Impact of Individuals’ and Peers’ Socioeconomic Status on Academic Achievement

Jiajie Liu
Nankai Secondary School, Chongqing, 400000, China
jl15266@nyu.edu

Abstract. Modern day education is a focal point of public discussion. As media platforms develop, people become growingly aware of the disparities in education between people of different socioeconomic status. This review examines the influence of socioeconomic status (SES) on academic achievement, exploring how both individual and peer SES contribute to education outcomes. The analysis contains insights from an array of studies to create a comprehensive understanding of the ways socioeconomic factors shape learning experiences and performance. This review encompasses the multiple components of SES—race, family wealth, parental education, and occupation from both an individual standpoint and a peer perspective, aiming to elucidate how these factors provide or limit access to educational resources and opportunities. This review found that SES has varying degrees of influence on many aspects of academic performance, and then argues for policy interventions that aim to equalize opportunities. It advocates for initiatives that promote socioeconomic integration and resource distribution within educational institutions to counteract the disparities in academic achievement.

Keywords: Socioeconomic Status, academic achievement, peers.

1. Introduction

The public has realized the effect of socioeconomic status (SES) on education since long ago. Though systematic studies were never conducted on scales as large as the ones James Coleman had done until the 20th century, philosophers such as John Dewey have been acknowledging social status and wealth as an influencing factor to education. In Europe, Pierre Bourdieu also introduced the concept of Habitus, terming culture as a type of capital alongside real estates and liabilities. Nevertheless, the importance of the relationship between SES and education never really came into the spotlight until James Coleman, commissioned by the US government as part of the Civil Rights Act, published “Equality of Educational Opportunity.” Coleman started from studying the disparity between African American and White students, and found that the background of students were more positively correlated to academic achievement compared to facilities, curriculum, and teacher. This was a staggeringly novel idea that led researchers to delve into this field in an attempt to find the mechanisms at play that produces such results. Though much more deliberation has gone through this field since the last century, the definition of SES when researchers discuss its relation to education still varies by large between each study. Considering the growingly significant role that diversity plays in education, in discussing these studies on the relation of SES and education this review hopes to point out the underlying dynamic that results in the difference in academic achievement between students of different races, different backgrounds, and different identities in current societal conditions.

2. Overview

This review focuses on studies from both the last century and more recent times that depict how Individual students’ and their peers’ socioeconomic status affect their academic achievement. SES is typically defined as a measurement of an individual or family's economic and social position in relation to others, based on income, education, and occupation, it sometimes also include measurements of wealth, home environment, and cultural capital such as the availability of cultural
resources like books to an individual. On the other hand Academic achievement describes the extent to which a student achieves their short or long-term educational goals, which is also reflective of their educational attainment, usually indicated by grades, standardized test scores, and advanced course enrollment and completion. It is generally believed that a family’s socioeconomic status positively correlates to the amount of educational resource it is able to allocate, and, as a consequence, also positively correlates to one’s academic achievement. But since socioeconomic status describes a wide range of either a family or an individual’s traits, the significance of the occurring effects between SES and education achievement sometimes depends upon how and which aspect of SES is measured and how education achievement is operationally defined in studies [1]. Thus, reviewing the relation between SES relation and education bears careful consideration for which exact element is creating the largest influence under what specific circumstances. This review attempts to cover each of those different aspects respectively.

3. The Effect of Individual’s SES

One’s socioeconomic status can affect one from many aspects. The racial aspect of one’s socioeconomic status affects academic achievement by way of stereotypical racial expectations. One such way mentioned by Battle and Lewis is through a self-fulfilling prophecy that the teacher imposes on students of color [2]. Battle employed composite test scores from high school students drawn from National Education Longitudinal Study (NELS) and determined their association with a number of SES relating factors. As a result, he found that white students received greater benefits from their race two year later in SES compared to African American students. Some teachers view African American students as more often absent and less devoted to studying even when they are in reality not behaving in such a manner. Ultimately, the expectation of a group of student supposedly behaving in one typical manner triggers those students’ sense of loyalty and idea of belonging to a certain group, leading them to behave as the negative expectations predicts, again strengthening the stereotype and creating a vicious cycle. However, racial expectations are not always negative as presented in the African American case. The ethic self-schema framework proposes that the direction of correlation between racial expectation and academic achievement depends on the stereotype in question being positive or negative [3]. In the case of Asian Americans, racial expectations are in fact positively correlated with academic achievement. As African Americans have a sense of belonging to an overarching general type of behavior, Asian Americans who ascribe their behavior as a display of in-group loyalty also gain the urge to uphold the expectations of excellence in academics not only for themselves to achieve a sense of belonging, but also to maintain this favorable view towards their ethnic group, creating, in other words, a positive cycle.

Another undoubtedly influential aspect of one’s socioeconomic status on education is wealth. A wealthy family is able to choose better neighborhoods and schools to educate their offspring, they are generally able to maintain better friendly relationships with teachers, who consequently views their offspring more favorably. These families also have the capability of providing more educational resources in the means of tutorship, after class courses, extracurricular activities and even competitive academic or sports practices that would not only help with academic achievement directly, but moreover provide their offspring with better education attainment opportunities by way of entering higher ranking universities that will in turn bolster their academic achievement further. This effect has been seen not only in developed countries as the US, but also for developing countries where wealth also predicts educational attainment for children [4]. The obvious effects of wealth in this regard is not only at play for one generation, but spans across multiple generations [5]. Hällsten’s study carried out with the intention to determine the long term effects of wealth on educational achievement. In specific, he measured the SES of grandparents through a complex weighted calculation including not only their net worth but also accounting for their home wealth, debt, permanent income, occupation value, and education value, and measured the grade point average of their grandchildren. As a result, they found substantial relationship between the two. The insurance
mechanism of wealth, among other mechanism such as the purchasing mechanism, states that because wealth can smooth out unexpected disruptions in one’s career and act as compensatory income in times of need, families with greater wealth can afford to let their offspring pursue their own direction of interest, therefore strengthening their possible academic achievements by providing them with opportunities more suitable to their characteristics. Aside from wealth being a resource that is generally beneficial to the educational purpose, the attainment or preservation of wealth itself sometimes acts as a stimulant for education in certain families as well. Wealthier families with abundant assets require their offspring to have the capacity to properly manage said assets for the extended prosperity of the family. To that purpose, wealthier families would invest in their offspring’s education more, leading to greater academic achievements. This is also the case for middle class families, for which the accumulated wealth may not sustain through crisis, creating a urgent need for families to aid their offspring in education so that they may in turn gain greater income that would preserve the family’s status.

Parent’s education and occupation is another factor SES accounts for. More educated parents are more likely to value and support their children's educational endeavors. Children of these parents often benefit from a cognitively stimulating home environment, where they are exposed to more vocabulary, more reading materials, and engage in discussions that promote critical thinking skills. Parents with higher education also are more likely to possess higher academic expectations for their children, leading to a possible greater stimulus in terms of children’s motivation to study [6]. Similarly in occupation, parents in higher-status occupations often have more flexible work schedules and can allocate time to support their children's educational activities. Additionally, the social networks available to such parents can provide children with mentoring opportunities and exposure to professional environments, further motivating them and offering guidance on career pathways that align with academic success.

4. The Effect of Peers’ SES

However, a less foreseen dynamic is how one’s peers’ socioeconomic status plays an effect on oneself. The environment in which students grow and learn is a mosaic of diverse social, economic, and cultural factors that contributes to their academic experiences and outcomes. As Caldas maintained that learning of an individual’s social network can sometimes predict the individual’s attitude and behaviors even more precise than knowing of said individual’s characteristics [7]. Caldas, in his study, intended on finding the association between peer group SES and academic achievement by using the data available from public high schools in Louisiana since all public high school students are required to take a criterion referenced Graduation Exit Exam (GEE). He hypothesized that the poverty status, measured in students participating in low price lunch plans, of the peer group population is negatively related to academic achievement. Caldas also hypothesized that the mean parental education and occupation status would be representative of the student group’s academic achievement. Measuring for the families’ SES and calculating for their correlations, Caldas found that poor students were more likely to attend schools with disproportionate amounts of poor students. He also found that students were more likely to attend schools with students of a similar SES. Though one can argue whether or not a student participates in a low-priced lunch program is not perfectly representative of that student’s socioeconomic status, Caldas’s finding do prove to be convincing enough evidence on the question of whether a student’s peers’ SES is associated with said student’s academic achievement. Because students of a similar SES background are grouped together more often, their academic achievement would also, as established in the previous section, be more representative of each other. To be specific, peer group's SES can influence a student's academic performance through differential access to educational resources. Students from higher socioeconomic backgrounds often have access to a greater variety of supportive resources, ranging from technology, tutoring, to educational materials, which they can share with their peers. This communal sharing of resources can create an enriched learning environment for all students within
the group. Conversely, when a student is surrounded by peers from lower SES backgrounds, the collective access to resources is more commonly limited, potentially hindering the student's ability to perform at their best academically. A meta-analysis from 2009 also backs this argument [8]. Though Van Ewijk also argues that depending on the method of measurement determined by the researchers, the effect size can vary quite drastically. A dichotomous measure of SES such as the low-priced lunch program mentioned above would result in a weakened association between the variables.

Aside from peer SES being a potential source for shared educational resources, peer competition would also act as another influencing factor to the Peer SES academic achievement relation. Peer groups can exert considerable pressure on behavior and motivation. When surrounded by peers who value education and are motivated to achieve academically, a student himself is also more likely to adopt similar attitudes and strive for success. Similarly, if a student's peer group places little importance on education, or if there is a culture of low academic expectations, student's motivation and engagement with school will be negatively affected, leading to poor academic outcomes. Self-control, an essential factor to academic success, was found to be a characteristic learnable by students being around peers with good self-control habits [9]. Buechel’s study incorporates the theory of peer effects on self-control—which states that because one’s own level of self-control is usually unknown to oneself, being in a peer group provides one the ability to discern that level through comparison to others’ response to temptations—observation of peers handling a similar situation can be an encouraging experience that enhances one’s own determination and confidence to overcome challenges when that peer shows diligence and perseverance himself. The results of the study show that said observation is highly significant in its effect to stimulate positive responses in terms of planned effort and self-control, leading to a possible better academic outcome. However, the possible effects of being around peers that show less self-control was not documented. Admittedly, the relationship between peer competition and academic achievement is complex and context-dependent. While competition can motivate students to improve their performance, it can also lead to increased stress and undesirable behaviors like cheating [10]. Moreover, the effects of competition can vary depending on individual characteristics, such as self-control, expectations, and response to peer pressure.

5. Discussion

The intricate mechanisms creating the observed disparity in academic achievement of students and peers from different SES is a multifaceted phenomenon with important implications for educational equity. This review has focused on analyzing the many factors of SES—family wealth, parental education, and occupation—that influence academic achievement of students both directly through familial interaction and indirectly through peer relation. Wealthier families can provide their children with a wider range of educational resources and opportunities, from better schooling to extracurricular activities. Wealth itself can also act as buffer against disruptions, allowing families to invest in their children's long-term educational trajectories. Furthermore, higher parental educational attainment correlate with higher academic expectations and a more cognitively stimulating home environment that encourages children's academic success. This review then extends beyond the individual to consider the impact of peers. Peers' SES serve both as a resource and a benchmark, fostering an environment that can both cultivate and impede academic achievement depending on the specific influence. Students from affluent backgrounds are more likely to benefit from a shared pool of resources and heightened educational aspirations, while those from lower SES backgrounds may face collective resource limitations and reduced academic expectations. Moreover, peer dynamics in the form of competition and role modeling further complicate the relationship between SES and academic achievement. While a competitive environment among high-achieving peers can stimulate students to exert greater effort, it can also create stress and incentivize unethical behaviors. The adaptive learning of self-control through peer observation underscores the significance of a supportive peer group in fostering traits conducive to academic success. These mechanisms through which peers’
SES affect an individual’s academic performance underscore the importance of taking into account an individual’s peers when making educational interventions. It is also necessary to promote socioeconomic diversity within educational settings by adopting a more holistic view that acknowledges and intervenes in the multiple aspects of SES to harness the positive effects of peer influence on academic outcomes. Furthermore, since socioeconomic status is a changing topic dependent on societal contexts, it is important that more studies continue in this direction to document new dynamics that may occur under rapidly changing societal backgrounds such as the modern one. An emergent field for possible study is the relations of the SES of gender non-conforming individuals and their academic outcome under the Me Too movement.

6. Conclusion

This review on the influence of students’ and their peers’ socioeconomic status on academic achievement has provided compelling evidence that SES is a pivotal factor in educational outcomes. The synthesis of findings from historical and contemporary studies underscores the persistent and pervasive nature of SES. The evidence points to the potential benefits of a resource-rich peer environment, while also cautioning against the risks of stratified education based on SES which can amplify existing disparities. This review hopes to direct more attention towards the inequitable effects of SES on education. The education system should not only be more aware of the socioeconomic factors influencing academic achievement but should also attempt to level its effects, ensuring that a student's future is shaped by their talents and aspirations rather than the socioeconomic status they are born into.

References