School Segregation

Many countries continue to have influx of immigrants, which is an increased ethnic residual and school segregation. Additionally, the processes have changed the demographic composition of children (McArdle & Acevedo-Garcia, 2017). School segregation has been an important subject in US for the public and political debate. Partly, the broader racial equity issues has been evident in many US cities where certain races have been segregated. Policy makers have shown high levels of segregation in providing economic opportunities for low income and minority children, with some societies having wider benefits than others do.

The United States has been one of those countries suffering from school segregation despite is development. The April 2020 police brutality case has shown to the world that racism is still deeply rooted in the country. Protests in many cities about the Black Lives Matter movement has helped keep the racial issue in the media spotlight. Additionally, when Barack Obama was the president, the country saw an increase in policies that addressed racial equality, including the Strong Together grant program that intended to support local efforts y income (Reeves & Rodrigue, 2016).

Various researchers have established methods of measuring levels of segregation. According to Frankel & Volij, (2019) segregation is unfair treatment of an individual or group of people based on their race, religion, or geographic location. Level of segregation measures how the minority population is compared to the other. The commonly used method is the dissimilarity index. The method measures index ranges from 0.0 where 0.0 indicates that the set range is completely integrated (complete integration) while 1.0 or 0.1 means that there is (complete segregation) (Vignoles & Allen, 2016).

Data and Method

This research was intended to show the rate of school segregation in United States. It used secondary data from Nation Center for Education Statics. Data was analyzed using R programming language to derive meaning and visualize the data. R studio also provides open source libraries that allows complex analysis of data. Variables used in the analysis included various cities in the country(Metro Area), Black-white dissimilarity index, Black Total Students and Black Total Students

To conduct the study sample data longitudinal data was used from Nation Center for Education Statics 2015- 2016. The research used the dissimilarity index method to test the level of segregation between black and white children in US schools. Data was collected from cities in United States. The dissimilarity index varied between 0 and 1 where 0 indicates a condition of total under which both groups are evenly distributed. To properly understand the data, descriptive analysis was used.

Results

Descriptive statistics conducted showed that the total number of white students in US cities were more than that of blacks. The highest number of whites students in the cities was 954, 262 and

the least with 4, 344. On the other hand, black students showed a lower turnout in American schools with the minimum population per city being 2005 and a maximum of 507,410. The results are shown in table 1 bellow.

| Black Total Students | White Total Studen |
|-----------------------------|--------------------|
| Min. : 2005 | Min.: 4344 |
| 1st Qu.: 4184 | 1st Qu.: 16501 |
| Median: 9590 | Median: 32341 |
| Mean : 28662 | Mean : 70633 |
| 3rd Qu.: 24977 | 3rd Qu.: 71747 |
| Max :507410 | Max ·954262 |

Figure 1 bellow also confirms the statistics from descriptive. Majority of students in United States were whites.

Total Number of Students by Race

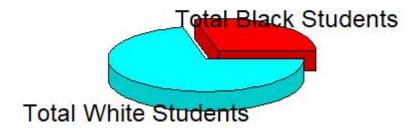


Figure 1: Number of Students

Black-white dissimilarity index

The data bellow shows that majority of the cities had a dissimilarity index of 0.5446, while the city with list dissimilarity was 0.234. The data indicates that all cities had a school segregation. The city with highest black-white dissimilarity rate had a 0.821 rate which is very high.

Min. :0.2342 1st Qu.:0.4621 Median :0.5446 Mean :0.5432 3rd Qu.:0.6341 Max. :0.8210

Black-White Dissimilarity Index

The dissimilarity index rate for black and white students was shown in a histogram for easy understanding of the situation. The graph shows that the dissimilarity index rate was 0.5 and 0.6

across all cities in United States. Majority of cities therefore did not practice fair policy implementations when it comes to school segregation.

Histogram of data\$`Black-white dissimilarity index`

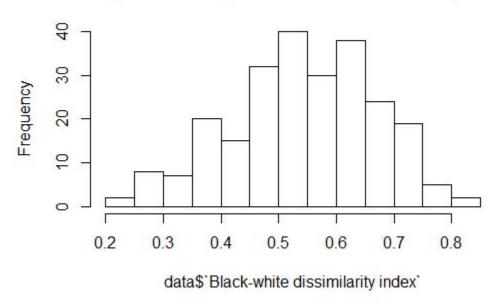


Figure 2: Black- White Dissimilarity Index

Conclusion

A country's economy becomes more productive as the proportion of educated workers increases. This is to say that with school segregation, some potential students will likely not get enough resources to achieve desired levels of education. In a country such as United States, racial discrimination should be a thing in the past. Policies that empower all its citizens without dividing them based on race should be formulated and implemented. The statistics found in the data shows concerns where the rate of black and white dissimilarity index is from more than 0.4.

References

- Frankel, D. M., & Volij, O. (2019). Measuring School Segregation. Education Journals, 6.
- McArdle, N., & Acevedo-Garcia, D. (2017). *Consequences of Segregation for Children's Opportunity and Wellbeing*. Harvard: President and Fellows of Harvard College.
- Reeves, R. V., & Rodrigue, E. (2016). *SEGREGATION, RACE, AND CHARTER SCHOOLS:* WHAT DO WE KNOW? WHITEHURST: Walton Family Foundation.
- Vignoles, A., & Allen, R. (2016). What Should an Index of School Segregation Measure? *Oxford Review of Education*, 3.