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Deciphering Dropout Factors: Using Fishbone Diagram (a Longitudinal Qualitative Research in the Faculty of Management at the University of Tehran)

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ABSTRACT

This study investigates the underlying factors contributing to student dropout at the Faculty of Management, University of Tehran, over a seven-year period (2018–2024). Employing a longitudinal qualitative research design, the study focuses on all students who discontinued their studies during this timeframe. Data collection was conducted in two stages: Initially, through a comprehensive census of all dropout cases, followed by purposive random sampling to select a diverse group of students across different academic years. Semi-structured interviews were held with 23 former students, serving as the primary data source. The interviews were analyzed through qualitative content analysis, guided by the Push, Pull, and Falling Out theoretical framework. Findings revealed two overarching categories of dropout factors: individual and non-individual. Individual factors encompassed four main themes and ten subthemes, while non-individual factors were divided into four main themes and eight subthemes. A fishbone (Ishikawa) diagram was employed to visually map the interrelations among these factors. Notably, socio-cultural norms and structural constraints emerged as the most deeply rooted and influential causes. The study concludes with policy and practical recommendations aimed at mitigating the dropout phenomenon within higher education institutions.

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Introduction

In recent decades, higher education has emerged as a central driver of national progress, fostering human capital and enabling countries to compete in an increasingly knowledge-based global economy. However, the promise of higher education is being undermined by a growing concern: student dropout. Despite expanded access to university education and institutional efforts to attract and retain students, many still leave before achieving their degrees. This phenomenon not only affects individual students but also places economic and reputational burdens on universities and hampers societal development. The issue is particularly salient in Iran, where the scale of higher education remains significant, yet persistent dropout and delays in graduation challenge the effectiveness of the system. Within this national context, management education—due to its career-oriented focus and student expectations—is especially vulnerable to attrition.

The literature widely acknowledges the critical role of higher education in economic development and technological advancement (Li et al., 2024; Mussaiyib & Pradhan, 2024; Trinh, 2023). Universities are positioned as hubs within global innovation ecosystems, linking knowledge, industry, and society (Peng & Xu, 2024, Keykha & Ezati, 2021). In Iran, although the total population of students decreased by 2.7% in 2021–2022 compared to the previous year, the trend still reflects a 2% increase over the past four years (Institute for Research and Planning in Higher Education, 2023). For example, the University of Tehran had 45,295 students enrolled in 2019–2020 (University of Tehran Statistical Yearbook, 2019–2020). Student dropout and delayed course completion have become a global challenge (Nagy & Molontay, 2024). UNESCO has also warned of the long-term consequences of dropout on both youth and society, highlighting the importance of timely interventions. Dropout is a multifaceted phenomenon with individual, institutional, and systemic consequences (Álvarez-Pérez et al., 2024; Liu et al., 2025). Scholars note that dropout impacts students' mental health and professional futures, faculty morale, university metrics, public funding, and national labor markets (Orozco-Rodríguez et al., 2025). Dropout rates vary widely, with estimates of 15% in the UK, 20.8% in Spain, and up to 35% in Colombia (OECD, 2022; Tuero et al., 2024). In response, many governments and universities have prioritized retention strategies and aligned their goals with international frameworks, such as the UN's Sustainable Development Goal 4, which advocates for inclusive and equitable quality education (United Nations, 2020).

Despite the increasing global interest, significant knowledge gaps remain—particularly concerning the root causes of dropout in Iranian universities, and more specifically, in management education. Previous research has identified contributing factors, such as student perceptions, values, institutional policies, and environmental stressors (Naderi et al., 2023), while other studies have emphasized how academic disruptions often result in either dropout or field-switching (Goldasteh et al., 2022; Ravanshad et al., 2019). However, much of this literature either lacks a contextualized, discipline-specific focus or relies on quantitative methods that may overlook the nuanced, lived experiences behind attrition. Moreover, there is a limited integrative understanding of how personal, academic, and socio-political factors intersect to influence dropout, particularly in dynamic, transitional societies such as Iran, where students may face conflicting pressures related to career expectations, migration desires, or institutional misfit.

This study addresses these gaps by focusing on dropout among the students of the Faculty of Management at the University of Tehran. It employs a longitudinal qualitative approach to trace the decision-making process of students who left their education. Using in-depth interviews and thematic analysis, this research applies the Fishbone (Ishikawa) diagram to map the structural and psychological root causes of dropout. This approach enables a holistic understanding of the interplay between institutional shortcomings, student motivations, societal constraints, and future aspirations. The findings aim to contribute actionable insights for university administrators, educational policymakers, and researchers by highlighting specific areas for intervention and reform.

The remainder of this paper is organized as follows. Section 2 reviews the existing literature on higher education dropout, with particular attention to theoretical frameworks and empirical findings in the Iranian context. Section 3 outlines the methodology, including participant selection, data collection, and analytical strategy. Section 4 presents the findings, structured around the Fishbone diagram's categories. Section 5 discusses the implications of the results for both institutional practice

and educational policy. Finally, Section 6 concludes the paper by summarizing the theoretical contributions and suggesting directions for future research.

Literature Review

The literature review Section is organized into three core sections: (1) the conceptualization, causes, and statistical evidence related to student dropout; (2) the theoretical framework employed in this study; and (3) prior research with a specific focus on Iran.

1. Conceptualization, Causes, Models, and Statistical Evidence

The Concept of Dropout and Its Causes

Defining student dropout is complex, as interpretations vary. Some studies consider transfers to other programs or institutions as dropout (Heublein, 2014), while others define it as complete dropout from the education system, typically marked by failing to enroll in core courses for two consecutive years (Gury, 2011). Generally, dropout refers to students who discontinue their academic journey before earning a degree. Statistically, it is measured through attrition rates, representing the inverse of retention and graduation rates. Dropout can be voluntary—due to employment, academic disinterest, or personal preference—or involuntary, often resulting from financial hardship, family obligations, or academic failure (Kehm et al., 2019). The phenomenon has been examined from several theoretical perspectives: the psychological lens focuses on motivation and self-efficacy (Bean & Eaton, 2000); the sociological view highlights socioeconomic background (Hauser & Featherman, 1978); the institutional perspective explores university-related influences (Berger, 2001); and the interactionist model considers the interplay between personal and environmental factors (Tinto, 1992). Overall, dropout is shaped by a combination of individual, institutional, and systemic variables. The following tables synthesize key findings from international and Iranian studies on this multifaceted issue.

Table 1. International Research on Dropout Causes

Cause	Source
Family problems, financial problems, time management issues, workload academic problems	Nieuwoudt & Pedler (2023)
Academic problems, student interest, and expectations from educational programs	Behr et al. (2021)
Job-related problems, learning difficulties, lack of academic progress, role adaptation issues	Casanova et al. (2021)
Poor academic performance and negative relationships with professors	Tayebi (2021)
Academic decline in the first year	Herbaut (2021)
Academic burnout	Marôco et al. (2020)
The educational system of the country, such as the country's financial policies Higher education institutions, such as the type of institution or the quality of teaching a) Determining factors before enrollment, such as the type of high school b) Conditions of study, such as working while studying	Behr et al. (2020)
Parental employment status, being the head of the household, the type of secondary school	Venegas-Muggli (2020)
Employment during studies	Kocsis & Pusztai (2020)
Poor academic performance	Ortiz-Lozano et al. (2020)

International research shows that student dropout results from a complex mix of academic struggles, socio-economic stress, and institutional shortcomings. Common factors include poor performance, financial pressure, family duties, and inadequate teaching. Addressing dropout requires multidimensional, context-sensitive strategies targeting personal, structural, and systemic causes.

Table 2. Iranian Research on Dropout Causes

Cause	Source
Weak culture in the university, inappropriate environment, and organizational culture contribute to the high unemployment rate of graduates.	Habibi Babadi et al. (2022)
Improper student admission system.	Shirzad et al. (2022)
Personal disinterest, family problems, and long shifts.	Ravanshad et al. (2019)
Decreased interest in the field of study, personal problems, hopelessness about career prospects and the job market, the volume of study materials and difficulty of exams, tuition fees, negative attitude toward Payame Noor University, university facilities, educational services, and acceptance at other universities.	Mesbahi & Saberi (2016)

Iranian studies indicate that student dropout stems from systemic, institutional, and individual issues. Key factors include outdated teaching, poor facilities, weak governance, and unrealistic student expectations. Economic hardship and family pressures further reduce motivation. Dropout reflects broader structural dysfunction, highlighting the need for comprehensive reform in Iran's higher education system.

Statistics and Evidence on Dropout Rates

Statistical evidence highlights the growing scale and urgency of student dropout in higher education. Although global expansion has increased demand for university graduates, it has also coincided with rising attrition rates. According to the OECD (2019), dropout in higher education has risen by around 30%. UNESCO (2022) also forecasts a 3.5% decline in global university enrollments—equivalent to a loss of approximately 7 million students. The OECD (2022) reports that 12% of students drop out before their second year, and 21% fail to graduate on time. In the U.S., the average dropout rate is 40% (Hanson, 2021), while Spain reports 33.2% (Galve-González et al., 2024). Latin America and the Caribbean show even higher rates, reaching up to 54% (Ferreyra et al., 2017). In Chile, 39% of students leave within their first year (González-Campos et al., 2020). The OECD average remains around 30% (OECD, 2020).

In contrast, Iran faces a different yet equally pressing issue: the absence of reliable, up-to-date national statistics on student dropout. Despite the size and importance of its higher education system, comprehensive data on dropout trends are lacking. This absence limits effective policy-making and program design. The Iranian case represents a dual challenge—both the likely prevalence of dropout and the lack of institutional attention. Without a clear picture of the underlying causes and patterns, planning remains reactive. This study aims to address that gap by focusing on the Faculty of Management at the University of Tehran, offering insights to guide institutional and national efforts in dropout prevention.

2. Theoretical Framework: Push, Pull, and Falling Out Factors

To better understand student dropout, Jordan et al. (1994) and Watt and Roessingh (1994) proposed a widely used framework that classifies dropout causes into three categories: push factors, pull factors, and falling out. This model provides an integrated approach to understanding how students disengage from formal education. Push factors, introduced by Jordan et al. (1994), are institutional elements that alienate students and disrupt their connection with the academic environment. These may include strict testing policies, harsh discipline, rigid attendance rules, or punitive institutional responses, ultimately pushing students out of the system. Pull factors, in contrast, arise from external life pressures that draw students away from their studies. These include financial difficulties, employment, family responsibilities, health issues, or marriage. In such cases, students voluntarily disengage due to competing personal obligations or opportunities.

Watt and Roessingh (1994) added falling out as a third dimension. This occurs when students gradually lose motivation and emotional connection without a specific decision or event. A lack of academic, emotional, or institutional support leads to passive disengagement and eventual dropout. Unlike push or pull, falling out involves no clear agent—dropout results from systemic neglect or insufficient engagement. The key distinction among the three lies in agency: institutions push, students pull, and falling out reflects neither. Though pull and falling out may appear similar, the former involves conscious decisions, while the latter reflects passive erosion of involvement. This study adopts the push–pull–falling out model to analyze dropout at the Faculty of Management, University of Tehran. Push factors include academic stress and performance issues; pull factors involve personal obligations; and falling out results from declining motivation and a lack of support. This framework shapes the analysis and informs targeted intervention strategies.

3. Previous Studies on Student Dropout (in Iran)

In Iran, student dropout has been studied through various disciplinary and methodological approaches. Keykha (2024) reported that dropout rates among tuition-paying graduate and doctoral students at the University of Tehran's Faculty of Management were nearly double those of non-paying students, highlighting the significant role of financial burden. This finding aligns with Naderi et al.'s (2023) meta-

analysis of 77 studies (1990–2020), which confirmed that tuition fees strongly influence dropout decisions, particularly among socioeconomically vulnerable groups. Other research has explored field-specific factors. Ravanshad et al. (2019) identified personal disinterest, family challenges, and extended clinical shifts as reasons for dropout among medical trainees. Abdollahi et al. (2020) found that over half of nursing students experienced bullying in clinical settings, contributing to disengagement. From a demographic angle, Ahmadi and Kherati (2019) used data mining to show that age significantly predicts dropout at Payame Noor University, with the most vulnerable groups being undergraduate students aged 18 to 21, master's students aged 22 to 26, and doctoral students aged 29 to 31. Khaleghkhah and Najafi (2018) further demonstrated that unemployment and anxiety over job prospects negatively impact academic motivation. Despite these insights, notable gaps remain. No study has specifically focused on dropout in the Faculty of Management at the University of Tehran. Moreover, longitudinal qualitative approaches are rare, and the Fishbone (Ishikawa) diagram has not yet been applied in this context. This study addresses these gaps by employing a longitudinal qualitative method and utilizing the Fishbone diagram to map the complex, multi-layered causes of student dropout.

Research Methodology

Method

This applied study is based on qualitative research methodology, which is well-suited for examining complex social phenomena through non-numerical data. Rooted in the interpretivist paradigm, qualitative research emphasizes human agency, focusing on individuals' subjective beliefs, meanings, and lived experiences. The researcher-participant relationship is interactive and reciprocal, valuing personal narratives and contextual understanding. Within this framework, the current study employs a longitudinal qualitative design, enabling exploration of changes and emerging patterns over time. As Bennett et al. (2020) explain, longitudinal studies may follow retrospective or prospective formats. Retrospective studies analyze pre-existing data, sometimes supplemented by concurrent collection, while prospective designs gather data throughout the study period. This research adopts a retrospective approach, using administrative records and student reports generated before the study's formal launch. This design allowed for a temporal, in-depth analysis of student dropout experiences across several academic years, aligning with the study's aim to understand evolving motivations and patterns behind dropout decisions.

Sampling and Participants

The statistical population included all students enrolled in the Faculty of Management at the University of Tehran from 2018 to 2024. A multi-stage sampling strategy was used, combining census sampling and purposive random sampling. First, census data were used to identify all dropout cases. Then, purposive sampling was applied based on criteria such as dropout year and contact availability. To ensure diversity and reduce bias, a random selection was performed within each yearly cohort (Omona, 2013). Sampling continued to the point of theoretical saturation—when interviews no longer yielded new insights. A total of 23 students participated (12 females, and 11 males), including 18 masters' and 5 doctoral students. Due to limited data access, only postgraduate students were included. While the overall number of dropouts during this period was relatively small, the longitudinal qualitative approach and targeted sampling provided adequate depth for meaningful analysis.

Data Collection

Data were collected through semi-structured interviews, chosen for their flexibility in adapting questions and enabling participants to share experiences in their own words. Interviews lasted 35–60 minutes and were conducted both in-person and online (Google Meet, Skype), based on participant preference. At the start of each session, the study's purpose was explained, focusing on reasons for academic dropout. Informed consent was obtained, and confidentiality ensured. With permission, interviews were audio-recorded and later transcribed verbatim for analysis. This method enabled in-depth exploration of the personal and contextual factors influencing students' decisions to discontinue their studies.

Data Analysis

This study employed a combined approach of qualitative content analysis and the Fishbone diagram (Ishikawa diagram) to analyze the underlying causes of student dropout. The Fishbone diagram,

developed by Kaoru Ishikawa in the 1960s, visually represents the root causes of a problem through a structured skeleton consisting of three parts: the head (central issue), the body (primary categories), and the tail (conclusions) (Wahyudi, 2024). Originally used in quality management, it is now widely applied in educational and social research (Puspita et al., 2023). The diagram is effective for identifying and categorizing primary and secondary causes, encouraging pattern recognition and structured analysis (Demirbay & Gündüz, 2024; Meilian & Natasha, 2023; Sabtu et al., 2023). The qualitative content analysis in this study was conducted following the systematic three-phase framework developed by Elo and Kyngäs (2008), which is widely recognized for its methodological rigor in inductive and deductive qualitative analysis. In the preparation phase, the unit of analysis was defined at the paragraph level, and the researchers engaged in repeated readings of the interview transcripts to become deeply familiar with the data and identify key initial concepts. In the organizing phase, open coding was performed manually by two researchers, who independently labeled significant textual segments. These codes were subsequently grouped into subcategories based on thematic similarity and then further synthesized into broader main categories. This hierarchical structuring laid the foundation for the development of the Fishbone (Ishikawa) diagram, which served as a visual tool to illustrate the interconnections among causal themes. In the reporting phase, the categorized data were interpreted in light of the study's theoretical framework (push–pull–falling out), with findings supported by direct quotations from interviewees to enhance credibility. The integration of Elo and Kyngäs's method ensured a transparent, replicable, and theoretically grounded analytic process that captured the complexity of student dropout in a longitudinal context.

Specifically, each factor extracted from the interview transcripts was independently evaluated by four researchers and a group of thirteen participants along a 6-point Likert scale (1.00–6.00), representing its perceived weight in the dropout decision. The scale was divided into three ordinal bands: low (1.00–2.66), moderate (2.67–4.32), and high importance (4.33–6.00), allowing for categorical interpretation in the diagram layout. The scoring process followed a content-to-score logic: a cause mentioned more frequently and with greater emotional salience or depth (e.g., extended elaboration, repeated emphasis, or direct linkage to dropout decision) was assigned a higher score. Conversely, causes that appeared sporadically or without clear impact were ranked lower. Each coder conducted this scoring independently, and discrepancies were resolved via negotiated consensus or, when needed, through the intervention of a neutral third reviewer. This method ensured both intra-rater reliability (via retest coding, reported at 89%) and inter-rater reliability through cross-validation. The scores were then synthesized with frequency counts to determine each factor's placement within the Fishbone diagram. Those causes with both high frequency and high perceived impact were positioned closer to the diagram's "head" (the central outcome of dropout), signifying their status as likely root causes. This hybrid method allowed for a visually intuitive representation of causal intensity while maintaining the epistemological integrity of qualitative inquiry.

Data Validation

To validate the qualitative findings, the study followed Lincoln and Guba's (1985) criteria: credibility, dependability, confirmability, and transferability. To enhance credibility, researchers engaged in prolonged participant interaction and used participant observation for contextual understanding. Peer debriefing during data analysis helped reduce bias and cross-check interpretations. For dependability, all research procedures—including data collection, coding decisions, and analytical steps—were thoroughly documented to create an audit trail for replication and transparency. Confirmability was addressed by ensuring that findings reflected participants' narratives rather than researcher bias. This was achieved through field notes, reflexivity, and conscious bracketing of personal assumptions. Researchers continuously monitored their own perspectives to minimize the influence on interpretations. These measures ensured the trustworthiness and rigor of the study, grounding the analysis in the authentic lived experiences of participants and enhancing the validity of its conclusions. To further enhance the reliability of the qualitative findings, the study employed a test–retest strategy for coding stability, grounded in the method of temporal consistency. In this approach, all initially extracted key concepts (codes) were subjected to double coding by the same researcher at two different time points, spaced 20 days apart. The purpose was to assess the consistency and reliability of the categorization process over time. The researcher independently reclassified the data during the

second session without referencing the initial coding. The outcomes of the two sessions were then systematically compared: matching codes were counted as instances of agreement, while non-matching ones were recorded as disagreement. Out of a total of 491 concepts, 203 were found to be in agreement across both coding rounds. Applying the standard reliability formula, this resulted in a coding reliability score of 82%, which exceeds the widely accepted threshold of 60% for qualitative reliability, thereby confirming the internal stability of the categorization process (Keykha et al., 2019).

$$\text{Test}-\text{Re test Re liability Percentage} = \frac{203*2}{491}*100$$

Results

Figure 1 presents the primary factors contributing to student dropout, organized through a Fishbone diagram that categorizes causes into personal and non-personal domains. The personal domain, detailed in Table 3, includes three main categories and eight subcategories derived from qualitative content analysis. These categories are: study migration intentions—driven by personal goals and social influence; lack of motivation and academic disinterest—shaped by both internal and external factors; individual challenges—such as financial stress and psychological concerns. Together, these reflect the complex psychological, social, and contextual dimensions influencing students' decisions to withdraw from university.

Table 3. Identifying the Main and Sub-Causes of Student Drop Out at the Personal Level

The Main Causes	Sub-Causes	Key Concepts
Decision to academic migration	Personal preferences	Aspiration for academic migration, including plans to pursue higher education abroad, intent to emigrate, preference for studying in higher-ranked universities, and prior international experience. This also encompasses mutual spousal agreements on emigration, separation due to a spouse living abroad, and proactive measures such as part-time work to fund future migration.
	Academic and career progress	Desire for enhanced academic and intellectual development as a motivating factor for migration, cognitive comparison of research infrastructure and academic resources in foreign versus domestic universities, perceived access to superior employment opportunities abroad, pursuit of higher salaries and more favorable career prospects overseas, aspiration to secure academic positions at international universities.
	Being influenced by others	Seeking advice from peers regarding migration, obtaining guidance from a counselor to make emigration decisions, being influenced by the migration experiences of fellow students, being affected by the emigration of faculty members.
Lack of motivation and academic disinterest	Affected by internal factors	Academic disengagement driven by age-related challenges, lack of prior experience with virtual learning, disinterest in the chosen major, and low academic self-confidence. Additional factors include mismatch between personal interests and field characteristics, inadequate foundational knowledge, poor academic advising, and misinformed or accidental major selection. Emotional factors, such as academic frustration, depression, a sense of hopelessness, perceived futility of continued education, and disillusionment with the value of a university degree further compound the issue.
	Affected by external factors	Perceived shortcomings in e-learning environments, including unmet academic expectations, limited interaction, and lack of intellectual engagement, contributed to student discontent. Comparisons with prior high-quality academic experiences and dissatisfaction with peer motivation, competitive atmosphere, and perceived degree credibility further undermined engagement. Additionally, generational gaps, unclear career prospects in Iran, and external influences, such as peer frustration, indecision, and low educational background within families, shaped students' academic disillusionment and dropout intentions.
Individual challenges	Financial concerns	Financial-related mental preoccupations, responsibility for supporting multiple children and associated living expenses, absence of adequate financial aid or family support, high cost of living, substantial transportation expenses related to commuting to the university city, aspiration to attain financial independence and enter the job market.
	Mental concerns	Strategic academic reorientation driven by personal, economic, and professional pressures played a key role in dropout decisions. Factors included stress related to compulsory military service, guilt over workplace absence, and a desire for life change to improve academic outcomes. Financial considerations, such as reluctance to pay tuition and preference for free programs, combined with perceptions of limited career prospects in the current field. Students also expressed aspirations to enroll in alternative disciplines or institutions, often driven by comparisons with perceived higher-ranking universities and beliefs in potential greater success elsewhere.
	Personal life concerns	Securing employment, getting married, spouse's pregnancy, experiencing the loss of a child, family opposition to the chosen field of study, being preoccupied with work commitments, being an only child and living away from family, having a dependent personality, emotional attachment in an unreciprocated romantic relationship, strong tendencies toward personal perfectionism, unexpected changes in personal life plans, parents' illness and death, personal life difficulties and disruptions.

Table 4. Identifying the Main and Sub-Causes of Student Drop Out at the Non- Personal Level

The Main Causes	Sub-Causes	Key Concepts
Challenges at the university level	Scientific challenges	Institutional and pedagogical shortcomings, including low e-learning quality, non-specialist instructors, and outdated curricula, were major contributors to student dissatisfaction. Students cited misaligned teaching responsibilities, inappropriate assignments, and a lack of engaging, collaborative, or competitive academic culture. Additional concerns involved faculty overload, incompatibility with modern teaching, absence of scientific rigor, and perceived irrelevance of university education. A decline in student-faculty respect, poor academic planning, and rigid expectations without practical justification further eroded motivation and academic engagement.
	Non-scientific challenges	A wide range of institutional shortcomings, including insufficient infrastructure, dormitory allocation issues, ineffective communication, and administrative mismanagement, contributed to dissatisfaction among students. Specific concerns included unprofessional behavior from staff, lack of support for e-learning students, poor policy implementation, limited access to labs and scholarships, and a toxic organizational culture. Broader issues involved favoritism in faculty recruitment, political interference in governance, flawed admission processes, and a lack of international collaboration. These structural weaknesses undermined students' academic engagement and institutional trust.
Challenges in higher education	Improper implementation of programs and policies	Systemic failures in higher education policy and governance significantly contributed to student disengagement. Key issues included incoherent policymaking, lack of academic advising, and unchecked university expansion without adequate quality control. Students faced insufficient resources, absence of post-graduation support systems (e.g., unemployment insurance), and high graduate unemployment. Additional concerns involved non-payment of stipends to doctoral students, low faculty salaries, weak financial incentives, and unresolved legal challenges undermining institutional trust and long-term educational commitment.
	Inappropriate policy	Widespread structural inefficiencies have weakened Iran's higher education system. Challenges include flawed student admission procedures, especially in interview-based selections, and misalignment between academic output and labor market needs. The decline in academic quality, outdated disciplines, and a lack of scientific autonomy further erode institutional performance. Weak doctoral admission policies, ineffective faculty promotion systems, and bureaucratic recruitment discourage faculty motivation. Moreover, the rapid growth of tuition-based programs, failure to apply research and theses in policymaking, and a lack of strategic planning in academic program development reflect an erosion of core academic functions.
Challenges at the government level	Non-economic challenges	Dysfunctions in Iran's employment system have contributed significantly to academic disengagement. Key issues include unjust military service regulations, lack of meritocracy in public appointments, and widespread corruption in administration. Additional barriers such as job insecurity, political-ideological interference in career advancement, credentialism in public sector hiring, and structural inefficiencies in recruitment processes have eroded students' confidence in the value of academic achievement and long-term professional prospects.
	Economic challenges	Severe economic challenges in Iran, high cost of living in Tehran, policy inconsistencies between the Ministry of Health and the Ministry of Science in the field of psychology, prolonged economic stagnation, low income levels, high inflation rates, depreciation of the national currency.
Social and cultural challenges	Social challenges	Broader sociocultural and ideological constraints played a critical role in students' academic disengagement. Key factors included the absence of intellectual freedom, restricted political climate, and misalignment between societal norms and personal values. The low social legitimacy of e-learning, traditional family mindsets, authoritarian parenting, and intellectually stifling home environments further discouraged educational engagement. Additionally, a societal devaluation of education, declining belief in success, restricted freedoms, and a pervasive lack of hope for future improvement compounded feelings of futility and academic disinterest.
	Cultural challenges	Cultural dynamics deeply shape academic trajectories in Iran. Students face misalignment between research themes and cultural norms, value conflicts in academic pursuits, and social expectations tied to degree attainment. The rise of a degree-oriented mentality, erosion of educator status, and generational shifts have further complicated perceptions of education. For female students, cultural restrictions, such as bias in field selection and barriers to educational migration, limit autonomy. Broader societal trends reflect a transformation of traditional values into counter-values and a shift toward individual over collective interests, fueling tension between personal goals and cultural expectations.
Externally-Imposed pressures	Avoiding compulsory military service	Choosing an academic field as a means of avoiding compulsory military service, deferring military enlistment through continued education, psychological conflict arising from uncertainty about military status and future obligations, mental stress and anxiety associated with impending military service.
	Circumstantial compulsions	External pressures, including organizational demands, family influence, and societal expectations, significantly shaped academic decisions. Factors included organizational pressure to remain competitive, pursuit of social prestige, parental coercion in major selection, and influence of family occupational background. Students also cited peer pressure around university entrance exams, blame toward family for imposed choices, and selection of socially acceptable or male-dominated fields over personal interests. Additionally, exam-related stress and forced enrollment in undesired fields due to admission denial intensified academic dissatisfaction.

The Fishbone diagram highlights three key personal-level causes of student dropout: study migration, lack of motivation, and individual challenges. Migration was driven by aspirations for better opportunities abroad, influenced by past experiences and social cues. Academic disengagement stemmed from internal disillusionment and external issues such as poor e-learning quality. Financial hardship, psychological stress, and major life events also played significant roles. Table 4 shows the main and secondary causes at the non-individual level. In this table, four main causes with ten sub-causes were identified. These causes include: challenges at the university level (scientific challenges, non-scientific challenges), challenges in higher education (improper implementation of programs and policies, inappropriate policy), challenges at the government level (non-economic challenges, economic challenges), social and cultural challenges (social challenges, cultural challenges), and externally-imposed pressures (avoiding compulsory military service and circumstantial compulsions).

The analysis of non-personal dropout factors reveals a complex, systemic crisis in Iran's higher education system. At the university level, students face outdated curricula, poor teaching quality, inadequate infrastructure, and weak administrative responsiveness. These issues are worsened by national policy failures, including misalignment between academic training and job market demands, weak faculty development, and ineffective recruitment systems. At the governmental level, non-economic problems, such as weak meritocracy, politicized education, and legal ambiguities, alongside economic instability, inflation, and unemployment, further erode student motivation. Additionally, socio-cultural barriers, including gender-based restrictions, rigid family expectations, generational value gaps, and limited social freedoms, discourage academic engagement. In some cases, education was pursued to delay military service or satisfy external pressures. Together, these factors show that dropout is not just a personal choice but reflects deep institutional, cultural, and structural dysfunctions that reduce the perceived value of higher education. Figure 1 (Fishbone diagram) maps these individual and non-individual causes to illustrate their interconnected impact.

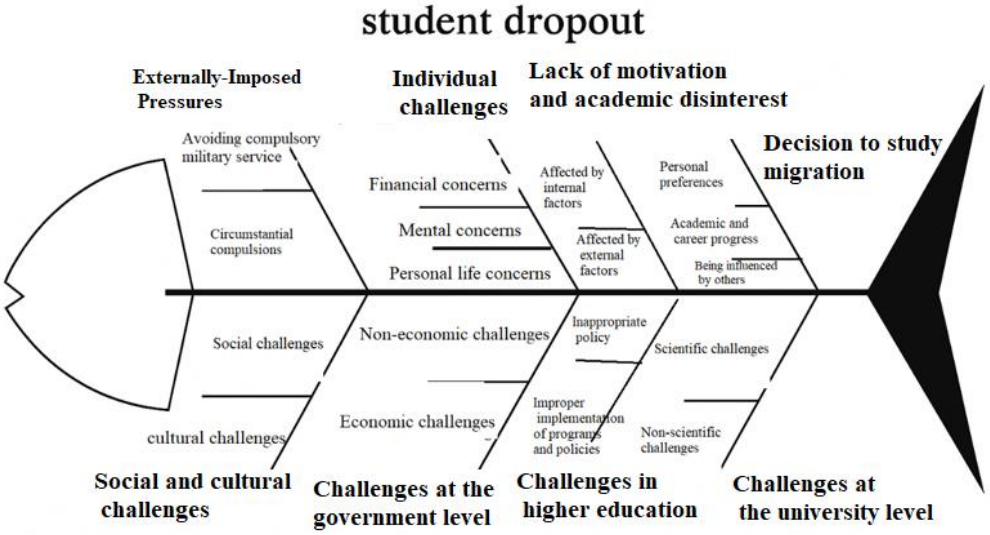

Fig. 1. Fishbone Diagram of the Root Causes of Student Dropout

Discussion and Conclusion

This study identified the causes of student dropout across two main categories: personal and non-personal. Personal causes included study migration, lack of motivation, individual challenges, and compulsion—each with related sub-factors. Non-personal causes involved university-level issues, higher education policy failures, governmental challenges, and socio-cultural pressures. Each category encompassed academic, structural, and social dimensions. These factors were systematically analyzed and visualized using a Fishbone diagram, highlighting the complex interplay of influences shaping students' decisions to discontinue their studies. Based on the theory used in this research, both personal and non-personal levels have been analyzed. In Figure 2, the classification of the findings according to this theory is presented.

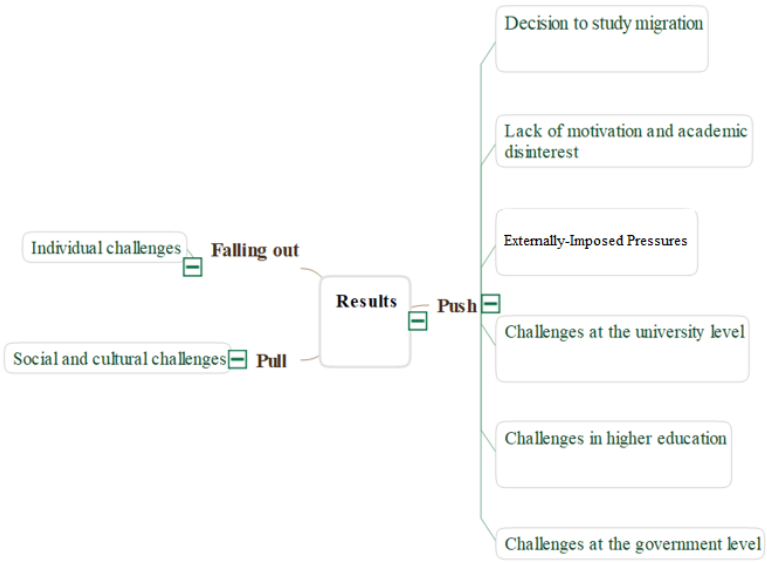

Fig. 2. Classification of Findings Based on Theory

A) Push the Decision

Educational migration has rapidly expanded, with international student numbers rising from 2 million to 64 million between 2000 and 2020, outpacing general migration growth (Batista et al., 2024). This trend reflects the critical role of higher education in global mobility and development beyond national borders (Nyamsuren et al., 2024). Iranian student migration follows this global pattern, increasing from 17,442 to 66,701 in two decades (Iranian Migration Observatory, 2022), despite a decline in Iran's global rank. This shift indicates intensified international competition and highlights underlying domestic challenges. Our findings identify economic hardship, political dissatisfaction, educational limitations, and urban inefficiencies as key drivers, corroborating studies by Torabizadeh et al. (2025) and Mehrabi et al. (2025). The prominence of economic and occupational factors aligns with prior research, emphasizing their decisive role. Qualitative data reveal deeper psychological and social dynamics. Direct comparisons of domestic and foreign academic environments foster dissatisfaction and motivate dropout (Code 1), illustrating how perceived institutional inadequacies drive migration intentions, consistent with Cham-Asmani et al. (2024). Furthermore, the social normalization of migration, exemplified by peers and professors leaving, creates a reinforcing cycle of academic exodus (Code 13), echoing Zarei et al. (2023). The COVID-19 pandemic further intensified migration interest due to increased uncertainty (Ragheb & Karami, 2024), accelerating pre-existing trends. By critically synthesizing our data with the literature, this study deepens understanding of Iranian educational migration as a multifaceted process shaped by economic, political, social, and psychological factors. It highlights the need for systemic reforms to improve domestic educational quality and stability, aiming to retain talent amid global competition

Lack of Motivation and Academic Disinterest

Deci and Ryan's self-determination theory (1985) provides a foundational framework for understanding motivation, distinguishing intrinsic motivation, driven by personal interest, from extrinsic motivation, influenced by external rewards or pressures, and demotivation, characterized by disengagement due to a perceived lack of connection between actions and outcomes (Deci & Ryan, 2008). Vallerand and Bissonnette (1992) further conceptualize demotivation as a sustained unwillingness to act, rooted in absent future planning or expectations. A critical contributor to academic demotivation is a weak sense of belonging within educational environments. Students disconnected from their university communities often show reduced motivation and engagement, particularly when they lack genuine interest in their chosen fields (Behr et al., 2021; Keykha et al., 2025; Lorenzo-Quiles et al., 2023; Pedler et al., 2021). Melián et al. (2024) identify the loss of sustained motivation as a primary reason for doctoral student withdrawals, with participants framing their decisions as rational responses to personal circumstances. Similarly, Rahmani et al. (2024)

emphasize the lack of motivation and disinterest as key dropout factors. Demotivation arises from intertwined personal, institutional, and societal factors. Misalignment of personal values with academic programs, poor teaching quality, insufficient support services, rigid curricula, cultural materialism, and job market anxieties collectively undermine student motivation. Ghasemzadeh and Hoseini Sadr (2022) specifically highlight six demotivators among Iranian student-teachers: ineffective teaching, disinterest in content, inadequate services, materialistic pressures, career insecurity, and weak institutional collaboration. The interview excerpts exemplify these dynamics. Code 2 reflects the common mismatch between student interests and field choice, where the lack of intrinsic motivation leads to withdrawal. Code 4 underscores how unfavorable institutional conditions, beyond personal disinterest, erode educational engagement. By synthesizing these findings with extant literature, this study elucidates the multifaceted nature of academic demotivation, emphasizing the necessity for institutions to foster alignment between student aspirations and academic environments, improve support mechanisms, and address systemic barriers to enhance motivation and retention.

Challenges at the University Level (Scientific and Non-Scientific Challenges)

At the university level, dropout decisions are shaped by a complex interplay of structural, pedagogical, and non-academic factors, many of which have been exacerbated in the post-COVID-19 landscape. A prominent issue is the substandard quality of e-learning systems, marked by weak digital platforms, insufficient pedagogical readiness, and limited technical support (Vershitskaya et al., 2020). Bicak (2024) and Aldowah et al. (2020) found that ineffective online course design, limited feedback, and weak social support structures significantly contributed to attrition in virtual learning environments. These findings are echoed in student narratives. For instance, Code 6 illustrates how logistical neglect in hybrid systems, such as the absence of basic accommodation during mandatory in-person exams, translates into severe emotional and physical strain, ultimately driving withdrawal. Academic overload further compounds these problems. Excessive workload and scheduling pressures are consistently cited as demotivating factors (Nieuwoudt & Pedler, 2023; Xavier & Meneses, 2021). This is evident in studies across disciplines—from medical education (Rahmani et al., 2024) to the arts (Kavčič Pucihar et al., 2024)—and is worsened by students' struggles to balance academic, work, and family responsibilities (Tavares et al., 2025; Yaghi, 2024). These pressures erode well-being and reduce academic persistence. Institutional governance also plays a critical role. Bureaucratic inefficiency, poor leadership, and lack of transparency impair students' academic experiences (Greenland & Moore, 2022). Valencia Quecano et al. (2024) and Armstrong et al. (2018) emphasize how outdated teaching methods, rigid curricula, and pedagogical stagnation disengage students, while inadequate feedback and weak faculty-student interaction (Keykha, 2020; Srairi, 2022) further diminish academic satisfaction. Student testimony (Code 5) highlights this disconnect, revealing dissatisfaction with obsolete teaching practices that fail to reflect current global standards. These findings align with Mestan (2016) and Rahmani et al. (2024), who stress the influence of curriculum relevance and teaching quality on retention. Beyond instructional design, university culture and infrastructure shape dropout outcomes. Poor facilities, such as inadequate dormitories (Marongwe et al., 2020), substandard classrooms (Keykha, 2020), or limited digital access (Fatima et al., 2024), compromise the overall educational experience. Financial hardship is another major driver. The lack of scholarships and rising educational costs are consistently identified as key factors in dropout decisions (Bicak, 2024; Espinoza et al., 2025; Kalalahti et al., 2025; Rahmani et al., 2024). Students from financially constrained backgrounds face systemic barriers that hinder academic continuity. For instance, Kalalahti et al. (2025) report a direct link between financial resources and academic persistence, underlining the role of economic support in retention strategies. Cultural and managerial weaknesses within institutions further aggravate the problem. Hierarchical rigidity, the lack of collaboration, and poor human resource management reduce institutional responsiveness and student inclusion (Gaikwad & Berad, 2017; Habibi Babadi et al., 2022; Sulong & Othman, 2024). International students, in particular, report exclusionary practices and administrative incompetence, which intensify attrition risk (Rahmani et al., 2024). Collectively, these findings underscore how withdrawal is not merely a consequence of individual disinterest but emerges from systemic institutional failures. The convergence of weak academic structures, outdated pedagogies, inadequate infrastructure, and insufficient support services fundamentally undermines student retention.

Addressing these issues requires integrated reforms that prioritize educational quality, student well-being, institutional flexibility, and financial accessibility.

Challenges in Higher Education (Improper Implementation of Programs, Policies, and Inappropriate Policy)

Systemic and structural deficiencies in higher education policy and governance play a central role in student dropout. In the context of Iran, inappropriate policymaking has led to misaligned development strategies, as evidenced by Shahsavari and Eslahi (2025), who describe a web of internal and external forces driving inconsistent and unbalanced higher education planning. A key concern is the unregulated expansion of universities and student intake without parallel investment in quality assurance (Keykha et al., 2022). This unchecked growth has strained existing infrastructure, undermined academic standards, and diluted the quality of education. A lack of evidence-based policy implementation further weakens institutional responsiveness. Karimi (2022) notes that research outputs are often excluded from policymaking processes, limiting innovation and strategic reform. This disconnect is exacerbated by rigid governance structures, low academic salaries, unclear promotion pathways, and limited faculty involvement in decision-making (Habibi Babadi et al., 2022; Keykha & Towfighi, 2021; Shirzad et al., 2022). As a result, both faculty motivation and academic performance are compromised. These institutional weaknesses directly influence student perceptions and behaviors. As noted in the student quote (Code 10), the absence of financial support at the graduate level—contrary to global norms where stipends are common—represents a critical barrier to continuation, particularly for students from lower socioeconomic backgrounds. The statement underscores how financial policy neglect at the structural level discourages academic persistence. Moreover, perceptions of declining educational quality (Code 13) reflect broader dissatisfaction with the trajectory of higher education in Iran. Students perceive systemic degradation rather than isolated shortcomings, aligning with Keykha's (2022) observation of eroded confidence in the value of a university degree amid high graduate unemployment. The loss of trust in the system not only weakens academic motivation but also fosters a broader sense of futility regarding the return on educational investment. Collectively, these findings emphasize that dropout is not simply an outcome of individual or academic challenges but a symptom of broader policy and governance failures. Without targeted reforms to stabilize quality, engage faculty, and financially support students, attrition rates are likely to persist.

Challenges at the Government Level (Non-Economic Challenges, Economic Challenges)

At the governmental level, structural inefficiencies and economic instability play a critical role in shaping student attrition. One persistent issue is the inappropriate selection of university and institutional managers, often shaped by favoritism, nepotism, and political interference rather than merit-based criteria (Atafar & Azarbayjani, 2001). Such practices erode trust in institutional legitimacy and perpetuate perceptions of unfairness and limited upward mobility, particularly among students and early-career academics (Jafari & Shariatnejad, 2022). In parallel, the broader economic context exacerbates demotivation. Prolonged job insecurity (Cheraghi et al., 2024), currency devaluation, and recessionary pressures (Rezaei, 2018) have collectively undermined the perceived value of higher education. When academic effort no longer translates into meaningful employment or financial stability, particularly in high-cost urban areas, student motivation to persist naturally declines. This misalignment between educational attainment and labor market outcomes is particularly damaging for the youth. In response to rising unemployment, the Iranian government has implemented short-term solutions, such as expanding university admission and supporting private institutions, to absorb demand (Shahsavari-Pour et al., 2023). However, these policies have often led to oversupply, intensifying the mismatch between graduate qualifications and available job opportunities, and reinforcing the sense of futility among students. As Toyon (2024) notes, education–job mismatch is a key factor in both academic redirection and dropout. This is echoed in student narratives. For instance, one participant (Code 10) remarked: "Even if you pursue a doctorate, you study for four or five years and get no achievement... with rent and transport costs, you have no money left." This highlights a structural disconnect between academic labor and socioeconomic reward, where even advanced degrees fail to ensure economic security. Another student (Code 6) emphasized the unbearable cost of living: "If I have two children now... this is not called living; it's just surviving." The framing of

existence as mere survival reflects a deep psychological strain rooted in economic despair. In sum, macro-level policy failures, both in governance and economic planning, fuel a climate of uncertainty and hopelessness. Without reform that links higher education to tangible and stable life outcomes, student dropout will likely remain a systemic issue.

Externally-Imposed Pressures (Avoiding Compulsory Military Service, Circumstantial Compulsions)

One of the unique structural pressures influencing university dropout in Iran is the mandatory military service imposed under the National Service Law (1984), which mandates conscription for all men over 18. While framed as a civic duty, students frequently perceive military service as a disruptive force due to its outdated regulations, inflexible structure, and poor alignment with academic and career aspirations (Eskandari Nejad & Hashemi, 2022). Proposals for reform, such as shortening service or offering education-based exemptions, remain largely unimplemented (Sinaei, 2015), perpetuating anxiety among male students. As a result, university enrollment is often instrumentalized as a legal strategy to postpone conscription. Eskandari-Nejad and Ghafari (2022) note that this deferment function can become the primary driver of continued education, rather than genuine academic interest. However, this strategic enrollment tends to undermine long-term engagement. Students who enroll solely to delay military service often lack intrinsic motivation, leading to superficial participation and eventual dropout. This is reflected in student testimony (Code 13): "I enrolled in university to avoid military service... I see many of my friends who do the same, even though they have no interest." The disconnection between purpose and participation signals the fragility of such academic trajectories. As one participant noted (Code 5): "My family insisted I choose the field they suggested... later I regretted it and dropped out." This highlights how rigid sociocultural norms can override student agency, creating misaligned academic identities that are vulnerable to collapse under stress. Furthermore, as previously noted, cultural and familial expectations often push students into disciplines that misalign with their interests. Over time, this mismatch erodes intrinsic motivation. As one student explained (Code 5): "My family was very insistent that I chose the field they suggested… later I regretted it and dropped out." These coercive dynamics not only reduce student satisfaction but also undermine long-term academic engagement. Together, these forms of structural and cultural compulsion—military, familial, and societal—undermine autonomous educational decision-making. Without reform to reduce external pressures and support student agency, dropout driven by such misalignments is likely to persist.

B) Pull Individual Challenges (Financial Concerns, Mental Concerns, Personal Life Concerns)

In addition to institutional and structural challenges, individual-level factors, including financial strain, mental health difficulties, personal life events, and misaligned expectations, play a significant role in shaping dropout decisions. These personal "pull" factors often intensify the impact of systemic "push" forces, creating a compounded risk environment for students, particularly in under-resourced higher education systems. Multiple studies underscore the multidimensional nature of student attrition. Laufer and Group (2019), in a study on international doctoral students, identified challenges such as academic adjustment, language barriers, financial instability, and social isolation—factors that can lead to disconnection from both academic and social environments. Similarly, Aina et al. (2022) emphasized that persistence in higher education, especially for disadvantaged groups, hinges on students' ability to socially and academically integrate into their institutions. In online and blended learning environments, dropout is often tied to a mix of psychological and logistical issues. Xavier and Meneses (2020) found that low motivation, the lack of academic support, inadequate time management, and economic hardship were key contributors to withdrawal. Their longitudinal analysis reaffirmed that dropout is rarely the result of a single cause; instead, it emerges from an interplay of interrelated pressures. Likewise, Behr et al. (2020) categorized dropout across national, institutional, and personal levels, showing how background factors, such as secondary school experience or part-time employment, can critically influence educational outcomes. More specifically, Bicak (2024) identified personal-level indicators such as low GPA, summer enrollment, and the number of credits attempted per term as important predictors of attrition. Mestan (2016) further elaborated that individual motives, including health issues, mismatched career goals, peer disconnection, and dissatisfaction with chosen fields, frequently lead to disengagement and withdrawal. The role of

mental health has become increasingly prominent in recent studies. Psychological distress, including anxiety, depression, and burnout, has been repeatedly linked to dropout behavior (Hefny et al., 2024; Rahmani et al., 2024; Yaghi, 2024). Garcés-Delgado et al. (2024) reported that the lack of emotional support and challenges in adapting to university life were especially critical for first-year students. Similarly, Lykkegaard and Qvortrup (2024) pointed to the gap between students' expectations and their actual experiences, as well as value misalignment with institutional culture, as key psychological triggers of attrition. Tavares et al. (2025) reinforced this view, highlighting the tension between aspirational ideals and academic realities as a central cause of withdrawal. Socioeconomic background also continues to exert a major influence. Buenaño et al. (2024), in a study on Ecuadorian students, showed that economic hardship—intertwined with social inequality—shaped educational outcomes and increased vulnerability to dropout. These academic findings are vividly reflected in student voices. One participant stated (Code 6): "I got married, and my wife became pregnant, but unfortunately, we lost the child that year." This quote captures the deep emotional trauma that life events can introduce into a student's academic trajectory. The psychological burden of such experiences, particularly in environments lacking counseling or support services, often leads to academic withdrawal. Another student shared (Code 6): "I had to commute to Tehran twice a week, and my transportation costs were two or three times my total tuition fees, which led to my dropout." This example highlights how financial stress is not limited to tuition alone; geographic distance, lack of institutional housing, and insufficient transportation subsidies compound financial burdens to the point of rendering education economically unviable. In sum, while institutional reforms are crucial, attention to personal, psychological, and socioeconomic dimensions is equally necessary. Effective dropout prevention strategies must address both systemic inequities and the individual realities students face, recognizing the complex, intertwined nature of academic persistence.

C) Falling-out Social and Cultural Challenges (Social Challenges, Cultural Challenges)

Social and cultural factors exert profound yet often underestimated influence on students' academic trajectories, particularly regarding persistence and dropout. These forces operate both directly—through family, peer groups, and societal norms—and indirectly, by shaping students' identities, aspirations, and perceptions of educational value. One salient example is the evolving prestige hierarchy of academic disciplines in Iran. In the early 2000s (1380s in the Iranian calendar), engineering held the dominant status. More recently, however, there has been a marked shift in societal preference toward medical and healthcare-related fields. This transition reflects changing labor market signals, cultural values, and social expectations, which in turn influence students' field selection—sometimes at odds with personal interest or aptitude. Parental expectations and family dynamics are pivotal in this context. While Chenani et al. (2022) highlighted the role of authoritarian parenting and strict upbringing in fostering educational stress, Baalmann et al. (2024) found that high parental educational aspirations are often protective, reducing students' propensity to drop out. These findings suggest a dual-edged dynamic: while supportive aspirations can enhance persistence, rigid or misaligned expectations may contribute to emotional fatigue and disengagement. More broadly, students often report a general sense of dissatisfaction with life conditions in Iran, which directly affects academic motivation. Nadami et al. (2018) noted that dissatisfaction with socioeconomic and political conditions fosters a climate of uncertainty and hopelessness. This is compounded by restrictions on social and political freedoms, as emphasized by Ramazani Arani et al. (2024), which reduce students' sense of agency and belonging within the university environment. Cultural taboos and conservative norms further constrain academic expression and identity formation. As Tajroshan and Zorofi (2015) argue, cultural pressures frequently influence the choice of study field, prioritizing socially "acceptable" disciplines over individual interest or labor market relevance. These norms can restrict students' intellectual freedom and sense of purpose within academic life. Research also affirms the powerful impact of social interactions and peer influences. Hefny et al. (2024) identified social factors, such as alienation and lack of belonging, as significant drivers of dropout. Baalmann et al. (2024) similarly pointed to peer group dynamics and societal pressure as influential in shaping withdrawal decisions. Comparative findings from Pakistan underscore how cultural norms, particularly early marriage and gender-based discrimination, exacerbate attrition, especially among women (Fatima et al., 2024). Another key social phenomenon is credentialism—the overvaluation of

academic degrees as status symbols rather than indicators of competence. According to Zeraatkish (2020), this instrumental approach to education diminishes intrinsic motivation, leading students to view higher education not as a process of personal or intellectual growth but as a bureaucratic hurdle. When the promise of upward mobility through credentials fails to materialize, students may become disillusioned and choose to exit the system. These cultural and societal dynamics are poignantly illustrated in students' own reflections. One student (Code 6) remarked: "For example, homosexuality is a study subject worldwide, but in our culture and tradition, it is seen as something unacceptable and degenerate." This statement highlights the tension between global academic norms and local cultural taboos. The inability to engage with certain topics—due to fear of social or institutional backlash—undermines students' sense of academic freedom and intellectual legitimacy, leading to disaffection. Another student (Code 11) shared: "My spouse told me that I don't have social freedom here, and I want to go somewhere where no one bothers me." This quote speaks to broader feelings of constraint, where social and political restrictions push students toward emigration and disengagement from domestic institutions. The pursuit of personal autonomy, often framed in terms of leaving rather than reforming the system, illustrates how sociocultural dissatisfaction can fuel academic dropout and even broader brain drain. In summary, social and cultural dynamics do not operate in isolation but intersect with economic, institutional, and psychological domains. To effectively address dropout, higher education policies must confront not only structural inefficiencies but also the deep-rooted cultural narratives and social constraints that shape students' academic lives.

Theoretical Implications

This study contributes to the literature on higher education attrition by offering a comprehensive, context-specific model that captures both personal and non-personal dimensions of student dropout, using a longitudinal qualitative approach and Fishbone (Ishikawa) diagram. Theoretically, it expands on existing frameworks by integrating psychological, socio-cultural, institutional, and policy-level determinants of dropout, revealing their interdependent nature. While most prior studies tend to isolate individual-level factors or institutional deficiencies, this research situates student attrition within a multilayered and dynamic ecosystem, reflective of both micro and macro-level pressures. By demonstrating how personal motivations, such as academic migration intent and internal disengagement, intersect with structural and cultural constraints, including flawed higher education governance, economic instability, and sociopolitical influences, the findings support a systems-thinking approach to educational disengagement. This contributes to the theoretical advancement of retention models, suggesting that student dropout is not merely a function of academic failure or individual deficiency but a manifestation of broader institutional and societal dysfunctions. Furthermore, the application of a Fishbone diagram offers a novel visual-theoretical tool for categorizing and understanding dropout causes holistically, which can be replicated or adapted in future comparative studies across educational systems.

Managerial or Policy Implications

A) In the Faculty of Management at the University of Tehran; Improving the quality of online education: Reviewing and improving course content, utilizing specialized professors, and enhancing technical infrastructure for online learning (Short-term). Creating a dynamic and healthy competitive environment. Designing programs to increase scientific and social interactions among students, such as workshops, seminars, and group projects (Short-term). Providing adequate welfare facilities. Improving the quality of dormitories and welfare facilities for both virtual and on-campus students (Short-term). Increasing scholarships and student loans. Providing financial facilities to support students facing economic difficulties (Short-term).

B) At the Higher Education Level; Coordination between the Ministry of Science and executive bodies: Coordinating policies in student admissions, revising military service laws, and reducing administrative complexities (Long-term). Revising the student admission system. Focusing on the skills and abilities of applicants rather than merely entrance exam scores (Long-term). Ensuring the quality of higher education. Improving the academic level of universities and preventing the unnecessary expansion of universities and low-quality degree programs (Long-term). Merit-based recruitment in the academic staff system, along with increasing faculty salaries (Long-term).

C) At the Governance Level; Revising military service laws to facilitate students' continued education, such as providing educational exemptions for graduate studies and reducing service duration, (Long-term). Designing alternative military service programs such as working on scientific or industrial projects related to the field of study (Short-term). Fighting the phenomenon of favoritism and inappropriate appointments through public oversight systems and process transparency (Long-term). Allocating a larger share of the state budget to universities and scientific institutions, especially in the fields of research and technology (Long-term).

D) At the Social and Cultural Level; Providing educational programs for parents in schools about the importance of graduate education based on children's interests and abilities (Long-term). Promoting a skill-oriented culture and emphasizing practical abilities over university degrees in hiring practices (Long-term). Increasing public awareness of the value of online education and expanding the global reach of these courses in universities worldwide (Long-term). Awareness programs for families to address unreasonable cultural restrictions on girls' education (Long-term).

Ideas for Future Research

Building on the current findings, several directions emerge for future investigation.

Comparative Studies Across Disciplines and Universities: Future research could examine whether the identified dropout causes are unique to management education or generalizable across other disciplines and institutions in Iran and comparable contexts.

Longitudinal Quantitative Validation: While this study provides qualitative depth, future work can operationalize the identified variables into a longitudinal quantitative framework to test causal relationships and predictive models of dropout.

Post-Dropout Trajectories: Exploring the academic, career, and psychological outcomes of students who drop out would provide insights into the long-term implications of educational disengagement and inform reintegration strategies.

Declaration of AI Assistance

In the preparation of this article, ChatGPT version 5.1 was used for full-text translation, sentence rewriting, and sentence shortening. All outputs generated by the AI were reviewed and approved by the authors to ensure conceptual accuracy and adherence to the scholarly style.

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