A Qualitative Study of Unveiling School Dropout Complexity in Türkiye

Nurten Karacan Ozdemir[1] · Fatma Nur Aras Kemer[1] · Arif Arslan[2] ·
Burak Tuna[3]

Abstract

This study investigates school dropout, particularly the shift to open high schools in Türkiye during the pandemic, through a multi-stakeholder lens. Using grounded theory, data was collected via semi-structured interviews with 12 students, 15 teachers, and 20 school administrators. Results reveal a model linking themes: predictive reasons for transferring to open high school, both pandemic-related and unrelated, positive/negative consequences of the transition, pandemic's impact on formal education continuity, essential open high school skills, and strategies to reduce such preferences. Findings highlight the sway of exam-focused education on open high school interest, regardless of COVID-19, and emphasize the need for equitable education amidst Türkiye's pandemic challenges. Theoretical implications may infer the necessity of approaching school dropout as a multilayered dynamic issue within the cultural context. The implications also may convey the significance of policies and systems not only to reduce the rates of school dropout but also critically unpack underlying reasons to make improvements.

Keywords School dropout · Open high school · Cultural context · COVID-19 · Grounded theory

There are differences in the definition of school dropout due to different national policies. In the US, for instance, non-enrollment and lacking a high school diploma or

✉ Nurten Karacan Ozdemir
karacan.nurten@gmail.com

1   Department of Psychological Counseling and Guidance, Educational Sciences, Hacettepe University, Beytepe, Ankara, Türkiye

2   Department of Psychological Counseling and Guidance, Educational Sciences, Giresun University, Giresun, Türkiye

3   Psychological Counseling Center, Kadir Has University, İstanbul, Türkiye

🖄 Springer

equivalent by ages 16–24 classify individuals as dropouts (National Center for Educational Statistics, [NCES], 2021). In the European Union (EU), early school leaving refers to individuals aged 18–24 who have, at most, completed lower secondary education and were not enrolled in further education or training during the four weeks preceding (European Statistics, [EUROSTAT], 2023). Therefore, school dropout can be understood as the absence of official certification signifying the completion of mandatory education as set by governmental regulations (Estevao & Alvares, 2014). Despite definitional nuances, school dropout poses a significant challenge globally.

The school dropout rate stands at 9.6% in EU member states (EUROSTAT, 2023) and 5.1% in the United States (NCES, 2021), underscoring a significant challenge even in developed nations. When examining the percentage of out-of-school students in underdeveloped or developing regions, it is evident that this rate is significantly higher. For instance, the percentage of out-of school students is 9.3% in the Oceania region, 15.5% in the North Africa and Western Asia region, 21.5% in the Southern Asia region, and 31.2% in the Sub-Saharan Africa region (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2019). Prolonged school closures and amplified educational disparities during the COVID-19 pandemic are anticipated to further elevate dropout rates. Projections indicate that as a consequence of the pandemic's economic impact, at least 23.8 million, potentially reaching up to 10.7 million children, might discontinue their education due to financial strain (Azevedo et al., 2021; Save the Children, 2021; United Nations, 2020;). Pre- and post-pandemic data show an increase in school dropout rates. For example, from 2019 to 2021, the proportion of early school leavers increased from 10.3 to 12.5% in Germany, from 7.2 to 9.3% in Luxembourg and from 7.3 to 8.2% in Finland (EUROSTAT, 2023).

Escalating school dropout rates pose multifaceted challenges for individuals, societies, and governments. Dropouts are predisposed to both physical and mental health issues, including depression, anxiety disorders, and suicidal tendencies (Gonzalez et al., 2016; Maynard et al., 2015; Ramsdal et al., 2018). Leaving school increases risky behaviors, including substance abuse (Townsend et al., 2007), and criminal involvement (Monrad, 2007), as compared to non-dropouts (Backman, 2017). Furthermore, prematurely terminating an education can result in reduced earnings (NCES, 2021) and diminished employment prospects (Koç et al., 2020). Moreover, dropping out of school also brings societal challenges alongside individual adversity, such as straining government budgets (Uppal, 2017). Therefore, understanding the risk of high school dropout and its exacerbating determinants is of paramount importance, especially in the context of the COVID−19 era.

School dropout is the result of a complicated interplay of multilayered factors related to students (De Witte et al., 2013), families (Adelman & Szekely, 2016; Belen et al., 2021; Hussain, 2021), and schools (De Witte et al., 2013; Fortin et al., 2013), rather than isolated causes. Previous work addressed the concept of school dropout from a systemic, contextual, and ecological perspective (Ecker-Lyster & Niileksela, 2016; Koç et al., 2020; Zorbaz & Özer, 2020), indicating an interaction of factors across various levels. Thus, González-Rodríguez et al. (2019) classified variables predicting ESL into academic and non-academic factors in their study, highlighting the complex nature of the concept. The following findings may justify this perspective.

Student-specific variables such as gender are predictive of school dropout. However, gender-based dropout rates vary globally: In the EU, dropout rates are 11.1% for young men and 8% for young women, and in the United States, 6.4% for males and 4.4% for females (EUROSTAT, 2023; NCES, 2020; Organisation for Economic Co-operation and Development [OECD], 2012). Whereas, in Northern Africa and Western Asia, 17% of female students drop out compared to 14% of males, and in Sub-Saharan Africa, rates are 33.6% for females and 28.9% for males (OECD, 2012). Other student-specific variables that predict school dropout include ethnicity (especially among American Indians, Alaska Natives, and Hispanics) (NCES, 2021; Piscitello & Robinson, 2022), and poor academic performance (Fortin et al., 2013; Gil et al., 2019; Kartal & Ballı, 2020; Kim et al., 2018; Saraiva et al., 2011). Family factors such as parental education, household composition, parental absence (e.g., death, divorce), and parent-child relationships play a significant role in school dropout (González-Rodríguez et al., 2019; Huisman & Smits, 2015; United Nations Children's Fund, 2013). Economic constraints spur dropout (Koç et al., 2020) compelling disadvantaged students to work, which hinders education (Nayak & Kumar, 2022). In schools, detrimental environments, high student-teacher ratios, underqualified teachers, and negative dynamics exacerbate the risk of dropping out (De Witte et al., 2013; Fortin et al., 2013; González-Rodríguez et al., 2019).

Amidst the COVID-19 pandemic, gender-related vulnerabilities, encompassing risks of gender-based violations, early marriage, and unplanned pregnancies, have emerged (World Bank Group, 2020). Adverse economic conditions further amplify risks (Saavedra, 2020; Shuja et al., 2022). Many reports suggest that COVID-19 may increase school dropout rates (Azevedo et al., 2021; Save The Children, 2021; United Nations, 2020), and comparisons of school dropout rates in some countries before and after COVID-19 show significant increases (EUROSTAT, 2023), however, the impact of the pandemic on education and school dropout is still not well understood. This study might contribute to the literature by providing valuable insight into the possible causes and dynamics of dropouts based on the perspective of multiple stakeholders during the pandemic rather than merely reporting rates.

1 The Turkish Context

In Türkiye, the concept of school dropout lacks precise demarcation. It encompasses those who repeat a grade twice, transition to open high schools, lack graduation credentials, and remain unenrolled between ages 6 to 18 (Republic of Türkiye Ministry of National Education, [MoNE], 2013). The Türkiye educational structure mandates twelve years of compulsory education, distributed across primary, secondary, and high school phases. Formal education operates in face-to-face and open education formats. However, the records of high school students who drop out of formal education are automatically transferred to open high schools, ensuring their participation in the education system. Additionally, adults who have discontinued high school but wish to obtain a high school diploma can also enroll in open high schools. Consequently, open high schools contribute to the efforts of reintegration for those who have left school, aligning with the lifelong learning approach (MoNE, 2024). In

2021, about 18 million students were formally educated in Türkiye, with two million in open-education high schools (MoNE, 2021). Based on this context, this study tentatively assumes that students transitioning to open high schools are a possible dropout population. In addition, while school dropout is prevalent across various age groups, including primary, lower secondary, and upper secondary school ages, it was reported that the highest dropout rate occurs among students in the upper secondary school age group, reaching 20% in Turkiye (UNESCO, 2023). Thus, this study focuses specifically on the dropout status of students within this age range.

Türkiye's history is marked by crises – wars (e.g., Syrian civil war, Ukrainian-Russia war), extended COVID-19 school closures, and seismic events – all impacting its education system. Of 1.6 million Syrian children under temporary protection, 865 thousand are in formal education, leaving an estimated 400 thousand without access (United Nations Children's Fund, 2019). With a high 26.7% school dropout rate compared to the EU's 9.6% (EUROSTAT, 2023), this may worsen, considering excluded Syrian children. Despite Türkiye's commitment to reducing dropout rates for EU negotiations (European Commission, 2021) and enhancing graduation rates by 2023 (Presidency of the Republic of Türkiye, 2019), crises like COVID-19, disasters, and migration pose challenges.

Türkiye's pre-COVID-19 endeavors to enhance educational standards and increase enrollment rates might encounter formidable challenges given the adverse economic repercussions of the pandemic (World Bank Group, 2020). Notably, Türkiye's schools endured a closure of approximately 49 weeks (UNESCO, 2022), making it the second-longest closure among OECD member nations (TUSIAD & ERG, 2021). This extended closure disproportionately affected students, particularly those with limited socioeconomic means in Türkiye. A staggering 57% of underprivileged students in Türkiye lacked essential tools like tablets, computers, TVs, and internet connectivity, impeding their access to education during the pandemic (Deep Poverty Network & Open Space Association, 2020). Projected figures suggest that COVID-19 might precipitate the dropout of nearly 7 million students in Türkiye (TEDMEM, 2020).

Hence, uncovering dropout reasons, preempting it, and identifying COVID-19's impact on dropout risk, especially transitioning to open high schools, is paramount. Prior Türkiye research emphasizes factors like absenteeism, grade retention (Taş et al., 2013), discipline (Kartal & Ballı, 2020; Özer et al., 2011), weak academics (Çakır & Çolak, 2019), family attitudes towards female education, such as not enrolling girl children in school and assigning caregiving roles to them within the family (Belen et al., 2021; Hussain, 2021), low socioeconomic status (Adelman & Szekely, 2016; Yavuz et al., 2016), and academic disengagement (Arslan, 2021) as dropout catalysts. These insights, while valuable, inadequately address COVID-19's specific influence on dropout risk and the shift to open high schools, underscoring the novelty of this study.

Numerous theories elucidate school dropout, including the Ecological Approach (Koç et al., 2020; Zorbaz & Özer, 2020), Self-Determination Theory (Vallerand et al., 1997), and Pull Out, Push Out, and Fall Out Theories (Ecker-Lyster & Niileksela, 2016). These theories offer varied insights. The Ecological Approach considers interactions across microsystem, mesosystem, ecosystem, macrosystem, and chro-

nosystem levels. Self-Determination Theory focuses on internal and external motivation, along with amotivation. Pull Out, Push Out, and Fall Out Theories analyze individual, school, and environmental factors. González-Rodríguez et al. (2019), in their systematic review, provide a comprehensive perspective for understanding the concept by categorizing student, family, and school-related factors influencing early school leaving under the titles of academic and non-academic factors. Yet, a culturally-grounded model for dropout during crises, like COVID-19, is absent. This study holds vital importance, especially amid the ongoing pandemic. By creating a model tailored to Türkiye's context, centered on the shift from formal to open high schools during COVID-19, it aims to address a crucial knowledge gap. The research questions guiding this study are: (1) What are the predictive factors explaining students' transition to open high schools during COVID-19? (2) What are the resulting consequences? (3) How can a culturally-grounded model elucidate this shift during the pandemic in Türkiye? This study's findings can guide efforts to mitigate dropout risks and enhance educational resilience in crises.

2 Method

This study employed a grounded theory approach (Corbin & Strauss, 2015) to develop a comprehensive understanding of students' transition to open high school during the COVID-19 pandemic. Grounded theory is the iterative process of developing theoretical constructs based on empirical data through qualitative analysis (Glaser & Strauss, 1967). Grounding theory involves ongoing interactions between data collection, analysis, and theory development (Corbin & Strauss, 2015). The aim was to explore relationships among categories derived from the data, focusing on contextual factors associated with the risk of school dropout, operationalized by transferring to open high school education in Türkiye.

2.1 Participants

The study included 12 students, 15 teachers, and 20 school administrators from 17 open and formal high schools in Ankara. A theoretical sampling approach was employed to purposefully select participants who can contribute relevant insights and perspectives to the development of theories or models (Glaser & Strauss, 2017). Hence, participants meeting specific criteria, such as students attending an open high school after the pandemic and teachers and administrators working in both open and formal high schools during and before the pandemic were recruited. The school administrators in the study consist of principals and assistant principals, who are responsible for overseeing open high school transactions and teaching a few classes. Consequently, they possess a wealth of information about students and their decisions regarding open high school in addition to teachers. Hence, students were only selected from open high schools to uncover their transition experiences, while teachers and administrators were chosen from both open and formal high schools to examine the dynamics of this transition process before and after it occurred.

Theoretical sampling was employed until ensuring theoretical saturation that refers to not emerging new insights or concepts from data analysis, engaging an iterative process of data collection, analysis and interpretation recursively (Glaser & Strauss, 2017). Therefore, the researchers assumed that they reached theoretical saturation when similar codes and themes continued to emerge, but recruited additional participants- four teachers, two administrators, and two students - to minimize researcher bias and ensure data saturation (Yang et al., 2022).

Following these procedures, the study group of students included five females (42%) and seven males (58%) with a mean age of 16.92, distributed across 12th (8), 11th (1), 10th (2), and 9th (1) grades. Among teachers and administrators, there were eight women (23%) and 27 men (77%), aged 30–40 (34.29%), 41–50 (31.43%), 51–60 (31.43%), and over 60 (2.86%). Their teaching subjects encompassed technical/vocational and general academic lectures (See Supl.1 for detailed participant description).

2.2 Data Collection Tools and Procedure

A "Personal Information Form" collected socio-demographic details of participants, including gender, age, grade levels, GPA, grade repetition status, absenteeism, health status, and receiving any disciplinary punishment for students; age, gender, subject, experience year for teachers and administrators. "Semi-structured interview forms" (SIF) gathered insights into participants' perceptions, experiences, and evaluations of school dropout, operationalized as students' shift to open high school during COVID-19. Questions focused on critical dimensions and emerging model exploration. In student interviews, question blocks covered school life pre-transition (8 questions), the transition period (5 questions), school experiences during the pandemic (5 questions), and post-transition experiences (8 questions), totaling 23 questions. Sample questions included "Describe your pre-pandemic school experience," "Why did you enroll in open high school?", and "Share your open high school education experiences." For teachers and administrators, the questionnaire included sections on transition reasons (5 questions), student profiles (5 questions), and prevention advice, totaling 15 questions. Sample questions encompassed "Factors influencing students' transition to open high schools during the pandemic", "Describe profiles of students enrolling in open high schools during the pandemic," and "Proposals to reduce open high school enrollment during the pandemic."

These semistructured, open-ended questions were designed to explore in depth the effects of the pandemic on the transition to open high schools, as well as whether other trends are independent of the pandemic. To this end, research questions were developed drawing from relevant literature on early leaving and dropout risk, encompassing social, political, and pandemic factors (De Witte et al., 2013; González-Rodriguez et al., 2019; NCES, 2021), academic and adaptation issues in the context (e.g., Çakır & Çolak, 2019), and demographic inquiries including student medical history, household composition, etc. (e.g., Huisman & Smits, 2015; Maynard et al., 2015). Following the the development of initial question pool by the researchers, excluding the first researcher, based on the literature and research aim, the research team collectively finalized the questions through three panel discussions, simplifying the

language, changing some words (e.g., "attitude" to "thoughts and emotions", "peer" to "friend"), reordering questions from general to specific, and combining overlapping questions. The first researcher who taught courses about both the research topic and qualitative research design held a supervisor role, verifying the final versions of the questions.

2.3 Data Collection Procedure

After obtaining ethical committee approval from a public university associated with the researchers and official permission from MoNE, online interviews were conducted via Zoom with voluntary participants. The second, third, and fourth researchers respectively interviewed teachers, students, and school administrators, strictly adhering to the developed interview protocol. This protocol encompassed pre-, during-, and post-interview steps, such as sharing informed consent and questions beforehand, ensuring consistent data collection procedures among researchers. Interviews were recorded with participant consent. Data collection occurred from May to October 2021. Interviews spanned 17 to 77 minutes each. Following each interview, researchers documented memos capturing their reflections and emerging theoretical insights.

2.4 Data Analysis

Initially, the researchers transcribed interviews conducted with students, teachers, and school administrators. Four online team meetings were held to analyze randomly selected interviews (one from each participant group), ensuring inter-researcher reliability. Subsequently, individual researchers analyzed remaining data for each participant group using MaxqDa 12 software.

The grounded theory approach was adopted, encompassing three data coding phases: open, axial, and selective coding (Corbin & Strauss, 2015). Open coding entailed repeated transcript readings, employing line-by-line coding to identify salient categories. Concepts emerging from similar points were labeled with relevant content-based codes (Corbin & Strauss, 2015).

In axial coding, the researchers compared, combined, and explored causal relationships between categories. Causes, strategies, contexts, and consequences of transitioning to open high school were identified across participant groups. Through online meetings, the research team jointly examined these findings.

In the selective coding phase, the central phenomenon was systematically linked to other categories, forming an analytical narrative revealing relationships (Corbin & Strauss, 2015). To create a theoretical model, researchers individually developed models and engaged in five online meetings to refine and agree upon a graphical representation (Fig. 1). This model visually encapsulated findings regarding the risk of school dropout and transition to open high school during COVID-19 within the study's context.

2.5 Trustworthiness of the Study

To ensure the study's methodological rigor, a combination of strategies was employed. Data triangulation involving students, teachers, and school administrators from different school types, as well as researchers, was used to enhance credibility, reliability, and confirmability (Guba & Lincoln, 1982). To bolster credibility, member checking was applied, where participants reviewed interview transcripts (Lincoln & Guba, 1985). Peer review was integrated through multiple researchers engaging in coding, comparing resulting categories, and engaging in ongoing team meetings throughout the research process for validation and comprehensive result presentation. The research process was meticulously explained, complemented by direct quotations from participants, enhancing confirmability and transferability. Memoing during axial coding was utilized to facilitate the creation of a model aligned with the research objective (Strauss & Corbin, 1990).

Through the research process, we adhered to American Psychological Association (2020) standards for qualitative research reporting. In line with this, we provided a summary of the research design, detailed participant information, and descriptions of the recruitment process, participant selection, data collection procedures including data collection protocol, data analysis methods, and methodological integrity. Minutes of these meetings documented discussions and decisions among the research team, regarding design of the research, developing interview questions, data analysis and finalization of the codes and themes, designing the model based on the findings, and presentation and discussion of the results.

3 Results

Our findings have produced a comprehensive model (Fig. 1) that illustrates the transition to an open high school and highlights the interconnections among emerging themes. Derived from multi-stakeholder perspectives, the grounded theoretical
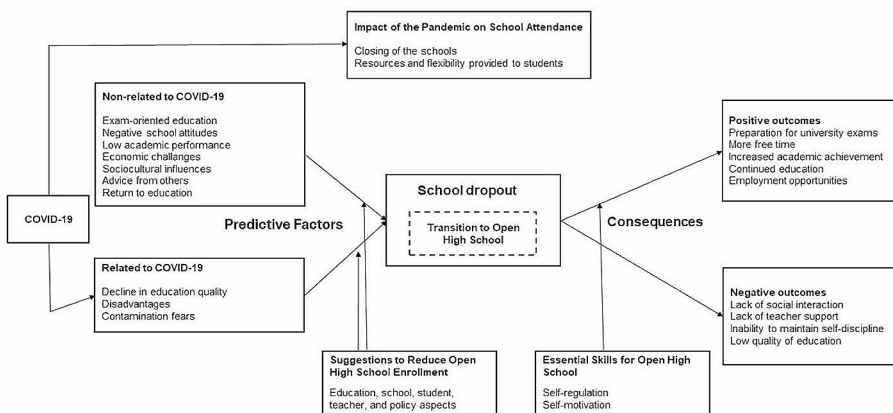

Fig. 1 Mapping the route: the transition to open high school

model encompasses COVID-19-related and non-related predictive factors, the pandemic's effects on school attendance, the consequences of transitioning to an open high school, essential skills for open high school education, and suggestions for mitigating such transitions.

3.1 Predictive Factors

The factors leading to the transition to open high school were categorized as non-COVID-19-related and COVID-19-related. The former encompassed the exam-oriented education system, negative school attitudes, low academic performance, economic challenges, sociocultural influences, advice from others, and return to education. Participants noted that the focus on exams prompted students to opt for open high school, perceiving formal education as insufficient and time-consuming. Open high schools' syllabi were seen as easier, potentially boosting GPAs, crucial for university entry exams. A13 (School Administrator) explained, "Students think they can save time for university entrance preparations." Negative attitudes towards school, stemming from issues with authorities, adaptation difficulties, and unwillingness to continue, also influenced students' choice of open high school. S3 (Student) remarked, "Half my day goes to school…this is not possible."

Compulsory attendance, vocational courses, and school regulations, including attire, were reasons for opting for open high schools. For instance, S12 recounted, "The vice principal would always pick on me for my attire. There were public confrontations. It was far from pleasant." S8 expressed, "I don't like rules, I want to set my own. I want to study when and how I see fit." A teacher further elaborated, "A single teacher can push a child to leave school. A student might change schools due to teacher conflicts or issues with the vice principal. Some students, weary of the school environment and driven by other goals like marriage, viewed open high school as an escape from education" (T20).

In addition, poor academic performance, reflected in low course grades and grade repetition, emerged as a catalyst for transitioning to open high schools. Families perceived academic underachievement as a reason to withdraw their children from school. A15 stated, "If a child fails, it's often the family's decision. They prefer their child to quit school." Moreover, after experiencing academic setbacks, students sometimes lose hope and turn to the workforce as a swift resolution. T13 explained, "Underachieving students may leave school to avoid facing failure and negative interactions with teachers and peers." Four students who enrolled in open high school cited low academic performance as their motive for the shift.

While none of the student participants cited economic issues as influencing their decisions, both school administrators and teachers emphasized its significance. Open high schools were perceived as an option for students to work and support their families, alleviating financial pressures such as transportation and food costs. A6 noted, "Enrolling elsewhere is an added cost for the family. So, families push children to drop out, or children decide for themselves." T10 highlighted, "Some students start working early to aid their families financially." Socio-cultural factors were also identified, including broken families, parents' limited education, and early marriages. A9 mentioned, "Some female students shift to open high schools due to marriage pros-

pects, as husbands may not support their continued formal education." T11 added, "Girls are often viewed as potential domestic help; any maternal absence leads to their withdrawal from school."

Advice from others (i.e., peers, siblings, family members, and even teachers) emerged as another influencer driving students towards open high schools. Particularly, teachers from private institutions preparing students for university entrance exams actively encouraged transitioning to open high schools to dedicate more time to exam preparation. S9 recounted, "Someone I know mentioned that successful individuals who immersed themselves in exam preparation attended open high schools." This advice, received during S9's 11th grade, influenced their choice. T3 emphasized, "Former open high school attendees who excelled in university exams, along with their families, often present this as a viable option."

Administrators and teachers highlighted that individuals from various age groups returned to open high schools to enhance job prospects or fulfill requirements for acquiring a driver's license. A15 provided an illustrative case, stating, "One of our female graduates used to attend school secretly against her husband's wishes. She obtained her diploma and is now pursuing a degree in Theology. Despite progress, her husband still opposes her education, similar to her parents' stance in the past."

COVID-19-related factors included declining education quality, disadvantages, and contamination fears. Participants stressed the inefficiency of distance education, worsened academic assessment due to online exams, and uncertainties in the process. For instance, S2 mentioned, "Distance education made understanding math even harder." S10 added, "Classes weren't effective; it was a waste of time." Disadvantaged groups faced serious obstacles due to limited resources for online learning. Some students shared that their family closed their shop during the pandemic, so they shifted to open high school to save money." Meeting online education standards proved challenging for disadvantaged families. A school administrator explained, "Many students, with low socioeconomic status, worked during the pandemic… They preferred open high school due to work commitments" (A2). T5 highlighted, "There are five kids, but only three smartphones… Not enough internet." Contamination fears were also evident. Some students with health issues chose open high school for safety. Parents, concerned about contagion, especially with older family members at home, favored this choice (T7).

3.2 Impact of the Pandemic on School Attendance

COVID-19 also influenced decisions regarding formal education continuation. Administrators and teachers noted that remote learning, absence-free online exams, and simplified course passing contributed to students choosing to remain in formal education. T13 highlighted, "No compulsory attendance, one exam per period in online education… students don't need open high school." A5 added, "Schools became like open education during the pandemic; attendance isn't obligatory."

3.3 Consequences of Transition to Open High School

The transition to open high school can yield both positive and negative outcomes. Positive consequences encompass opportunities to prepare for university entrance exams, increased academic achievement, more available free time, continued education for disadvantaged groups, and prospects for employment. Students who shifted to open high school emphasized improved academic performance and enhanced preparation for university entrance exams. For instance, S9 remarked, "The exams in the school are tough. However, right now, I am just studying for the university entrance exam. I also do not have to take the time to prepare for school exams." School administrators and teachers also highlighted that open high schools can be particularly beneficial for students with limited socioeconomic status and those facing various difficulties hindering their educational pursuits. Additionally, participants emphasized the inclusion of vocational training in technical schools, providing students with practical skills and employment opportunities. S5 expressed, "They give both traineeship and mastery certificates and high school diplomas. I think this method is very good. When I compare it with formal education, I say it is good that I transitioned to open high school."

However, our findings also identified negative consequences linked to open high school education, including reduced social interaction, limited teacher support, self-discipline challenges, and diminished educational quality. Participants stressed that open high school settings curtail opportunities for social engagement, impeding the development of vital relationships fostered within traditional schools. S3 emphasized, "At school, I can meet people with diverse perspectives, broadening my horizons… Peer support could also be better." Teachers and school administrators noted that open high schools not only lack academic assistance but also the comprehensive professional and personal guidance typically provided by teachers. Educators' observations underscored students' potential struggles in maintaining self-discipline after transitioning to open high school. Administrators and teachers highlighted the school's pivotal role in structuring students' lives and promoting self-discipline (e.g., T17).

3.3.1 Dependence on Essential Skills for Positive Outcomes

As depicted in Fig. 1, our findings underscore that the realization of the positive consequences hinges on specific skills students need to possess during open high school education. School administrators and teachers emphasized that self-regulation and self-motivation skills are vital for experiencing favorable outcomes within the open high school context. T20 remarked, "…this process is about self-motivation and self-discipline for students who decide to move to an open high school. I say that if they can organize this open high school process for university preparation and stick to it and provide motivation by themselves, they can healthily take the process." A4 also pointed out the necessity to balance essential aspects like sleep, study, and nutrition, particularly when students transition to open high school for university entrance exam preparation.

3.4 Suggestions to Mitigate Open High School Enrollment

Our findings yielded suggestions from school administrators and teachers to curtail the prevalence of transitions to open high schools, which were classified into categories encompassing education, school, student, teacher, and policy aspects. While the majority of suggestions such as categorized under education, school, and student primarily address predictive factors unrelated to COVID-19, participants also highlighted recommendations pertaining to challenges exacerbated during the pandemic such as issues of disadvantage and the decline in educational quality. Education-related recommendations highlighted the inadequacy of formal education for university entrance exams, prompting a call for its enhancement to better equip students for these exams. For instance, T14 emphasized, "If there were more mock exams for university entrance, students might opt to stay in school." Moreover, providing effective educational and career guidance emerged as a crucial approach to deter the shift to open high schools.

Participants also emphasized the vital role of schools in enhancing students' sense of belonging and engagement. They stressed the importance of collaborative efforts between teachers and parents, particularly in tackling issues like absenteeism. T10 underscored, "Parents wield significant influence in the decision to transition to open high schools. Establishing communication not only with students but also with their parents is crucial." A13 echoed this sentiment, stating, "By fostering a school environment that supports university exam preparation and holistic development, the tendency for students to opt for open high schools might be reduced."

A third set of suggestions highlighted the significance of comprehending student-related factors, including the influence of incorrect school choices, as a means to mitigate the transition to open high schools. Participants proposed providing educational guidance during secondary school and utilizing resources to identify students' skills and interests. T4 articulated, "Students are motivated by a variety of factors leading to this decision. Therefore, it's essential to listen to them without preconceptions."

The fourth recommendation highlighted the importance of teacher training to meet students' needs. Some educators struggled to adapt to technology during distance education, prompting the need for technology education. This recommendation can be linked to predictive factors related to the pandemic, such as the decline in the quality of education, pointing to the urgency of improving the digital literacy of educators, which have become crucial skills during the pandemic. Furthermore, participants stressed the significance of educating teachers about students' developmental stages and enhancing pedagogical knowledge. A8 recounted challenges in guiding teachers through technology adoption, while T18 emphasized the necessity for well-developed pedagogical skills.

The fifth recommendation emphasized the necessity for educational policy changes. Participants expressed frustration with frequent alterations in school procedures and proposed revising passing grade regulations to boost student motivation. Additionally, suggestions were made to explore reasons for transitioning to open high school and establish enrollment standards. Suggestions like establishing the necessary technological infrastructure can be connected to pandemic-related predictive factors for school dropout by addressing students with disadvantaged conditions who

had limited access to distance education during the pandemic. Participants also advocated for governmental support in curbing child labor and early marriages among disadvantaged families, thus enhancing school attendance.

4 Discussion

Our model (Fig. 1) illustrates "non-COVID related and COVID-related predictive factors" leading to transition to an open high school during the COVID-19 period. Regarding non-COVID related factors, our findings revealed that students often opted for open high school to allocate more time for university entrance exam preparation, deeming formal education inadequate for this purpose. Open high schools were seen as offering easier courses, crucial for achieving higher grades which is vital for university acceptance. This aligns with prior studies indicating that students in Türkiye considered open high schools as a means to enhance their GPAs more conveniently (Ay & Gülözer, 2022; Kekeç & Üstün, 2022). Paradoxically, successful students who transition to open high schools reinforce this mindset, creating a cycle. Notably, seeking advice from peers and parents to opt for open high schools emerged as a significant factor, underlined in previous research (e.g., Sözer, 2017). Intriguingly, even certain school administrators and teachers endorsed this choice for students. This reflects how Türkiye's exam-focused education system positions open high schools as a preparation route for university exams. Furthermore, the weight of vocational course loads impelled some students to migrate to open high schools, corroborating previous observations (Taş et al., 2013). This underscores the persistence of vocational high schools prioritizing university exam readiness alongside vocational training.

Another group of non-COVID-related predictive factors encompassed students' low academic performance, negative school attitudes, and resistance to complying with school requirements. Research has demonstrated that academic underachievement (Gil et al., 2019; Kartal & Ballı, 2020; Kim et al., 2018; Saraiva et al., 2011) and difficulty in adapting to school (MONE, 2013; Ogresta et al., 2021) are significant drivers of leaving school. A reciprocal connection is evident between students' academic struggles and their detachment from school. In essence, students may struggle academically due to their disengagement from school, or they may disengage because of their academic struggles. In both scenarios, supporting students toward academic success proves essential. Additionally, our findings highlighted challenges in meeting school requirements such as attendance, vocational course demands, responsibilities, and dress code regulations, akin to factors associated with school dropout (Arslan, 2021; Sözer, 2017). Moreover, our results indicated that students' clashes with school authorities, including administrators and teachers, influenced their decision to transition to open high school. In alignment with these findings, research suggests that educators' positive attitudes play a pivotal role in students' persistence in formal education (De Witte et al., 2013; González-Rodríguez et al., 2019), while negative, severe, and unjust attitudes contribute to school dropout (Çakır & Çolak, 2019; Fortin et al., 2013). Collectively assessing our findings and relevant literature underscores the significance of a positive school environment, students' sense of belonging, and

educators' constructive demeanor in shaping students' attitudes toward school and their commitment to education.

Socio-cultural factors (such as early marriage), economic influences, and re-entry into education after leaving school were revealed as drivers behind the transition to open high schools, also. School administrators and teachers noted that while socio-cultural and economic factors were preexisting, their impact escalated amid the pandemic. This echoes previous research revealing that low socio-economic status (Adelman & Szekely, 2016; Çakır & Çolak, 2019; Yavuz et al., 2016) and its implications, like family caregiving and financial obligations (Belen et al., 2021; Hussain, 2021; Koç et al., 2020; Nayak & Kumar, 2022), along with early marriage and pregnancies (Kartal & Ballı, 2020; Koçtürk et al., 2018), contribute to school dropout. The pandemic has exacerbated these challenges by limiting access to schools (Hussain, 2021). Some studies suggest a dual relationship between early marriage and school dropout, as students leaving school are more prone to early marriages (Birchall, 2018). This intricate dynamic can be attributed to the direct influence of cultural norms, economic factors, and educational attainment on school dropout, as well as the mediating role of these factors in the connection between early marriage and leaving school. Furthermore, our findings indicated that adults who couldn't initially attend school due to reasons like early marriage and work later enrolled in open education. Although this trend existed before the pandemic (e.g., Şahin & Uysal, 2017), the pandemic's effects, including easier online exams and reduced compulsory credit requirements for graduation (MoNE General Directorate of Lifelong Learning, 2021), likely influenced adults' decisions to return to open education.

Current findings highlight the "COVID-19-related predictive factors" influencing the transition to open high schools, encompassing decreased education quality during the pandemic, experienced disadvantages, and contamination concerns. The fluctuating education landscape, marked by closures and uncertain exam formats, led students to prefer open high schools for a consistent routine. This resonates with prior research on pandemic-induced learning setbacks (Maldonado & De Witte, 2020; Shuja et al., 2022; Tomasik et al., 2021), with the World Bank Report emphasizing learning loss increasing dropout risks (UNESCO, 2020b). The uncertainties of remote learning and evaluation amplified student anxiety (Han & Demirbilek, 2021). Furthermore, participants noted that online exams in open high schools became manageable during the pandemic. This, combined with the incorporation of high school grades into Türkiye's university entrance evaluation, impacted the appeal of open high schools. The reduced graduation period from eight to five semesters (Ay & Gülözer, 2022; Kekeç & Üstün, 2022) may have contributed to this trend.

Disadvantaged students, disproportionately affected by the pandemic due to economic, technological, and socio-cultural challenges, shifted to open high schools. Challenges included limited academic engagement, family involvement, economic constraints, and technology barriers. Teachers' struggles to engage these students online aligned with global concerns (Saavedra, 2020; UNESCO, 2020a). Our developing country research echoed global meta-analyses, stressing the need for technological access (Education Endowment Foundation, 2020).

Moreover, participants, particularly those concerned about personal or familial health, cited COVID-19 contamination fears as motivation for enrolling in open high

schools. While Türkiye-specific studies were absent, international research supports health-related concerns impacting in-person attendance decisions (Shuja et al., 2022; UNESCO, 2020b).

Our findings revealed that the closure of schools and the implementation of resources like the Education Information Network and mobile data support, along with flexible measures such as online exams and no attendance requirements, encouraged students to "persist in their education rather than transferring to open high schools". This was noted by teachers and administrators who observed a reduction in the number of students opting for open high schools during the pandemic. Confirming this finding, the MoNE (2022) added the annex 2 article titled "Examination of grade and student success in extraordinary situations" to the Regulation on Secondary Education Institutions to eliminate the factors such as absenteeism, grade repetition, and low academic achievement that may cause school dropout.

As depicted in Fig. 1, the move to open high school education yielded both positive and negative outcomes. On the positive side, students benefited from increased preparation time for university exams, higher academic averages, and opportunities for education completion and part-time work. These findings align with literature highlighting the flexibility and cost-effectiveness of open and distance learning (UNESCO, 2002). However, in our context, the choice of open high school for university exam readiness brings attention to potential flaws in the exam-based education system. The model also emphasized that such positive outcomes hinged on students possessing skills like self-regulation and motivation. Earlier studies echo this, stressing time management, resource allocation, and self-regulated learning (Magno, 2016; Newman et al., 2014), while noting that academic motivation is vital for self-regulation (Zimmerman et al., 1992). Given the pandemic context, these findings gain importance as students exhibit higher motivation for in-person education compared to remote learning (Kayır & Uçar, 2022; Smith et al., 2021).

Our results also highlight the positive impact of open high school for disadvantaged students, supporting their return to education, as seen in previous research (Kekeç & Üstün, 2022). However, there are drawbacks to transitioning to open high schools, including reduced social interaction, teacher support, self-discipline, and education quality, in line with earlier work (Kekeç & Üstün, 2022). Open education lacks student interaction, effective practical teaching, and support for those with weaker self-regulated learning skills (Ataş, 2017).

Our model incorporated recommendations from school administrators and teachers to reduce the transition to open high schools, categorized under education, school, student, teacher, and policy within a cultural context. First, revising formal education curricula to align with university entrance exams and easing the intensity of vocational high school curricula was proposed. Past research has shown dissatisfaction with formal education's preparation for university exams (Türkiye Eğitim Derneği, 2005) and vocational high school teachers' concerns about the curriculum's balance between general academic and vocational courses (Ayaz & Karacan Özdemir, 2021). Second, the school's role in nurturing a sense of belonging and fostering a positive school climate was highlighted to counter school dropout rates (Duffy et al., 2022).

Third, supporting students' academic, emotional, and career development within schools was addressed, particularly in helping them make informed high school

choices. Misguided school choices have been identified as a cause for leaving school (Hitt et al., 2018). Fourth, there was an emphasis on training teachers to serve as effective role models, understand students' needs, guide them effectively, and enhance their technological skills, mirroring previous findings (Sarıtepeci et al., 2016). Fifth, it was recommended to introduce policies that make transitioning to open high schools, especially for university exam preparation, more challenging. This aligns with the notion of re-evaluating standards for transitioning to open education (Ünver, 2022). Additionally, participants proposed supporting disadvantaged students, for example, to prevent early marriages and improve access to education (Birchall, 2018; World Bank Group, 2020).

5 Limitations, Implications, and Future Directions

This study has a few limitations. Firstly, the Türkiye education system mandates students leaving formal education to enroll in open high schools. This complexity arises as students transition for various reasons, such as university exam preparation or returning to education later in life, adding depth to the issue beyond just school dropout, which could be seen as a limitation. Secondly, data collection occurred during the pandemic when Türkiye suspended open high school transitions, affecting the sample. However, administrator and teacher data supplemented this limitation. Lastly, the study was confined to participants from economically disadvantaged areas in Ankara's central districts, limiting transferability.

Despite these limitations, the study carries significant implications. Theoretically, it delved deep into the school dropout phenomenon, redefined here as transitioning to open high schools during the pandemic, from a multi-stakeholder standpoint. The findings yielded a model that unraveled the intricate nature of this process. This theoretical framework seamlessly integrated individual factors with the education system's influence, all within the pandemic context. For instance, our model showcased that COVID-19 not only impacted open high school enrollment but also influenced students' persistence in formal education due to systemic changes bridging formal and open education. Additionally, our thorough exploration unveiled participants' positive perception of open high school enrollment, viewing it as a chance to prepare for university entrance exams. This viewpoint, considering schools' diverse roles including pedagogical formation, is open to debate. Furthermore, our model underscored how COVID-19 both directly triggered certain predictive factors (e.g., fear of contamination) and indirectly influenced non-COVID-19 related predictive factors guiding students' transition to open high schools.

In terms of future research, while grounded theory methodology yielded a comprehensive theoretical model elucidating the study's targeted explanations and the interconnections among themes, validation of this model through quantitative research methodologies is suggested. In practice, the findings implied advocating for social justice for students facing disadvantageous conditions in schools during the pandemic is imperative. Additionally, the findings underscore the role of school counselors in comprehending students considering open high school enrollment. This involves raising awareness among both students and parents about the process, as

well as fostering collaboration among teachers and administrators to foster a positive school environment.

Data Availability Not applicable due to privacy/ethical restrictions. The authors do not have permission to share data.

Declarations

Ethical approval All the procedures that involved human participants were conducted in accordance with the ethical standards of the institutional and/or national research committee. The IRB approval was obtained from Hacettepe University Ethics Committee (REF: 76942594-600-00001431037). Declaration of generative AI in Scientific Writing: The authors used ChatGPT, Bard and WordTune to shorten and edit the text in order to improve readability and language of this work. While and after using these tools, the authors reviewed the content as needed.

Competing Interest The authors declare no conflict of interest.

References

Adelman, M. A., & Szekely, M. (2016). School dropout in Central America: An overview of trends, causes, consequences, and promising interventions. *World Bank Policy Research Working Paper*, (7561). https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2730378.

American Psychological Association (APA) (2020). *APA Style JARS: Journal Article Reporting Standards* https://apastyle.apa.org/jars/qual-table-1.pdf.

Arslan, A. (2021). Ortaöğretim öğrencilerinde okul terki riskinin yordayıcıları: Okula bağlılık ve okul tükenmişliği. *Ankara University Journal of Faculty of Educational Sciences (JFES)*, *54*(2), 431–458. https://doi.org/10.30964/auebfd.669522.

Ataş, B. (2017). *The use of video in learning environments in open and distance higher education: evaluations on practices in Turkey* [Unpublished master's thesis]. Anadolu University, Turkiye.

Ay, D., & Gülözer, K. (2022). The relationship between the reasons for higher education preparation and lifelong learning tendencies of open education high school students and graduates. *Bartın Üniversitesi Eğitim Araştırmaları Dergisi*, *6*(1), 27–40.

Ayaz, A., & Karacan Özdemir, N. (2021). A case study of a Turkish vocational high school, and the challenges for teachers. *Journal of Vocational Education & Training*, *75*(3), 459–478. https://doi.org/10.1080/13636820.2021.1895873.

Azevedo, J. P., Hasan, A., Goldemberg, D., Geven, K., & Iqbal, S. A. (2021). Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. *The World Bank Research Observer*, *36*(1), 1–40. https://doi.org/10.1093/wbro/lkab003.

Backman, O. (2017). High school dropout, resource attainment, and criminal convictions. *Journal of Research in Crime and Delinquency*, *54*(5), 715–749. https://doi.org/10.1177/0022427817697.

Belen, A., Kandak, M., Demir, E., Çekin, B., Demir, M., & Kandak, D. (2021). In line with the opinions of open high school students determining the reasons for choosing open high school: Ermenek example. *Uygulamalı Sosyal Bilimler ve Güzel Sanatlar Dergisi*, *3*(6), 99–114.

Birchall, J. (2018). *Early marriage, pregnancy, and girl child school dropout. K4D Helpdesk Report* Institute of Development Studies. https://assets.publishing.service.gov.uk/.

Çakır, R., & Çolak, C. (2019). Views of high school students about dropout risks. *Karadeniz Sosyal Bilimler Dergisi*, *11*(21), 269–286.

Corbin, J., & Strauss, A. (2015). *Basics of qualitative research: Techniques and procedures for developing grounded theory*. Sage.

De Witte, K., Cabus, S., Thyssen, G., Groot, W., & van Den Brink, H. M. (2013). A critical review of the literature on school dropout. *Educational Research Review*, *10*, 13–28. https://doi.org/10.1016/j.edurev.2013.05.002.

Deep Poverty Network, & Open Space Association (2020). *Pandemi döneminde derin yoksulluk ve haklara erişim araştırması: Yerel yönetimlere kriz donemi sosyal destek programlari icin oneriler* https://derinyoksullukagi.org/raporlar/pandemi-doneminde-derin-yoksulluk-ve-haklara-erisim-arastirmasi-yerel-yonetimlere-kriz-donemi-sosyal-destek-programlari-icin-oneriler/.

Duffy, R. D., Kim, H. J., Perez, G., Prieto, C., Torgal, C., & Kenny, M. (2022). Decent education as a precursor to decent work: An overview and construct conceptualization. *Journal of Vocational Behavior*, *138*(2022). https://doi.org/10.1016/j.jvb.2022.103771.

Ecker-Lyster, M., & Niileksela, C. (2016). Keeping students on track to graduate: A synthesis of school dropout trends, prevention, and intervention initiatives. *Journal of At-Risk Issues*, *19*(2), 24–31.

Education Endowment Foundation (2019). Using digital technology to improve learning: Evidence review. https://d2tic4wvo1iusb.cloudfront.net/production/documents/guidance/Using_Digital_Technology_to_Improve_learning_Evidence_Review.pdf?v=1711018463.

Estevao, P., & Alvares, M. (2014). What do we mean by school dropout? Early school leaving and the shifting of paradigms in school dropout measurement. *Portuguese Journal of Social Science*, *13*(1), 21–32. https://doi.org/10.1386/pjss.13.1.21_1.

European Commission (2021). *Türkiye 2021 Report*. https://ab.gov.tr/siteimages/birimler/kpb/turkey-report-2021-v2.pdf.

EUROSTAT (2023). *Early leavers from education and training by sex and labour status*. https://ec.europa.eu/eurostat/databrowser/view/edat_lfse_14/default/table?lang=en.

Fortin, L., Marcotte, D., Diallo, T., Potvin, P., & Royer, É. (2013). A multidimensional model of school dropout from an 8-year longitudinal study in a general high school population. *European Journal of Psychology of Education*, *28*(2), 563–583. https://doi.org/10.1007/s10212-012-0129-2.

Gil, A. J., Antelm-Lanzat, A. M., Cacheiro-González, M. L., & Pérez-Navío, E. (2019). School dropout factors: A teacher and school manager perspective. *Educational Studies*, *45*(6), 756–770. https://doi.org/10.1080/03055698.2018.1516632.

Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Sociology.

Glaser, B. B., & Strauss, A. L. (2017). Theoretical sampling. In Denzin, N.K. (Ed.). *Sociological Methods: A Sourcebook* (pp. 105–114). Routledge. https://doi.org/10.4324/9781315129945.

Gonzalez, J. M. R., Salas-Wright, C. P., Connell, N. M., Jetelina, K. K., Clipper, S. J., & Businelle, M. S. (2016). The long-term effects of school dropout and GED attainment on substance use disorders. *Drug and Alcohol Dependence*, *158*, 60–66. https://doi.org/10.1016/j.drugalcdep.2015.11.002.

González-Rodríguez, D., Vieira, M. J., & Vidal, J. (2019). Factors that influence early school leaving: A comprehensive model. *Educational Research*, *61*(2), 214–230. https://doi.org/10.1080/00131881.2019.1596034.

Guba, E. G., & Lincoln, Y. S. (1982). Epistemological and methodological bases of naturalistic inquiry. *Educational Communication & Technology Journal*, *30*(4), 233–252. https://link.springer.com/article/10.1007/BF02765185.

Han, F., & Demirbilek, N. (2021). University students' views on compulsory distance education in the times of covid-19. *Uluslararası Avrasya Sosyal Bilimler Dergisi*, *12*(44), 182–203. https://doi.org/10.35826/ijoess.2897.

MoNE General Directorate of Lifelong Learning. (Hayat Boyu Öğrenme Genel Müdürlüğü). (2021). *Open Education High School 2021–2022 academic year I. semester first registration guide*. Açık Öğretim Lisesi Müdürlüğü. https://aol.meb.gov.tr/meb_iys_dosyalar/2021_08/31115807_Ylk_kayYt_kYlavuzu.pdf.

Hitt, C., McShane, M. Q., & Wolf, P. J. (2018). *Do impacts on test scores even matter? Lessons from long-run outcomes in school choice research*. American Enterprise Institutehttps://www.aei.org/wp-content/uploads/2018/04/Do-Impacts-on-Test-Scores-Even-Matter.pdf.

Huisman, J., & Smits, J. (2015). Keeping children in school: Effects of household and context characteristics on school dropout in 363 districts of 30 developing countries. *Saga Open*, *5*(4), 1–16. https://doi.org/10.1177/2158244015609666.

Hussain, R. (2021, December). *Child marriage and school dropout in Bangladesh during COVID-19: Challenges for youth education sustainability [Conference presentation abstract]*. In China and Higher Education 2021 Conference-Hong Kong Session: Education and SDGs: Promoting Quality Education for All. https://scholars.ln.edu.hk/en/publications/child-marriage-and-school-dropout-in-bangladesh-during-covid-19-c.

Kartal, S., & Ballı, F. E. (2020). School dropout studies: A systematic analysis study. *Kırıkkale Üniversitesi Sosyal Bilimler Dergisi*, *10*(2), 257–278.

Kayır, G., & Uçar, Ş. (2022). Investigation of academic motivation of high school students during covid-19 pandemic period. O*rdu Üniversitesi Sosyal Bilimler Enstitüsü. Sosyal Bilimler Araştırmaları Dergisi*, *12*(1), 209–226. https://doi.org/10.48146/odusobiad.1081139.

Kekeç, K., & Üstün, A. (2022). The effects of the problems encountered in education on the academic achievement of the students studying in open high school. *Academic Social Resources Journal*, *7*(39), 722–731. https://doi.org/10.29228/ASRJOURNAL.62982.

Kim, Y., Joo, H. J., & Lee, S. (2018). School factors related to high school dropout. *KEDI Journal of Educational Policy, 15*(1), 59–79. https://research.ebsco.com/linkprocessor/plink?id=7dc26635-07a0-3a39-bde1-e500f739efac.

Koç, M., Zorbaz, O., & Demirtaş-Zorbaz, S. (2020). Has the ship sailed? The causes and consequences of school dropout from an ecological viewpoint. *Social Psychology of Education*, *23*, 1149–1171. https://doi.org/10.1007/s11218-020-09568-w.

Koçtürk, N., Bilge, F., & Yüksel, F. (2018). The individual and familial characteristics of girls who have underage marriage, their reasons for dropping out, and marital problems. *Türk Psikolojik Danışma Ve Rehberlik Dergisi*, *8*(50), 1–28.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage Publications, Inc.

Magno, C. (2016). The effect size of self-regulation and prior knowledge on students performance in an open high school program. *The International Journal of Research and Review*, *11*, 39–48.

Maldonado, J., & De Witte, K. (2020). The effect of school closures on standardised student test outcomes. *British Educational Research Journal*, *48*(1), 49–94. https://doi.org/10.1002/berj.3754.

Maynard, B. R., Salas -Wright, C. P., & Vaughn, M. G. (2015). High school dropouts in emerging adulthood: Substance use, mental health problems, and crime. *Community Mental Health Journal*, *51*, 289–299.

MoNE (2024). *Açık öğretim lisesi 2023–2024 eğitim ve öğretim yılı ikinci dönem ilk kayıt kılavuzu*. Hayat Boyu Öğrenme Genel Müdürlüğü, Açık Öğretim Daire Başkanlığı. https://aol.meb.gov.tr/meb_iys_dosyalar/2023_12/27154237_acikogretimlisesiilkkayitkilavuzu.pdf.

MoNE (2022, September). *Resmi İstatistikler*. Strateji Geliştirme Başkanlığı. https://sgb.meb.gov.tr/www/icerik_goruntule.php?KNO=460.

MoNE (2022). *Regulation on making changes in the regulation of secondary education institutions* (No:31121).

Monrad, M. (2007). *High school dropout: A quick stats fact sheet*. National High School Center. https://eric.ed.gov/?id=ED501066.

National Center for Educational Statistics (NCES) (2021). *Report on the Condition of Education 2021*. U.S. Department Of Education. https://nces.ed.gov/pubs2021/2021144.pdf.

Nayak, K. V., & Kumar, R. (2022). In pursuit of education: Why some tribal girls continue and others dropout of schools in rural India? *Journal of Human Values*, *28*(2), 129–142. https://doi.org/10.1177/09716858211064251.

NCES. (2020). *Trends in high school dropout and completion rates in the United States: 2019*. U.S. Department Of Education. https://nces.ed.gov/pubs2020/2020117.pdf.

Newman, D., Deyoe, M. M., Connor, K., & Lamendola, J. (2014). Promoting active learning through the flipped classroom model. In J. Keengwe, G. Onchwari, & J. N. Oigara (Eds.), *Flipping STEM learning: Impact on student's process of learning and faculty instructional activities* (pp. 113–131). IGI Global.

Ogresta, J., Rezo, I., Kožljan, P., Paré, M. H., & Ajduković, M. (2021). Why do we drop out? Typology of dropping out of high school. *Youth & Society*, *53*(6), 934–954. https://doi.org/10.1177/0044118X20918435.

Organisation for Economic Co-operation and Development (OECD). (2012). *Equity and quality in education: Supporting disadvantaged students and schools*. OECD Publishing. https://www.oecd.org/education/school/50293148.pdf.

Özer, A., Gençtanirim, D., & Ergene, T. (2011). Türk lise öğrencilerinde okul terkinin yordanması: Aracı ve etkileşim değişkenleri ile bir model testi. *Education in Science: The Bulletin of the Association for Science Education*, *36*(161), 302–317.

Piscitello, J., & Robinson, S. (2022). Sociodemographic risk, school engagement, and community characteristics: A mediated approach to understanding high school dropout. *Children and Youth Services Review*, *133*, 106347. https://doi.org/10.1016/j.childyouth.2021.106347.

Presidency of the Republic of Türkiye (2019). *The eleventh development plan (2019–2023)*.General Directorate of Administrative Services. https://www.sbb.gov.tr/wp-content/uploads/2022/07/Eleventh_Development_Plan_2019-2023.pdf.

Ramsdal, G. H., Bergvik, S., & Wynn, R. (2018). Long-term dropout from school and work and mental health in young adults in Norway: A qualitative interview-based study. *Cogent Psychology*, *5*(1), 1455365. https://doi.org/10.1080/23311908.2018.1455365.

Republic of Türkiye Ministry of National Education (2021). *National Education Statistics, Formal Education 2020/2021*. Strateji Geliştirme Başkanlığı. https://sgb.meb.gov.tr/www/resmi-istatistikler/icerik/64.

Republic of Türkiye Ministry of National Education [Ministry of National Education (MoNE)] (2013). Policy recommendations report on grade retention in secondary education, reasons for dropout and children out of formal education (ISBN: 978-975-11-3809-5). Ortaöğretim Genel Müdürlüğü. https://www.meb.gov.tr/earged/unicef/S%C4%B1n%C4%B1f%20Tekrar%C4%B1,%20Okul%20Terki%20Politika%20Raporu.pdf.

Saavedra, J. (2020). July 20). A lesson on the pandemic – the lesson we didn't learn about inequality. *World Bank Blogs*https://blogs.worldbank.org/education/lesson-pandemic-lesson-we-didnt-learn-about-inequality.

Şahin, B., & Uysal, M. (2017). Açık öğretim lisesinin yetişkin eğitiminde katılım sorunsalı bağlamında incelenmesi. *Journal of Faculty of EducationalSciences*, *50*(1), 127–159.

Saraiva, A. B., Pereira, B. O., & Zamith-Cruz, J. (2011). School dropout, problem behaviour and poor academic achievement: A longitudinal view of Portuguese male offenders. *Emotional and Behavioural Difficulties*, *16*(4), 419–436. https://doi.org/10.1080/13632752.2011.616351.

Sarıtepeci, M., Durak, H., & Seferoğlu, S. S. (2016). Examination of teachers' in-service training needs in the field of instructional technology: An evaluation in light of applications implemented at FATIH project. *Turkish Journal of Computer and Mathematics Education*, *7*(3), 601–620. https://doi.org/10.16949/turkbilmat.277873.

Save the Children (2021). *Save our education*. https://www.savethechildren.net/save-our-education-report/.

Shuja, A., Ali, A., Khan, S. S. A., Burki, S. B., & Bilal, S. (2022). Perspectives on the factors affecting students' dropout rate during COVID-19: A case study from Pakistan. *SAGE Open*, *12*(2), 1–15. https://doi.org/10.1177/21582440221097.

Smith, J., Guimond, F. A., Bergeron, J., St-Amand, J., Fitzpatrick, C., & Gagnon, M. (2021). Changes in students' achievement motivation in the context of the COVID-19 pandemic: A function of extraversion/introversion? *Education Sciences*, *11*(1), 30. https://doi.org/10.3390/educsci11010030.

Sözer, Y. (2017). Evaluation of vocational open high school students' opinions about the reasons of being out of formal education. *Dicle Üniversitesi Ziya Gökalp Eğitim Fakültesi Dergisi*, *30*, 493–507. https://doi.org/10.14582/DUZGEF.785.

Strauss, A., & Corbin, J. M. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Sage Publications, Inc.

Taş, A., Selvitopu, A., Bora, V., & Demirkaya, Y. (2013). Meslek lisesi öğrencilerinin okul terk nedenleri. *Kuram ve Uygulamada Eğitim Bilimleri, 13*(3), 1551–1566.

TEDMEM (2020). *COVID-19 sürecinde eğitim: Uzaktan öğrenme, sorunlar ve çözüm önerileri* TEDMEM Analiz Dizisi 7. https://tedmem.org/storage/publications/February2023/FvZgqcTeABuqBueLWx50.pdf.

Tomasik, M. J., Helbling, L. A., & Moser, U. (2021). Educational gains of in-person vs. distance learning in primary and secondary schools: A natural experiment during the COVID-19 pandemic school closures in Switzerland. *International Journal of Psychology, 56*(4), 566–576. https://doi.org/10.1002/ijop.12728.

Townsend, L., Flisher, A. J., & King, G. (2007). A systematic review of the relationship between high school dropout and substance use. *Clinical Child and Family Psychology Review, 10*(4), 295–317.

Türkiye Eğitim Derneği [Türkiye Education Association (TEA)]. (2005). *Türkiye'de üniversiteye giriş sistemi araştırması [University entrance system research in Türkiye]*. TEA.

TUSIAD & ERG (2021). *COVID-19 etkisinde Türkiye'de eğitim*. https://tusiad.org/tr/yayinlar/raporlar/item/10820-tusiad-erg-covid-19-etkisinde-turkiye-de-egitim.

UNESCO (2002). *ODL (Open and distance learning): Trends, policy and strategy consideration*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000128463.

UNESCO (2023). *World ınequality database on education*. https://www.education-inequalities.org/.

UNESCO (2019). *New methodology shows that 258 million children, adolescents and youth are out of school*. https://uis.unesco.org/sites/default/files/documents/new-methodology-shows-258-million-children-adolescents-and-youth-are-out-school.pdf.

UNESCO (2020a). *Adverse consequences of school closures*https://en.unesco.org/covid19/educationresponse/ consequences.

UNESCO (2020b). *How many students are at risk of not returning to school?* UNESCO COVID-19 Education Response. https://unesdoc.unesco.org/ark:/48223/pf0000373992.

UNESCO (2022). *Education: From COVID-19 school closures to recovery*https://www.unesco.org/en/covid-19/education-response#schoolclosures.

UNICEF (2019). *Education of children under temporary protection in Türkiye: Statistical report*. https://www.unicef.org/turkiye/en/reports/education-children-under-temporary-protection-turkey-statistical-report.

United Nations Children's Fund (UNICEF) (2013). *Identification and monitoring of out-of-school children and dropping-out of students*. https://www.unicef.org/kazakhstan/media/1466/file.

United Nations (2020). Policy brief: *Education during COVID-19 and beyond*. https://unsdg.un.org/resources/policy-brief-education-during-covid-19-and-beyond.

Ünver, G. (2022). *Reasons for school absenteeism and dropout: a meta-synthesis investigation* [Unpublished Master Thesis]. İstanbul Medeniyet University.

Uppal, S. (2017). *Young men and women without a high school diploma*. https://calp.ca/_uploads/resource-doc-751.pdf.

Vallerand, R. J., Fortier, M. S., & Guay, F. (1997). Self-determination and persistence in a real-life setting: Toward a motivational model of high school dropout. *Journal of Personality and Social Psychology, 72*(5), 1161–1176. https://doi.org/10.1037/0022-3514.72.5.1161.

World Bank Group (2020). *The impact of the COVID-19 pandemic on education financing*. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/479041589318526060/the-impact-of-thecovid-19-pandemic-on-education-financing.

Yang, L., QI, L., & Zhang, B. (2022). Concepts and evaluation of saturation in qualitative research. *Advances in Psychological Science, 30*(3), 511–521. https://doi.org/10.3724/SP.J.1042.2022.00511.

Yavuz, M., Özkaral, T., & Yıldız, D. (2016). Kız öğrencilerin örgün eğitimlerini sürdürmeme nedenleri. *21. Yüzyılda Eğitim v e Toplum Eğitim Bilimleri v e Sosyal Araştırmalar Dergisi, 5*(14), 261–273.

Zimmerman, B. J., Bandura, A., & Martinez-Pons, M. (1992). Self-motivation for academic attainment: The role of self-efficacy beliefs and personal goal setting. *American Educational Research Journal, 29*(3), 663–676. https://doi.org/10.3102/00028312029003663.

Zorbaz, O., & Özer, A. (2020). Okul Terk Riskini Etkileyen öğrenci özellikleri, bir okuldan diğerine farklı mıdır? *Eğitim Ve Bilim, 45*(202), 191–210.