participation in extracurriculars negatively affects dropout. In this way, it can be inferred that the commitment of time and effort in out of school activities does not directly affect dropout rates, and instead other factors that may differentiate the students by activity, such as parents'/guardians' highest level of education, total family income, and GPA are more significant.

Table 13: S2 Number of extracurriculars student is involved in * X3 Ever dropout crosstabulation

			S2 Number of extracurriculars student is involved in					Total
			0	1	2	3	4 or more	
X3 Ever dropout	No known dropout episode	Count	3693	5585	4105	2422	1698	17503
		% within X3 Ever dropout	21.1%	31.9%	23.5%	13.8%	9.7%	100.0%
	At least one known dropout episode	Count	736	534	342	193	141	1946
		% within X3 Ever dropout	37.8%	27.4%	17.6%	9.9%	7.2%	100.0%
Total		Count	4429	6119	4447	2615	1839	19449
		% within X3 Ever dropout	22.8%	31.5%	22.9%	13.4%	9.5%	100.0%

Because parents'/guardians' highest level of education, total family income, and GPA are more direct indicators of likelihood of dropout episode, it would be beneficial to look at hours of employment and dropout rate in the context of the other three variables. In this way, inferences made based on the correlations between the variables can be further supported. In table 14, parents'/guardians' highest level of education, total family income, and GPA are controlled separately when calculating the correlation coefficient between whether or not a student has had a known dropout episode and how many hours a week the student works during the school year. Table 15 shows the correlation when all three of these variables are controlled together.

Table 14: Correlation between X3 Ever dropout and S2 F09 Hours per week working spring 2012/most recent school year job with X1 parents'/guardians' highest level of education, X1 total family income from all sources 2008, and X3 Overall GPA computed controlled.

Control Variable			X3 Ever dropout	S2 F09 Hours per week working spring 2012/most recent school year job
X1 parents'/ guardians' highest level of education	X3 Ever dropout	Correlation	1.000	
		Significance (2-tailed)		
		df	0	
	S2 F09 Hours per week working spring 2012/ most recent school year job	Correlation	.071	1.000
		Significance (2-tailed)	.000	
		df	6943	0
X1 total family income from all sources 2008	X3 Ever dropout	Correlation	1.000	
		Significance (2-tailed)		
		df	0	
	S2 F09 Hours per week working spring 2012/ most recent school year job	Correlation	.079	1.000
		Significance (2-tailed)	.000	
		df	6937	0
X3 Overall GPA computed	X3 Ever dropout	Correlation	1.000	
		Significance (2-tailed)		
		df	0	
	S2 F09 Hours per week working spring 2012/ most recent school year job	Correlation	.031	1.000
		Significance (2-tailed)	.004	
		df	8757	0

When parents'/guardians' highest level of education and total family income are controlled, number of hours worked per week maintains significance when considering dropout rates. The correlation coefficients for these findings are .071 and .079 respectively. This means that although the variables are influential, they are not the most significant variable in determining whether or not a student will have a dropout episode. Likewise, this correlation is weaker when GPA is controlled, suggesting that GPA is the most influential variable on both dropout episode rate and hours per week working. The correlation coefficient for this finding is .031, with a significance of .004.

Table 15: Correlation between X3 Ever dropout and S2 F09 Hours per week working spring 2012/most recent school year job with X1 parents'/guardians' highest level of education, X1 total family income from all sources 2008, and X3 Overall GPA computed controlled altogether.

Control Variable			X3 Ever dropout	S2 F09 Hours per week working spring 2012/most recent school year job
X1 parents'/ guardians' highest level of education & X1 total family income from all sources 2008 & X3 Overall GPA computed	X3 Ever dropout	Correlation	1.000	
		Significance (2-tailed)		
		df	0	
	S2 F09 Hours per week working spring 2012/ most recent school year job	Correlation	.012	1.000
		Significance (2-tailed)	.325	
		df	6587	0

The correlation coefficient when all three variables are controlled in .012, with a significance of .325. This further suggests that hours worked per week on its own is not a viable factor in determining whether or not a student will have a dropout episode, and instead there is a combination of variables that increase likelihood when combined. This also supports the claim that inherent socioeconomic status and academic performance can influence whether or not a student chooses to partake in employment versus another extracurricular activity. In this way, although employment status can indirectly, and significantly, determine a student's likelihood of dropout, it is a spurious relationship greatly influenced by outside factors such as parents'/guardians' highest level of education, total family income, and overall GPA.

Chapter 5

Discussion

The purpose of this study was to examine the influence, as well as the influences' intensity, of after school employment and extracurricular activities on whether or not a student drops out of high school, using data from a nationally representative sample of high school students in the United States. Although there has been a decrease in high school dropout among recent cohorts of youth, there is still a large number of students being left behind by the American education system. Of these students, my research shows that there are only slight subgroups differences in the risk of dropout. For instance, males are slightly more likely to dropout than females. Non-Hispanic Asian and White youth also have lower rates than their peers. However, the disparity between populations has also decreased over time, suggesting that programs and initiatives aimed at keeping at-risk populations in school have been effective. In this way, other factors, such as socioeconomic status, have more influence than other constructs such as race and gender. It is important to note, however, that students were given only two options when noting their gender; students who identify as transgender or another gender identity cannot be properly represented in the survey. In future research, it would be valuable to consider dropout rates for this population, which is small but highly stigmatized.

In order to better understand employment's influence, I chose to first look at other variables that are interdependent. In this way, I chose to look at socioeconomic status from three angles: parents/guardians highest level of education, total family income, and overall computed GPA. Although intelligence is not directly related to SES, academic success is largely influenced by a student's available resources, such as tutoring, computer access, and adequate school supplies and textbooks, which cost a considerable amount of money. Similarly, weighted-credit courses such as Advanced Placement and International Baccalaureate can be out of reach for low-SES students, as they can often cost upwards of

$94 per exam. As expected, all three of these factors were statistically significant predictors of dropout, with GPA having the strongest correlation. This suggests that many students dropped out because of poor grades, or they received poor grades as a result of other factors leading to their dropout episode. Nevertheless, it is important to also address that the variables are interdependent. For example, the average salary steadily increases with the amount of education a person has (See Appendix C). People with a lower GPAs in high school are also less likely to pursue advanced degrees.

Regardless of these variables, however, a vast majority of the students in the survey had a positive outlook on their academic aspirations going into ninth grade. There is a discrepancy between the percentage of students who dropped out versus the percentage who predicted they would, suggesting some degree of uncontrollability. In contrast, though, 50.7% of dropouts indicated that they left partially because they just did not enjoy school. In this way, there is a lot of gray area between objective and subjective reasons for dropout, and it is important to look at both sides to get a more holistic understanding of the factors influencing dropout.

I chose to include employment as a risk factor for several reasons. For one, extracurricular activities are almost always seen as positive factors in a student's education. The data collected reflects this notion. Through past research, however, employment's effect on academic success is much less clear. There is an inherent difference between students who are employed versus those in other forms of extracurriculars, and I wanted to better understand what underlying factors are most important in alleviating the dropout rate. Many of the results confirmed my hypotheses. For instance, a high percentage of students are employed in some form during the school year, but an even higher percentage of them, nearly 80%, work no more than twenty five hours a week. Many of these instances are informal forms of employment, such as babysitting. Rarely to teenagers have to juggle school with a full time job, so the findings overall deemed employment as a positive influence on dropout rate.

However, when splicing the data by time commitment, I found that the positive effects of employment start to plateau and reverse after working more than twenty hours. Only 4.6% of employed

students work more than forty hours a week, but this small percentage accounts for 11.2% of students who have had a dropout episode. This means that out of the 430 students working more than full time, nearly 23% have dropped out during high school, much higher than the population average of 11%. In this way, although the population is small, the students who are working for longer are in fact struggling to stay in school a lot more. However, I found an interesting comparison: extracurricular involvement does not follow a similar trend, inferring that there is something inherently different between students who work versus participate in sports, music, etc. The act of working itself is not a negative influence. In this way, the three variables analyzed before, parents'/guardians' highest level of education, total family income, and GPA, come in to play as more direct indicators of dropout. Nevertheless, these factors can influence numbers of hours worked per week as well as level of extracurricular involvement.

Although it could be beneficial for alleviating dropout to restrict laws on employment before the age of 18, there are other steps that can be taken that would be much more effective. For example, because GPA was found to be the most influential variable on dropout rate and hours of work per week, it is important to address issues relating to poor grades. Initiatives that offer subsidized tutoring or other resources can be very beneficial for academically struggling students. Similarly, extending hours for school libraries or computer labs can offer a safe and productive environment for students to complete homework. In a world that is becoming increasingly integrated with electronics, living in a home that cannot afford a computer or internet service can be detrimental to a child's educational opportunity. Lastly, other services like expanding free lunch programs can alleviate a lot of stress on students who are ignoring their studies to financially support their family. Almost a quarter of dropouts indicated that this was a driving factor in their decision to leave school.

Also related to parents'/guardians' highest level of education, total family income, and GPA, it's important for students at risk of dropout to have adequate guidance through their schooling. The highest reported reasons for dropout were because they were struggling academically and failing to see the benefits of completing their diploma. For example, if a teenager does not have a role model, such as a

parent or guardian, with advanced degrees, the perceived value in pursuing one is much lower for that student. In this way, my thesis also results shed light on the importance of school counselors, who can help advise students on choosing classes and activities that better fit their abilities and career aspirations. Likewise, counselors play a vital role in building meaningful connections between students and their school community.

Chapter 6

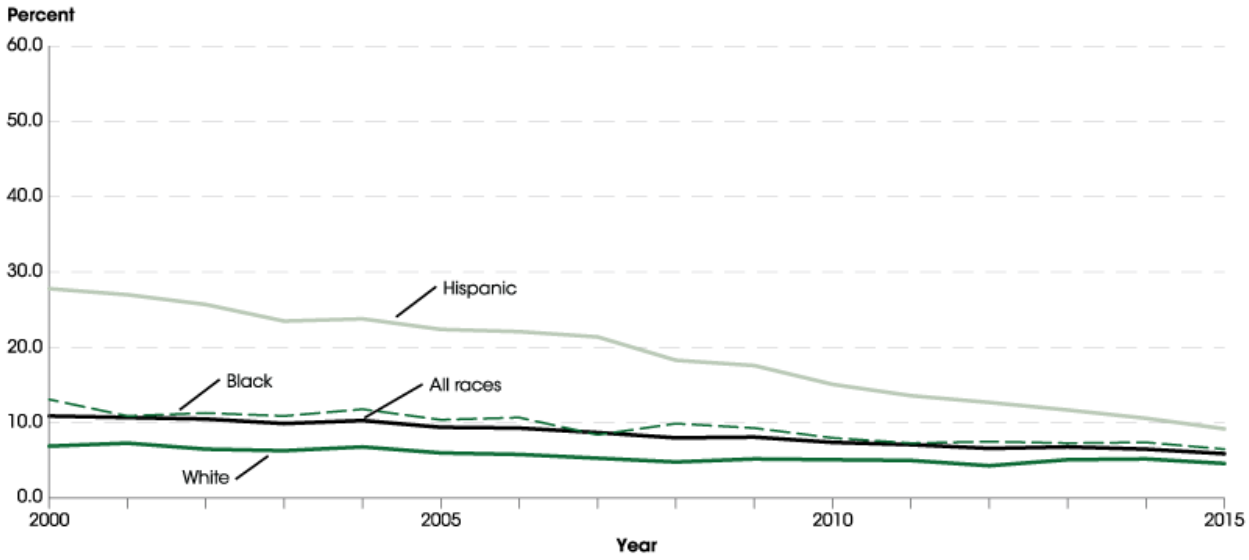
Conclusion

Due to the diversity of the United States' population, the education system will never be 'one size fits all.' Although we have made significant progress over the last century, increasing accessibility and improving teaching methods, every student is different and can be influenced by any number of factors, both inside and outside of school. In this way, although employment offered interesting and valuable insight into why a student may or may not drop out of high school, there are many other variables, most of which are interdependent, that make the equation for academic success much more complicated. In fact, because of the diverging trends between extracurricular involvement and employment, it is possible that employment itself is actually not significant at all, and instead a symptom of greater socioeconomic issues.

In this way, regulating employment for minors may not be the best plan of action. Instead, my thesis findings further support the need for better school resources such as greater-subsidized classroom materials, increased computer access, and access to school counselors. Many of the risk factors, as found, were independent; by just alleviating one, it can influence not only the student themselves, but generations that come after. In order to keep kids in school, policy makers must first look at foundational problems plaguing American students, alleviating economic restraints and maintaining meaningful engagement with the school community.

Appendix A

Status dropout rates of 16- to 24- year olds, by race/ethnicity: 2000-2015

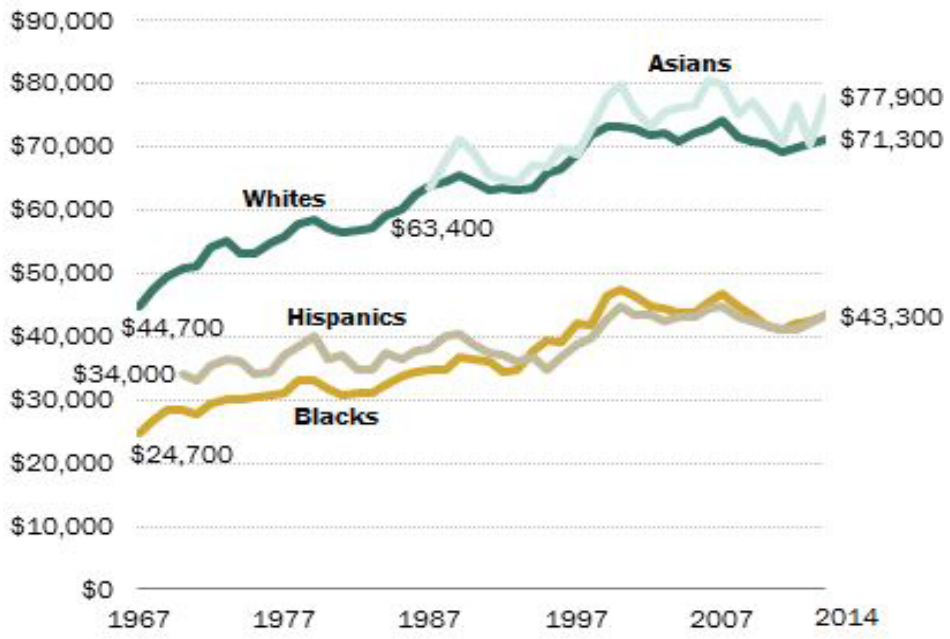


NOTE: The "status dropout rate" is the percentage of 16- to 24-year-olds who are not enrolled in school and have not earned a high school credential (either a diploma or an equivalency credential such as a GED certificate). Data are based on sample surveys of the civilian noninstitutionalized population, which excludes persons in prisons, persons in the military, and other persons not living in households. Data for all races include other racial/ethnic categories not separately shown. Race categories exclude persons of Hispanic ethnicity.

SOURCE: U.S. Department of Education, National Center for Education Statistics. (2017). *The Condition of Education 2017* (NCES 2017-144),Status Dropout Rates.

Appendix B

Median adjusted household income in 2014 by race

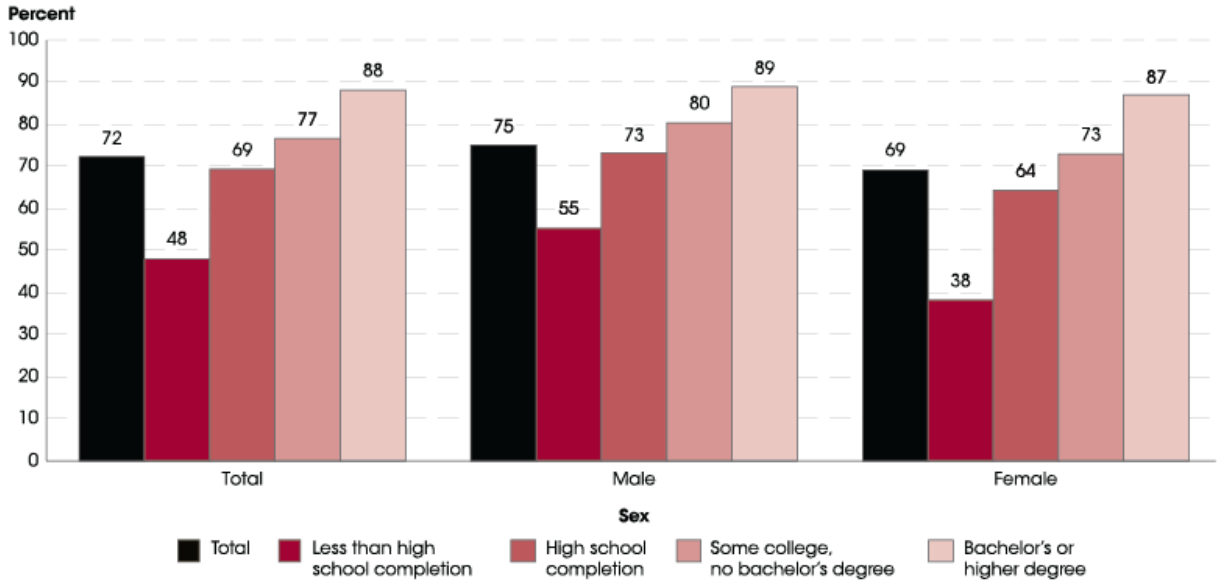


NOTE: Whites, blacks, and Asians include only those who reported a single race. Native Americans and mixed-race groups not shown. Data for whites, blacks, and Asians from 1971 to 2015 include only non-Hispanics. Data for whites and blacks prior to 1971 include Hispanics. Data for Hispanics not available prior to 1971. Hispanics are of any race. Data for Asians not available prior to 1988. Asians include Pacific Islanders. Prior to 1992 those who completed at least 16 years of school are classified as having a bachelor's degree.

SOURCE: Pew Research Center tabulation of the 1964-2015 Current Population Survey Annual Social and Economic Supplement (IPUMS). "On Views of Race and Inequality, Blacks and Whites are Worlds Apart."

Appendix C

Employment rates of 20- to 24-year-olds, by sex and educational attainment: 2016

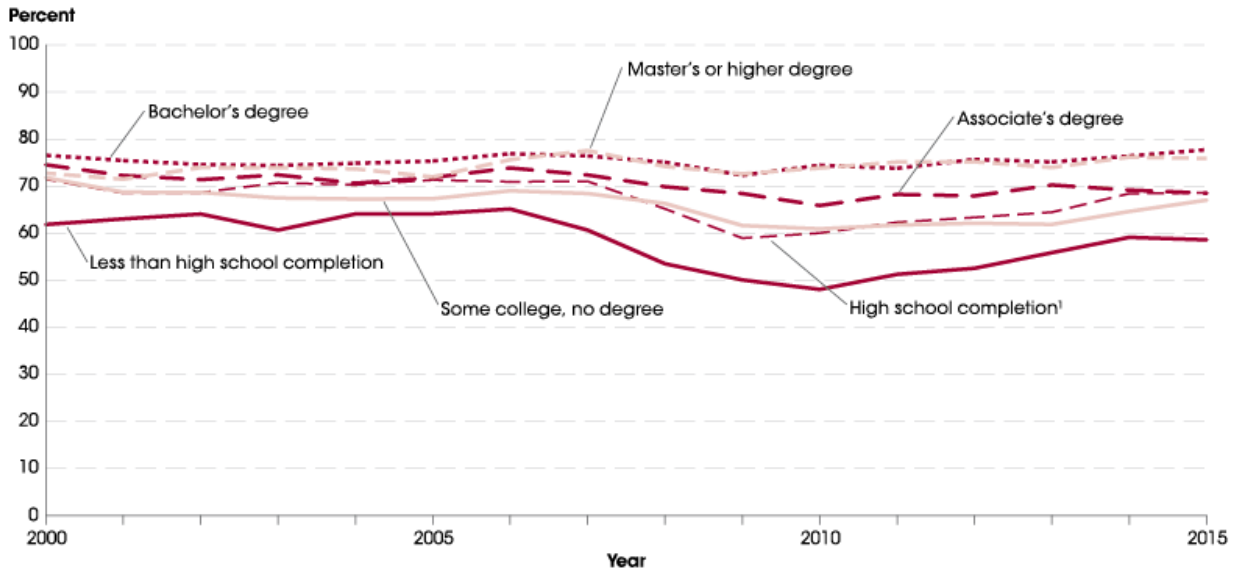


NOTE: Data are based on sample surveys of the noninstitutionalized population, which excludes persons living in institutions (e.g., prisons or nursing facilities); this figure includes data only on the civilian population (excludes all military personnel). For each group presented, the employment rate, or employment to population ratio, is the number of persons in that group who are employed as a percentage of the civilian population in that group. Data exclude persons enrolled in school. "Some college, no bachelor's degree" includes persons with an associate's degree. "High school completion" includes equivalency credentials, such as the GED.

SOURCE: U.S. Department of Education, National Center for Education Statistics. (2017). *The Condition of Education 2016* (NCES 2017-144), Employment and Unemployment Rates by Educational Attainment.

Appendix D

Percentage of the labor force ages 25–34 who worked full time, year round, by educational attainment: 2000–2015



NOTE: Data are based on sample surveys of the noninstitutionalized population, which excludes persons in institutions (e.g., prisons or nursing facilities) and military barracks. *Full-time, year-round* workers are those who worked 35 or more hours per week for 50 or more weeks per year.

SOURCE: U.S. Department of Education, National Center for Education Statistics. (2017). *The Condition of Education 2017* (NCES 2017-144), Annual Earnings of Young Adults.

BIBLIOGRAPHY

Barro, S. 1984. The Incidence of Dropping Out: A Descriptive Analysis. Washington, DC: Economic Research.

Bickel, R. and G. Papagiannis. 1988. "Post- High School Prospects and District-Level Dropout Rates." Youth and Society 20:123-47

Bourdieu, P. (2011). The forms of capital. (1986). *Cultural theory: An anthology*, *1*, 81-93.

Boyd, S. (2014, April 28). Extracurriculars Are Central to Learning. Retrieved from http://www.usnews.com/opinion/articles/2014/04/28/music-art-and-language-programs-in-schools-have-long-lasting-benefits

Coleman, J., & Marjoribanks, K. (1975). Equal Educational Opportunity: A Definition. *Oxford Review of Education, 1*(1), 25-26.

Becker, G. S. (1994). Human Capital Revisited. In *Human Capital: A Theoretical and Empirical Analysis with Special Reference to Education* (3rd ed., pp. 15-28). Chicago, IL: University of Chicago Press.

Bradley, C., & Renzulli, L. (2011). The Complexity of Non-Completion: Being Pushed or Pulled to Drop Out of High School. *Social Forces, 90*(2), 521-545.

Coleman J.S., (1988) "Social Capital in the Creation of Human Capital," *American Journal of Sociology* 94, no.S95-S120.

Cusick, P. 1973. Inside High School. New York: Holt, Rinehart, & Winston.

D'Amico, R. 1984. "Does Employment During High School Impair Academic Progress?" Sociology of Education 57:152-64

Duncan, B. (1965). "Dropouts and the Unemployed." Journal of Political Economy 73:121-34.

Ekstrom, R., M. Goertz, J. Pollack, and D. Rock. (1986). "Who Drops Out of High School and Why? Findings from a National Study." Teachers College Record 87:356- 73

Harris, A. L. (2006). I (don't) hate school: Revisiting oppositional culture theory of blacks' resistance to schooling. *Social Forces, 85*(2), 797-834. Retrieved from http://ezaccess.libraries.psu.edu/login?url=https://search.proquest.com/docview/229851779?accountid=13158

Hirschi, T. (1969). Causes of Delinquency. Los Angeles: University of California Press

Hunt, T. C. (2016, March 22). National Defense Education Act (NDEA). Retrieved from https://www.britannica.com/topic/National-Defense-Education-Act

Jimerson, S., Egeland, B., Sroufe, L., & Carlson, B. (2000). A Prospective Longitudinal Study of High School Dropouts Examining Multiple Predictors Across Development. *Journal of School Psychology, 38*(6), 525-549.

Jones, J. (2017, February 13). The racial wealth gap: How African-Americans have been shortchanged out of the materials to build wealth. *Economic Policy Institute.*

Kearney, M., & Levine, P. (2016). Income Inequality, Social Mobility, and the Decision to Drop Out of High School. *Brookings Papers on Economic Activity*, 333-380.

Kingston, S. (2015) Do the Effects of Adolescent Employment Differ by Employment Intensity and Neighborhood Context? American Journal of Community Psychology, 55(1-2), 37-47.

Lareau, A. (1987). Social Class Differences in Family-School Relationships: The Importance of Cultural Capital. *Sociology of Education, 60*(2), 73-85.

Lee, J. C., & Staff, J. (2007). When Work Matters: The Varying Impact of Work Intensity on High School Dropout. *Sociology of Education, 80*(2), 158-178. doi:10.1177/003804070708000204

Lewit, E. (1992). Dropout Rates for High School Students. *The Future of Children, 2*(1), 127-130.

McNeal, R. (1997). Are Students Being Pulled Out of High School? The Effect of Adolescent Employment on Dropping Out. *Sociology of Education, 70*(3), 206-220.

McNeal, R. (1995). Extracurricular Activities and High School Dropouts. *Sociology of Education, 68*(1), 62-80.

Mortimer, J., & Lorence, J. (1979). Work Experience and Occupational Value Socialization: A Longitudinal Study. *American Journal of Sociology, 84*(6), 1361-1385.

Mortimer, J.; Pimentei, E.; Ryu, S.; Nash, K. (1996). Part-Time Work and Occupational Value Formation in Adolescence. *Social Forces* 74(4), 1405-1418_____

Nightingale, D. S., Haveman, R. H., & Blank, R. (1995). *The work alternative: welfare reform and the realities of the job market*. Washington, D.C.: Urban Institute Press

Ogbu, John U. 1987. "Variability in Minority School Performance." Anthropological Education Quarterly 1 8(4) :3 12-34.

Pew Research Center tabulation of the 1964-2015 Current Population Survey Annual Social and Economic Supplement (IPUMS). “On Views of Race and Inequality, Blacks and Whites are Worlds Apart.”

Ruhm, C. (1997). Is High School Employment Consumption or Investment? *Journal of Labor Economics, 15*(4), 735-776. doi:10.1086/209844

Rumberger, R. 1983. "Dropping Out of High School: The Influence of Race, Sex, and Family Background." American Educational Research Journal 20:199-220.

Rumberger, R. 1987. "High School Dropouts: A Review of Issues and Evidence." Review of Educational Research 57:101-21.

Sewell, W., Haller, A., & Ohlendorf, G. (1970). The Educational and Early Occupational Status Attainment Process: Replication and Revision. *American Sociological Review, 35*(6), 1014-1027.

Sewell, W. H., & Hauser, R. M. (1972). Causes and Consequences of Higher Education: Models of the Status Attainment Process. *American Journal Of Agricultural Economics, 54*(5), 851.

Status Dropout Rates. *National Center of Education Statistics.* (May 2016). Retrieved from https://nces.ed.gov/programs/coe/indicator_coj.asp

Steinberg, L., P. Blinde, and K. Chan. 1984. "Dropping Out Among Language Minority Youth." Review of Educational Research 54:113-32.

Suh, S., & Suh, J. (2007). Risk Factors and Levels of Risk for High School Dropouts. *Professional School Counseling, 10*(3), 297-306.

Tinto, V. 1975. "Dropout from Higher Education: A Theoretical Synthesis of Recent Research." Review of Educational Research 45:89-125.

U.S. Department of Education, National Center for Education Statistics. (2017). The Condition of Education 2017 (NCES 2017-144), Annual Earnings of Young Adults.

U.S. Department of Education, National Center for Education Statistics. (2017). The Condition of Education 2016 (NCES 2017-144), Employment and Unemployment Rates by Educational Attainment.

U.S. Department of Education, National Center for Education Statistics. (2017). The Condition of Education 2017 (NCES 2017-144), Status Dropout Rates.

Warren, J., & Hamrock, C. (2010). The Effect of Minimum Wage Rates on High School Completion. *Social Forces*, *88*(3), 1379-1392.

Warren, J. (2002) Reconsidering the Relationship Between Student Employment and Academic Outcomes. *Youth & Society*, *33(3) 366-393* doi:10.1177/0044118X02033003002

Williams, C. L., & Collins, R. (1995). Four Sociological Traditions. *Teaching Sociology, 23*(3), 299. doi:10.2307/1319231

Academic Vita

Laura Gates
lauragates8211@gmail.com
219 S. Sparks St Apt 21, State College PA 16801

Education

The Pennsylvania State University, University Park, PA (August 2014-May 2018)

- Major in sociology
- Minors in education policy studies and information systems and statistical analysis
- Schreyer Honors Scholar and Paterno Fellow
- Dean's List: SP 2015, FA 2015, SP 2016, FA 2016, SP 2017, FA 2017

National Outdoor Leadership School, Lander, WY

- May 2018-June 2018
- Rocky Mountain Outdoor Educator course

Research Experience

Honors thesis in Sociology

- Title: Understanding High School Dropout: The Implications of Student Employment on Educational Attainment
- Under the supervision of Dr. Jeremy Staff, Professor of Sociology and Criminology

Undergraduate Assistantship (August 2016-December 2016)

- Title: Understanding Gender-based Cyberbullying on Twitter
- Under the supervision of Dr. Diane Felmlee, Professor of Sociology
- Transferable skills: Data collection and cleaning, NodeXL, Microsoft Excel

Teaching Experience

Agricultural Extension Education Intern (May 2017-August 2017)

- The Penn State Center Philadelphia; Federation of Neighborhood Centers
- Description: assistant taught lessons on urban agriculture, food justice, and nutrition for an at-risk teen program run by FNC. Worked at various urban farms across the city of Philadelphia.

ORION Leader (April 2016-Present)

- AURORA Outdoor Orientation Programs
- Description: Lead groups of incoming freshman on introductory backpacking trips throughout Central PA. Taught essential backpacking and camping skills, facilitated discussion groups, issued and graded course assignments.

Course Mentor (December 2016-April 2017)

- RPTM 330: Adventure Program Leadership
- Description: assisted lessons and classroom activities, facilitated discussion groups, mentored potential AURORA employees

Counselor (Spring 2017, Fall 2017)

- Penn State Outdoor School

- Description: Assisted outdoor and environmental science-based lessons for fifth graders. Managed cabin groups and served as a mentor for students.

Learning Assistant (Spring 2016, Fall 2016)

- STAT 200: Intermediate Statistics
- Description: Assisted students in completing weekly labs, proctored exams
- Transferable skills: Minitab, SPSS, statistics pedagogy

President

- Raw Aesthetic Movements, Penn State University
- Secretary 2015-2016, President 2016-2017
- Description: RAM is an urban dance group and hip-hop community focused on fundamentals education and personal development through dance. Duties included task delegation and quality control, managing the master calendar, choreographic performances and organizing Rhythm Spotlight XIV, a nationally recognized jam sanctioned by UDEF.

Certifications

Wilderness first Responder

- SOLO Southeast Wilderness Medicine, Nantahala Outdoor Center
- December 2017-December 2020

CPR and AED

- American Health and Safety Institute, Nantahala Outdoor Center
- December 2017-December 2019

Honors and Awards

Dean's List: SP 2015, FA 2015, SP 2016, FA 2016, SP 2017, FA 2017, SP 2018
Schreyer Summer Internship Grant
College of Liberal Arts Enrichment Grant