

Caitlin Hamrock
Extended Abstract

This research draws on the 2003 National Survey of College Graduates to investigate which aspect of educational attainment is associated with greater increases in earnings— a higher level of degree or a higher level of degree relevance? Results of this analysis indicate that the wage increases associated with highly relevant degrees are significantly greater than the wage increases associated with obtaining a higher level of degree, controlling for the degree relevance. As the labor market becomes increasingly polarized with the decline of unions and the downsizing of the traditional manufacturing sector, educational attainment is becoming increasingly significant for socioeconomic attainment, and this relationship is thus becoming more relevant to understanding stratification in contemporary America.

Over 40 years ago Blau and Duncan's seminal study showed that education played a key role in mediating the effects of socioeconomic origins on occupational achievement. Since then, numerous studies have examined the important link that exists between education and occupational achievement. These studies have demonstrated that increasing levels of educational attainment, or credentials, are associated with higher earnings (Brown, 2001; Collins, 1971; Spence, 1973).

In response to changes in the American education and labor markets, as well as the impact of so-called credential inflation, researchers have come to focus on the concept of overeducation. Overeducation, also called occupation or skills mismatch, refers to a discrepancy between an individual's attained level of schooling and the level of schooling required by the individual's job or occupation, such that an individual has more schooling than is typically required of someone working in that job. Research on this topic generally suggests that overeducation has a negative effect on returns to schooling, but does not typically have a negative effect on an individual's wage. This means that overeducated workers earn less than workers who have similar levels of education working in jobs for which their level of education is typical, yet still earn more than workers with similar jobs who have only the required level of schooling (Cohn and Kahn, 1995; Duncan and Hoffman 1981; Hartog, 1986; Hartog and Oosterbeek, 1988; Rumberger, 1987).

More recently, researchers have raised questions about the importance of the field of one's degree. They have argued that it is inadequate to examine the effect of a mismatch between the required and obtained levels of schooling, without examining mismatches between the field of education and the field of occupation. Studies have shown that having an education that is relevant to one's occupation is also associated with higher earnings (Robst, 2007; Yakusheva, 2010).

The aforementioned fields of inquiry have remained, for the most part, discrete and no comparison has been made between the wage effects associated with increasing levels of degree and the wage effects associated with increasing levels of degree relevance. This research will make such a comparison in order to investigate which aspect of educational attainment is associated with greater increases in earnings— a higher level of degree or a higher level of degree relevance.

The 2003 National Survey of College Graduates provides a unique opportunity to draw such a comparison using individuals' assessments of the extent to which their educational background is utilized in their jobs and work activities. In this study I use a series of regressions which incorporate a number of independent variables related to socio-demographic characteristics, educational background, and occupational factors.

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Socio-demographic variables include race, gender and age. Educational and occupational variables include level of degree and a self-assessment of the relevance of one's degree to their occupation. The field of one's degree was also taken into account to rule out the possibility that wage effects were due to wage variation between different sectors in the labor market. The outcome variable is the log of annualized wage.

The findings of this research support earlier assertions that higher levels of post-secondary degrees are associated with increases in wages. Post-secondary degrees that are closely related to the individual's primary occupation, however, are associated with even greater increases in wages. The wage increases associated with having a post-secondary degree that is closely related to one's primary occupation, controlling for the level of the degree, are greater than those associated with obtaining a PhD or Master degree. An individual with a Master's degree is predicted to make 5% more than an individual with a Bachelor's degree. An individual with a Doctoral degree is predicted to make 22% more than an individual with a Bachelor's degree. Controlling for level of degree, an individual with a degree that is closely related to their occupation is predicted to make 37% more than an individual with an unrelated degree. Similarly an individual with a somewhat related degree is predicted to make 17% more than an individual with an unrelated degree¹. These patterns remain after controlling for field of degree, indicating that the effects are related to educational factors and not to labor market factors that may vary according to field.

If these results are interpreted in terms of the returns to education, this research suggests that it is more profitable to obtain a highly relevant degree, as opposed to a high level degree that is only somewhat related to one's occupation. While the impact of higher levels of education on wage outcomes is undeniable, the importance of the training and socializing effect of education should not be discounted. Given the current state of state and federal budgets, and problems facing the US labor market, it is particularly important to examine what aspects of educational attainment are most important to increasing wages. Across the country people are facing increased scarcity of state and federal funding for post-secondary education. There is also a growing gap between the number of jobs that require post-secondary education and the number of young people obtaining such degrees (Carnevale, 2010). Information about those aspects of education that are associated with increases in wages would be helpful in creating targeted policy solutions to help people obtain the kinds of education that will be most useful to them in their jobs.

¹ For all reported coefficients $p < .001$.

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