Does education level have an effect on health outcomes?

**Prospectus**

Various health issues have been reported across the world, including pandemics and life-limiting conditions. Communicable diseases are also responsible for deaths and various conditions witnessed worldwide (Ferguson and Pawlak, 2011). Highly developed countries and lowly developed countries exhibit differences in life spans. Whereas in highly developed countries, the lifespan of people is high, in developing countries, the lifespans remain low. It has been argued that there are low literacy levels in developing countries compared to the developed countries (Dursun, Cesur & Mocan, 2018). Likewise, in the United States, there is a low life expectancy in those states with low literacy levels. At the same time, there is a higher life expectancy in those states with higher literacy levels. Therefore, the question that seek to answer is whether the level of education directly impacts the health outcome of various individuals. The study looks at education, as an independent parameter, on health outcomes as a dependent parameter. Measuring the health outcomes is based on morbidity rates, mortality rates, and disability indices. Therefore, the study intends to find out the contribution of the levels of education on health outcomes.

The research question is “Does education level have an effect on health outcomes?”. The main objective of this research is to establish the impacts of education level on the health status of different individuals.

Health outcome is one of the most determinants of the economy. This study seeks to provide a long-term solution to the health outcome and, in essence, economic productivity. Therefore, the study is significant in determining the extent to which educational level contributes to positive health outcomes and how the positive health outcomes are significantly crucial in changing economic fortunes (Ashraf, 2020). Human resources provide both skilled and non-skilled labor in the production system. Therefore, understanding the health outcomes has been critical in determining the production systems and ensuring that different activities are achieved. Economically, the study will be essential in designing proper policies that increase health outcomes.

Davies et al. (2018) conducted a study on the causal effects of education on health outcomes in the UK Biobank. Davies et al. (2018) argue that educated people are generally healthier and have fewer comorbidities. Educated individuals also live longer compared to those who are uneducated (Davies et al., 2018). Therefore, an understanding of the educational level and comorbidities should be based on an understanding of the activities conducted and the impacts that these activities have on the lives of the people. Education enlightens people and makes individuals aware of various health conditions. Therefore, most people can maintain healthier lifestyles when they are educated compared to uneducated people. Consequently, Davies et al. (2018) conducted a natural experiment on the impact of the education levels on health outcomes and indicated that a higher level of education increases the health outcomes.

The main goal of this research is to answer if higher education level has a better effect on the health outcomes in the Unites States. The higher level of education may result in better health outcomes. To identify the correlation between the education level and health outcomes, regression analysis will be used. It is to investigate the relationship between a dependent variable and the independent variables assumed to cause variation in it. Factors in health outcomes include education level, demographics, income, unemployment, housing status, transportation, food security and health service. Regression will be to see if the education level, demographics, income, unemployment, housing status, transportation, food security and health service will be used to meet if they are statically significant with better health outcomes.

Data I will be using will include states, per capita personal income in $, homeownership rate, percent with at least a high school diploma, percent with at least a college degree, adult obesity rate, percent that consume recommended fruits/vegetables daily and percent of adults who have used marijuana. Education levels will be analyzed state to state to find out if the states with the highest educations have the better health outcomes. The U.S. Census Bureau of Labor Statistics includes the data of educational attainment of the population 18 years and over and 25 years and over by demographics in 2019. This research will overall find the factors that determine the relationship of how the higher education level have an impact with better health outcomes.

There will be two economic models that will be used in this paper. Budget constraint model will be used to measure of income and years of education attained to see if people would afford the health insurance. If education levels are not high, the income will have a tendency to be low. If income is low, then people cannot afford to have health insurance or if they do, it is not a good insurance. So people would not go to the doctor, dentist or have any health services which potentially will affect their health. Keynesian model will be used to figure out to see if education attainment increases, more people will be employed, which in result in an increase access to healthcare services. Employment depends upon effective demand which is education. If higher education is more attainable then it can be assumed that GDP would rise causing unemployment to be lower. If more people have occupations, specifically higher skilled jobs, then there would be better access to health services.

**Literature Review**

**Introduction**

Studies have shown that a substantial and long-standing relationship exists between education and health outcomes. The connection is evident in several nations and historical periods, as well as for a wide range of health indicators (Fonseca, 2020). The disparities between the learned and uneducated are important. Surveys conducted on the issue indicated that the age-adjusted death rate among high school dropouts aged 25 to 64 was more than double that of those with a minimal college education. Different studies have been conducted to investigate the impact of education on health (Davies et al., 2018). The developed nations such as the United States have the same trend where individuals with lower levels of education have worse health as compared to other groups. Section 1 talks about how a year of schooling increases wages with specific scales. Section 2 illustrates with greater education; it reduces fatality from chronic diseases and have better mental performance as well. Section 3 shows how with the condition, health and education differs described with the scale of the percentage. Section 4 discuss the association between health outcomes and education is mediated by five types of factors; economic, psychological, social, interpersonal, and behavioral health. Section 5 talks about the importance in education to health outcomes which helps individuals to develop an extensive qualities and skills, subsequently, contribute to human capital. This literature review aims to identify the connection between educational level and health outcomes by answering the research question; “Does education level have an effect on health?”.

Raghupathi & Wullianallur (2020) state that several projections illustrate that a year of schooling increases wages by roughly 10% or $80,000 in the current value over a career. Applying information obtained from the National Longitudinal Mortality Study (NLMS), the researchers discover that every additional year of schooling enhances average lifespan by 0.18 years when applying a discount rate of 3%, or by 0.6 years when no discounting is used (Raghupathi & Wullianallur, 2020). Based on the assumption that a year of health is equivalent or worth $75,000, which is a rather modest estimate, this equates to around $13,500 to $44,000 in current value (Raghupathi & Wullianallur, 2020). According to these rough evaluations, the health gains to education boost the overall educational attainment by 15% or more, and possibly by a higher rate of up to 55%.

According to the statistics presented by Raghupathi & Wullianallur (2020), the better educated had reduced fatality from the most prevalent acute and chronic diseases such as heart disease, hypertension, stroke, asthma attacks, cholesterol, diabetes, emphysema, or ulcer. People with higher educational levels are less likely to be hypertensive or experience conditions like emphysema or diabetes. Greater educated people have better physical and mental performance (Zajacova & Elizabeth 2018). The more educated are significantly less likely to report bad health and are less likely to express anxiety or despair. Lastly, more educated persons report spending fewer hours in bed or missing work due to illness, and they have reduced functional restrictions.

The scale of the link existing between health and education differs with the condition, although it is typically significant. Four more years of schooling reduces five-year mortality by 1.8 percentage points (Raghupathi & Wullianallur, 2020). Besides, Ogden et al. (2017) support the idea that it lowers the risk of conditions like heart disease by 2.16 percentage points as well as the risk of getting diabetes by 1.3 percentage points. Four extra years of education reduces the likelihood of rating oneself in poor or fair health by six percentage points and lowers missed days of work due to illness by 2.3 days per year (Raghupathi & Wullianallur, 2020). Although the impacts of gender and race are not highlighted, the amplitude of four years of education is generally equal to being African American or female. These effects are not inconsequential.

The association between health outcomes and education is mediated by different types of factors: economic, psychological, social, interpersonal, and behavioral health (Fonseca, Michaud, & Zheng, 2020) Lowering the differences in health outcomes and enhancing general health among the public can be achieved if people understand the health gains brought by education. Lowering the differences in health outcomes and enhancing general health among the public can be achieved if people understand the health gains brought by education. To begin with, economic factors like income and occupation help to moderate the link between health outcomes and educational levels by regulating and determining the availability of acute and preventative medical treatment (Dursun, Cesur, & Mocan 2018). People with varying levels of education can use coping resources and techniques, social support, and problem-solving, and cognitive ability to deal with ill-health effects such as stress thanks to social, psychological, and interpersonal resources. Healthy practices allow educated persons to detect indications of illness and seek appropriate healthcare assistance in a timely way.

Dursun, Cesur, and Mocan (2018) add that education is significant in relation to health outcomes since it allows individuals to develop a wide range of qualities and skills, such as cognitive and problem-solving ability, personal control, and learning effectiveness, which incline them to better health outcomes and, as a result, contribute to human capital. Education, over the years, has been helpful in states' financial security, secure employment, and social prosperity over the years. Countries that implement measures to promote education gain the benefits of healthy conduct, such as lower rates of smoking and obesity in their populations (Davies et al., 2018). Lowering the differences in health outcomes and enhancing general health among the public can be achieved if people understand the health gains brought by education.

**Conclusion**

The purpose of this paper is to investigate the link between health outcomes and education. There has been a significant relationship between the level of education and health outcomes. All of the studies shown vary expressively and provide contributions to the study of the relationship between education level and health outcomes. Taken as a whole, it appears that studies have attempted to explain how the two concepts relate and the need to understand the existing connection. Higher educational level attracts higher pay, which enables people to engage in effective healthcare practices and gain high-quality care or become aware of their health status with preventative medical treatment. Besides, the association between education and health results from different mediators, which include economic, psychological, social, and interpersonal, and behavioral health. Education leads to improved health outcomes since it influences or fosters various qualities and skills, such as cognitive and problem-solving ability, personal control, and learned effectiveness which lets to perceive indications of illness and have the ability to obtain for health assistance as well as beneficial to financial security, secure employment, and social prosperity. The main goal of this research is to answer if higher education level has a better effect on the health outcomes in the Unites States. This research will contribute to the testing whether the higher level of education may result in better health outcomes. Another contribution will be to analyze the education levels state to state to find out if the states with the highest educations have the better health outcomes. With the demographics in 2016, the research will overall find the factors that determine the relationship of how the higher education level have an impact with better health outcomes.

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