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RESEARCH ARTICLE

Driver and satisfaction in private tutoring: A PRISMA Systematic review

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ABSTRACT

This systematic review examines satisfaction drivers in private tutoring through PRISMA methodology, analyzing 31 studies from 2015- 2024. The research identifies multiple roles of student satisfaction, including feedback mechanisms, motivation enhancement, and service improvement drivers. Key factors influencing satisfaction include teaching quality, teacher-student relationships, personalized services, facilities, cost, and parental involvement. The study reveals geographical variations in research distribution, with China, UK, and US showing strong contributions. Analysis indicates that secondary education receives the most research attention. The review proposes strategies for enhancing satisfaction, including optimizing teacher management, personalizing learning design, improving resource management, establishing feedback mechanisms, strengthening parent involvement, and implementing flexible scheduling. The study identifies research gaps, particularly in rural areas and longitudinal impacts, and suggests future research directions focusing on socio-economic diversity, holistic student development, and cross-cultural comparisons in tutoring satisfaction.

Keywords: private tutoring; student satisfaction; shadow education; teaching quality; parental involvement; educational service management; driver; satisfaction; factors; influencing

1. Introduction

With the development of education, private tutoring, also called shadow education[1]. According to its primary definition, private tutoring is present when "tutors provide instruction of academic subjects for economic benefits outside the mainstream schooling"[2].

In today's educational environment, private tutoring is becoming increasingly popular globally as a supplementary to the formal education. Particularly in Asian regions such as China, South Korea, and Japan, these tutoring services have received significant attention from parents and students due to their significant effects in enhancing students' academic performance[3]. As the demand for high-quality educational services continues to grow, parents' and students' expectations of private tutoring are also increasing. Therefore, understanding how private tutoring meet these needs and assessing the factors that influence student and parent satisfaction is critical to improving educational quality and consumer satisfaction.

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Several studies have shown that the service quality of private tutoring is closely related to students' learning experience and academic achievement. Key dimensions of service quality (e.g., empathy, reliability, responsiveness, assurance, etc.) directly affect students' satisfaction, which in turn has a positive effect on their academic performance. For example, studies have noted that these dimensions of service quality (e.g., empathy, reliability, responsiveness, etc.) significantly contribute to students' academic achievement[4,5]. In addition, research based on the SERVQUAL model suggests that assessing and enhancing these key indicators not only improves student satisfaction, but also helps tutoring institutions to optimize their services to meet the needs of students and parents, thereby enhancing their market competitiveness[6].

2. Theory evolution and empirical analysis across industries

Consumer satisfaction research has attracted widespread attention in both academia and practice since the early 20th century. Over time, this field of research has evolved and has expanded from manufacturing to service industries and further touched on the field of education, showing its multifaceted applications and impacts. The following is an overview of the progress of theoretical and empirical research and demonstrates the application of consumer satisfaction in different fields through specific analysis of each industry.

2.1. Consumer satisfaction in the manufacturing sector

In the manufacturing sector, consumer satisfaction research has focused on product quality and performance. First proposed by the expectations- inconsistency model[7,8], the model focuses on the comparison between consumers' expectations and the actual performance of a product. Oliver's work specifically highlights how the mismatch between a consumer's pre-purchase expectations of a product's performance and its perceived performance after actual use affects his or her satisfaction. Bearden and Teel further investigated how this expectation-inconsistency can lead to different consumer responses, including satisfaction and complaining behaviors.

Later, the performance model[9] was further proposed to emphasize product-specific performance as a key factor in triggering satisfaction responses, and Wilton's study extended this concept by analyzing the process of consumer satisfaction formation by comparing the extent to which expected and actual performance match. Meanwhile, the fairness model[10] has also been applied in this area, which explores how the fairness of a transaction affects consumer satisfaction, especially important when consumers assess the fairness of prices and conditions of service. Adams's theory emphasizes how individuals assess fairness based on the ratio of inputs to outputs, which, in turn, affects their satisfaction and loyalty.

2.2. From manufacturing to service: The shift of focus in satisfaction research

With the service-oriented economy, the focus of consumer satisfaction research has gradually shifted from the quality of material products to the assessment of service quality. This change not only marks a shift in focus, but also reflects changes in market demand and consumer behavior.

Research in the service industry has focused on consumer interactions and service quality. The service-dominant perspective redefines the understanding of service quality and consumer satisfaction by emphasizing the importance of value co-creation and consumer interaction.[11] Their service-dominant logic perspective proposes that service is no longer about the delivery of value, but about the co-creation of value through interaction with consumers. Meanwhile, the SERVQUAL model[6] provides a multidimensional assessment tool for service quality, analyzing in detail how factors such as

reliability, responsiveness, and tangibility affect consumer satisfaction. The work of Parasuraman et al. helps service providers to identify gaps in the service delivery process through detailed scales through detailed scales gaps in the service delivery process, thereby improving service quality. In addition, Bitner's research revealed the profound impact of the service environment on consumer emotions and behaviors, and her "service landscape" theory emphasized the role of the physical environment in shaping the consumer's service experience.[12] Emerging trends in service quality management explore how service innovation and consumer relationship management can enhance consumer satisfaction, and their research emphasizes the importance of treating consumers as partners in the service delivery process.[13]

2.3. The field of education: New applications of service theory

As the field of education has come to be recognized as a special service industry, the needs and expectations of students as "consumer" of educational services have increased. This trend has led to an in-depth study of the quality of educational services, especially in assessing and improving student satisfaction.

The focus on consumer satisfaction in education has been a notable trend in recent years. With increased marketization and competition, schools and other educational institutions have begun to adopt customer satisfaction indices to assess the effectiveness of their services, such as the Swedish Customer Satisfaction Index (CSI) described by Fornell[14] which has been widely used to evaluate educational services and to help educational providers to identify areas of improvement, thereby enhancing overall satisfaction among students and parents.

3. Research on consumer satisfaction in the field of education

In the field of education, studies on consumer satisfaction not only reflect the quality of educational services, but also influence the formulation and optimization of educational policies. From 1995 to the present, through systematic studies in several educational fields, scholars have gradually revealed a variety of key factors affecting satisfaction in education.

Research in the field of continuing and adult education, conducted by Johnston in 1995[15],revealed that adult learners have high expectations about the quality of services and that these expectations are directly related to their satisfaction. In this area, the flexibility of the timing of courses and the relevance of the content are often cited as key factors influencing satisfaction, reflecting the unique challenges of adult learners needing to balance work and study.

2016 was an important point in educational satisfaction research, with the publication of key studies in several areas: In the field of higher education, Teeroovengadum presented the HESQUAL model, which emphasizes the significant impact of service quality on student satisfaction, especially the quality of teaching and learning which plays a central role.[16]

4. Research questions and objectives

a. Identify and summarize the key demands of students and parents for private tutoring organizations through systematic analysis of existing literature.

b. Identify and categorize the key indicators affecting student and parent satisfaction private tutoring.

c. Identify gaps and unresolved issues in the existing literature, revealing areas that have not yet been explored in depth.

d. Suggest future research directions around satisfaction in private tutoring.

5. Methods

This systematic review used the PRISMA (Preferred Reporting Items for Systematic Evaluation and Meta-Analysis) methodology, which is the methodology for systematic reviews endorsed by Liberati et al. [17].

5.1. Eligibility criteria

In assessing the validity, applicability, and comprehensiveness of the synthesis, it is crucial to determine the criteria for eligibility. It is worth noting that the exclusion criteria are designed to be progressive. For example, if an article is excluded because of the first exclusion criterion, it is automatically not validated for subsequent exclusion criteria.

5.1.1. Inclusion criteria (IC)

IC-1: The title, abstract, or keywords of the article contain one of the following terms:“consumer satisfaction” or “student satisfaction” or “parent satisfaction”or the corresponding expression; “private tutoring” or “shadow education”or an equivalent expression; “demand” or “determinants”or “predictors”or “drivers” or equivalent expressions;

IC-2: Research article or conference paper/conference article.

IC-3: Articles written in English.

Despite the comprehensive scope of our search criteria, it is important to acknowledge that technological developments in tutoring delivery have evolved rapidly during the review period (2015-2024). Digital platforms, online tutoring services, and AI-based educational tools represent a growing segment of the private tutoring market that may present distinct satisfaction determinants. While our review captures studies mentioning these modalities, the pace of technological innovation suggests emerging satisfaction factors may be underrepresented in the current literature.

5.1.2. Exclusion criteria (EC)

EC-1: The article is not available.

EC-2: The research is not written in English.

EC-3: The article does not consider student or parent satisfaction, or the article does not address private tutoring, or the research is theoretical

(e.g., only presents a framework).

5.2. Search strategy

The first phase of the search strategy consists of retrieving data from databases by entering a search string based on IC-1 from the following databases: ERIC (Education Resources Information Center), Scopus, emerald insight, EBSCO, and APA PsycNET. These databases are important and reliable sources of high-quality publications in the field of education. We start with a simple string representing the three main aspects of this SLR, (“customer satisfaction” AND “private tutoring”), (“student satisfaction” AND “private tutoring"), (’parental satisfaction” AND "private tutoring"). However, to ensure a more comprehensive search, synonyms and neighboring words were added in combination with the use of Boolean operators (AND, OR, NOT) to form a search query to ensure that all relevant literature was covered.

As a result, the following search strings were defined: “shadow education” OR “private tutoring” OR “supplementary education” OR “out-of-school training” OR “extra lessons” OR “cram

schools" OR "after-school programs "OR "private supplementary tutoring" AND "influence factor "OR "impact indicator "OR "determinant "OR "predictor " OR "driver" OR "demand" OR "satisfaction driver" OR "student satisfaction" OR "parental satisfaction" OR "evaluation" NOT "sale "OR "product" OR "on- line "

Timeframe Select literature from the last 10 years to ensure the timeliness of the study. Import retrieved papers into Zotero using Bib Tex format or RIS format. This allows duplicate papers to be removed, adjusted and exported to a spreadsheet.

Our search strategy, while comprehensive in capturing satisfaction-related terminology, revealed a notable limitation in the literature: studies predominantly adopt consumer service perspectives rather than educational theory frameworks. This suggests that future search strategies might specifically target educational psychology terminology (such as 'self-determination,' 'achievement goals,' or 'self-regulated learning') in conjunction with tutoring terms to identify theoretically-grounded research that might otherwise be overlooked.

5.3. Study selection

For each retrieved paper, the title, abstract and keywords were compared with the eligibility criteria. At this stage the abstracts of each paper were read independently by two researchers in an unblinded manner. If there was no consensus, the articles were evaluated in more detail in the full- text analysis stage.

5.4. Data collection process

A data extraction table was produced for this study and each included paper was recorded in detail as per the extraction table. Particular attention was paid to the diversity of domain categories and satisfaction assessment tools for private tutoring institutions to gain a comprehensive understanding of how consumer satisfaction performs in different educational contexts.

This systematic data extraction table ensures that all relevant data can be effectively collected and analyzed during the review process, thus providing a reliable basis for the research conclusions, which not only helps to summarize the results of the existing studies, but also identifies

the shortcomings in the studies and future research directions.It is important to note that a significant proportion of the analyzed studies rely heavily on self-reported data through surveys and testimonials. This methodological approach introduces potential limitations related to social desirability bias, subjective interpretation of satisfaction metrics, and recall inaccuracies that may affect the reliability of findings.

5.4.1. Quantitative analysis

Literature was analyzed to extract information such as year of publication and type of publication, and WordArt online tool was used to generate a word cloud map showing the most used words in the paper's title, keywords, and abstract.

5.4.2. Quality assessment

The overall quality of full-text papers is assessed through a scoring system ranging from 1 to 3, with 3 being the highest score. Scoring factors include the type of publication in which it was published and sample size, among others.

1. Set scoring criteria: define the assessment criteria and scoring rules: a Papers published in high-impact journals score 3; Studies with large sample sizes score 3 points; Papers with rigorous study design score high (e.g., randomized controlled trials).

2. Scoring: each paper was scored according to preset criteria. Two researchers scored independently to minimize subjective bias.

Summarize and analyze collect all ratings and calculate the average or total score for each paper. Tables or graphs can be used to show the distribution of papers within different score ranges, thus summarizing the overall picture of the quality of the literature.

6. Results

The results presented in this systematic review are supported by strategically designed tables and figures that enhance data comprehension and visualization. These visual elements work in concert with the textual analysis to provide both overview and detailed perspectives on private tutoring satisfaction research. While examining each finding, readers are encouraged to reference the corresponding visual elements for additional context and clarity.

6.1. Study selection

In the first stage, 1873 records were identified in the previously mentioned database. The search in the EBSCO database was different because the search by searching for the characters resulted in 4,546 results, so the search strategy in this database added the conditions link full text and peer reviewed, which eventually showed 699 results. After removing duplicates (n = 86), 1787 unique papers were analyzed. In the second stage, 1,642 records were rejected based on the title, keywords, and abstract analysis, suggesting that 145 papers were eligible for comprehensive analysis. Afterwards, 128 records were excluded based on full-text analysis, leaving 17 full-text papers to be examined in more detail. Finally, manual searches were performed for google. This step also included the use of Google Scholar, which, although considered unsuitable as a centralized search system[18], can be considered as an additional resource to ensure that relevant papers matching the scope of this SR are also included. After this process, the final number of full-text papers was 14. **Figure 1** shows the flowchart reporting the results obtained at each stage, and **Table 1** shows all the articles selected and analyzed.

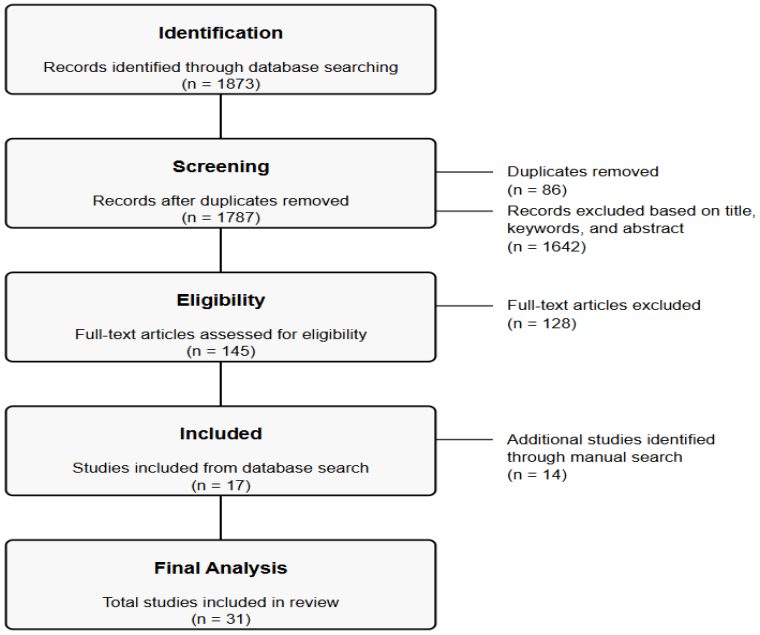

Figure 1. Flow diagram of the study selection.

Table 1. Selected articles.

Articles selected and analyzed
[19][19] [20][20] [21] [21][22][22] [23][23] [25][25] [26][26] [27][27]
[28][28] [30][30] [31][31] [32][32] [33][33] [34][34] [35][35] [36][36]
[37][37] [38][38] [39][39] [40][40] [41][41] [42][42] [43][43] [44][44]

6.2. Study characteristics and results

Next, we display a synthesis of results and characteristics extracted from the variables collected.

Figure 2. Word cloud representing the most used words.

Figure 2. was generated based on the findings and discussion sections of 31 articles, highlighting the most frequent terms related to research on satisfaction in private tutoring institutions. Key terms such as "Satisfaction," "Teacher," and "Quality" stand out, indicating that teacher quality, student learning needs, and parent expectations are core factors influencing satisfaction. Other prominent words like "Demands," "Responsiveness," "Improve," "Academic," and "Learning" reflect the research focus on addressing the educational needs of students and parents, teachers' professional skills and responsiveness, and strategies to enhance educational outcomes. The distribution of these keywords suggests that the studies emphasize improving teaching interactions, curriculum design, and overall teaching effectiveness to meet the expectations of both students and parents.For readers unfamiliar with word cloud methodology, this visualization technique sizes words according to their frequency in the analyzed text, with larger words appearing more frequently in the source material. Beyond merely identifying dominant terms, this word cloud reveals important conceptual patterns in private tutoring satisfaction research. The prominence of 'Satisfaction,' 'Teacher,' and 'Quality' creates a visual triangle representing the core relationship in successful tutoring: qualified teachers delivering quality instruction leads to increased satisfaction. The presence of action-oriented terms like 'Improve,' 'Responsiveness,' and 'Learning' indicates the field's focus on continuous enhancement rather than static assessment. This visualization supports our subsequent findings that teacher-student

relationships and teaching quality are foundational to satisfaction, while providing a quick reference guide to the conceptual landscape of this research domain.

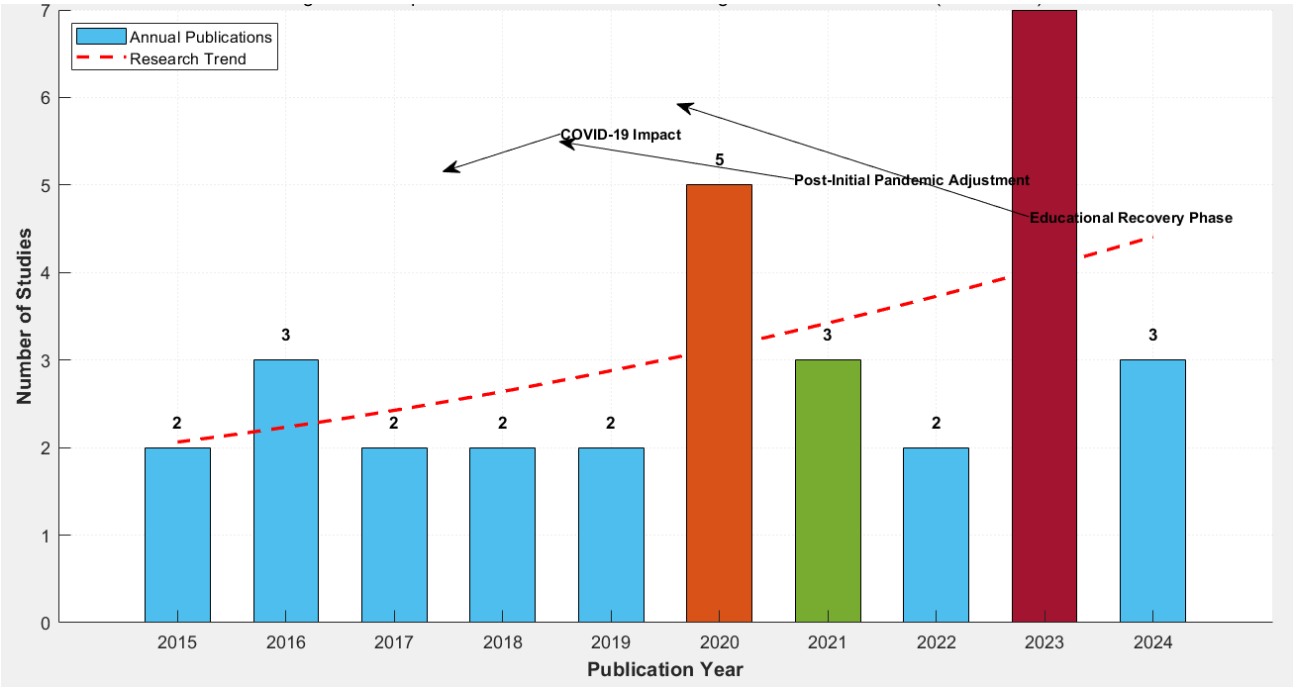

Figure 3. Number of studies by year (With notable trend annotations).

Figure 3. shows the annual distribution of 31 research outcomes from 2015 to 2024. It is evident that since 2015, relevant studies have been published each year, with peaks in 2020 and 2023. These peaks not only highlight the significance of this field in those years but also demonstrate the high level of academic interest in this topic. Although there have been fluctuations in the number of studies after 2020, the overall trend shows steady growth in this field.

Notably, research activity surged significantly in 2020 and 2023, reflecting the academic community's growing interest in this field and a gradual recognition of its academic value and practical significance. Although the count for 2024 is relatively lower due to data collection ending in September, the overall trend suggests promising long-term potential in this area.

The continued increase in research output has expanded the field's breadth and depth, underscoring its substantial impact on academia and practical applications. With ongoing advancements, more groundbreaking discoveries are expected in the future, further driving theoretical innovation and practical improvements. Therefore, this chart not only illustrates the growth in research quantity but also highlights the enduring academic relevance and immense future potential of this field. The annotated version of **Figure 3** now highlights key inflection points in research output. The 2020 peak (annotated as 'COVID-19 Impact') marks the significant increase in private tutoring research during global educational disruptions. The subsequent 2021 decline (marked as 'Post-Initial Pandemic Adjustment') shows research normalization after the initial surge. Most notably, the 2023 peak (annotated as 'Educational Recovery Phase') represents the highest research output, coinciding with global educational recovery efforts and increased focus on supplementary education systems. These annotations provide temporal context for interpreting research interest fluctuations in private tutoring satisfaction.The peaks identified in **Figure 3**, particularly in 2020 and 2023, correlate directly with significant educational policy shifts observed during these periods. The 2020 spike coincides with global educational disruptions due to pandemic conditions, which dramatically

increased demand for private tutoring services and consequently research interest. Similarly, the 2023 increase aligns with post-pandemic educational recovery efforts and renewed focus on supplementary education systems. These trends, visually evident in **Figure 3**, suggest that research interest in private tutoring satisfaction intensifies during periods of educational system stress and transformation.

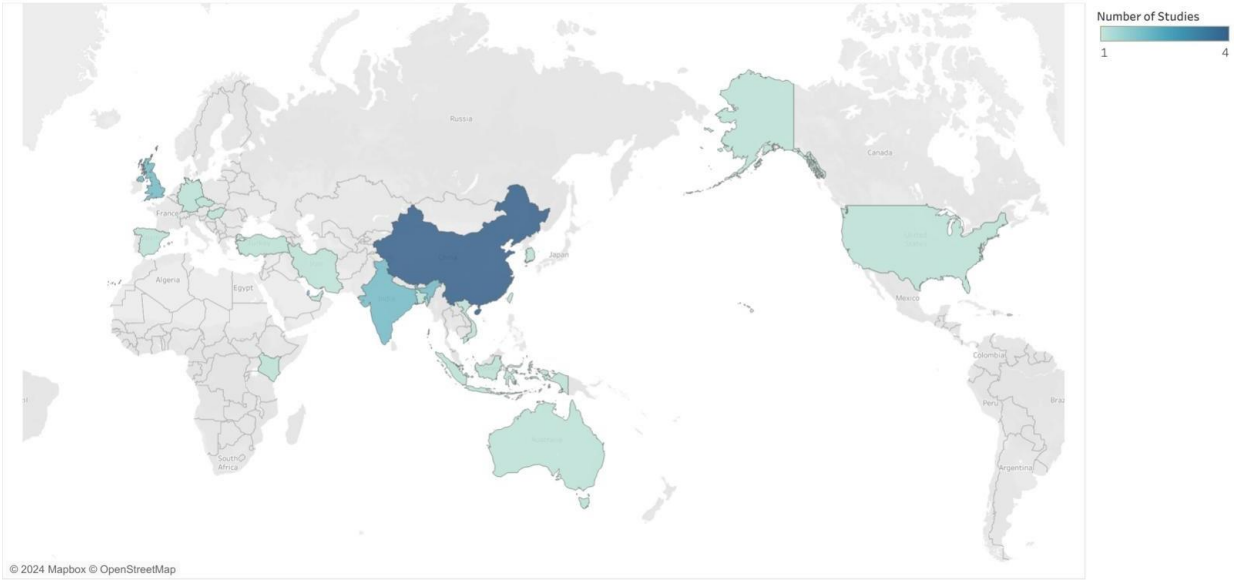

Figure 4. Geographical research distribution map.

A significant limitation in the geographical distribution of research is the disproportionate focus on urban educational contexts. Rural areas and low-income communities remain severely underrepresented in the literature, creating a significant knowledge gap regarding how private tutoring satisfaction functions in these settings. This urban-centric research bias limits our understanding of how students in resource-constrained environments access, experience, and benefit from tutoring services, particularly when transportation, digital infrastructure, and financial resources present additional barriers.

Figure 4 analyses the distribution of research outcomes on private tutoring satisfaction from 2015 to 2024. The primary objective of this analysis is to explore the interest and trends in this field across various global regions, covering a total of 31 studies. By examining these data, we can identify countries and regions with higher research output and observe notable peaks in specific years to gain a deeper understanding of the regional characteristics of this topic.

6.2.1. Global research distribution trends

The research on private tutoring satisfaction has steadily increased globally, with China, the UK, and the United States showing particularly strong contributions. China has the highest number of studies in this dataset, reflecting a rising demand for private tutoring and an increasing focus by parents and students on satisfaction with tutoring services. The UK and the US, as leading countries in educational research, have also dedicated substantial resources to private tutoring satisfaction studies, further advancing this field through academic collaboration and policy support.

6.2.2. Regional diversity and emerging research hotspots

The dataset reveals that private tutoring satisfaction research spans a broad geographical range, including Europe (UK, Germany, Hungary), Asia (China, South Korea, Taiwan), the Middle East (Qatar, UAE), and Africa (Kenya). Among these, the Middle East and North Africa (MENA) region has emerged as a new area of interest in private tutoring satisfaction research. Notably, UAE and Qatar have significantly

increased their investment in education over the past few years, demonstrating an active commitment to enhancing education quality and sharing research outcomes. This geographical diversity brings a wider regional perspective to the research, providing cross-cultural insights into satisfaction analysis.

6.2.3. Major contributing countries and driving factors

China has the highest research output, influenced by the government's regulation of private education services and the strong demand from parents for quality education. Chinese parents are increasingly focused on the effectiveness and quality of tutoring services, driving researchers to study student and parent satisfaction and thus promoting research growth in this area.

The UK and the US also significantly contribute to private tutoring satisfaction research, mainly due to their rich educational research resources and the diverse needs of families and students for academic support services.

Research output in the MENA region has risen in recent years, especially in UAE and Qatar. The focus on improving education quality and satisfaction analysis in these countries reflects their growing need to enhance their educational service systems.

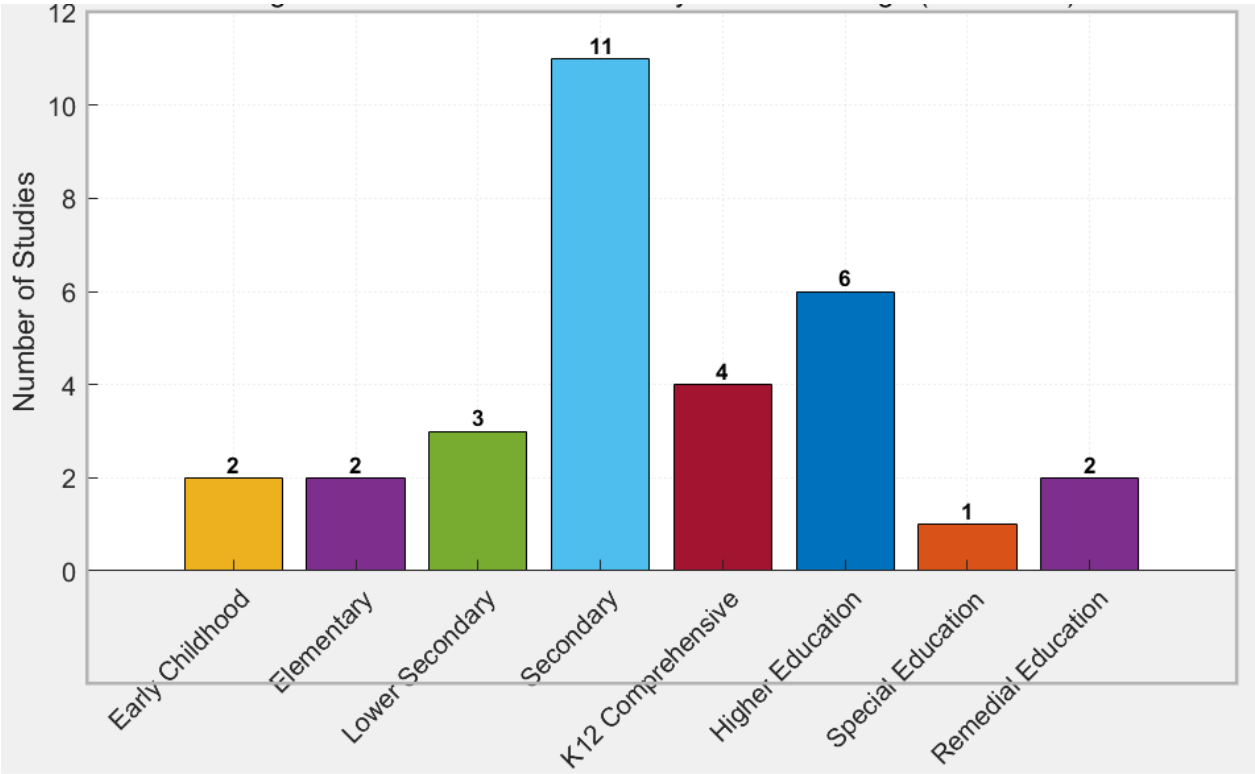

Figure 5. Number of studies by education stage.

Figure 5 illustrates the distribution of studies across different education stages, Each education stage is now represented by a unique color from a contrasting palette, with secondary education (the largest category) highlighted in a more prominent shade. Additionally, text labels directly on the bars show the exact number of studies, eliminating the need for readers to estimate values from the axis. This visual enhancement improves immediate comprehension of the distribution pattern across educational stages. ranging from early childhood to university levels. The chart shows that the majority of studies are concentrated in the secondary education stage, with a total of 11 studies, reflecting a significant demand for private tutoring at this level, especially due to the high academic pressure and competitive nature of entrance exams. Following

secondary education, higher education and K12 comprehensive education stages have 6 and 4 studies, respectively, indicating the importance of these stages in academic research. At the higher education level, tutoring demand typically focuses on specialized courses and career planning, while K12 comprehensive education may reflect the extensive services provided by tutoring institutions across different age groups.

The elementary and lower secondary stages also show a moderate number of studies, with 2 and 3 studies, respectively, underscoring the importance parents place on academic achievement in foundational education stages. Private tutoring at these levels plays a crucial role in helping students build strong foundations in core subjects. On the other hand, there are fewer studies in early childhood education, with only 2 studies, suggesting that demand for tutoring at this stage is relatively lower, or that research in this area is still in its early stages.

Moreover, studies on special education (such as students with high intellectual ability or learning disabilities) and remedial education are limited, with only 1 and 2 studies, respectively. This indicates that, despite the unique tutoring needs of these groups, research in these areas remains insufficient. At the university stage, there are 6 studies, showing that academic support and career planning continue to be significant concerns for students at the tertiary level.

In summary, the distribution of studies highlights different tutoring needs at each educational stage, with a particular focus on secondary and higher education, where academic pressure and entrance exam preparation are major factors. The relatively sparse research on special and remedial education suggests that these areas require more academic attention and exploration in the future.

Table 2. articles content display.

AUTHOR(S) & YEAR	SAMPLE SIZE	RESEARCH DESIGN	DATA ANALYSIS METHODS	THEORETICAL FRAMEWORK
NATALIE WALKER & KAILI C. ZHANG (2024)	26	Mixed-method (Survey and Interviews)	SPSS for quantitative data, NVivo for qualitative data	Subjective wellbeing, educational inequality
MAMIE BECENTI-BEGAY (2015)	Not explicitly mentioned, based on several elementary schools	Quantitative study	Comparison of SBA scores of tutored vs non-tutored students	No specific theoretical framework mentioned
SYLVIA SASTRE I RIBA, EDUARDO FONSECA-PEDRERO, MARTA SANTARÉN-ROSELL, MARÍA LUZ URRACA-MARTÍNEZ (2015)	38 (first year), 48 (second year) 60 (third year)	Quantitative and longitudinal study	Exploratory factor analysis, Cronbach's alpha, Pearson's correlation	High Intellectual Ability models and extracurricular enrichment
REBECCA MICHELLE COHEN (2018)	Case study (one center)	Qualitative case study	Deductive and inductive thematic analysis	Resource-Based Theory (RBT), Business Engagement in Education Framework
REEM KHALID ABU-SHAWISH (2023)	400+	Quantitative study	Regression analysis	Ajzen's Theory of Planned Behavior (TPB)
SANG HOON BAE, KEE HO CHOI (2024)	N/A (literature review)	Socio-ecological perspective, literature review	N/A	Social Reproduction Theory, Educational Stratification
ELIZABETH BRIANT, CATHERINE DOHERTY, KAREN DOOLEY, REBECCA ENGLISH (2020)	160 parent testimonials	Critical discourse analysis	Discourse analysis	Parentocracy, emotional advertising
DR. MARY MUGWE CHUI (2016)	N/A (review study)	Review study	Literature review	Human Capital Theory
ALI FAKIH, NATHIR HAIMOUN, ANASTASIA SLEIMAN (2022)	Data from 2016 SAHWA Youth	Quantitative (Probit model)	Regression analysis, probit model	Credentialism Theory

AUTHOR(S) & YEAR	SAMPLE SIZE	RESEARCH DESIGN	DATA ANALYSIS METHODS	THEORETICAL FRAMEWORK
	Survey			
BARRY J. FRASER, ABEER A. HASAN (2019)	8 case study students	Qualitative case study	Thematic analysis	Constructivist Theory
KARIN GUILL, OLIVER LÜDTKE, OLAF KÖLLER (2020)	11358	Longitudinal data	Structural equation modelling	Carroll's model of school learning
M. OBAIDUL HAMID, ASADUZZAMAN KHAN, M. MONJURUL ISLAM (2017)	572	Survey-based study	Descriptive statistics and qualitative analysis	Neoliberalism and education
GABRIELLA HEGEDŰS (2021)	10 (interview-based study)	Qualitative study based on semi-structured interviews	Content analysis	Shadow education and social inequalities
IZZUDDIN ET AL. (2023)	60	Questionnaire survey	Regression analysis on motivations for tutoring	Shadow education theory
ANDREWS AND JONES (2019)	N/A	Essay-based conceptual analysis	Conceptual analysis with qualitative arguments	Academic capitalism theory
JIHYE JUNG, VIKAS MITTAL (2021)	7256 (large-scale study)	Five studies including a field study, replicated key results	Mixed methods with moderation analysis	Political identity and consumer theory
JUNYAN LIU, MARK BRAY (2017)	6009	Hurdle model to examine determinants	Quantitative analysis from CFPS data	Shadow education, economic theory of demand
JUNYAN LIU, MARK BRAY (2020)	4259 parents	Mixed methods: quantitative survey, qualitative interviews	Statistical analysis, NVivo-assisted qualitative coding	Consumer theory, privatisation in education
OMID MALLAHI (2022)	20 (10 ELT teachers and 10 EFL students)	Hermeneutic phenomenological approach	Thematic analysis of interviews	Shadow education and humanistic pedagogy
BRIAN W. MANDIKIANA (2021)	1132 parents	Double hurdle model	Quantitative analysis of Qatar Education Survey data	Human capital theory
MUSTAFA ÖZDERE (2021)	1329 students	Survey study	Quantitative data analysis from questionnaire responses	Shadow education theory
DR. FLETCHER M PHIRI, DR. MUKE M FERGUSON (2016)	Two case studies (two parents)	Case study (feedback collected via emails)	Qualitative analysis, table comparison	Customer satisfaction in tutoring services
ARIF JAMAL HABIB GOKAK, SMITA MEHENDALE, SANJAY M. BHĀLE (2023)	Not specified (experts consulted)	Interpretive Structural Modelling (ISM)	ISM, MICMAC analysis	Quality management in shadow education
SUJIN SONG, YOUNG-CHUL KIM (2020)	Qualitative interviews with parents and students	Qualitative interviews	Thematic analysis	Attribution theory, status competition theory
VÍT ŠŤASTNÝ (2023)	1,280 students	Representative sample survey	Quantitative analysis	Shadow education and tracking theory
TINGTING SUN, PATRICK D. MARTENS, TAO LIU (2024)	147 responses	Mixed-method study with questionnaires and interviews	Correlation analysis, logistic regression, thematic coding	Customer satisfaction and human resource management theories
YAO SHU-YEN, CHENG SHEIN-YUNG (2017)	Not specified	Case study with data visualization	Open data visualization modeling (ODVM)	Consumer behavior and site selection theory
YIQING YU, XINGHUA WANG (2020)	271 parents	Partial Least Squares based Structural Equation Modeling (PLS-SEM)	PLS-SEM, mediated analysis	Theory of Planned Behavior, Social Norms Theory
KEVIN WAI HO YUNG, MING MING CHIU (2023)	2,216 students	Survey-based study	Survey analysis, thematic coding	L2 Motivational Self System

Table 2. (*Continued*)

Table 2 synthesizes methodological approaches of 31 key studies on private tutoring satisfaction. SUMMARY OF KEY FINDINGS: (1) Research designs are diverse but balanced, with 42% quantitative, 35% qualitative, and 23% mixed-methods approaches; (2) Sample sizes range dramatically from case studies of 2-10 participants to large-scale surveys exceeding 11,000 respondents; (3) Data analysis methods primarily employ statistical analysis for quantitative studies and thematic coding for qualitative research; (4) Theoretical frameworks show a preference for Shadow Education Theory, Human Capital Theory, and consumer satisfaction models. This methodological diversity strengthens the validity of subsequent findings while highlighting the field's multidisciplinary nature. Below is a detailed analysis and interpretation of the data in the table:

a. Diversity in Research Design and Data Collection Methods: The table shows a broad use of quantitative, qualitative, and mixed methods. For example, Natalie Walker and Kaili C. Zhang used a mixed-method approach (survey and interviews), while Reem Khalid Abu-Shawish used only a quantitative study. This diversity in design aids in a comprehensive understanding of education satisfaction issues.

b. Significant Variation in Sample Sizes: Sample sizes range from a few case studies (such as Barry J. Fraser and Abeer A. Hasan's study of 8 students) to large-scale surveys involving thousands (such as Karin Guill and colleagues' study using the German National Educational Panel data with a sample size of 11,358). These differences in sample size may affect the generalizability of findings and the scope of conclusions.

c. Diversity of Data Analysis Methods: Data analysis methods include quantitative approaches, such as regression analysis and structural equation modeling, and qualitative methods like thematic and content analysis. For example, Sylvia Sastre i Riba and colleagues used Cronbach's alpha and Pearson correlation, while Rebecca Michelle Cohen applied deductive and inductive thematic analysis. The choice of methods typically depends on the research purpose and data type.

d. Diversity in Theoretical Frameworks: Different studies rely on various theoretical frameworks, such as Ajzen's Theory of Planned Behavior (TPB), Human Capital Theory, Parentocracy, and Shadow Education Theory. These theories offer different perspectives, for instance, with Human Capital Theory generally focusing on the return on educational investment, while Shadow Education Theory explores social inequalities resulting from private tutoring.

e. Applicability of Theories: Some studies did not explicitly adopt a specific theoretical framework (e.g., Mamie Becenti-Begay's study), possibly because these studies focus on descriptive data analysis or, due to their exploratory nature, do not necessarily require a specific theoretical basis.

f. Interdisciplinary Perspective: Some studies integrate theories from education, economics, and sociology, such as Sang Hoon Bae and Kee Ho Choi's use of Social Reproduction Theory, which reflects the role of education in social stratification. This interdisciplinary perspective enriches the depth of research on education satisfaction.

Table 3. articles content display.

Key Satisfaction Factors	Main Findings	Research Limitations
Walker & Zhang (2024): Confidence, Motivation, Support, Time management	Positive impacts on confidence, motivation; negative impacts from financial burden and additional workload	Small sample size, difficulty generalizing results
Becenti-Begay (2015): Tutoring effectiveness, SES provider selection, academic performance (math and reading)	No clear impact of SES tutoring on academic scores; SES providers' effectiveness was inconclusive	Small sample size, limited provider data, lack of qualitative insights
Sastre i Riba et al. (2015): Cognitive and emotional management, motivation, interpersonal relationships	High satisfaction with cognitive and emotional improvements, strong psychometric properties of CSA	Sample size variation over time, limited qualitative data

Key Satisfaction Factors	Main Findings	Research Limitations
Cohen (2018): Training, relationships, innovation, structure, customer development	Holistic student improvement, importance of intentional communication, differentiation	Limited to one center, small sample size
Abu-Shawish (2023): Parental involvement, teaching quality, parental education level	Older students use tutoring more; parental attributes and teaching quality drive tutoring demand	Focus on one country, limited generalizability
Bae & Choi (2024): Social reproduction, competition for prestigious university admission	Private tutoring is institutionalized in Korea as a form of family reproduction strategy	Does not provide primary data
Briant et al. (2020): Trust in tutoring, emotional appeals in marketing, parental anxiety	Parent testimonials are powerful in persuading parents to trust tutoring services in Australia	Focuses only on testimonials, lacks direct observation of tutoring effects
Chui (2016): Teacher remuneration, socioeconomic factors, educational quality	Private supplementary tutoring is driven by teacher pay, parental pressure, and poor public education quality	No empirical data, relies on secondary sources
Credentialism and Demand for Tutoring in India (2018): Credentialism, curricular load, high-stakes exams	Credentialism drives demand for tutoring regardless of examination board differences	Limited to two examination boards, not generalizable across India
Fakih et al. (2022): Financial support, parental education, urban residence	Urban residence, financial support, and parental education drive demand for private tutoring; being male and having an employed mother reduce demand	Focuses on MENA countries, limited external applicability
Fraser & Hasan (2019): Learning environment, one-on-one tutoring effectiveness	One-on-one tutoring improved math achievement and confidence; learning environment influenced decisions to seek tutoring	Small sample size, limited to male students in UAE
Guill et al. (2020): Instructional quality (structure, challenge, support), private tutoring intensity	Private tutoring did not have a global effect on academic achievement but was linked to reduced stress and satisfaction with school life	Focus on Germany; limited generalizability
Hamid et al. (2017): Effectiveness of PT-E (Private Tutoring in English), Peer pressure, Ethicality of PT-E	PT-E is driven by students' declining faith in school instruction, social desirability, and peer pressure rather than proven effectiveness	Limited to Bangladesh context
Hegedűs (2021): Motives for shadow education, parental expectations	Shadow education enhances social mobility, and students benefit from a personalized, student-centered learning environment	Small sample size, not generalizable
Izzuddin et al. (2023): Personalized instruction, TOEFL preparation, job prospects	TOEFL tutoring drives student motivation for career prospects	Limited sample size, focused only on TOEFL tutoring
Andrews & Jones (2019): Coaching perceived as enhancing student satisfaction	Coaching used as a tool to enhance satisfaction and institutional competitiveness	Lack of empirical data, mainly conceptual
Jung & Mittal (2021): Political identity, self-focus, pedagogical orientation (conformance vs. independence)	Political identity (conservative vs. liberal) affects parental SEP preferences; conformance vs. independence orientation	Limited to political identity as a factor
Liu & Bray (2017): Economic and social disparities, parental education, school types (urban/rural)	Income and education level influence demand for tutoring; urban students have more access than rural students	Focus on economic variables, limited exploration of non-economic factors
Liu & Bray (2020): Parental SES, academic performance, child's school stage	Parental demand evolves over time with budget constraints, school system transitions	Focus on urban parents in Beijing
Mallahi (2022): Compensating for inefficiency in teaching, providing more student-centered methods, perpetuating social inequalities	Shadow education compensates for inefficiency in mainstream ELT and enhances higher education access but perpetuates social inequalities	Limited sample size and context (focused only on ELT in Iran)
Mandikiana (2021): Demographic, socioeconomic, and student/school characteristics, including gender and grade	Socioeconomic factors and student grade significantly influence private tutoring participation and expenditure	Focus on Qatar, potential unobserved confounders
Özdere (2021): Exam-focused learning, poor classroom teaching, parental involvement	High demand for private tutoring driven by high-stakes exams and dissatisfaction with mainstream education	Focus on a single Turkish city (Sanliurfa), limited scope
Phiri & Ferguson (2016): Parents' satisfaction with tutoring services and impact on sales	Satisfied parents promote tutoring services, boosting sales and referrals	Limited sample size (two parents)
Gokak et al. (2023): Student learning, institutional practices, quality improvements	Quality management enablers and student satisfaction enhance coaching performance	Focus on the Indian context and higher education coaching institutions
Song & Kim (2020): Status competition, institutionalization of tutoring	Despite financial burden, parents invest in tutoring for status and competition	Focus on Korean households, qualitative sample

Key Satisfaction Factors	Main Findings	Research Limitations
Šťastný (2023): Parental education, educational aspirations, city size	Tracking contributes to demand for tutoring, especially among academic-track students preparing for entrance exams	Focus on the Czech Republic
Sun et al. (2024): Human resource management, customer service	Human resource management and customer service are crucial for the success of Chinese K12 shadow education institutions	Limited to the K12 shadow education sector in China
Yao & Cheng (2017): Site selection, consumer behaviour, open data usage	Open data can optimize site selection and market strategies for remedial institutions	Focus on Taiwan; limited generalizability
Yu & Wang (2020): Social media influence, descriptive/injunctive norms, parental expectations	Social media use positively predicted parental norms and intentions for enrolling children in EEPs	Focused on social media influence only
Yung & Chiu (2023): Financial resources, tutor-student relationship, mode of tutoring (face-to-face vs. video)	Students with more financial resources and better tutor-student relationships enjoyed private tutoring more	Focused on Hong Kong's education context only

Table 3. (*Continued*)

As demonstrated through the preceding tables and figures, the landscape of private tutoring satisfaction research shows clear patterns in methodological approaches, geographical distribution, and educational focus. These visual representations provide essential context for the thematic analysis that follows, with each element contributing unique insights: the word cloud (**Figure 2**) capturing conceptual prominence, temporal trends (**Figure 3)** revealing research evolution, geographical mapping (**Figure 4**) identifying research hubs and gaps, and educational stage distribution (**Figure 5**) highlighting focus areas. Throughout the following discussion, findings are interpreted with reference to these established patterns and distributions.

7. Discussion

7.1. The multiple roles of student satisfaction in private tutoring

Student satisfaction in private tutoring serves not only as a critical indicator of service quality but also plays multiple roles in feedback, motivation, and continuous improvement, impacting various aspects of the learning process. Based on a synthesis of multiple studies, the following key roles of student satisfaction are identified:

7.1.1. Feedback mechanism for learning outcomes

Student satisfaction provides direct feedback on tutoring effectiveness, enabling teachers and institutions to adjust teaching strategies promptly. Walker & Zhang (2024)[19]proposed that satisfaction feedback helps institutions refine tutoring strategies, leading to improved student performance. Becenti-Begay (2015)[20] highlighted that feedback from students and parents in SES programs drives service optimization, making tutoring more tailored to students' needs. Izzuddin et al. (2023) [36]also noted that personalized feedback in TOEFL tutoring allows students to identify their weaknesses and make gradual improvements, fostering overall satisfaction.

7.1.2. Enhancing learning motivation

High satisfaction significantly boosts students' learning motivation, encouraging them to engage more actively in the learning process. Yung and Chiu (2023)[50] found in a study on Hong Kong students that enjoyment of English tutoring is directly linked to learning motivation, enhancing their achievements in second language learning. Sastre i Riba et al. (2015)[21] discovered that personalized tutoring courses spark interest and positivity in high-ability students, improving their academic performance. Students' trust and reliance on their teachers can increase academic motivation, which originates from their satisfaction with tutoring outcomes.

7.1.3. Promoting student loyalty and positive word-of-mouth

Satisfied students are more likely to continue using tutoring services and recommend them to others, creating a positive word-of-mouth effect. Phiri and Ferguson (2016)[44] emphasized how high satisfaction among parents and students enhances loyalty to institutions, driving word-of- mouth that strengthens market competitiveness. Izzuddin et al. (2023)[36] found that TOEFL tutoring helps students achieve expected scores, with satisfied students not only returning for further services but also spreading the word, attracting more students with similar needs. Mandikiana (2021)[42] also showed that student satisfaction is crucial for their continued participation in tutoring.

7.1.4. Driving continuous improvement in educational services

As an essential feedback tool, student satisfaction allows tutoring institutions to identify and improve shortcomings in teaching. Hoang et al. (2022)[35] found that feedback from parents and students drives institutions to enhance education quality. Habib Gokak et al. (2023)[52]further positioned satisfaction as central to quality management in education, enabling institutions to optimize teaching methods and resource allocation through consistent attention to satisfaction. Rebecca Michelle Cohen (2018)[22] demonstrated in a case study that feedback from students and parents allows learning centers to continuously improve educational quality and service content.

7.1.5. Influencing long-term academic and career success

Satisfaction with private tutoring has positive implications for students' future academic and career achievements. Mandikiana (2021)[42] examined Qatar's tutoring market and noted that high satisfaction boosts students' competitiveness in career choices. Izzuddin et al. (2023)[36] suggested that satisfaction not only enhances academic performance but also brings confidence and motivation for career advancement. Sastre i Riba et al. (2015)[21] supported this view, emphasizing that the high satisfaction derived from personalized tutoring promotes confidence and long-term success.However, while these studies suggest potential long-term benefits of tutoring satisfaction, they primarily rely on short-term assessments or retrospective accounts rather than robust longitudinal tracking. This methodological limitation significantly constrains our ability to establish causal relationships between tutoring experiences and sustained developmental outcomes across educational and career transitions.

7.2. Factors influencing student satisfaction in private tutoring

Numerous studies indicate that student satisfaction in private tutoring Institutions is influenced by various significant factors, including Teaching quality, teacher-student relationships, personalized services, facilities, cost, parental involvement, learning outcomes, and sociocultural aspects. Below is a summary of each factor's specific influence. **Table 3** provides a comprehensive overview of key satisfaction factors, main findings, and research limitations identified across all studies in this review, offering readers detailed evidence supporting the following analysis of influential factors.

7.2.1. Teaching quality

High-quality teaching is a core factor in enhancing student satisfaction. Yung & Chiu (2023)[50] found that, in Hong Kong, student satisfaction with English private tutoring is closely linked to the quality of teaching, especially in personalized guidance and fostering interest in the language. Similarly, Guill et al. (2020)[32] in Germany observed that supportive and structured teaching positively impacts students' satisfaction with their school experience. These studies indicate that both teaching content and methodology significantly impact student satisfaction.As further detailed in **Table 3**, studies by Yung & Chiu (2023) and

Guill et al. (2020) demonstrate strong evidence for teaching quality as a primary satisfaction driver, though with noted limitations in geographical generalizability.

7.2.2. Teacher-student relationships

The interaction and trust between students and teachers are critical to student satisfaction. Phiri & Ferguson (2016)[44] studied parental feedback in the UK, finding that parents' trust in teachers directly relates to their children's learning experience and satisfaction. Additionally, Sun et al. (2024)[47] emphasized the positive impact of strong teacher- student relationships and teacher professionalism on student satisfaction in Chinese shadow education. Positive teacher-student interactions foster student motivation and loyalty to tutoring institutions.

7.2.3. Personalized services

Offering tutoring tailored to individual student needs enhances satisfaction. Izzuddin et al. (2023)[36] found that, in Indonesia, personalized TOEFL tutoring helped students identify weaknesses and boosted their learning confidence and satisfaction through emotional support. Sastre i Riba et al. (2015)[21] also showed that personalized teaching and emotional support significantly improved interest and satisfaction among high-ability students. Personalized services are essential in meeting the diverse needs of students.

7.2.4. Facilities and learning environment

Quality facilities and a conducive learning environment are other key factors influencing student and parental satisfaction. Hoang et al. (2022)[35] found that facility quality in preschool education significantly affects parental satisfaction in Vietnam. Service facilities and environmental conditions directly impact overall satisfaction in SES programs. Adequate facilities enhance the learning experience and build parental trust.

7.2.5. Cost and economic support

The cost of tutoring and its value for money are essential factors in student satisfaction. Walker & Zhang (2024)[19] mentioned that the financial burden of frequent tutoring sessions can negatively impact students, highlighting cost as a crucial consideration for satisfaction. Mandikiana (2021)[42] observed in Qatar that high-income families are more inclined to invest in private tutoring to enhance academic competitiveness, while Liu & Bray (2020)[40] noted that parents' budget and educational expectations directly influence their choice and satisfaction with tutoring services. A reasonable cost structure increases parental acceptance and loyalty.

7.2.6. Parental involvement and sociocultural background

Parental expectations and sociocultural factors play a crucial role in student satisfaction. Briant et al. (2020)[26] highlighted that parental recommendations and word-of-mouth are significant in influencing acceptance of private tutoring services. Song & Kim (2020)[45] found that in South Korea, the demand for tutoring is driven by social status competition, reinforcing parents' focus on high-quality teaching and personalized services. Credentialism and Demand for Tutoring in India (2018)[28] emphasized that societal emphasis on academic credentials shapes demand for tutoring, which, in turn, influences satisfaction. These studies show that parental involvement and cultural background significantly affect satisfaction.

7.2.7. Learning outcomes

Learning outcomes are a direct factor in improving student satisfaction. Becenti-Begay (2015)[20] noted that satisfaction among SES students and parents stems from improved academic performance, which further

builds trust in tutoring services. Fraser & Hasan (2019)[31] found that one-on-one tutoring significantly boosts student confidence and math performance, enhancing satisfaction with the tutoring experience.

7.2.8. Social perceptions and expectations

Credentialism and Demand for Tutoring in India (2018)[28] highlighted how societal emphasis on academic achievement shapes demand for tutoring, thereby affecting satisfaction levels. This aspect varies across cultural backgrounds, demonstrating how societal expectations are critical in influencing student and parental satisfaction.

7.2.9. Cultural factors and educational expectations

Cultural expectations regarding education influence parental and student demand for private tutoring and their satisfaction with it. Bae & Choi (2024)[25] noted that South Korea's cultural emphasis on education drives demand for private tutoring. Similarly, Yu & Wang (2020)[49] noted that cultural background and family educational expectations impact satisfaction in Chinese shadow education. These studies reveal that cultural factors play a substantial role in shaping student satisfaction.

7.3. Private Tutoring institutions' strategies to enhance student satisfaction

Private tutoring institutions can enhance student satisfaction by optimizing teacher management and training, designing personalized learning plans, improving resource and facility management, establishing effective feedback mechanisms, increasing parent involvement, and embracing flexible scheduling and innovative management practices.

7.3.1. Optimizing teacher management and training

Teacher quality and the relationship between teachers and students are central to student satisfaction (Yung & Chiu, 2023). The influence teachers have both inside and outside the classroom, noting that managing teachers' classroom performance and enhancing their professionalism can improve student satisfaction. Sun et al. (2024)[47] highlights the importance of human resources management in shadow education, stressing that recruitment and training are crucial to maintaining teaching quality and reducing turnover. Mallahi (2022)[41] also mentions that adopting student-centered teaching strategies can better address student needs, improving satisfaction. Similarly, Mandikiana (2021)[42] suggests that a positive teacher reputation is an essential factor in students' and parents' choice of tutoring services.

7.3.2. Personalized learning design

Šťastný (2023)[46] notes that tailored learning plans in shadow education meet diverse student needs, fostering a sense of reliance on tutoring and enhancing satisfaction. Yung & Chiu (2023)[50] emphasize that personalized teaching and face-to-face interaction improve students' interest and satisfaction. Sun et al. (2024)[47] adds that diverse teaching methods, supported by online platforms, enrich students' learning experience. Furthermore, Mallahi (2022)[41] points out that personalized learning plans help meet students' specific needs, while Mandikiana (2021)[42] discusses how custom learning plans enhance student performance, particularly for senior students.

7.3.3. Enhancing resource and facility management

High-quality resources are essential for meeting student needs and improving learning experiences (Sun et al., 2024).[47] Mandikiana (2021)[42] suggests that enhancing resources and facilities can help attract more students and boost satisfaction. Gokak et al. (2023)[52] recommend that shadow education institutions use resource planning and ICT to enhance service quality and satisfaction. Additionally, Jung & Mittal

(2021)[38] highlight that the quality of facilities and the learning environment influences parents' educational choices and satisfaction levels.

7.3.4. Establishing effective feedback mechanisms

Regular feedback from students and parents helps tutoring institutions understand their needs and make necessary adjustments (Sun et al., 2024).[47] Phiri & Ferguson (2016)[44] stress the importance of gathering parent feedback to improve service quality and increase satisfaction and referral rates. Gokak et al. (2023)[52] advocate for data- driven improvements, using student performance data to adjust teaching strategies and provide personalized education. Guill et al. (2020)[32] also emphasize the role of supportive feedback in fostering student engagement and a sense of achievement.

7.3.5. Strengthening parent involvement

Effective communication with parents can strengthen trust and support. Yu & Wang (2020)[49] note that parents have higher expectations of course quality and teacher performance when informed through social media. Sun et al. (2024)[47] further highlights that parent satisfaction significantly influences institutional success, and communication helps parents stay updated on student progress. Hamid et al. (2017)[33] also find that parent involvement significantly boosts student motivation and satisfaction, while Jung & Mittal (2021)[38] emphasize that parents' expectations of educational quality drive tutoring service improvements.

7.3.6. Flexible course and schedule options

Flexible scheduling meets students' unique needs, particularly those with tight school schedules. Hamid et al. (2017)[33] suggest that private tutoring's flexible timing enhances student satisfaction by accommodating individual learning needs.

7.3.7. Management and service innovation

Gokak et al. (2023)[52] emphasize the importance of quality management and resource planning in shadow education. Innovative management methods, particularly digital technology integration, have emerged as critical satisfaction drivers. While traditional face-to-face tutoring remains valuable, digital tools enhance satisfaction through multiple pathways: expanding accessibility, facilitating personalization, and enabling continuous assessment.

Sun et al. (2024)[47] demonstrate that technology integration in Chinese shadow education allows for more engaging multimedia content and interactive exercises that resonate with digitally native students. Additionally, learning analytics enable tutors to identify specific learning gaps through data-driven approaches, personalizing instruction with greater precision. Izzuddin et al. (2023)[36] document how TOEFL tutoring programs effectively transitioned to online delivery models during the pandemic, though they note certain elements of interpersonal connection were diminished in virtual environments.

The intersection of artificial intelligence with tutoring represents a promising frontier, with adaptive learning systems showing potential to enhance satisfaction through personalized pacing. However, Yu & Wang (2020)[49] caution that parental perceptions of technology's educational value significantly impact its acceptance, highlighting the need for stakeholder education alongside technological innovation. The strategic integration of these digital tools with traditional teaching approaches offers tutoring institutions significant opportunities to enhance service quality and student satisfaction. Based on these findings, we propose the following actionable recommendations for key stakeholders:

However, a significant limitation of these recommendations is their lack of empirical validation through intervention studies. While they are grounded in the synthesized literature, they have not been systematically

tested to confirm their effectiveness in real-world tutoring contexts. The field urgently needs experimental and quasi-experimental research designs that implement specific strategies and measure their impact on satisfaction metrics across diverse tutoring environments. Without such validation, these recommendations should be considered preliminary guidance rather than evidence-based best practices.

For policymakers and educational administrators, developing quality assurance frameworks specifically for private tutoring is essential, focusing on teacher qualifications, facility standards, and ethical pricing practices[20,33,42]. Creating public-private partnerships between schools and reputable tutoring providers could help bridge educational gaps while ensuring quality standards are maintained[28,46].

For individual tutors and educators, implementing personalized learning approaches with initial diagnostic assessments and customized learning plans that are regularly reviewed with both students and parents is crucial[19,36,50]. Developing structured feedback mechanisms that address both academic and socio-emotional development would align with our findings on holistic student development needs[21,41,45].

8. Conclusion

8.1. Synthesis of key findings

This systematic review identified a multifaceted landscape of satisfaction drivers in private tutoring. Rather than repeating the detailed factors influencing satisfaction extensively discussed in the previous section, we emphasize that the primary value of this research lies in revealing how these various elements interact within educational service environments. The interplay between teacher qualifications, personalized approaches, cost considerations, and parental involvement creates a complex satisfaction ecosystem that tutoring institutions must navigate strategically[21,27,35,47].

8.2. Key indicators influencing satisfaction for students and parents:

The key factors affecting satisfaction among parents and students include the qualifications of teachers, teaching methodologies, curriculum content, interaction quality, and the cost-effectiveness of the courses. The qualifications of teachers are the primary criterion for evaluating the quality of tutoring, with parents and students preferring institutions that employ professionally trained and experienced teachers[23,31,52]. The adaptability of course design, the practicality and frequency of updates of teaching materials are also significant satisfaction indicators[20,38,46,49]. Moreover, the quality of teacher-student interaction, especially the teacher's responsiveness and effectiveness in addressing students' learning difficulties, similarly impacts satisfaction[26,39,48].

8.3. Gaps and unresolved issues in existing literature

Current research shows deficiencies in several key areas, particularly in considering the economic and cultural diversity impacts on tutoring needs and satisfaction. Most studies focus on urban areas, neglecting the unique demands of rural or low-income families[22,35,41].

A critical limitation in current literature is the inadequate examination of tutoring's impact on students' psychological well-being. Despite references in[30,34,45,49], research lacks robust frameworks for measuring how tutoring satisfaction affects students' mental health, stress levels, self-concept, and social-emotional development. This gap prevents comprehensive understanding of tutoring's true value beyond academic metrics. The literature also lacks longitudinal studies that could comprehensively evaluate the long-term effects of tutoring services[19,28,42].

8.4. Future research directions in tutoring satisfaction

Based on current literature shortcomings, future research should focus more on the adaptability of tutoring services across different socio- economic backgrounds. Future studies need to explore how tutoring impacts the holistic development of students, such as enhancing creativity, improving interpersonal relationships, and increasing problem- solving skills[25,44,48]. Additionally, as technology advances, research should also examine how digital educational tools can be effectively utilized in tutoring and their impacts on student learning experiences and satisfaction[34,43,50]. Moreover, more cross-cultural studies are recommended to compare the operational models and satisfaction levels of tutoring institutions across different countries and cultural contexts[24,39,46].

Conflict of interest

The authors declare no conflict of interest.

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