

The Jaime and Joan Constantiner School of Education The Lester and Sally Entin Faculty of Humanities Tel Aviv University

TAU - Research Alliance in Education

March 2024 | BRIEF Researchers: Prof. Audrey Addi Raccah and Shani Streisfeld



Social Gaps between Schools in Eligibility for Matriculation before and during COVID-19: Survey Findings*

With the policy change, has it been possible to limit the negative impact of the pandemic on educational outcomes and prevent the widening of social gaps? The issue is significant as a matriculation certificate is required for accessing higher education. This applies even more in the case of matriculation, which includes mathematics and English at an advanced level, which gives advantages to enrolling in prestigious fields of study in higher education. Given the 'Iron swords' war situation, it is also essential to address this issue, which requires further adjustments to the matriculation exams.

THE POTENTIAL IMPACT OF CRISIS ON EDUCATION AND INEQUALITY

According to Curran (2017), times of crisis and exposure to risks constitute a framework that can lead to increased social gaps as advantaged groups are better equipped to manage risks than disadvantaged groups, who become more vulnerable and exposed to more significant harm. The COVID-19 pandemic, as a situation of risk and crisis, led to predictions of increasing social gaps in students' achievements (Bailey et al., 2021; Blasko et al., 2022; Goudeau et al., 2021). Indeed, this phenomenon has been evident globally. Findings show that students from schools that serve socioeconomically well-established populations have suffered less from COVID-19 than socially vulnerable groups (e.g., migrants, minorities, low socioeconomic status). This situation has contributed to widening social gaps (e.g., Haelermans et al., 2022; Kogan & Lavertu, 2021; Dorn et al., 2020).

THE POWER OF POLICY

To address the COVID-19 crisis and the school closures that disrupted the lives and studies of all students, the Ministry of Education made several adaptations to the format of the matriculation exams.

- Students were required to be tested in math, English, language and one advanced school subject. For these subjects, the Ministry reduced the scope of learning material required for the exam by 25% giving students more choices between the exam questions (Vurgan, 2020; Ministry of Education, 2020; Weissblay, 2020).
- There were additional schedules available for taking the exams.
- Regarding humanities school subjects, out of four mandatory subjects for matriculation, only one was subject to external evaluation, and the rest were evaluated internally based on grades given by the teachers. Similar adaptations were made regarding exams in science and technology at advanced levels.

This brief is based on a research led by Addi- Raccah, A., & Streisfeld, S. (n.d.). *Social gaps in entitlement for matriculation certificate in Israel: A pre and post-COVID-19 comparison*. The full research is published in "Social Justice Research". * Sponsored by the Chief Scientist in the Ministry of Education



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DATA

The study is based on educational administrative data. It examines whether there were any changes in social gaps between schools defined by the educational sector and socioeconomic level during the COVID-19 pandemic compared to the period before its outbreak. The data analysis includes all 847 secondary schools in public education (Jewish and Arab, excluding Ultra-Orthodox and special education schools), for which data were available from 2018 and 2019 before COVID-19, as well as for 2020 and 2021. Two dependent variables were examined: percentage of students in school who were eligibility for matriculation certificate and percentage of student in school who were eligible for matriculation. These data were analyzed by a two-level linear mixed model with repeated measures (2018-2021). In addition, the analysis included interactions between the time variable and school socioeconomic composition and educational sector to examine whether changes in the school percentage of eligibility for matriculation certificates were different between schools serving different populations of students. The analysis was also conducted while controlling for school characteristics such as size, teachers' education, teaching experience, and school structure (secondary or high school).

KEY FINDINGS

Figures 1-4 refer to eligibility for matriculation and eligibility for matriculation with five study units of mathematics by year, sector, and school socioeconomic composition.*

Regarding the sector, there has been an overtime change in the eligibility percentage, showing that from 2018 to 2021, the gaps between the educational sectors have reduced (Figure 1). However, schools in the Jewish religious sector retained their advantage and had the highest eligibility percentage on average, followed by the Jewish secular sector and the Arab sector. While no significant differences in the percentage of eligibility were recorded in 2018 and 2019, a rise in the eligibility percentage was observed in the transition from 2019 to 2020, following the outbreak of COVID-19. This increase was particularly noticeable in the Arab sectors, while the Jewish religious sector remained stable. In math, the eligibility rates increased (Figure 2). Significant differences were found between the sectors over the four years, with an advantage to Jewish religious education over the Arab sector.

Regarding SES, the gaps between the low and high-SES schools narrowed over time. Although no significant differences have been recorded between 2018 and 2019, there was an increase in eligibility between 2019 and 2020, following the COVID-19 outbreak, in all schools. This increase was more moderate between 2020 and 2021. In the percentage eligibility for matriculation with five study units of math, there are also relatively stable gaps between SES. However, as indicated in Figure 3, in 2020, there was a moderate increase in mid-SES schools, and in 2021, there was a rise in high-SES schools, which widened the SES gap.

^{*} The results are presented after controlling for school characteristics: size, teachers' seniority and education, academic or vocational/technological school, school structure (high 3-4 years or secondary school- 6 years)

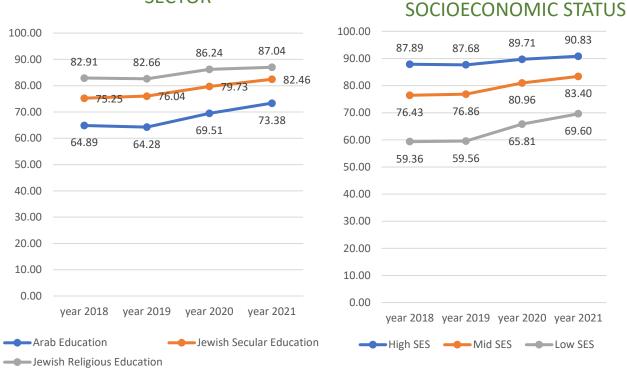
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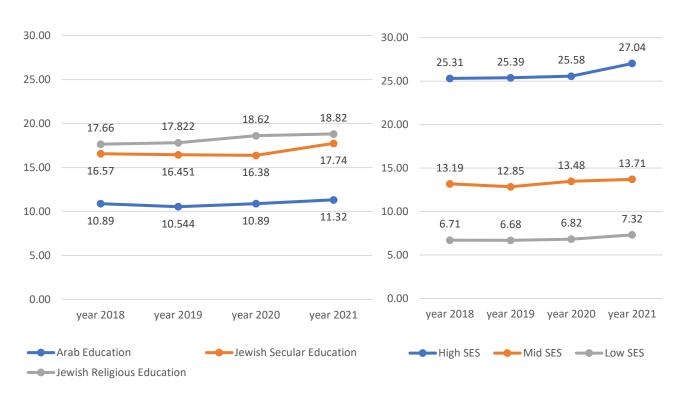
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MATRICULATION



MATRICULATION WITH FIVE STUDY UNITS OF MATH



SECTOR



SUMMARY

The changes in the format of the matriculation exam have assisted in mitigating the possible negative impact of COVID-19. Overall, the study indicates how educational opportunities are shaped by the changes to the matriculation exam format. As a result of these changes, disadvantaged groups were given the opportunity to obtain a matriculation certificate. This is a considerable achievement since the matriculation certificate continues to be significant for enrolling in higher education. This shows how appropriate educational policy during periods of crisis can significantly impact social inequality. At the same time, it appears that the percentage of students who obtain a high-quality matriculation certificate with five study units of mathematics, remains relatively stable over time, and the gap between Jewish and Arab education in this respect has even increased. Following Curran's approach (Curran, 2017), the advantaged groups view crises as opportunities to maintain their social advantages, resulting in persisting social gaps. It is important to consider this conclusion in light of social inequality on other crises currently facing Israeli society, (such as the 'Iron Swords' War) and for future policy decisions.

REFERENCES

Bailey, D. H., Duncan, G. J., Murnane, R. J., & Au Yeung, N. (2021). Achievement gaps in the wake of COVID-19. Educational Researcher, 50(5), 266–275.

Blaskó, Z., Costa, P. da, & Schnepf, S. V. (2022). Learning losses and educational inequalities in Europe: Mapping the potential consequences of the COVID-19 crisis. Journal of European Social Policy.

Curran, D. (2017). Risk, power, and inequality in the 21st century. Palgrave Macmillan.

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. (2020). COVID-19 and learning loss—Disparities grow and students need help. McKinsey and Company.

Goudeau, S., Sanrey, C., Stanczak, A., Manstead, A., & Darnon, C. (2021). Why lockdown and distance learning during the COVID-19 pandemic are likely to increase the social class achievement gap. Nature Human Behaviour, 5(10), 1273–1281.

Haelermans, C., Korthals, R., Jacobs, M., de Leeuw, S., Vermeulen, S., van Vugt, L., Aarts, B., Prokic-Breuer, T., van der Velden, R., van Wetten, S., & de Wolf, I. (2022). Sharp increase in inequality in education in times of the COVID-19-pandemic. In PLoS ONE (Vol. 17, Issue 2 February).

Kogan, V., & Lavertu, S. (2021). How the covid-19 pandemic affected student learning Ohio: Analysis of spring 2021 ohio state tests. Ohio State University, John Glenn College of Public Affairs, 2021-10.

Ministry of Education (2020). Preparing for Matriculation Exams in the Shadow of COVID-19 – Special Date for Summer 2020. (Hebrew).

Vurgan, Y. (2020). Conducting Matriculation Exams in View of the COVID-19 crisis. The Knesset – Research & Information Center. (Hebrew).

Weissblay, A. (2020). The Matriculation Exams During COVID-19 – Present Situation. The Knesset – Research & Information Center. (Hebrew).