REVIEW	Open Access
DERLEME	Açık Erişim

Undergraduate Dropout Intentions in Turkey: A Systematic Review of Factors and Implications[*]

Türkiye'de Üniversite Öğrencilerinin Okulu Bırakma Niyetleri: Faktörlerin ve Sonuçlarının Sistematik Bir İncelemesi

Müyesser Eraslan Yalçın, Sevinç Gülseçen

ABSTRACT

The purpose of this research is to find and analyze the sources about student dropout in higher education in Turkey using the systematic review method. According to the research questions, sixteen sources (nine papers and seven theses in the year 2012 and after) conducted in Turkey are taken into consideration and make a content analysis defined under the PRISMA 2020 Method. The qualitative and quantitative methods were used to examine the problems more deeply and to indicate the factors behind the problems. The sample was composed of people still in the university, people who dropped out of the university, instructors, and administrators. The factors behind dropout are taken in two processes as pre-university (personal factors, the effects of guidance to choose a department, family factors, educational system-related factors, the level of vocational maturity factors, and the factors of the location city of the university) and university (social adaptation, academic factors, and organizational factors). In this study, the causes and consequences of school dropouts, and solutions to prevent or reduce dropouts were discussed.

Author Information

Müyesser Eraslan Yalçın [ID]
PhD. Student, İstanbul University, İstanbul, Türkiye
muyesseraslan@gmail.com

Sevinç Gülseçen [ID]
Prof., İstanbul University, İstanbul, Türkiye
gulsecen@istanbul.edu.tr

ÖZ

Bu araştırmanın amacı, Türkiye'deki yükseköğretimde öğrenci okul bırakma konusundaki kaynakları sistematik inceleme yöntemi kullanarak bulmak ve analiz etmektir. Araştırma sorularına göre, Türkiye'de 2012 yılından sonra yürütülen on altı kaynak (dokuz makale ve yedi tez) dikkate alınmış ve PRISMA 2020 Yöntemi altında tanımlanan bir içerik tabanlı analiz yapılmıştır. Sorunları daha derinlemesine incelemek ve sorunların arkasındaki faktörleri belirtmek için nitel ve nicel yöntemler kullanılmıştır. Örneklem, hâlâ üniversitede olanlar, üniversiteyi bırakanlar, öğretmenler ve yöneticilerden oluşmaktadır. Okulu bırakmanın arkasındaki faktörler, ön-üniversite (kişisel faktörler, bölüm seçimine rehberliğin etkileri, aile faktörleri, eğitim sistemi ile ilgili faktörler, mesleki olgunluk düzeyi faktörleri ve üniversitenin bulunduğu şehir faktörleri) ve üniversite (sosyal uyum, akademik faktörler ve örgütsel faktörler) olarak iki süreçte ele alınmıştır. Bu çalışmada, okul bırakmanın nedenleri ve sonuçları ve okul bırakmaları önlemek veya azaltmak için çözümler tartışılmıştır.

Ethical Statement: This article, being of a review type, does not require ethical committee approval.

---

[*] This study is a preliminary investigation for a doctoral thesis.

Introduction

After 2010, studying in higher education has become a must for adaptation of the new world order in terms of finding a proper job, understanding of new version of changing nature of knowledge, and keeping up with globalization matters affecting economic and social life. This rapid growth in higher education brings school dropouts around the world (Dündar & Bülbül, 2022; Segura et al., 2022; Yılmaz & Sarpkaya, 2022) and the necessary policies must be developed for the students who have problems to continue study (Uslu Gülşen et al., 2022).

Reasons for dropping out vary in different countries such as Australia and America developed systems to prevent students from dropping out and to detect risky groups making them continue to their studies (Lee and Chung, 2019). The objective of the European community is to enhance students' knowledge and skills because of fulfilling the needs of the labor market and executing a more productive and socially equitable environment (Ortiz-Lozano et al., 2018; Segura et al., 2022). In this respect, the dropout is related not only to the students but also the students' environment, family, and government (Şimşek, 2013; Uslu Gülşen et al., 2022). Also, involvement of parents, partners and friends in students' lives affects the student's dropout (Baalmann et al., 2022).

To predict the risky groups, some researchers pointed out that academic variables are more important than sociodemographic ones, and the organizations should share extended and big university datasets including academic and sociodemographic data (Ortiz-Lozano et al., 2022). However, work conditions as part-time or full-time, the time of studying at university, and the interest in the studying area are seen as other important factors (Segura et al., 2022).

Likewise, the purpose of most studies about dropout is to detect the best time and the best data to guess the students dropping out of the university (Ortiz-Lozano et al., 2022). The level of dropout (changing the department or university and dropping out of the university education) is another important factor (Segura et al., 2022).

In the context of the Turkish higher education system, the graduation rate witnessed a significant ascent, surging from 12% in 2008 to 87.1% in 2019 and this notable progression propelled Turkey to secure the 11th position in rankings, as per the OECD 2019 report (Aypay et al., 2012; OECD, 2019). Additionally, an examination of the 2017 data provided by the Student Selection and Placement Center revealed that students enrolling in higher education programs and participating in the annual examination accounted for 19.5% of the total student population, constituting 3.5% of the enrolled students (ÖSYM, 2017). According to the results of the 2021 Turkey Family Structure Survey, the proportion of young individuals aged 15-24 who have discontinued their education (including university) despite their desire to continue stands at 7.6% (TurkStat, 2021). The predominant education system in Turkey has faced significant critique due to its inability to equip students with skills necessary for the modern information age rooted in science (Gök & Akar, 2023). Evaluations conducted by OECD in the areas of mathematics, science, and reading have highlighted apprehensions regarding students' capabilities in analysis, reasoning, and problem-solving (OECD, 2019). Furthermore, concerning students' sense of belonging at school, Turkey was among the nations with the least satisfactory ratings (Gök & Akar, 2023; OECD,2019).

The aim of this study is to conduct a systematic review of literature sources concerning the decision or intention of Turkish undergraduate students to drop out from universities. The analysis will be based on 16 sources conducted in Turkey using content analysis, as defined under the PRISMA 2020 Method (Page et al., 2021).

Method

The aim of this research is to conduct a systematic review of sources related to student dropout decisions in higher education. The systematic review method involves gathering extensive quantitative and qualitative information about the research questions, identifying all positive and negative aspects of results and solutions, and providing an overview of the problem to guide future research (Page et al., 2021). This article utilizes a mixed study approach following the PRISMA 2020 Method. Firstly, the sources are identified, and then the findings are synthesized.

Research Questions:

The questions trying to find solutions in this research:

1.   What is the aim of dropout studies in Turkey?

2.   What is the method of dropout studies in Turkey?

3.   What is the sample population and size of in the dropout studies in Turkey?

4.   What are the results of dropout studies in Turkey?

5.   What are the suggestions for future research in dropout studies in Turkey?

6.   What trends have been followed in the study of university student dropout in Turkey in terms of the characteristics of publications and methodologies?

7.   What progress has been made in the study of university student dropout in Turkey, based on the determinants of study (individual, socio-economic, academic, and institutional)?

Collection of The Sources:

The systematic analysis process was conducted to address specific research questions, sources from the year 2012 and onwards were examined. These sources were obtained from Google Scholar, Science Direct, and the Turkey Council of Higher Education Thesis Databases. The search keywords used were "dropout in higher education," "university dropout," "school dropout," and "dropout." The selection criteria for the sources are illustrated in Figure 1 below:

1.   In Turkey, studies were conducted concerning dropout in higher education.

2.   The study's sample contains Turkish students.

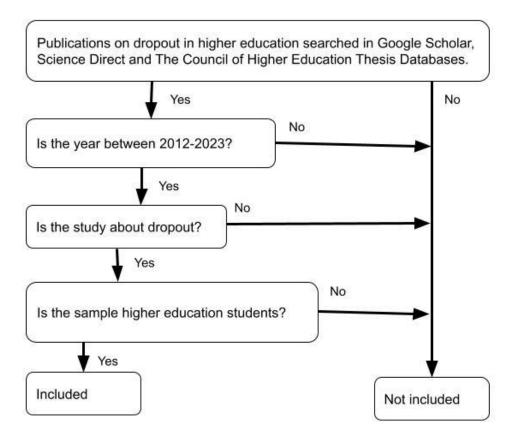3.   The study was conducted in the year 2012 and onwards.

Figure 1. PRISMA 2020 Method Flow Chart (Adapted from (Page et al., 2021)).

After the literature search, a total of 16 sources were found as suitable according to the study questions (9 papers and 7 theses) (Table 1). The theses are taken from the official website of the Turkey Council of Higher Education Thesis Databases, and they are open access. The journals are mostly obtained from Google Scholar and have mostly a quartile value (3 for Q1, 2 for Q2, 1 for Q3, 2 for Q4, and 1 for NA). Due to the limited number of studies conducted on school dropout in Turkey, all relevant studies fitting the research questions have been included in this study.

Table 1. Sources in the sample under analysis.

Code	Authors and year of publication	Paper or Thesis Title	Quartile
J1	Ay (2021)	Dropout from the Faculties of Theology: A Phenomenological Study on those who withdrew from the Faculties of Theology	Q1
J2	Baltacı (2019)	The School Dropout in Higher Religious Education	Q4
J3	Bülbül (2012)	Dropout in Higher Education: Reasons and Solutions	Q3
J4	Dündar & Bülbül (2022)	Relations between University Students' Perceptions of Organizational Image, Levels of Alienation and Tendency to Drop-Out	Q1

J5	Şimşek (2013)	University Students' Tendencies Toward and Reasons Behind Dropout	Q2
J6	Gülşen et al. (2022)	Dropout from Higher Education in Turkey: A Qualitative Study	NA
J7	Bağrıacık Yılmaz & Karataş (2022)	Why do open and distance education students drop out? Views from various stakeholders	Q1
J8	Yılmaz & Sarpkaya (2022)	A Case Study on University Dropout: Perspectives from Education Faculty Students and Academicians	Q4
J9	Can, Aktas, & Arpacioglu (2017)	The Reasons of School Dropouts in Higher Education: Babaeski Vocational College Case	Q2
T1	Aguş (2019)	Reasons for Student Dropout in Open and Distance Education: a Study at Anadolu University Open Education System	NA
T2	Dündar (2020)	Relations Between University Students' Perceptions of Organizational Image, Levels of Alienation and Tendency to Drop-Out	NA
T3	Esgice (2015)	Causes of Students' Drop-Out in Open and Distance Education	NA
T4	Yılmaz (2020)	University Dropout: a Case Study	NA
T5	Gülşen (2017)	Dropout in Higher Education	NA
T6	Uyumaz (2021)	Adaptation of The School Dropout Scale in Higher Education to Turkish Culture and Determination of Cross-cultural Measurement Invariance	NA
T7	Yılmaz (2020)	Why do Open and Distance Education Students Dropout or Persist?	NA

Note: code J refers to papers and T to theses. NA is not applicable.

Findings

The findings from the sources are presented as follows, and tables are created to clearly illustrate the results.

Findings About The Aims of The Research

When the sources are examined, it is revealed that the aims of the research are generally to determine the reasons for the dropout or to offer solutions to the dropout. Upon reviewing Table 2, it can be observed that most of the studies focus on revealing the reasons behind dropout. Due to the prevalence of semi-structured interview forms in the selected studies, a validity data table has not been constructed for these studies.

Table 2. The aims of the sources

Main Topic	Research Aims	The Research
Dropout Factors	The examination of the reasons for students' academic persistence in and/or dropout of open and distance education	Aguş (2019), Esgice (2015), and Yılmaz (2020)
	The determination of the factors which affect the decision to dropouts in higher education	Bağrıacık Yılmaz & Karataş (2022), Dündar & Bülbül (2022), Gülşen (2017), Gülşen et al. (2022), and Yılmaz (2020)
	The specific aspects of the Faculty of Education of school dropouts in higher education	Yılmaz & Sarpkaya (2022)
	In the Faculty of Theology, the specific aspects of school dropouts in higher education	Ay (2021)
	Determining the factors determining affecting the intention to student dropout in higher education	Dündar (2020), and Uyumaz (2021)
The solutions for the prevention of dropout	The dropout reasons and solutions	Bülbül (2012), Can et al. (2017), and Şimşek (2013)
	The discussions of dropout problems and the suggestions for religious education institutions	Baltacı (2019)

Findings About The Design of The Research

As regards with the design, it is seen that mostly qualitative studies are carried out by examining the findings, and it is understood that most of the research was conducted by interview method (Table 3).

Table 3. The findings on the research design

Method	Method Type	References
Quantitative Method	Survey	Aguş (2019), and Şimşek (2013)
	Scale	Dündar (2020), Dündar & Bülbül (2022), and Uyumaz (2021)
Qualitative Method	Interview Method	Ay (2021), A. Yılmaz (2020), Bağrıacık Yılmaz & Karataş (2022), Baltacı (2019), Bülbül (2012), Can et al. (2017), Esgice (2015), Gülşen (2017), Gülşen et al. (2022), Yılmaz (2020), and Yılmaz & Sarpkaya (2022)

Findings Regarding The Participants of The Studies

Most of the sources on the student dropout in university education have been conducted with students or individuals who have left school. The following table shows the participants and sample articles in the study (Table 4). It is observed that a majority of the sources were conducted with a small group and within a single department of a single university. In these sources, due to the comprehensive individual-level descriptions of student dropout, the findings could not be conveyed using numerical data. As a result, the findings have been presented narratively and will be summarized in the discussion section as well.

Table 4. The sample details of the sources

Code	Authors and year of publication	Sample Description
J1	Ay (2021)	8 students studying in Faculties of Theology
J2	Baltacı (2019)	36 students studying in Faculties of Theology and 11 lecturers working in the same faculties
J3	Bülbül (2012)	12 students studying different faculties and colleges of the same university and 6 academic members from 3 different faculties in the same university
J4	Dündar & Bülbül (2022)	967 second-grade students in the same university from 11 faculties and 2 colleges
J5	Şimşek (2013)	450 students from 8 different faculties in the same university
J6	Uslu Gülşen et al. (2022)	19 individuals who dropped out
J7	Bağrıacık Yılmaz & Karataş (2022)	Participants consist of 40 people, including 17 dropout students, 5 experts in ODE, 6 instructors, 4 administrators, and 8 support staff
J8	Yılmaz & Sarpkaya (2022)	In the same public university faculty, 10 people dropped out, and 8 academic staff members

J9	Can et al. (2017)	116 people who had applied for a registration clearance at Kirklareli University Babaeski Vocational School
T1	Aguş (2019)	302 undergraduate and associate degree students
T2	Dündar (2020)	967 students from eleven faculties and two colleges in the same university
T3	Esgice (2015)	25 individuals who dropped out in the same university
T4	Yılmaz (2020)	In the same public university faculty, 10 dropout individuals and 8 academic personnel in the same term
T5	Uslu Gülşen (2017)	19 individuals who dropped out from different faculties and universities
T6	Uyumaz (2021)	560 individuals who are freshmen in higher education
T7	Yılmaz (2020)	54 people in total, including 17 dropout people in open and distance education, 14 people who are still students in open and distance education, and 23 personnel as experts, teaching staff, managers, and support services staff

Findings Regarding The Results of The Studies

Ay (2021) identified several challenges leading to dropout, including difficulties in vocational courses, the struggle to find suitable employment, issues with faculty members, challenges in adapting to the social environment, and unmet societal expectations placed on the Faculty of Theology and its members.

On the other hand, the dropout results of the study conducted by Baltacı (2019) are academic experience in high school, academic failure, academic and social environment adaptation problems, financial insufficiency problems, health-related problems, and religious belief conflicts-related.

According to Bülbül's research (2012), the social adaptation difficulties during the pre-university periods, the academic adaptation problems during university education, the interest in the related area, employment facilities, the organizational facilities, the location city of the university, financial insufficiency, inefficient consultancy were listed for the dropout reasons.

The image perceptions of students regarding organizational image and the student's level of alienation were found as reasons for dropout tendencies by Dündar and Bülbül (2022). The organizational image consists of the quality of the university, the quality of chosen program, sports facilities, the general outlook and physical infrastructure of the university, the aspect of social environment, the facilities of entertainment in the faculty, and the condition of housing and food.

The findings by Şimşek (2013) listed personal characteristics, academic failure, attendance, working, boredom at school, disciplinary action, the level of satisfaction with faculty, faculty administrators and instructors, social activity in the faculty, the adaptation to the faculty, the reasons to choose the related program and the effect of friends dropped out the school.

The reasons to choose the related program, social adjustment, academic factors, financial difficulties, finding suitable employment or not, and marriage were found to be the reasons for the dropout by Uslu Gülşen et al. (2022).

According to the study conducted by Bağrıacık Yılmaz, and Karataş (2022), the reasons for dropout in higher education were categorized into four groups: external reasons, internal reasons, student skills, and student characteristics. The most significant factors for the dropout were the qualifications of the instructors, the peer interactions, the academic failure, the accessibility of the service/institution, insufficient student-content interaction, the reasons to choose the related program, and students' self-regulation and digital literacy skills.

Yılmaz and Sarpkaya (2022) divided the dropout decision process into two categories as pre-admission factors of the university and factors that appeared in the university process and affect student dropout. The first part was related to the reasons to choose the related program for the students (the effects of guidance, system, family, career options, personality, and the location city of the university). The second part consisted of psychological-related problems, the level of academic achievements, social adoption, family-related problems, organizational-related problems, appointment factors, military enrollment condition, and the level of financial sufficiency.

Agus's study (2019) found that time constraints and lack of motivation had the most significant effect on dropout. Organizational factors (tuition fees and unmet expectations) and academic factors (inappropriate study habits and academic difficulty) had a moderate effect on dropout. Also, the aspect of distance education about the learning process, and less or no communication with instructors and peers had little importance on the dropout, and technical competence, job/school change, and family and health problems were the least effects on dropout. The impact of the listed factors on dropout varied according to personal characteristics such as the purpose of school enrollment, gender, age, education level, marital status, chosen program type, employment status, and residence.

The findings of the study carried out by Dündar (2020) showed that organizational image perceptions (quality of the organization, the quality of chosen program, sports facilities, social atmosphere in the university, entertainment facilities, and housing and food) and alienation levels had a significant effect on the dropout varying by gender and age.

According to Esgice's study (2015), the difficulty to pay tuition fees, the aspect of open and distance education about the learning process, and technical problems during exams are the most important factors for dropout. Personal factors (previous learning experience, distance education expectations, lack of personal career goals, and failure anxiety) and environmental factors (environmental conditions and the responsibilities of work and family) were found the other most important factors. Finally, the effects of these factors on dropout varied by programs, personal characteristics, and environmental conditions.

Yılmaz (2020) divide the findings into three categories as pre-enrollment factors, university process factors, and adaptation factors. The pre-enrollment factors consist of guidance factors to decide the program and university, personal factors, educational system-related factors, the factors related to the effects of family, the level of vocational maturity factors, and the city of the university factors. The university process factors make students challenged during studying at the university psychologically, academically, and socially. Additionally, organizational-related problems, appointment factors, military service enrollment conditions, familial situations, and level of financial sufficiency are seen as other factors that affect the students significantly. Finally, adaptation factors are divided into 3

categories: academic, social, and organizational. All these factors affect the students' motivation intrinsically and extrinsicly.

Uslu Gülşen (2017) took the factors into three processes: the pre-university process, the college process, and the dropout decision process. The first process is about the preference of the department which is affected by the type of the graduated high school, the meaning attached to the university education, the vocational sufficiency situation, autonomy situation in department preference, the level of parent education and profession, and the score of the university entrance exam. The college process consists of social adaptation (relations with peers, the university social environment, the opportunities of the location city of the university, and the awareness of own interests and abilities) and academic factors (self-regulated learning skills, impression towards classes, communication with instructors, perception towards department and absenteeism) and organizational factors (institutional belonging, academic advisory system, and campus facilities). Finally, the dropout decision comes from the improper choice of department, financial insufficiency, academic failure, appointment as an officer, working, setting up own business, marriage, and employment opportunities after graduation.

According to the study conducted by Uyumaz (2021), students who worked part or full-time during their university education have a high tendency to drop out due to health, happiness, financial, academic reasons, and academic staff than students who didn't work. Also, the reasons for the dropout were found as working, mostly financial insufficiency, and less social adaptation factors.

The study's findings for dropout reasons (Yılmaz, 2020) are categorized into two periods as pre-university and university. During the pre-university period, the dropout reasons depend on students' characteristics (the structure of personality, target commitment, etc.) and students' skills (self-regulation, metacognitive thinking, etc.). After starting the university, the students have challenges internally and externally. While academic and social integration has a significant effect on dropout internally and financial status, family life and social life have a significant effect on the dropout externally.

In the research conducted by Can et al. (2017), it was found that the factors contributing to dropout include financial reasons (housing problems, nutrition, other education expenditures, and expenses related to a student's social and cultural needs during their university education), family reasons, enrolling in other universities, and employment.

Discussions And Suggestions

Considering the importance of the dropout problem and examining the studies conducted in Turkey on this topic, it can be concluded that the number of studies conducted in Turkey is moderately low. Among these limited number of studies, research has been conducted with students currently enrolled in universities, as well as those who have dropped out, instructors, and administrators. These studies explore the causes and consequences of school dropouts while proposing solutions to prevent or reduce dropout rates. In this systematic review study, research on student dropout in higher education conducted from the year 2012 and onwards was thoroughly examined. Most of the studies were conducted using qualitative methods, particularly the interview method, as it allows for a deeper exploration of the underlying issues. Additionally, five studies utilized quantitative methods such as surveys and scales.

Some researchers take the dropout into processes as pre-university (personal factors, the effects of guidance to choose a department, educational system-related factors, family factors, vocational

factors, and city factors) and university (social adaptation, academic factors, and organizational factors) (Uslu Gülşen, 2017; Uslu Gülşen et al., 2022; Yılmaz 2020; Yılmaz & Sarpkaya, 2022). Examining the factors contributing to dropout on a periodic basis allows for the observation of distinct repercussions of dropout across varying time intervals and facilitates a thorough comprehension of the phenomenon.

During the pre-university process, the department choice is one of the most important factors affected by guidance, the graduated high school type, vocational maturity, expectations from university education, and university entrance exam score. Some students stated that graduating from a vocational high school or taking advice from family, friends, or teachers forced them to choose a specific department but after they started to study in the related department, they realized that the department did not satisfy their expectations, and this resulted in their early leaving the university (Ay, 2021; Baltacı, 2019; Uslu Gülşen, 2017; Uslu Gülşen et al., 2022). Also, if the students choose their departments according to university entrance exam scores, not their characteristics or the interest in the related area, it resulted in dropping out of the department (Ay, 2021; Bülbül, 2012; Uslu Gülşen, 2017).

After starting a university education, social and academic adaptation is a major problem for students (Aguş, 2019; Ay, 2021; Baltacı, 2019; Bülbül, 2012; Dündar & Bülbül, 2022; Uslu Gülşen, 2017; Uslu Gülşen et al., 2022; Yılmaz & Sarpkaya, 2022). Social adoption is an important factor in school dropout (Ay, 2021), and enhances the students' organizational commitment (Baltacı, 2019). It is examined that the school dropout decision depends on school satisfaction and organizational commitment (Bülbül, 2013) and students with aims to study the university and low school satisfaction and organizational commitment have less likely to intend to drop out of higher education (Baltaci, 2019). Attendance in courses affect socialization and students who have low attendance level should be determined and guided by the university psychological counselors (Baltacı, 2019). For students to socialize with each other, the location of the department should be on the university campus (Ay, 2021).

The geographical location of the university, the general outlook and physical infrastructure of the university, the aspect of social environment, and the facilities of entertainment in the faculty influence students' presence on campus, subsequently impacting their social integration and level of commitment to the institution (Bülbül, 2012; Dündar, 2020; Dündar and Bülbül, 2022; Şimşek, 2013). Also, the study by Dündar (2020) examines the relationship between the quality of the organization and the presence of sports facilities with regards to dropout rates in higher education. The research delves into the potential impact of the quality of the educational institution's organizational structure and the availability of sports facilities on the decisions of students to continue or discontinue their higher education pursuits. In short, if students encounter challenges related to geographical factors, institutional reputation, and the availability of resources within their current institutions, they may opt to transfer or enroll at alternative institutions (Can et al., 2017). This phenomenon could be regarded as a potential contributing factor to the rates of dropout within the realm of higher education.

During the university period, some students have problems with academic staff (Ay, 2021; Baltacı, 2019; Şimşek, 2013; Uslu Gülşen, 2017). These problems are the way of teaching style, academic staff's negative thoughts about their colleagues, and academic staff's political thoughts. These problems affect the students' organizational commitment (Ay, 2021; Baltacı, 2019). Other dropout factors are seen in that students do not keep up with instructors' way of teaching style and assessment methods, and during the course time, some academic staff speak political thoughts with students (Ay, 2021; Baltacı, 2019). Detailed research should be done to find students' problems regarding teaching processes applied in university, and the university management, and the sample should be chosen from the students who have left higher education (Can et al., 2017; Şimşek, 2013). In short, the degree of

contentment with faculty members, academic administrators, and instructors and their qualifications influences the decision to drop out (Bağrıacık Yılmaz, & Karataş, 2022; Şimşek, 2013).

Students' abilities, including self-regulation and digital literacy skills, have an impact on their educational journey. If a student is unable to perform basic tasks such as installing simple applications or managing their study habits, it may lead to a decision to drop out from university education (Bağrıacık Yılmaz, & Karataş, 2022). However, In distance education, the facets of the learning process hold minimal significance, whereas technical competence exhibits the least impact on dropout rates (Agus, 2019).

Ay's study (2021) focused on only the Faculty of Theology students who dropped out and would not come to the university again and defined this condition as a limitation. Moreover, Segura et al. (2022) make suggestions about studying more faculty and departments at the same time, using machine learning techniques to analyze the data, and taking more detailed data about students' characteristics. Similarly, conducting similar studies with various sample groups can provide more comprehensive information about the factors that affect students' dropout decisions (Uslu Gülşen, 2017).

Academic failure is another factor in dropout (Agus, 2019; Ay, 2021; Baltacı, 2019). Especially, in preparatory classes, the students take low or poor grades or have challenges to take high grades, they have a tendency to drop out due to boredom during this preparatory process (Ay, 2021). Furthermore, challenges encountered within vocational courses led to academic underachievement and the subsequent choice of student dropout (Ay, 2021). It is pointed out that dropout decisions are taken mostly in the first years, and it is an effective way to decrease dropouts that students should be supported socially (Baltacı, 2019). However, students who have high school experience parallel with the university education have no or less tendency to drop out. Moreover, Baltacı (2019) stated that if students had academic failure or social adaptation problems in high school, they have the same problems during the university education. Thus, the detection of these types of students and counseling socially and academically is important (Baltacı, 2019).

Society's expectations of graduated students put pressure on students and if the students do not keep up with these expectations (being an example to society, a role model, mission, moral responsibility, rebuilding the society, transforming, and pioneering in all fields), they leave the school due to this pressure (Ay, 2021). After graduation, the state of being unemployed, and having inappropriate employment were seen as other factors in dropout (Ay, 2021; Uslu Gülşen, 2017). Additionally, deciding to get married and subsequently assuming the responsibilities that come with marriage incline students especially females towards making the decision to discontinue their education (Uslu Gülşen et al., 2022) but Agus (2019) revealed that due to the majority of school dropouts being unmarried, it has been determined that marital status is not a highly significant factor in the decision to discontinue education. Finally, In Turkey, the completion of military service is considered indispensable within social and vocational contexts. Male students may choose to undertake military service as an option to relieve themselves of these obligations, even at the cost of discontinuing their education (Yılmaz, 2020; Yılmaz & Sarpkaya, 2022).

Economic reasons are seen as an important factor in dropout decisions (Can et al., 2017). Some students who do not have financial support from their families have financial inadequacy and must work outside of the university, and these students have more social adaption problems than others that results in dropouts (Uslu Gülşen, 2017; Uyumaz, 2021). The financial expenditures are not education

fees, but they are course materials, computer, internet, social and cultural needs, housing, and nutrition expenditures (Agus, 2019; Can et al., 2017; Dündar, 2020). Also, it has been determined that 48.1% of those who dropped out of school did so due to economic reasons (TurkStat, 2021).

Some suggestions to prevent dropouts are listed below;

1.   to inform/guide prospective students about their university, department, courses, job opportunities, and university culture (Ay, 2021; Baltacı, 2019; Can et al., 2017; Uslu Gülşen, 2017).

2.   to periodically monitor students' satisfaction levels, especially their expectations, at the beginning of registration, and studies can be carried out to solve problems, if any, without causing school dropouts (Ay, 2021; Bülbül, 2012; Uslu Gülşen, 2017).

3.   to guide students to enhance their vocational knowledge (Ay, 2021).

4.   to develop a more student-centered teaching style and assessment methods (Ay, 2021).

5.   to continue in-class and out-of-class communication (Ay, 2021; Baltacı, 2019; Uslu Gülşen, 2017)

6.   to give awareness and adaptation training at every education level to make students adapt to new and different environments more easily (Baltacı, 2019; Uslu Gülşen, 2017).

7.   to provide work opportunities at university or find scholarships to solve students' financial problems (Baltacı, 2019; Can et al., 2017; Uslu Gülşen, 2017)

8.   to create peer coaching systems (Baltacı, 2019)

9.   to develop scales to detect the risk group and to reform new strategies and policies by the Council of Higher Education thanks to the government's support (Can et al., 2017; Uslu Gülşen, 2017)

10.   to take precautions for risky students and to referral them to university counceller and psychologists (Bülbül, 2012; Dündar & Bülbül, 2022; Uslu Gülşen, 2017)

For future studies, the connection between high school and university choice should be examined (Ay, 2021). Not only the first year but also all the classes and all degrees should be studied to examine the development in the process of dropout thoughts by years (Baltacı, 2019; Dündar & Bülbül, 2022; Uslu Gülşen, 2017). The mixed methods as qualitative and quantitative should be used to examine the factors under dropout decisions (Uslu Gülşen, 2017). The image perceptions of students regarding organizational image and student's level of alienation (Dündar & Bülbül, 2022), university adaptation, school burnout or engagement (Baltacı, 2019) psychological factors should be taken to examine the effects on dropout. Also, the risk of the dropout should be examined during pre-university and university processes to explain the possible effects of time-varying factors such as motivation, compliance or commitment and periodically it should be measured to detect the factors deeply (Bülbül, 2012). Also, there is no usage of machine learning techniques to analyze the students' dropout data and it is suggested to applied on the data analysis (Segura et al., 2022). Finally, the effects of family, partners and friends on students' life is found a significant effect on the dropout decision (Baalmann et al., 2022; Yılmaz, 2020) and it should be examined deeply by future studies.

Finally, one of the most significant limitations of this study is the limited number of available research studies. Due to their scarcity, these studies encountered challenges in terms of generalization, as they were conducted at the university or deparment level and involved a limited number of students.

Furthermore, due to the absence of a shared student system among higher education institutions, the exact dropout rate from universities cannot be conclusively determined.

References

Aguş, F. S. (2019). *Reasons for student dropout in open and distance education: A study at Anadolu University Open Education System.* (Doctoral dissertation). Retrieved from https://tez.yok.gov.tr/

Ay, M. F. (2021). İlahiyat fakülteleri'nde okul terki: İlahiyat fakültesinden kayıt sildirenler üzerine fenomenolojik bir araştırma. *Eskiyeni, (43)*, 269-288. https://doi.org/10.37697/eskiyeni.846289.

Aypay, A., Çekiç, O., & Boyaci, A. (2012). Student retention in higher education in Turkey: A qualitative study. *Journal of College Student Retention: Research, Theory & Practice, 14(1)*, 91-116.

Baalmann, T., Brömmelhaus, A., Hülsemann, J., Feldhaus, M., & Speck, K. (2022). The impact of parents, intimate relationships, and friends on students' dropout intentions. *Journal of College Student Retention: Research, Theory & Practice.* Advance online publication. https://doi.org/10.1177/15210251221133374.

Bağrıacık Yılmaz, A., & Karataş, S. (2022). Why do open and distance education students drop out? Views from various stakeholders. *International Journal of Educational Technology in Higher Education, 19(1)*, 1-22. https://doi.org/10.1186/s41239-022-00333-x.

Baltacı, A. (2019). Yüksek din öğretiminde okul terki. *Marife Dini Araştırmalar Dergisi, 19(2)*, 593-616. Doi: 10.33420/marife.625466.

Bülbül, T. (2012). Dropout in higher education: Reasons and solutions. *Education and Science, 37(166)*, 219-235.

Can, E., Aktas, F. O., & Arpacioglu, I. T. (2017). The Reasons of school dropouts in higher education: Babaeski vocational college case. *Universal Journal of Educational Research, 5(n12A)*, 84-88.

Dündar, Ö. (2020). *Relations between university students' perceptions of organizational ımage, levels of alienation and tendency to drop-out.* (Master Dissertation). Retrieved from https://tez.yok.gov.tr/

Dündar, Ö. & Bülbül, T. (2022). Üniversite öğrencilerinin örgütsel imaj algıları, okula yabancılaşma düzeyleri ve okul terki eğilimleri arasındaki ilişki. *MANAS Sosyal Araştırmalar Dergisi, 11(2)*, 522-541. https://doi.org/10.33206/mjss.1016872

Esgice, M. (2015). *Causes of students drop-out in open and distance education*. (Master Dissertation). Retrieved from https://tez.yok.gov.tr/

Gök, S., & Akar, H. (2023). Türkiye'de öncü bir alternatif okul olmak: değerler, pedagojik uygulamalar ve güçlükler. *Eğitim ve Bilim Dergisi, 48*, 216 139. http://dx.doi.org/10.15390/EB.2023.11778

Lee, S., & Chung, J. Y. (2019). The machine learning-based dropout early warning system for improving the performance of dropout prediction. *Applied Sciences, 9(15)*, 3093. https://doi.org/10.3390/app9153093

OECD, 2019. Education at a Glance. Retrieved from https://www.oecd.org/education/education-at-a-glance/EAG2019_CN_TUR.pdf (Retrieved date: 12 August 2023).

Ortiz-Lozano, J. M., Rua-Vieites, A., Bilbao-Calabuig, P., & Casadesús-Fa, M. (2018). University student retention: Best time and data to identify undergraduate students at risk of dropout. *Innovations in education and teaching international*. https://doi.org/10.1080/14703297.2018.1502090

ÖSYM,   2017.   Yerleştirme   sonuçlarına   ilişkin   sayısal   bilgiler. https://dokuman.osym.gov.tr/pdfdokuman/2017/OSYS/YER/YSay%C4%B1sal%20Bilgiler1508 2017.pdf (Retrieved date: 12 August 2023).

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., ... & Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *International journal of surgery, 88,* 105906. https://doi.org/10.1186/s13643-021-01626-4

Segura, M., Mello, J., & Hernández, A. (2022). Machine learning prediction of university student dropout: Does preference play a key role? *Mathematics, 10(18),* 3359. https://doi.org/10.3390/math10183359

Şimşek, H. (2013). University students' tendencies toward and reasons behind dropout. *Journal of Theoretical Educational Science, 6(2)*, 242-271.

TurkStat, 2021. Youth with statistics. Retrieved from https://data.tuik.gov.tr/

Uslu Gülşen, F. (2017). *Evaluation of dropout in higher education.* (Doctoral Dissertation). Retrieved from https://tez.yok.gov.tr/

Uslu Gülşen, F., Aydin, A., & Gïzïr, S. (2022). Dropout from higher education in turkey: A qualitative study. *Yükseköğretim Dergisi, 12(1),* 39-50. https://doi.org/10.2399/yod.21.587615

Uyumaz, G. (2021). *Adaptation of the school dropout scale in higher education to turkish culture and determination of cross-cultural measurement invariance*. (Master Dissertation). Retrieved from https://tez.yok.gov.tr/

Yılmaz, A. (2020). *Why do open and distance education students dropout or persist?* (Doctoral Dissertation). Retrieved from https://tez.yok.gov.tr/

Yılmaz, T. (2020). *University dropout: A case study.* (Doctoral Dissertation). Retrieved from https://tez.yok.gov.tr/

Yılmaz, T., & Sarpkaya, R. (2022). A case study on university dropout: Perspectives from education faculty students and academicians. *Research in Educational Administration and Leadership, 7(3),* 519-559. https://doi.org/10.30828/real.1163503.

Author Contribution Statement

This systematic review study is considered as a preliminary research for my doctoral thesis, conducted under the supervision of Prof. Sevinç Gülseçen.

Acknowledgement

Conflict of Interest

There is no conflict of interest.

Ethical Statement

This article does not require an ethics committee decision as it is a review type.