



# Disadvantage of Current Credential Inflation

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# Introduction

The current socioeconomic status of individuals is in part determined by education level, employment status, and income level. People with a low socioeconomic status in society are often less likely to attain higher education from higher educational levels, higher employment status, or higher income levels in society. Central struggles begin from the college experience which reinforce preexisting class differences. This begs the question, how socioeconomic status influences the return on education in terms of employment and income.

Differences between socioeconomic status starts from an individual's college experience. Recently, many parents, especially wealthy and at a higher socioeconomic level, are more capable of paying for their children's education. Moreover, it leads to devaluation of educational or academic credentials over time which is also known as credential inflation. As doing so, the average educational level increased over time, however, advantages of high socioeconomic level families also increased as well. There are various examples of how lowmaking less than people with the same education from higher socioeconomic status backgrounds.

This research will examine how educational inflation affected by individual socioeconomic status and parental socioeconomic status regarding sociological theories drive to educational differentiation. To do so, this paper examines several peer reviewed sociology research papers on educational inflation and uses the General Social Survey dataset to evaluate income effects of educational level for individuals of different socioeconomic backgrounds.

## Research Question

How does credential inflation in the United States disadvantage lower socioeconomic level families, relative to higher socioeconomic families, and their educational level regarding parent's backgrounds?

## Literature Review

In past studies of credential inflation, there are measurements of how credential inflation is affected by various environments, and how it continues to reproduce class domination in society. Some sociological theories illustrate how this phenomenon increases individual competition in occupational challenges and, furthermore, encourages the importance of education throughout economic growth.

Several sociological theories contemplate how credential inflation of students caused significant competition in modern society. Under these frameworks, researchers developed an idea of credential inflation that increased over time. David K. Brown examines the topic with several theoretical frameworks, such as Weberian educational credentialing theory, Marxian perspective of credential, and structural-functional theory. These theories lead to how education is considered an important tool to obtain a higher occupation or higher status in society (Brown, D, 2001). Brown also examines the relationship of educational expansion to economic growth and that technical skills are important to occupational environments (Brown, D, 2001).

First, educational credentialing theory suggested occupational monopolies are upheld by popular beliefs that mask cultural domination under ideologies of individual merit and technical competence. The theory explains that the content and occupational significance of credentials are

more cultural and exclusionary than technical and efficacious (Brown, D, 2001). Brown examines the professional market attached importance on self-recruitment and self-regulation that represent standardized degrees. Weber's theory of education examines that education is based on status-group domination, and suggests how educational credentials were essentially cultural-political constructions of competence (Brown, D, 2001). Educational patents institutionalized status honor as a sometimes intentional, other times coincidental. The authors demonstrate how the hierarchy system in schools reflects the structure of the labour market. For instance, education in school provides formal and informal knowledge of how to interact in the workplace, and provides direction to prepare for entering into the labour market.

Marxism suggested education is used by bourgeoisie to control the workforce that reproduce existing inequalities, and reject the notion of equal opportunities for everyone which explains social inequality (Brown, D, 2001). For instance, Bowles and Gintis in *Schooling in Capitalist America* argues the internal organization of schools corresponds to the internal organization of the capitalist workforce, specifically its structures, norms, and values. Brown examines Marxian perspectives leaned on capitalist manipulation (Brown, D, 2001). For example, Compulsory education and neo compulsory credential requirements for work merely serve to pacify the masses, and argue that educational degrees, particularly high degrees, are power phenomena to control universities through trustees who were members of the business elite (Brown, D, 2001). Compulsory education requires every student to get a higher level of education, and give a chance to individual students equally through attending school. Furthermore, it allows individuals to access capital to advocate their higher levels of education.

Lastly, structural-functional theory suggested interdependence between education and the economy, which expanded education provided job skills for increasing technical sophistication in employment. Increase of education over time can lead credentialing systems to a great potential of credential crises.

Research from Lehmann examines how human capital can increase status inequalities that are maintained by credential inflation, and extra credential experiences. Marxian theory explains the competition between individuals over educational level is the ideology of human capital. For instance, compulsory education increases job competition at the specific educational level, and further increases the potential gap between different socioeconomic status groups. Lehmann further highlighted how working class students are restricted from gaining extra-credential experiences for reasons other than their own (Lehmann, 2012). Low SES students were less involved in campus activities and had a lower likelihood of attending education beyond their undergraduate degree. Moreover, human capital defines most of the variation in labour market outcomes and is evidence of the employer's view of the value of a student's credentials, knowledge, skills and other attributes. He found main points from his research that extra-credentials lead to status inequalities.

From Lehmann's research of extra-credentials and status inequalities, high credentials ambition originates from high income families which needed to see a realistic chance of a return on their investment in higher education. Professional schools often require students to have an abundance of related work or volunteer experience which they need an access to opportunities. Working class students have no shortage of work experience but limited volunteer opportunities and lower financial resources. Their lack of opportunities is further disadvantaged in the unpaid

internship experience. Low income can affect students to prefer paid internships where they often have limited odds of getting hired full-time. Many members of the working or middle class students view higher education as a primary avenue to social mobility. It derives from the ideology of American Dream with educational investments. Lastly, social capital differences of students that financially struggle to gain access to career-related experience. Lower class students are disadvantaged by their lack of networks into their respective career areas. Lower class students receive an unfair relationship between skill and connections which explains the disadvantage of social capital. In conclusion, Lehmann suggested working class students overcome access barriers to higher education, meanwhile, they are still restricted in their abilities to gain increasingly important extra-credential experiences from disadvantaged social capital. Higher education does not proceed from the working class to extra-credential experiences, in contrast, high income level students gain cultural capital from their parent's support. Consequently, high income level students' reproduction of tastes and norms produce working class students that feel like cultural outsiders.

Various past research about credential inflation included several background surveys and data analysis which Werfhorst and Andersen used general social surveys of 1972 to 2000 (Werfhorst et al., 2005). Werfhorst et al. examine the impact of credential inflation on educational attainment in the 20th century US, and recognize how it is particularly influential on transition probabilities if parents had made the same transitions. For instance, Children of different social origins might have different educational levels that are affected by their different social backgrounds. Werfhorst et al, used regression models to predict educational transitions, and found educational expansion affected occupations in all social classes. This exemplifies

credential inflation which service class occupations increasingly filled with university graduates. Relative risk aversion theory explains the primary goal of individuals is to achieve at least enough education to gain access to the social class of their parents. Children of high income level are more ambitious to achieve higher educational levels while working class children are mostly less ambitious and focus on avoiding downward mobility. This caused educational credentials to devalue during the 21th century where ‘over-schooling’ has implications for individual strategies of educational investment, consequently, the over-qualified labour market is filled with the highest jobs of the highest qualifications.

Class origin often shapes earnings in higher professional and managerial employment, for example, traditional professions such as law, medicine, and finance which are dominated by the children of higher managers and professionals, and more technical occupations such as engineering and IT (Laurison et al., 2016). Even though people with working-class backgrounds successfully entered high-status occupations, they earn 17 percent less, on average, than individuals from privileged backgrounds (Laurison et al., 2016). Earnings do not necessarily provide a definitive measure of occupational position, but they are the best available proxy and also an important marker of success. For instance, respondents in Laruison’s study whose parents were in higher managerial and professional occupations have mean earnings of €844 a week, whereas upwardly mobile individuals earn, on average, €56 to €173 less per week. This also suggests middle class socialization which recruiters typically seek a polished appearance, strong debating skills and a confident manner, traits that traced back to advantaged social backgrounds (Laurison et al., 2016). “Glass ceiling” exemplifies the hidden barriers experienced by women and ethnic minorities which intra-occupational inequality underlines the theoretical limitations of

using occupation alone to understand class destination. Consequently, Individuals originating in the highest social classes go on to obtain the highest level of economic rewards, moreover, increasing social mobility is a point of convergence among political parties, and significant decrease in upward income mobility.

## Data

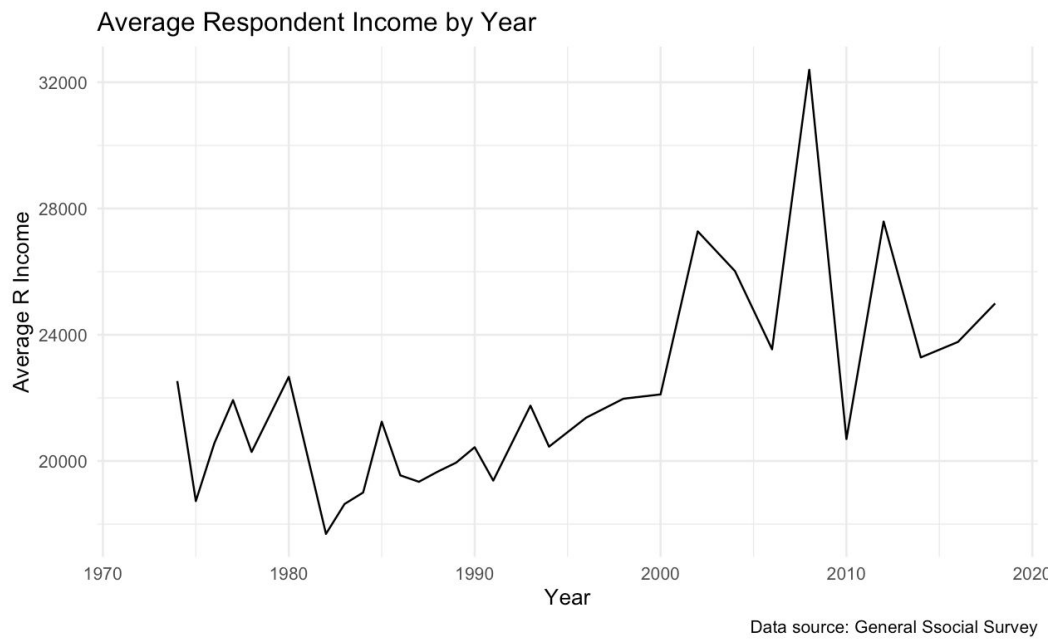
The General Social Survey provides politicians, policymakers, and scholars with a clear and unbiased perspective on what Americans think and feel about such issues. The survey is conducted face-to-face with an in-person interview by the National Opinion Research Center at the University of Chicago. It was conducted annually from 1972 to 1994 and biennially (every other year) from then until the present. Using this dataset, the paper will use questions regarding education, income, and socioeconomic status of individuals and their parents.

Variables that are used in this paper are Real income, Years of education of the respondent's and parents, and father's socioeconomic index (SEI). Real income is the respondent's income adjusted to constant dollars. To measure the educational level of each respondent, I use years of education and the highest degree achieved. The analysis also includes gender and race of the respondents.

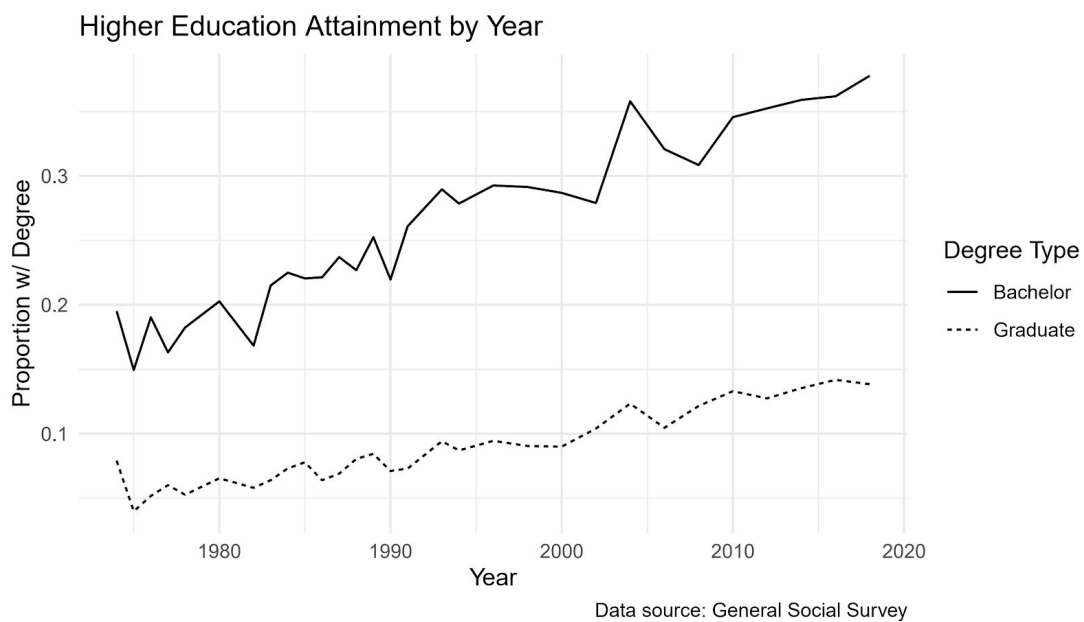
Figure 1 shows average respondent income by year, suggesting real income has increased over the 30 years of the survey, at least among respondents. Figure 2 shows education attainment too has increased, as it shows growth in the percentage of respondents with both bachelor and graduate degrees. However, proportion with degree between bachelor and graduate shows a wide difference, and the difference of proportion increases over time. This indicates that education becomes an important factor for individuals over time. Additionally, the association between



education and income is unclear whether it is positive or not, furthermore, I will examine their relationship by using the respondents and their father's background.



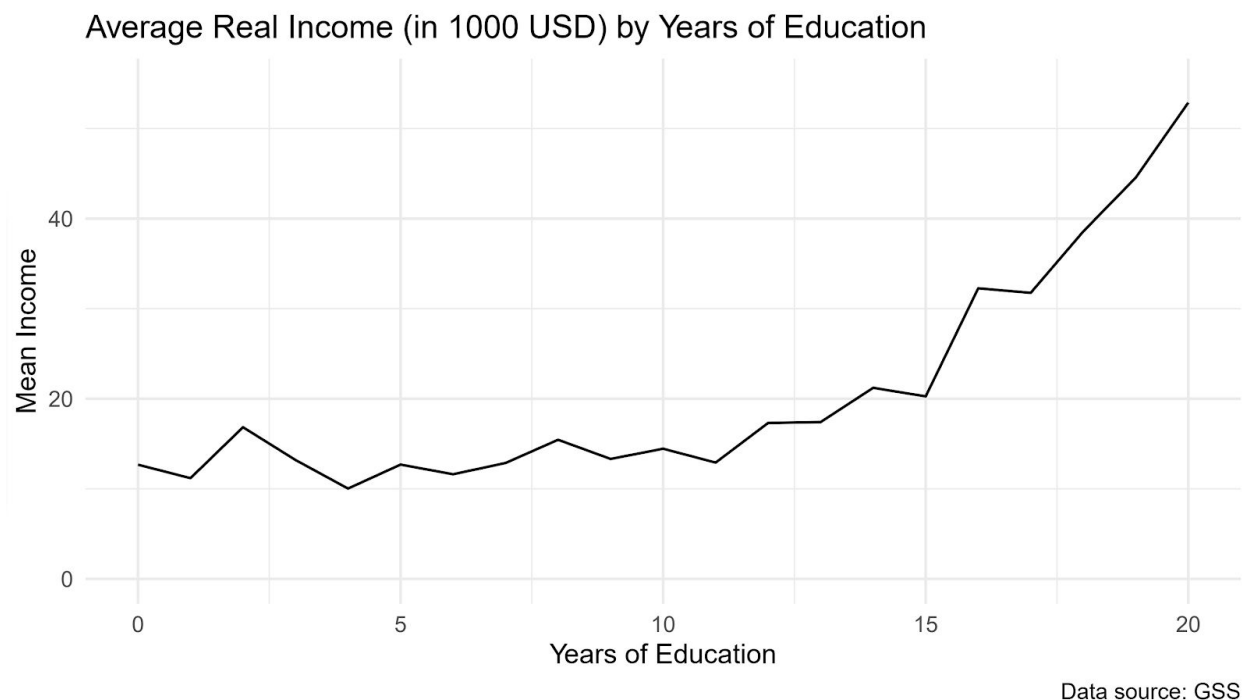
**Figure 1.** Average Respondent Real Constant Income by Year



**Figure 2.** Higher Education Attainment by Year

## Findings

Throughout literature review regarding various sociological theories related to credential inflations, the data analysis aims to recognize the importance of an individual's background and their parents. This section will examine the associations between individuals and their parent's background of income, year of education, and socioeconomic index.



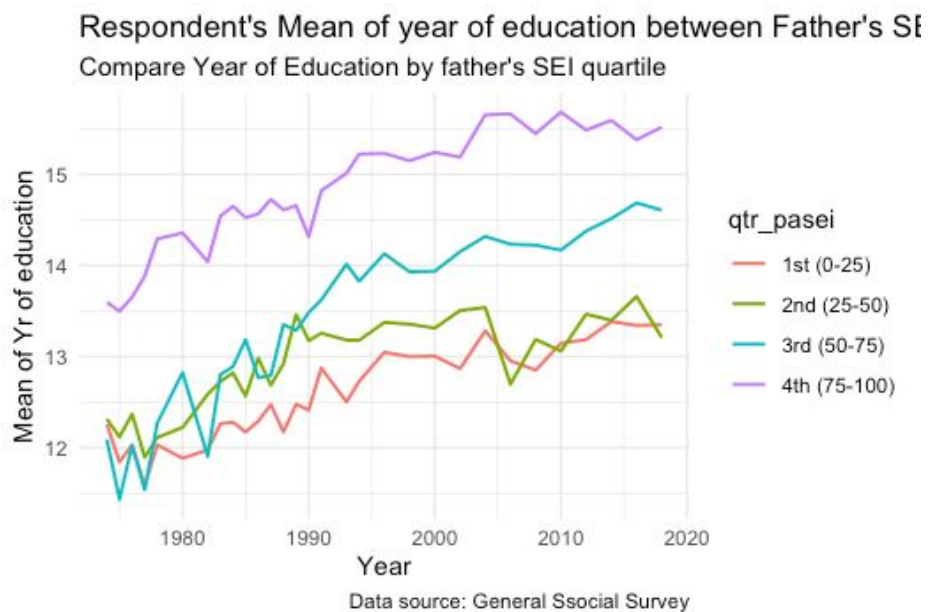
**Figure 3.** Average Real Income (in 1000 USD) by Years of Education

On average, individual Real income increases with Years of education (see Figure 3). This suggests education is positively associated with income, and the difference of income between individuals of high and low educational level. As SEI input includes years of education and income, this result indicates years of education and mean income both positively affect the SEI of an individual. These results illustrate an individual's income and year of education that

contribute to measure one's SEI. Moreover, this leads us to question whether a parent's SEI can theoretically influence respondents' education, income and thus the respondent's SEI.

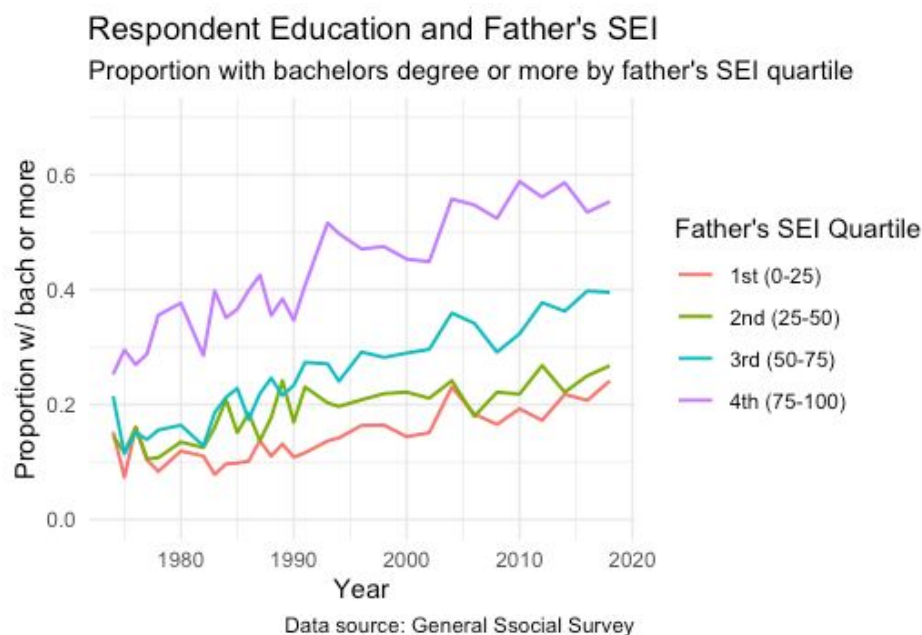
Consequently, parent's SEI influences respondents' financial, cultural, and social capital. These capital of parents influence children's access to education, socialization and accumulation of cultural capital, and introduce them into social circles for getting into schools, jobs, internships, and more. These forms of capital are at least partially inherited by children and can manifest in income advantages later in life (Laurison and Freeman 2016).

To analyze the influence of father's SEI on their children, I divide respondents into four different percentile ranges according to their father's SEI measure (0-25, 25-50, 50-75, 75-100 percentiles) and interpret it with the respondent's year of education and income.



**Figure 4.** Respondent's Mean of year of education between Father's SEI

Figure 4 shows the respondent's mean of years of education over time for the four father SEI groups. The slope shows the association between the year and the average years of education by the four father SEI groups, for example, greater slope implies stronger association between two. The 4th quartile, which is the highest father's SEI group, shows the highest years of education among the four groups. Moreover, two highest SEI groups have greater incline on the slope while two other groups have less inclination. This further indicates how higher SEI can lead to higher educational attainment which gives a question of proportion with bachelor or more degrees among these groups.



**Figure 5.** Respondent's Educational degree and Father's SEI

Figure 5 shows the proportion of the sample with bachelor and graduate degrees among father SEI groups over time. Highest father SEI group has a highest proportion with bachelor or more while two lowest father's SEI groups also have less inclination similar to figure 4. People

attempt to build their credentials through earning higher educational degrees to differentiate themselves from others in the labour market. Getting a higher degree of bachelor or more requires the ability of parents to pay an exclusive amount on children's education, moreover, the highest SEI group are likely to afford higher education to their children which leads to the highest proportion with bachelor degree or more.

The results from two interpretations conclude that education differs from individuals based on the father's SEI. Interesting part from the figures is that between 2000 and 2010, two lowest SEI groups have similar proportions with bachelor degrees or more, and mean years of education. It might occur from the second lowest group entering occupation, and begin their degree after getting a job. It further explains from the higher gap of two SEI groups in 2005.

A father's SEI is a significant factor to understanding the influence of father's background over the class status of the respondents rather than using mother's SEI as well. It concluded that many households in the early period only had one breadwinner, fathers, than both of the parents. This explains that the father's SEI will be relatively stronger than the measure of mother's to analyze the respondent's credentials.

For instance, without a father's capability of paying for their children's education, their children cannot proceed to cultural and social capital through education and earning a higher SEI of themselves. This examines father's SEI is a determinant of status inequality among individuals in the United States, and an important tool of entering the occupational market in society as previous analysis explained.

<i>Predictors</i>	<b>income</b>		<b>income</b>		<b>income</b>		<b>income</b>		<b>income</b>	
	<i>Estimates</i>	<i>std. Error</i>	<i>Estimates</i>	<i>std. Error</i>	<i>Estimates</i>	<i>std. Error</i>	<i>Estimates</i>	<i>std. Error</i>	<i>Estimates</i>	<i>std. Error</i>
(Intercept)	-151.44 ***	26.10	-131.48 ***	26.14	-147.16 ***	26.46	-165.58 ***	25.40	-180.47 ***	25.72
Highest year of school completed	2.59 ***	0.06	1.36 ***	0.14	1.30 ***	0.14	1.54 ***	0.14	1.48 ***	0.14
R's father's socioeconomic index (2010)	0.06 ***	0.01	-0.34 ***	0.04	-0.37 ***	0.04	-0.32 ***	0.04	-0.34 ***	0.04
GSS year for this respondent	0.07 ***	0.01	0.07 ***	0.01	0.08 ***	0.01	0.09 ***	0.01	0.09 ***	0.01
educ:pasei10			0.03 ***	0.00	0.03 ***	0.00	0.03 ***	0.00	0.03 ***	0.00
race_black					-4.61 ***	0.53			-3.45 ***	0.52
race_other					-1.35	0.71			-1.61 *	0.69
female							-13.46 ***	0.32	-13.36 ***	0.32
Observations	30174		30174		30174		30174		30174	
R <sup>2</sup> / R <sup>2</sup> adjusted	0.079 / 0.078		0.081 / 0.081		0.084 / 0.084		0.134 / 0.134		0.135 / 0.135	

\*  $p < 0.05$  \*\*  $p < 0.01$  \*\*\*  $p < 0.001$

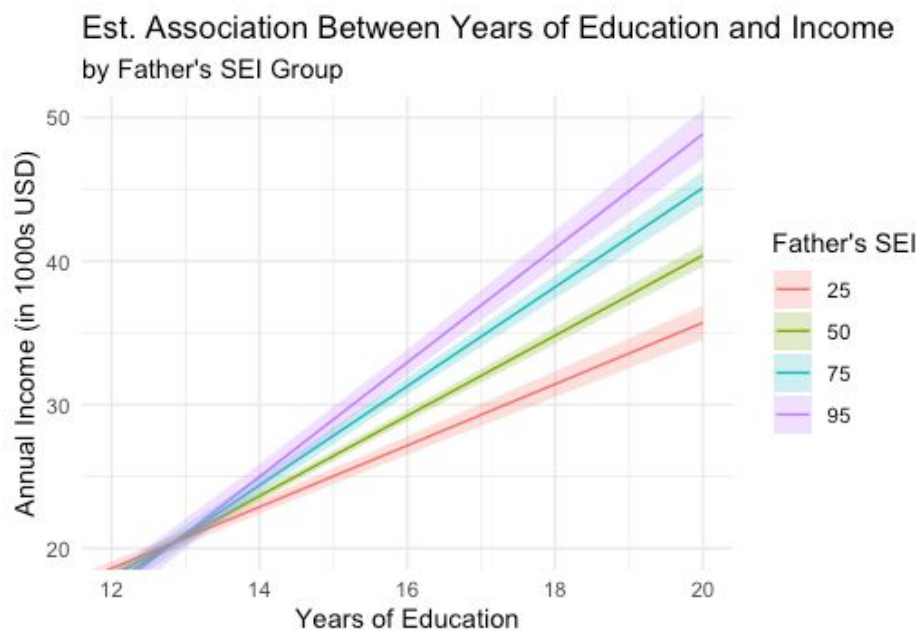
**Table 1.** Summary of predictors of income level

*Table 1* presents the summary of predictors of income level for five different models including various factors that can increase or decrease respondents' real income. The first model includes the respondent's years of education, the Father SEI, and the year (controlling for any time trend that may be present). Each variable has a positive association with the respondent's income. This means income increases over time, with additional years of education, and also income is higher for respondents for higher father SEIs. This suggests there is an effect of social class (measured by father SEI) on income even when controlling for years of education.

Consequently the effect of social class measured by father SEI, the second model indicates the interaction between father SEI and year of education. This model interprets the association between years of education and real income that change over the level of father SEI. Further implication is visualized in figure 7 that higher income at higher levels of education are associated with higher father SEI which is based on previous figures which show positive associations between each respondent's income and years of education by father SEI.

Third model presents other factors of the respondents such as race and gender which seems to decrease. Father's SEI shows a strong effective size which race of black factor decreases income into strongly negative. On the other hand, other races, the fourth model, increased the effective size that positively increased the respondent's income. This shows race is also associated with an individual's income whether they are capable to get a job with a higher income. For instance, the female factor negatively affected the estimate of the respondent's income level where gender was also considered as an important factor to determine an individual's income. Gender and race are also additionally variation accounted to the respondent's income, and the coefficients are significant and substantial. Furthermore, these other factors are also controlled by father's SEI which is also included as SEI measurements.

Considered figures above, the father's SEI has a great impact on the respondent's income and years of education. Comparing years of education and income by four quartiles of father's SEI groups can be a significant relationship where *figure 7* illustrates the estimated association using the estimates from the fifth model in Table 1.

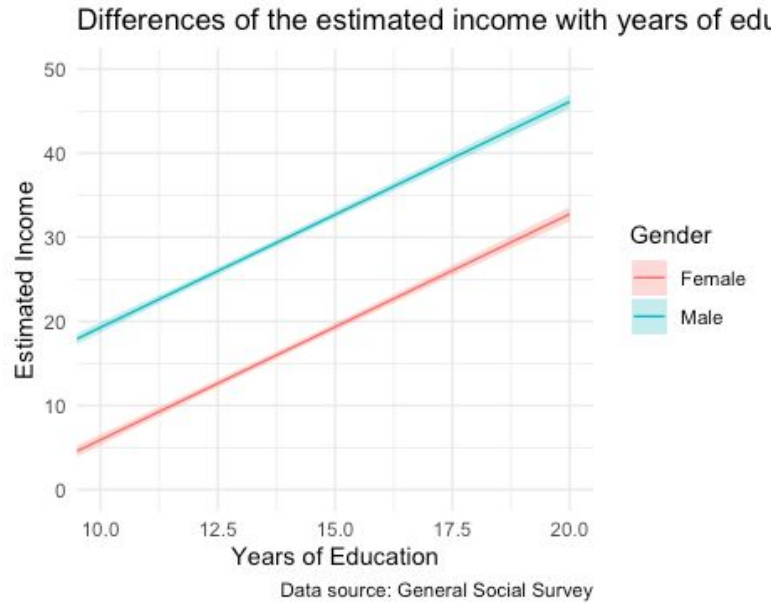


**Figure 7.** Est. Association between Years of Education and Income

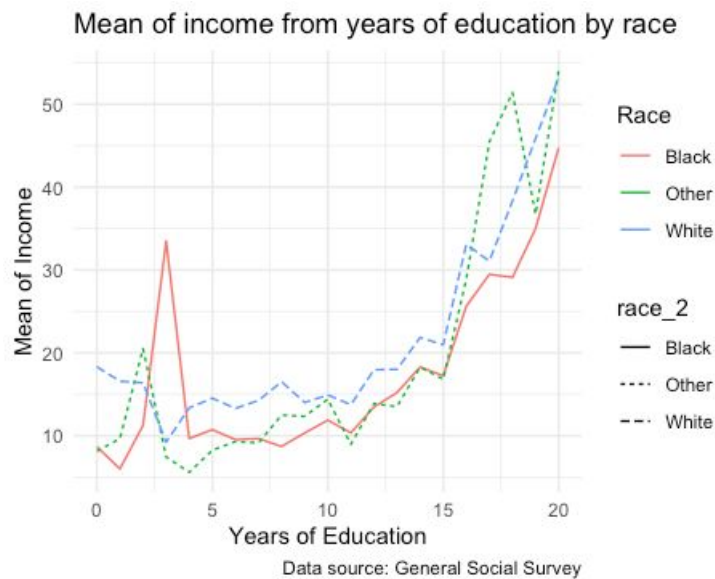
Figure 7 illustrates the estimated association between the respondent's year of education and income separately for each father SEI group. This visualization is the result of above insights which concludes how years of education increases when annual income also increases in all four groups of father's SEI. As both the respondent's income and years of education are positively associated with father's SEI, this visualization shows how both of factors contributed by father's SEI. Annual income in the 1000s USD of the highest SEI group (95) are the greater inclined slope of line than other groups of SEI which equals the highest annual income in four SEI groups. This explains father's SEI strongly relates to an individual's income level which is mostly effective to fathers with higher SEI. This, consequently, examines social capital of the father can extend an individual's capability of income, moreover, increase their income as well.

Leading to further approach of the respondent's income level by their own background of race and gender rather than father's SEI from *figure 7* and *table 1*.





**Figure 8.** Differences of the estimated income with years of education by gender



**Figure 9.** Mean of income from years of education by race

*Figure 8* presents the great difference between gender of estimated income by years of education. Both genders have increased over years of education, but male have a greater

estimated income. This connects to *figure 7* with female factor decreases the respondent's income level, moreover, *figure 9* is to compare race with mean of income by years of education. It shows race of black has a lower mean of income when years of education increases. However, in lower years of education, black has the highest mean of income which might occur from higher proportion of black in lower years of education and lower proportion of black in higher years of education. They often have less chance of getting employment than other racial groups, and are often occupied in low-paid jobs which usually do not require a high educational level. This also represents the respondent's background of race and gender can contribute to their income which is also associated with father's SEI given race and gender.

## Conclusion

Examine through literature review of sociological researches and data analysis based on General Social Survey dataset, credential inflations strongly affect an individual's income level which is determined by father's SEI. Considering Marxian theory, education is used by bourgeoisie to control the workforce that reproduce existing inequalities, and reject the notion of equal opportunities for everyone which explains social inequality; education is an essential factor that can manipulate one's socioeconomic status, furthermore, one's occupational achievement. Throughout the data analysis of GSS, Marxian theory applies to our data analysis of how father's SEI is strongly associated with the respondent's years of education and their income level.

Furthermore, Webian theory of education is based on status-group domination, and suggests how educational credentials were essentially cultural-political constructions of competence. Regarding our data analysis, webian theory suggests why higher father's SEI group has a higher chance of higher income level, and higher educational level as well. It presents the

respondents with high SEI fathers will be more likely to follow high SEI, moreover, leading themselves into higher education and occupation.

Education can also be recognized as a social and cultural capital of circumstances, furthermore, leading to credential inflation which the higher class dominates the society by themselves. In other words, education becomes a prestige of individuals having high SEI fathers. This also examines lower SEI groups often get a low chance of higher education than high SEI groups, and the difference of educational level is getting higher over time. It seems now an education becomes a social and cultural capital that increases income inequalities of individuals rather than an opportunity to lower income groups.

## References

Brown, D. (2001). The Social Sources of Educational Credentialism: Status Cultures, Labor Markets, and Organizations. *Sociology of Education*, 74, 19-34. doi:10.2307/2673251

Laurison, D., & Friedman, S. (2016). The Class Pay Gap in Higher Professional and Managerial Occupations. *American Sociological Review*, 81(4), 668–695.  
<https://doi.org/10.1177/0003122416653602>

Lehmann, W. (2012). Extra-credential experiences and social closure: Working-class students at university. *British Educational Research Journal*, 38(2), 203-218. Retrieved June 6, 2020, from [www.jstor.org/stable/23211466](http://www.jstor.org/stable/23211466)

Rivera, L.A., & Rivera, L.A. (2016). *Pedigree: How Elite Students Get Elite Jobs*. Princeton: Princeton University Press. [muse.jhu.edu/book/62420](http://muse.jhu.edu/book/62420).

SCHNEIDER, M. (2015). The Value of Sub–baccalaureate Credentials. *Issues in Science and Technology*, 31(4), 67-73. Retrieved June 6, 2020, from [www.jstor.org/stable/24726926](http://www.jstor.org/stable/24726926)

Van de Werfhorst, H., & Andersen, R. (2005). Social Background, Credential Inflation and Educational Strategies. *Acta Sociologica*, 48(4), 321-340. Retrieved June 6, 2020, from [www.jstor.org/stable/20059962](http://www.jstor.org/stable/20059962)