

The Matthew Effect in Turkish Education System

Mahmut ÖZER ^{a*}

a Prof. Dr., Chair of the Commission of National Education, Culture, Youth & Sports of the Parliament, <https://orcid.org/0000-0001-8722-8670>, *mahmutozer2002@yahoo.com

Review Article

Received:12.6.2023

Revised:20.9.2023

Accepted:20.9.2023

Abstract

Over the past 20 years, Türkiye has transitioned its education system to the massification phase, and schooling rates have reached over 99% at all levels of education, from primary to secondary levels. In addition to increasing the accessibility of education to those from disadvantaged socioeconomic status and facilitating the access of girls to education, this important transformation has also increased the effectiveness of the education system. Furthermore, the period was also characterized by free distribution of textbooks and teaching materials to all students in an effort to increase the equality of education opportunities. The provision of free meals, transportation to school, scholarships, accommodation assistance for students in need, as well as conditional financial support based upon the continuation of education was provided to students. The implementation of many social policies has continued over the past two decades in a consistent manner. With such a large system with approximately 19 million students, it is evident that this approach focuses on increasing equality of opportunity in education as opposed to simply increasing educational access. However, the achievement gap between schools persists despite all these supportive mechanisms, some of which are rooted in the past, some of which have arisen from massification of education. This study discusses the areas or instruments that prevent all students accessing education from receiving the same quality of education, regardless of their socioeconomic status, and areas of higher "Matthew effect" severity. The study reviews the impact of the Matthew effect on diverse aspects of education and uses document analysis method for analyzing the impact of Matthew effect through the recent data-based studies in Türkiye as an addition the literature on educational inequalities. The Matthew effect is particularly strong in four areas: in the Turkish educational system: access to early childhood education, the correlation of socioeconomic status with academic achievement, school tracking, and access to senior teachers. The study also provides suggestions for reducing the severity of the Matthew effect in these four areas.

Keywords: Matthew effect, education, massification, Türkiye, school tracking, socioeconomic status

Türk Eğitim Sisteminde Matta Etkisi

Öz

Türkiye, son 20 yılda eğitim sisteminin kitleleşme evresine geçişini sağlayarak temel eğitimden ortaöğretime kadar tüm eğitim kademelerinde okullaşma oranlarını %99'un üzerine çıkartmıştır. Eğitim sistemini büyütürken ve genişleterek yapılan bu önemli dönüşüm, özellikle dezavantajlı sosyoekonomik düzeyden gelen kesimlerin erişimini artırmış ve kız çocuklarının eğitime erişimlerini kolaylaştırmıştır. Bu atılan adımların yanı sıra dönemin en önemli özelliği, eğitime fırsat eşitliğini artırmak için ders kitaplarının ve öğretim materyallerinin tüm öğrencilere ücretsiz dağıtılmasından, ihtiyacı olan öğrencilere ücretsiz yemek, okula taşıma, burs desteği, konaklama desteği sağlanmasına ve çocukların eğitime devam etmesi koşulu ile şartlı eğitim yardımı sunulması gibi çok sayıda sosyal politikanın son 20 yılda istikrarlı bir şekilde uygulanmaya devam etmesidir. Yaklaşık 19 milyon öğrencinin yer aldığı böylesi devasa bir sistemde sadece bu sosyal politikaları uygulamanın doğurduğu yıllık maliyet göz önüne alındığında, bu yaklaşımın eğitime erişimi artırmanın ötesinde eğitimde fırsat eşitliğini de artırmaya odaklandığı görülecektir. Tüm bu destek mekanizmalarına rağmen bir kısmı geçmişe dayanan, bir kısmı da eğitimde kitleleşme ile birlikte gelen sorunlar, okullar arası başarı farklarının varlığını sürdürmesine yol açmaktadır. Bu çalışmada, eğitime erişen tüm öğrencilerin sosyoekonomik seviyelerinden bağımsız olarak aynı nitelikte eğitime erişememelerine yol açan alanlar veya enstrümanlar "Matta etkisi" şiddetinin arttığı alanlar olarak tanımlanmaktadır. Çalışma Matta etkisinin eğitimin farklı alanları üzerindeki etkisini değerlendirmek üzere doküman analizi yöntemini kullanmaktadır. Gerçekleştirilen doküman analizinde, genel alan yazın taramasının yanında özellikle Türkiye'de eğitim sistemindeki eşitsizliklere dair güncel veri tabanlı çalışmalar dikkate alınmıştır. Bu bağlamda Türk Eğitim Sistemi'nde özellikle dört alan Matta etkisinin en şiddetli görüldüğü alanlar olarak değerlendirilmektedir: okul öncesi eğitime erişim, sosyoekonomik düzeyi ile akademik başarı arasındaki ilişki, okul ayrıştırması ve mesleki kademeye yüksek öğretmene erişim. Çalışmada ayrıca bu dört alanda Matta etkisi şiddetini azaltmaya yönelik önerilerde bulunmaktadır.

Anahtar Sözcükler: Matta etkisi, eğitim, evrenselleşme, Türkiye, okul ayrıştırması, sosyoekonomik düzey

To cite this article in APA Style:

Özer, M. (2023). The Matthew effect Turkish education system. *Bartın University Journal of Faculty of Education*, 12(4), 704-712. <https://doi.org/10.14686/buefad.1359312>

© 2023 Bartın University Journal of Faculty of Education. This is an open-access article under the Creative Commons Attribution NonCommercial 4.0 license (<https://creativecommons.org/licenses/by-nc/4.0/>).

INTRODUCTION

It was especially important for countries to make their education systems more inclusive after World War II, ensuring that all individuals of educational age have access to education for increasing the skills and quality of their most permanent asset - human capital. In this way, new concepts such as "growth, expansion, massification, and universalization" have been introduced to education systems. A consequence of this trend has also been a decline in policies that were previously elitist or that encouraged certain social groups to have greater access to education. Having achieved universalization in primary education and secondary education many years ago, most developed countries are now focused on massification in higher education.

Although massification or universalization efforts are able to solve the issue of access to education to some extent, the rapid expansion of education systems has created new challenges: Among these is the issue of those who have access to schools not receiving the same quality education. Second, due to the increasing access to education for all segments of society, inequalities at unprecedented levels have emerged. Almost all countries are now debating issues such as equal opportunity in education, inequalities in education, the relationship between socioeconomic status (SES) and academic achievement, as well as disadvantaged schools and regions.

As these discussions began and spread, there were two major points. Firstly, it is important to recognize the early work of James S. Coleman and his colleagues (Coleman et al., 1966). It was clearly demonstrated for the first time in the report that academic achievement levels are associated not only by factors within the school, but also by a variety of factors outside the school. Even though numerous methodological criticisms have been raised regarding Coleman's studies, these findings have been confirmed in a number of subsequent studies. Secondly, the French sociologist Pierre Bourdieu provided pioneering studies with a conceptual framework for understanding the Coleman report's findings. Studies have indicated that inequalities are led by cultural and social capital that goes beyond SES, and that these relations can even deepen inequalities and facilitate social class reproduction through education (Bourdieu, 1973; 1986; Bourdieu & Passeron, 2000).

In the aftermath of these studies, international large-scale assessments designed to track student achievement -including PISA, TIMSS, and PIRLS-, focused on both out-of-school and in-school factors. Several studies have shown that out-of-school factors are relatively strongly associated with academic achievement, and in many cases, they are more effective than in-school factors. It appears that student's family characteristics and their home opportunities may play an important role in their achievement, and that these characteristics may also contribute to achievement gap among students. In other words, the countries' performance in combating these factors has become evident. Therefore, indicators regarding equality of opportunity in education gained more importance than the indicators regarding equal access to education in contemporary assessments and comparisons.

Furthermore, Robert K. Merton (*Matthew Effect*) introduced the phenomenon by drawing on a verse in the Gospel of Matthew stating that 'to whomever has, more will be given'. Merton (1968) used this verse to explain phenomena in which advantages lead to greater advantages in most social and educational contexts. Therefore, the Matthew effect has been extensively used in education to explain the latent dynamics of academic achievement, beginning with Coleman and continuing with Bourdieu. All areas of life where inequalities exist can be affected by the Matthew effect. The Matthew effect results in significantly skewed distributions of resources, achievements, and rewards (Zuckerman, 1989). This distortion may continue over the course of one's lifetime.

The Matthew effect may also emerges in diverse directions due to its association with out-of-school factors. In other words, if inequalities due to out-of-school factors have a significant potential to enhance the existing advantage, then the Matthew effect has become evident (Hirsch, 2007; Kerchoff & Glennie, 1999; Özer & Perc, 2020; Reschly, 2010; Stanovich, 1999; Suna et al, 2020; Walberg & Tsai, 1983). The Matthew effect can be clearly observed in education when there is a strong correlation between SES and academic achievement. In light of this, Hirsch (2007) used the Matthew effect to explain the educational achievement gap between students from low- and high-SES. Students from higher SES families receive more support throughout the years, are in better equipped environments, and therefore are more successful than students from poor families due to their greater resources in preparing for school. Stanovich (1986, 1999) has shown that a similar effect is also valid in reading skills as well. The Matthew effect operates most prominently in early childhood education and care (ECEC), whose access is directly correlated with SES (Van Lancker, 2021).

Despite the discrepancy among examples, the 'key characteristic is that previous achievement is a determinant of future achievement' as Erdi (2020) states. Therefore, if the dependency is not controlled and necessary precautions for equality are not taken, inequalities in society can perpetually reproduce themselves through education inequalities. The purpose of this study is to briefly examine the massification phase of Turkish

education, then review of the main areas in which the Matthew effect over-quell in the education system and provide recommendations for alleviating these effects for a more egalitarian education system.

Massification in Education

During the 2000s, Türkiye faced serious challenges accessing primary and secondary education. The education system has been surrounded by a complex tangle of new problems such as the headscarf ban and coefficient regulation (a disadvantaged situation on the side of the graduates of VET schools reducing the possibility of entrance to university), as an addition to long-term chronic issues.

During the last 20 years, a number of stable steps have taken place in education that have enabled important transformations. It is evident that these steps are primarily concentrated in three aspects: physical investments, removing antidemocratic practices which limiting access to education, and implementing social policies to increase equal opportunity in education (Özer, 2023a).

The first of these three aspects involves the construction of new schools and classrooms. As a part of efforts to increase and facilitate access to education, the number of classrooms built in the last 20 years has increased from approximately 300 thousand to 900 thousand. Conversely, headscarf bans and coefficients that deepened inequalities have been abolished, and elective course options have been enriched in terms of subject and content to accommodate social demands. Thirdly, textbooks have been provided free of charge in order to enhance equality of opportunity in education in the last 20 years, the number of free meals provided to students has been continuously increased, a free transportation education system has been developed to facilitate students' access to school, as well as conditional financial aid to families in exchange for their commitment to continuing education, especially for girls. There is continuing stability in the implementation of earlier-mentioned social policies.

During the past 20 years, all of these steps have contributed to the massification and eventual universalization of primary and secondary education in Türkiye. For the first time, schooling rates have increased above 99% in primary and secondary education, and practices which limiting to access to education -particularly among girls- have been resolved (OECD, 2023; Özer, 2023a; Özer & Suna, 2023). As a result of the steps taken, the most disadvantaged student groups and regions now have higher chances and investments of gaining access to education.

Emerging of Matthew Effect in Diverse Education Aspects

The Turkish education system has significantly improved access to education, and implemented many social policies to strengthen equality of opportunity in education. However, achievement gaps between schools still persist as a serious concern and have become evident in large-scale assessments. It is evident that there still remains a great deal of area for improvement in order to ensure that all students have access to same level of qualified education. In this study, we define educational aspects in which the Matthew effects is more intense and inequalities are more prevalent. Consequently, we expect that improvements in these areas will mitigate the Matthew effect and increase equality of opportunity for all students.

Over time, the Matthew effect led to minor gaps to deepen, thereby increasing the inequality. Therefore, recognizing these minor gaps, especially during the early levels of the learning path, will significantly alleviate the impact of future solutions. Consequently, these early interventions will contribute to alleviate the long-term Matthew effect, with a minimal investment. Meanwhile, identifying the aspects where the Matthew effect is particularly effective will provide important information for best educational policies and actions to mitigate this effect systemically.

Early childhood education and care

Early childhood education and care (ECE) is a key level based on the fact that achievement gaps have evident in Türkiye . There has long been knowledge about the long-term benefits of ECE education on children's psychosocial, cognitive and emotional development. Inequality in access to ECE has resulted in children who have access to or have received longer-term ECE having a much better position at the start of primary school than children who have not. There are several factors leading to the limitation of access to ECE in Türkiye (Özer and Perc, 2022). The schooling rate for 5-year-olds in the early 2000s' was only 18%, which means that only 18 out of 100 5-year-olds have a competitive advantage over the other 82. As seen in PISA, TIMSS, and PIRLS studies, this gap in ECE access constantly increases in the following stages of educational path.

Using data from the PISA and TIMSS studies, Suna and Özer (2022) examined the relationship between ECE participation and academic achievement. Due to the fact that PISA and TIMSS studies were conducted on different age groups, the study allowed to monitor the effects of ECE on academic achievement at various ages as well. First of all, studies have shown that as SES increases, both the access to ECE and the duration of ECE

programs increase. Alternatively, PISA and TIMSS average scores of students with ECE attendance were significantly higher than those of their peers who did not receive ECE. This relationship is strong for the 10-11 age group (i.e. TIMSS age level), while it is weaker for the 15 age group (i.e. PISA age level). In other words, although ECE access has a positive effect on academic achievement during the initial stages of education, this effect diminishes as education levels increase. A significant finding of this study is that participation in ECE is positively correlated with academic achievement even when SES is statistically controlled. Based on this finding, despite increases in SES significantly correlated with participation in ECE, the benefits of ECE are significant for students from diverse SES.

Socioeconomic status and academic achievement

In Türkiye, the Matthew effect is most evident in the strong correlation between SES and the academic achievement. To put it another way, academic achievement increases as SES increases. According to Suna et al. (2021), a comprehensive study that investigated the factors influencing academic achievement in Türkiye based on the data of all students participating in the 2020 LGS (secondary school entrance exam) found that the school SES has the strongest correlation with student achievement. The seniority of the teacher, the size of the school, and the size of the class are the other factors following the school-SES. It is noteworthy that the simultaneous change in school-size and class-size that leads to increases in academic achievement at the same time and in the same direction. In Türkiye, it is common to expect that students' academic achievement will increase in classes with fewer students (low-sized classes). Contrary to popular belief, these research findings indicate the opposite: higher interaction and academic competition, particularly in relatively crowded classes, may increase average academic achievement.

Another study, conducted by Suna and Özer (2021), examined how SES impacted students' TIMSS scores and how the gap between schools changed in the last three TIMSS cycles. SES has been shown to have relatively low effects on Türkiye's TIMSS scores over the last three cycles, from 2011 to 2019. However, the study indicates that the achievement gaps between schools increased the most in the fourth and eighth grades in 2019.

The first study of its kind in Türkiye has examined, the relationship between academic achievement and not only the SES, but also the SES of the school (school-level SES) (Özer & Suna, 2022). As the SES affects academic achievement at the individual level, the SES of schools (institutional level) also effective on academic achievement. This study shows that students' academic achievements are significantly influenced by their own and their peers' SES. Meanwhile, it appears that families' total years of education are much more strongly associated with academic achievement than their income level. Therefore, more educated families are more likely to emphasize and support the education of their children, resulting in a significantly higher level of academic achievement for their children. Even though this finding is valid for academic high schools, the level of parents' education is more effective than the level of family income; both variables are effective on achievement for students in vocational education.

School tracking

There have been different transition systems used in Türkiye for years in order to segregate high schools. This exam enables to sort students into different high school types (*school tracking*), including science high schools, Anatolian high schools, vocational high schools, and Imam Hatip (providing predominately religious education) high schools. During the period 2010-2019, Türkiye has been continuously seeking new opportunities in the transition from secondary schools to high schools, to SBS and TEOG and LGS (other transition systems). Gur et al. (2021) examined the effects of changes to the transition systems (OKS, SBS, TEOG and LGS) between 2010 and 2019 on students' mathematics achievement one year later than the examination period. Following each change, there was a significant decline in student achievement, however, the greatest decrease has been found with a relation to TEOG system.

Education systems with a strong and early track of students may deepen the impact of the Matthew effect on student outcomes (Kerchoff & Glennie, 1999). Tracking students based on academic achievement, particularly at an early age, actually divides students into different school types based upon their SES. It is therefore recommended to delay school tracking until as late as possible to mitigate the Matthew effect (Özer and Perc, 2020).

Educational inequalities are exacerbated by school tracking practices at an early age. These practices led to a clustering of students within the same schools who have similar academic achievement levels as well as similar SES. The PISA and TIMSS studies, which were discussed previously, indicate that Türkiye has one of the highest rates of school tracking and academic clustering. Due to tracking practices, competition increases in schools with

high academic achievement clusters, while peer education contributions decrease and teachers' expectations of students' achievement decrease, particularly in schools with clusters of students with low academic achievement. Due to tracking practices, schools are deprived their potential and contributions to the development of students.

In a study conducted by Suna and Özer (2021) the effects of school tracking were examined in the comparative context of vocational high schools. The comparison included SES clustering in vocational high schools compared to academic high schools over the last 10 years (2010-2019). Findings indicated that vocational high school students' SES has a significant disadvantage in all indicators: family income, family education levels, and family employment status, as compared to their peers in other high schools during 10 years. Thus, school tracking functions similarly to SES tracking, in which students are homogeneously grouped in different high schools based on their SES. Similarly, Suna et al. (2020) demonstrate that the income levels of the parents' in science high schools are significantly higher than those of their peers in other types of high schools. Another study has revealed similar findings and yielded additional evidence on the significant association with the school tracking and SES (Özoğlu & Gür, 2023).

The study also investigated how pre-academic achievement affects post-achievement after school tracking, and showed that pre-achievement and SES had a direct and significant impact on future academic achievement (Suna & Özer, 2021). Thus, SES influences the academic achievement of students before school tracking and become effective on the type of high school attended; and the high school type affects post-academic achievement, resulting in an even stronger Matthew effect cycle. Zuckerman (1989) described this situation as an accumulation of advantages and disadvantages. As in the American and British education systems, there is also a strong cycle of cumulative positive or cumulative negative effects on student achievement as a result of the school tracking (Kerchoff & Glennie, 1999).

Using three different transition systems (SBS, TEOG, and LGS), Suna et al. (2020) examined the relationship between SES and academic achievement in diverse school types. The study shows that private schools, which are more advantageous in terms of SES, maintain their advantages under all three tracking systems, but TEOG offers the greatest advantage. The correlation between SES and academic achievement peaked in the TEOG system. It is important to note that prior to TEOG, number of schools were scored with student achievement; while with TEOG, all schools are scored and the hierarchy among schools has strengthened. The results of the study indicated that private school students' scores decreased significantly when the effect of SES was controlled across all three tracking systems.

In a new study conducted by Özoğlu and Gür (2023) examined the effects of labeling the schools used during the TEOG period according to their scores on students, educators and administrators. Findings demonstrated that educators' expectations of student achievement increased in schools with higher achieving students; however it decreased in schools with low achieving students, with more disadvantaged SES. Thus, educators and administrators in schools with low-achieving students cannot well-establish a sense of belonging to schools. The study also found that the curriculum coverage varied a school to another as a result of the additional disciplinary problems caused by clustering of SES.

Teachers with high seniority

As the Turkish education system continues to grow, a significant number of new teachers are joining each year in order to reduce the average number of students per teacher and to keep up with OECD averages. Since the 2000s, the number of teachers in the education system has grown from approximately 500 thousand to more than 1 million 250 thousand. Although the average number of students per teacher in primary education has approached the OECD average, it has improved significantly in secondary education (OECD, 2023). Due to this rapid increase in the number of teachers, teachers in the education system are relatively young and have a relatively low level of professional experience. Furthermore, Türkiye is among the countries with the lowest average teacher age and seniority in the TALIS research..

Furthermore, TIMSS results indicate that student academic achievement in Türkiye is strongly associated with the teacher seniority (Özer, 2021). The achievement gap between students in schools whose teachers with at least 20 years experience and teachers with less than 5 years' experience corresponds to an average of over 50 points compared to the TIMSS average (less than 10 points). In contrast to most developed countries, there is a very strong correlation between teachers' years of seniority and students' academic achievement in Türkiye.

This Matthew effect is evident in regions where teachers with low professional seniority are assigned to a high density of students. In Türkiye, approximately 50.4% of new teachers or those with a few years of experience work in the most disadvantaged regions and schools (OECD, 2023; Özer, 2021). Consequently, students from

lower socioeconomic backgrounds are mostly unable to access teachers with higher seniority. As a result, a new disadvantage perpetuates the existing disadvantage due to diversity in access to senior teachers. Since teachers are able to work in SES-advantageous regions and schools after the years of seniority, the advantages of SES-advantageous regions and schools are preserved.

METHOD

This study is designed within the qualitative research perspective with a systematic review on the Matthew effect and its reflections on education. Since the first studies about the Matthew effect, major studies on this subject with a relation to educational context are considered. The study used document analysis to cover a comprehensive concept as the Matthew effect focusing on literature lasting its foundations and founders. Document analysis is suitable for the extensive review of the Matthew effect in education context based on the fact that it allows researcher(s) to evaluate the elaborative scientific studies and current materials on related subject(s) (Morgan, 2021). In this manner, the study began with an introduction and foundation to the Matthew effect, then discusses the aspects and reflections of the Matthew effect. Afterwards, data-based studies focusing on the equality in education and aspects which the Matthew effect is particularly effective in Türkiye. To reflect the contemporary data about the indicators of access and equality in education in Türkiye, recent technical reports and studies were included in analyses.

DISCUSSION AND CONCLUSION

It has long been known that the Matthew effect is the tendency for small gaps among individuals and groups to become larger in all spheres of life, i.e., advantages lead to new advantages. This effect constantly enhances the advantage of those who are privileged and perpetuates the disadvantage of those who are disadvantaged. The Matthew effect, therefore, contributes to the deepening and perpetuation of inequalities in societies. As a result, the Matthew effect in education has a significant role in perpetuating societal inequalities. There are almost no studies on the Matthew effect in education in Türkiye despite the fact that it has been the subject of extensive research globally. As a result, this study discusses the aspects which the Matthew effect has prevailed in the Turkish education system based on research on educational inequalities.

A very significant increase in enrollment rates has been achieved in Türkiye's primary and secondary education, particularly due to the major steps taken in the last 20 years. In this context, in the education system, schooling rates in 5-year-old ECEC, primary school, lower-secondary school and upper-secondary school have exceeded 99% for the first time. In this way, the education system has been strengthened in terms of equality of opportunities for children and girls from disadvantaged families.. The Matthew effect in the education system continues to pose critical problems, despite this rapid transformation that has improved access to education. The education system will be more egalitarian if improvements are made in order to alleviate the cumulative problems of the Matthew effect.

A particular area of the Matthew effect that is experiencing a significant increase is ECEC. The fact that access to ECEC has been influenced by SES for many years has been one of the primary reasons for inequalities within the education system. Though access to ECEC has been highlighted in all National Development Plans in Türkiye, it has been one of the most challenging areas until recent years. By the end of 2021, Türkiye had 2,782 ECEC education institutions, and the 3-year-old schooling rate was 9%, the 4-year-old schooling rate was 16%, and the 5-year-old schooling rate was around 65%. By May 2023, after the campaign to increase access to ECEC had been launched, 6,700 new ECEC institutions had been established, and the number of kindergartens had increased from 2,782 to 9,482. The schooling rate among 3-year-olds increased by 21%, the rate of 4-year-olds to 42%, and among 5-year-olds to 99.9%. Türkiye's educational system is experiencing most significant breakthrough in recent years in alleviating the Matthew effect. Thanks to the improvements in schooling rates at the age of 5, ECEC participation is no longer dependent on SES (Özer, Aşkar & Suna, 2023; Özer, 2023). Despite significant improvements in schooling rates at ages 3 and 4, further improvement is still needed. The Matthew effect will be minimized if the necessary importance is given to ECEC in the coming period as ECEC has potential to mitigate inequalities.

Among the most important instruments that increase the intensity of the Matthew effect in the Turkish education system is school tracking, which allows students to be placed in different high schools. School tracking in Türkiye has been exacerbated by continuous system changes that have increased the Matthew effect. Using the TEOG system, the Matthew effect is maximized and categorized students according to their SES (Suna et al., 2020; Özoğlu & Gür, 2031). With the introduction of TEOG, the most dangerous cycle - the sustainability of

inequalities in society- accumulated realized (Zuckerman, 1989). Between 2013 and 2017, the implementation of TEOG caused permanent damage to the Turkish education system. For the first time in the history of education in Türkiye, allowing all schools to be ranked both among high school types and within the same type. As a result, both high schools and also students were labeled with labels such as “successful” or “unsuccessful”. Schools with negative labeling have lowered teachers' expectations of students' achievement, which has adversely affected school climate and belonging. The clustering of students with similar achievement and SES into the same school types minimized peer learning due to the low heterogeneity, but increased discipline problems, absenteeism, and school dropouts, particularly in schools with low SES. The impact of school tracking is greatly mitigated with the abolition of TEOG in 2018 and the initiating of LGS, where the Matthew effect is less evident. According to residential region, GDP, and attendance status, the majority of students can be placed in the type of high school without the need to have a central exam score. As an indicator of satisfaction, the rate of students placed in high schools in their first choice exceeds 50% and that this rate increases every year. In both cases, however, there is a need to reduce the number of schools with achievement standards to less than 10%.

As in other countries, the foundational indicator that increases the severity of the Matthew effect is the SES. The studies mentioned in this study demonstrate that academic achievement is still directly related to SES. Making ECEC accessible to all students -especially for children aged five and under- has resulted in a significant improvement in this area. By switching from TEOG to LGS, inequalities led by school tracking may be mitigated in the long run. On the other hand, social policies implemented in the last 20 years to strengthen equality of opportunity in education (free course resources, free meals, free support and training courses [DYK], remedial education programs in primary education [İYEP], scholarship and hostel supports, free transportation for education, etc.) have contributed to minimize the gap (Özer, Gencoğlu & Suna, 2020). It is important to continue taking these steps, to increase their efficiency, and to support them with new initiatives.

Among the major negative consequences of SES disadvantage is the lack of access to educational resources. Therefore, free distribution of course textbooks will be alleviate the Matthew effect to some extent, as well as the impact of SES on academic achievement. In recent years, the Ministry of National Education (MoNE) has placed a great emphasis on such projects. '1,000 Schools Project in Vocational Education and Training' (Özer, 2021; 2022), '10,000 Schools Project in Primary Education' and '10,000 Schools Project in Secondary Education' are multi-dimensional projects designed to enhance the educational environments by providing positive discrimination to the schools with diverse disadvantages (OECD, 2023; Özer, 2023b). Furthermore, the most critical step in this context is to send all schools a particular budget to meet their unique needs (OECD, 2023).

Finally, the Matthew effect has increased in intensity in Türkiye due to a lack of access to teachers with high professional seniority in regions and schools with low SES. Teachers in Türkiye are relatively young, especially when compared to their counterparts in continental Europe. Therefore, there is a high percentage of teachers with fewer than five years of experience. The chronic problem of initial teacher training (in higher education level) contributes to the strong correlation between the seniority of the teacher and the academic achievement of the students. Verified by data, new teachers have began teaching with fewer qualifications than their counterparts in other developed countries, while they may increase their qualifications and skills with experience. This plays a significant role in deepening educational inequalities in education in Türkiye. It is therefore necessary to make comprehensive improvements in initial teacher training. A standard rate of senior teachers to new teachers in schools will may assist new teachers in improving their qualifications and ensuring access to highly qualified teachers, particularly in schools with a high concentration of students from low SES.

REFERENCES

- Bourdieu, P. (1973). Cultural reproduction and social reproduction. In R. K. Brown (Ed.) *Knowledge, educational and cultural change* (pp. 71–112). Tavistock .
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.) *Handbook of theory and research for the sociology education* (pp. 258-241). Greenwood Press.
- Bourdieu , P., & Passeron , J. C. (2000). *Reproduction in education, society and culture*. Sage Publication.
- Coleman , J. S., Campbell , E. Q., Hobson , C. J., McPartland , J., Mood , A. M., Weinfeld , F. D., & York, R.L. (1966). *Equality of education opportunity*. US Office of Education. Retrieved from <http://eric.ed.gov/?id=ED012275> .
- Erdi, P (2020). *Ranking: The unwritten rules of the social game we all play*. Oxford University Press.

- ERG & AÇEV (2016). Her çocuğa eşit fırsat: Türkiye’de erken çocukluk eğitiminin durumu ve öneriler [*Equal opportunity for every child: The status of early childhood education in Türkiye and recommendations*]. Retrieved from <https://www.acev.org/directory/her-cocuga-esit-firsat-turkiyede-erken-cocuklukegitiminin-durumu-ve-oneriler/>.
- Gür, B. S., Öztürk, A., Özer, M., & Suna, H. E. (2021). The effect of changes in the transition to secondary education systems on mathematics achievement. *Çukurova University Faculty of Education Journal*, 50(2), 1437-1463.
- Hirsch, E. D. (2007). *The knowledge deficit: Closing the shocking education gap for American children*. Mariner Books.
- Kerchoff, A. C., & Glennie, E. (1999). The Matthew effect in American education. *Research in Sociology of Education and Socialization*, 12, 35-66.
- Morgan, H. (2021). Conducting a qualitative document analysis. *The Qualitative Report*, 27(1), 64-77.
- OECD (2023). *Taking stock of education reforms for access and quality in Türkiye*. OECD Education Policy Perspectives No. 68. OECD Publishing
- Özer, M., & Suna, H. E. (2023). *Revolutionizing education in Türkiye: A year of multi-faceted improvements by the Ministry of National Education in 2022*. Discussion Paper from TRT WORLD Research Centre.
- Özer, M., & Suna, H. E. (2022). The relationship between school socioeconomic composition and academic achievement in Türkiye. *Journal of Economics Culture and Society*, 66, 17-27.
- Özer, M., & Perc, M. (2020). Dreams and realities of school tracking and vocational education. *Palgrave Communications*, 6, 34.
- Özer, M., & Perc, M. (2022). Improving equality in the education system of Türkiye. *Istanbul University Journal of Sociology*, 42, 325-334.
- Özer, M., Gençoğlu, C., & Suna, H. E. (2020). Policies implemented to reduce inequalities in education in Türkiye. *OMU Faculty of Education Journal*, 39(2), 294-312.
- Özer, M. (2021). A new step towards narrowing the achievement gap in Türkiye: “1,000 schools in vocational education and training” project. *Bartın University Journal of Faculty of Education*, 10(1), 97-108.
- Özer, M. (2022). School-based improvement in VET: “The 1,000 schools in vocational education and training project”. *Bartın University Journal of Faculty of Education*, 11(2), 268-279
- Özer, M. (2023a). An evaluation of the transformation of the education system in Türkiye over the last 20 years based on the latest OECD report “Taking Stock of Education Reforms for Access and Quality in Türkiye”. *Journal of Higher Education and Science*, 13(2), 148-163.
- Özer, M. (2023b). *Türkiye’de eğitimin geleceği: Eşit, kapsayıcı ve kaliteli [The future of education in Türkiye: Equal, inclusive and of high quality]*. VakıfBank Cultural Publications.
- Özöglü, M., & Gür, B. S. (2023). Extensive academic grouping at the secondary school placement and reproduction of inequalities. *The Journal of Humanity and Society*, 13(2), 185-216.
- Reschly, A. (2010). Reading and school completion: Critical connections and Matthew effects. *Reading & Writing Quarterly*, 26, 67-90.
- Stanovich, K. E. (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21(4), 360-407.
- Stanovich, K. E. (1998). Matthew effect in reading: Some consequences of individual differences in acquisition of literacy. *Journal of Education*, 189:23-55.
- Suna, H. E. & Özer, M. (2022). The relationship of preschool attendance with academic achievement and socioeconomic status in Türkiye. *Journal of Measurement and Evaluation in Education and Psychology*, 13(1), 54-68.

- Suna, H. E., & Özer, M. (2021). The impact of school tracking on secondary vocational education and training in Türkiye. *Hacettepe University Journal of Education*, 36(4), 855-870.
- Suna, H. E., Özer, M., Şensoy, S., Gür , B. S., Gelbal , S., & Askar , P. (2021). Determinants of academic achievement in Türkiye. *Journal of Economics Culture and Society*, 64, 143-162.
- Suna, H. E., Gür, B. S., Gelbal , S., & Özer, M. (2020). Socioeconomic background of science high school students and their preferences in transition to higher education. *Journal of Higher Education*, 10(3), 356–370.
- Suna, H. E., Tanberkan, H., Gür , B.S., Perc, M., & Özer, M. (2020). Socioeconomic status and school type as predictors of academic achievement. *Journal of Economics culture and Society*, 61, 41-64.
- Walberg, H. J., & Tsai , S. L. (1983). Matthew effects in Education, *American Educational Research Journal*, 20(3), 359-373.
- Van Lancker, W. (2021). *The Matthew effect in early childhood education and care: How family policies may amplify inequalities*. SPSW Working Paper No.CeSo /SPSW/2021-01. Center for Sociological Research, KU Leuven.
- Zuckerman, H. (1989). Accumulation of advantage and disadvantage: The theory and its intellectual biography. In C. Mongardini and S. Tabboni (Eds). *Robert K. Merton and contemporary sociology* (pp.153-176). New Brunswick.