The Hidden Toll of Achievement: Exploring the Psychological Impact of Shadow Education on Student Well-being

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Abstract

In today's rapidly evolving educational environment, a shift towards commercialized models is challenging the traditional view of education as a public good (UNESCO, 2016). Shadow education, a growing industry originating primarily in Asia and now valued in the billions globally, exemplifies this shift. This sector, characterized by private supplementary tutoring outside regular school hours, has become a significant player in the education landscape. This paper explores the effects of shadow education on students' psychological and emotional well-being within this commercialized context. Empirical research was conducted in Chandigarh City, India, focusing on 200 12th-grade students preparing for highly competitive All-India entrance exams in Medicine and Engineering. Descriptive surveys collected quantitative data on enrollment patterns, while qualitative interviews provided insights into students' experiences and perceptions. Institutional documents and records from shadow education institutes were also analyzed for additional evidence. The study reveals troubling trends in shadow education practices, such as lengthy two-year programs and high fees. A significant number of students prioritize shadow education over their regular schooling, resulting in increased anxiety, stress, isolation and diminished emotional resilience. These findings highlight the negative impact of shadow education on students' psychological and

emotional well-being. The study contributes to the broader discourse on the commercialization of education, emphasizing the need for policy interventions to address these issues. It also underscores the importance of reassessing educational priorities to ensure that profit motives do not compromise the core principles of equitable access to quality education and social justice.

Keywords: commercialized models, commercialization of education, educational priorities

1. Introduction

Shadow education, also known as private tutoring, cram schools, or after-school learning programs, encompasses educational activities conducted outside the formal school system. These programs often mirror the regular curriculum but require additional financial investment (Bray, 2009; Stevenson & Baker, 1992). Parents typically seek such tutoring to prepare their children for exams and improve their chances of gaining admission to prestigious, academically selective schools (Bray, 1999; Jokila et al., 2020). The existing literature highlights that shadow education mainly involves supplementary instruction in subjects already covered in schools, but it takes place outside regular school hours and incurs a fee (Zhang, 2021). Providers of these services include school teachers looking to earn extra income, university students, informal educators and entrepreneurs operating commercial enterprises (Bray, 2022; Duong and Silova, 2021). The nature and scope of tutoring vary widely, depending on demand and the services offered by different providers. Tutoring can be scheduled at various times throughout the day, week or year. It has been noted that some forms of shadow education help students who are struggling to keep up with their peers, while others offer tailored support to further enhance the skills of high achievers.

Shadow education is the manifestation of some of the most significant changes that the education sector has undergone over the past few decades. Historically, education has been viewed as a public good, with public institutions tasked with delivering and financing educational opportunities to promote social mobility and reduce inequalities (UNESCO, 2016). However, this traditional perspective is increasingly challenged by the rise of various stakeholders and funding sources within the education sector, driven by global educational trends (Daviet, 2016). Tilak (2011) argues that the neoliberal era has seen a rise in for-profit educational institutions where financial objectives often take precedence over educational quality, leading to the commercialization of education. This shift has facilitated the entry of private entities into the education sector, resulting in a proliferation of private schools, colleges and universities (UNESCO, 2016). The growing involvement of private capital in education has raised concerns about prioritizing profit over quality, treating education as a commodity that can be bought and sold (Patnaik, 2005). These concerns are amplified by the demand for shadow education, which includes additional tutoring outside regular school hours and represents a modern form of privatization within education. This trend is driven by competitive entrance exams that compel students to seek specialized coaching beyond the offerings of traditional schools (Singh, 2019). The expansion of private coaching institutes has led to their significant influence on students' educational experiences, with some students even opting to forego traditional schooling in favour of shadow education (Bray and Lykins, 2012). This development raises concerns about its impact on conventional educational structures and equitable access to education, as shadow education exacerbates the commercialization of the educational sector. This issue is particularly pressing for students from lower socio-economic backgrounds who may lack the financial resources to afford such coaching classes (Zhang, 2021).

The origin of shadow education can be traced back to the mid-nineteenth century (Zhang & Bray, 2020), but it was not until the 1980s and 1990s that scholarly interest in the topic significantly intensified. This heightened focus on shadow education reflects broader trends noted in the literature, which emphasize the global influence of neoliberalism. This shift has led to the privatization of education, exposing how external entities affect state educational policies, provisions, governance, and outcomes. This represents an internal form of privatization that incorporates market-driven ideologies into educational systems (Lubienski, Yemini, & Maxwell, 2022). As a result, the commodification of education and the growing involvement of private capital pose significant challenges to achieving equitable access and maintaining high-quality education for all.

The increased demand for tuition among students in urban areas can be attributed to several factors, including the highly competitive urban environment that heightens academic competition and the elevated expectations of urban parents, who generally have higher levels of educational attainment and greater socio-economic resources to afford substantial tuition costs (Bray, 2007). Additionally, focusing on the producers of private tutoring rather than the consumers is essential for two reasons: first, the availability of tutoring services often drives demand, as producers make these services accessible and recommend them to students who might not have sought them otherwise; and second, the characteristics of the tutoring supply, such as whether tutors offer one-on-one instruction at private homes or conduct large group classes, significantly influence the types of consumers attracted to these services.

In India, the shadow education industry has experienced rapid growth, with numerous franchises established nationwide (Singh, 2019). These tutoring enterprises operate alongside formal education systems, complementing rather than replacing them due to their flexible nature (Gupta, 2022). The prevalence of shadow education has become so extensive that some students are choosing to forego traditional schooling in favor of enrolling full-time in coaching institutes or "dummy schools" (Bray and Lykins, 2012). This shift exacerbates educational inequalities, as affluent families can afford comprehensive tutoring while middle-income and lower-income families often cannot, limiting opportunities for well-rounded development through extracurricular activities like sports (Kwok, 2010). The ease of establishing private coaching institutions, combined with insufficient regulatory oversight, has turned shadow education into a multi-billion-dollar industry in India (Bray and Lykins, 2012). Recent reports indicate that approximately 83% of high school students in India are enrolled in coaching classes (Asian Development Bank, 2012). This finding is supported by a study from the National Statistical Office (NSO, 2020), which reveals that one in three high school students receives private coaching. According to the NSO report, based on the 75th round of the National Sample Survey in India, 19.8% of students across all educational levels, from pre-primary to graduate studies, participate in some form of private coaching. Among students in Classes 9 and 10, who are preparing for critical board exams and entrance tests, this percentage exceeds 30%. Notably, urban upper-class students have significantly greater access to private coaching, with over 52% of boys from urban upper-class backgrounds attending coaching classes, compared to just 13.7% of rural boys

and girls from minority communities. The financial burden of private coaching is substantial, representing over 18% of the average annual expenditure on education for secondary school students. This expansion of shadow education significantly contributes to the privatization and commercialization of the education sector. Addressing these issues is essential to ensuring that education serves its societal purpose and benefits everyone, rather than just reinforcing advantages for the affluent segment of the society.

The educational investments hence require optimal decision-making with a comprehensive evaluation of both the costs and benefits involved in education production. While increased investment in learning can improve labor market productivity, the overall returns on education may be diminished if health issues caused by shadow education shorten the period over which these returns are realized due to health deterioration. There has been an increasing acknowledgment of the connection between education and mental health (Humphrey, 2018), with psychological health becoming a significant concern in the UK. Historically, mental health research predominantly concentrated on mental illness, focusing mainly on diagnosable conditions, which is a limited approach. Recently, however, there has been a shift toward a more comprehensive understanding of mental health, incorporating both objective and subjective well-being perspectives (Watson et al., 2012). Objective well-being measures happiness and quality of life using social and economic indicators but often overlooks personal significance and assumes that the same factors are universally important.

Objective well-being measures happiness and quality of life using social and economic indicators, such as income, education, and health. However, these measures often overlook personal significance and assume that the same factors are universally important. For instance, while increased investment in education is generally associated with improved labour market productivity, this approach can overlook the nuanced impacts of shadow education on individual well-being. Studies report that shadow education can sometimes lead to negative consequences, including increased stress or health issues, which might shorten the period over which the benefits of formal education are realized (Sinha and Sinha, 2024). The objective indicators might capture the immediate academic or economic benefits but fail to account for these detrimental side effects. Thus, while these measures consider broad social and economic factors, they may not fully reflect the complex interplay between education, mental health, and overall well-being. This narrow focus can lead to an incomplete understanding of how education impacts quality of life, particularly when personal and contextual factors are not taken into account. In contrast, subjective well-being focuses on individual perspectives, identifying what matters to them and how it impacts their emotional state. Schools and classroom teachers are seen as both contributors to and mitigators of declines in student well-being (Gunnell et al., 2018). Parents often have strong aspirations for their children's educational success, which can lead them to set high expectations. While these expectations might stem from a desire to secure a bright future for their children, they can sometimes place undue pressure on students. This pressure can manifest in stress, anxiety, and a diminished sense of self-worth if students feel they are constantly falling short of their parents' goals. The increasing focus on exam grades and the resultant pressure on both

students and teachers negatively impacts the emotional well-being of all involved (Chamberlain et al., 2011).

The potential negative impact of shadow education on students' health is a growing concern. Health is a crucial input in the educational process (Glewwe and Miguel, 2008; Currie, 2009), and the trade-offs involved in its utilization are significant. For example, the time that students allocate to recreation and sleep is often sacrificed for studying, especially during exam periods or when dealing with urgent assignments. This can lead to a range of health issues, including anxiety, depression, and other mental health problems driven by academic pressure and performance concerns (Misra et al., 2000). Literature indicates that extensive study time and involvement in shadow education can hinder student development (Mori and Baker, 2010), particularly evident in the trade-off between sleep and study (Gillen-O'Neel et al., 2013). Bray and Kobakhidze (2014) argue that excessive private tutoring can lead to adverse effects not only on students' personal growth but also on their overall academic performance. In a study conducted in Taiwan and Hong Kong, Tseng (1998) discovered that students experienced significant mental and physical distress due to the pressures of examinations and tutoring. This stress resulted in reduced time for sports, leisure activities, and socializing with friends and family. Consequently, it is evident that tutoring can impose considerable pressure on children and adolescents. Furthermore, excessive parental pressure on academic decisions is a significant factor contributing to compromised mental health among students, heightening tension and anxiety. Parental influence can be a major source of stress and significantly affect children's learning capabilities. The COVID-19 pandemic further highlighted these issues, as the sudden transition from traditional face-to-face teaching to virtual instruction was linked to various adverse effects on children's health, particularly their mental and visual well-being (Xu et al., 2021). The oversight of these potential health consequences in the context of shadow education is troubling, as some of these effects may be long-lasting or irreversible.

Theoretical framework

In exploring the psychological impact of shadow education on student well-being, several theoretical perspectives offer valuable insights.

Self-Determination Theory (SDT), as articulated by Ryan and Deci, posits that individuals become self-determined when their basic psychological needs for competence, autonomy and relatedness are satisfied (Deci and Ryan, 1985). In the context of shadow education, this theory suggests that students seek supplementary education primarily to enhance their academic competence and achieve mastery. Shadow education allows students to address their academic needs and achieve a higher level of competence, aligning with their intrinsic motivation for self-improvement and mastery. However, when shadow education imposes excessive pressure or diminishes students' sense of autonomy and relatedness, it can undermine their overall well-being. This tension between the pursuit of academic excellence and the potential erosion of fundamental psychological needs highlights the complex impact of shadow education on students' motivation and mental health.

Stress and Coping Theory, as articulated by Lazarus and Folkman (1984), provides another lens by highlighting how shadow education adds to academic demands, potentially overwhelming students and affecting their coping mechanisms. The theory distinguishes between two types of coping strategies: problem-focused and emotion-focused coping. Problem-focused coping involves taking proactive steps to address and resolve the issue at hand, such as gathering resources, seeking advice, or making changes to the situation. In the context of shadow education, students might engage in problem-focused coping by seeking additional academic support or adjusting their study strategies to manage the increased academic demands. On the other hand, emotion-focused coping is employed when students perceive the situation as uncontrollable and instead focus on managing their emotional responses. This could include practices such as meditation or discussing frustrations with friends to alleviate stress. Shadow education often amplifies academic demands, potentially overwhelming students and impacting their ability to use both coping strategies effectively. The added pressure from supplementary education can strain students' problem-focused coping efforts, as they may struggle to keep up with increased workload and expectations. Simultaneously, the intensified stress may also challenge their emotion-focused coping abilities, making it difficult for them to manage their emotions and maintain well-being. Thus, the balance between these coping mechanisms becomes crucial in understanding the psychological impact of shadow education on students.

Social Comparison Theory (SCT) introduced by Festinger (1954) provides insight into how individuals assess their own abilities, attitudes, and beliefs by comparing themselves with others. According to the theory, individuals engage in social comparisons—either upward or downward—based on their reference groups, which can significantly affect their self-esteem, self-worth, and motivation. In the context of shadow education, the competitive environment heightens these social comparisons. Students often compare their academic performance and achievements with those of their peers who are also participating in supplementary education. This upward comparison, where students measure themselves against higher-achieving peers, can intensify anxiety and pressure, impacting their overall mental health. The constant evaluation against others' successes can undermine self-esteem and increase feelings of inadequacy. Consequently, the competitive nature of shadow education exacerbates these effects, highlighting how social comparisons within this educational context contribute to heightened stress and diminished psychological well-being.

2. Research questions

i) What effects do shadow education practices have on students' psychological well-being?

ii) What are the various underlying challenges related to shadow education in India?

3. Objectives

i) To examine the effects that shadow education practices have on students' psychological well-being.

ii) To identify and analyse the underlying challenges related to shadow education in India.

4. Methodology

The study involved 200 twelfth-grade students in Chandigarh, India, who were preparing for national entrance exams in Medicine and Engineering. It aimed to explore both the challenges and opportunities faced by this group. The research was conducted in two distinct phases to offer a thorough understanding of their experiences.

Phase 1 - Quantitative: The initial phase utilized a quantitative approach. A structured questionnaire was developed to collect data from the participants. This questionnaire addressed several key areas to explore different aspects of the students' educational experiences:

i) Socioeconomic Background: Data on the students' economic status, family occupations, and household conditions.

ii) Access to shadow Education and underlying reasons: Examination of factors such as proximity to coaching institutes, availability of educational resources, transportation options and other underlying reasons why students seek or receive shadow education. This included examining the motivations behind their need for additional academic support.

iii) Parental Involvement: Evaluation of parental engagement in their children's education and their expectations regarding academic achievements.

iv) Educational Challenges and Psychosocial Factors: Identification of specific obstacles faced by students, including financial constraints, learning environments, and peer influences, along with gender disparities and access issues.

Phase 2 - Qualitative: The second phase employed a qualitative approach. In-depth interviews were conducted with a subset of the sample to gain a more nuanced understanding of their experiences and viewpoints. This phase used open-ended questions to allow participants to share detailed personal experiences, challenges and aspirations.

5. Results and findings

5.1 The effects of shadow education practices on students' psychological well-being

As students increasingly engage in additional educational practices to gain academic advantage, it is crucial to understand their impact on psychological well-being. This research aims to explore how shadow education practices affect students' psychological health in terms of how shadow education practices contribute to various aspects of psychological stress, including academic pressure and time management stress, as well as performance anxiety and fear of failure. Additionally, it will examine the effects on burnout, including physical and emotional exhaustion, mental fatigue, sleep deprivation, cognitive overload among others as depicted in table 1.

Table 1. Effects of shadow education practices on students' psychological well-being

Domain	Sub-domain	Percentage of students affected	Factors
Academic stress	Academic pressure	83%	Elevated parental expectations, intense academic competition, pressure to attain top grades
	Time management stress	94%	Balancing multiple responsibilities (school, coaching, extracurricular activities), rigorous schedules and deadlines, overlapping academic and personal commitments
Anxiety	Performance anxiety	88%	Fear of not performing well in exams or tests, worry about fulfilling personal or external expectations
	Fear of failure	74%	Concerns about failing to meet academic objectives, anxiety about future prospects and opportunities
Burnout	Physical exhaustion	68%	Physical exhaustion due to constant academic demands, Lack of adequate rest and recuperation
	Emotional exhaustion	71%	Emotional exhaustion due

			to ongoing academic pressures, sense of indifference and diminished motivation
Fatigue	Mental fatigue	86%	Mental fatigue from relentless studying, struggles with sustaining attention and concentration
	Sleep deprivation	93%	Insufficient sleep resulting from late-night study sessions or early morning classes, disturbed sleep patterns caused by academic stress
Self-esteem	Academic self-perception	54%	Self-esteem linked to academic achievements and grades, feelings of inadequacy related to academic results, impact of academic performance on self-image
	Comparison with peers	65%	Sense of inadequacy from comparing oneself to high-performing peers, perceived shortcomings in comparison to others' achievements, effect of comparing oneself to peers

			on self-confidence
Social isolation	Limited social engagement	86%	Limited chances for social interaction with peers because of time constraints, effect of academic responsibilities on social engagement
	Loneliness	77%	Sense of isolation due to insufficient time for social interactions, effect of hectic schedules on emotional relationships
Cognitive overload	Information overload	73%	Challenges in assimilating and remembering extensive information, effect of large volumes of study materials on cognitive ability
	Decreased concentration	56%	Difficulty maintaining focus and attention because of overwhelming study demands, effect of cognitive overload on the ability to concentrate
	Learning fatigue	79%	Decreased learning effectiveness resulting from constant academic pressure, Effect of continuous study on learning efficiency

The findings, as reported in Table 1, reveal that academic stress has become a significant factor affecting students, driven by tight deadlines, complex assignments, and the challenge of managing multiple demands simultaneously, all of which elevate stress levels. Alam and Zhu (2022) highlight that in Bangladesh, shadow education is characterized by intense competition, high stress, and a strong focus on examinations. The substantial pressure linked to exam preparation, including the fear of failure and the need to review extensive material within short timeframes, further exacerbates academic anxiety among students. Concerns about future job prospects, societal expectations, and achieving career goals significantly heighten academic anxiety. The immense pressure to meet academic standards and secure admission to preferred educational institutions deeply affects students' emotional well-being and self-esteem. This aligns with the Self Determination Theory such that shadow education increases academic pressure, which can undermine students' autonomy, competence, and relatedness. While students seek supplementary education to enhance their academic competence, excessive pressure can diminish their sense of autonomy and relatedness, leading to decreased well-being. Burnout is widespread, characterized by emotional exhaustion stemming from academic pressures, heavy workloads, and unhealthy competition. Research by Chen and Kuan (2021) confirms that frequent participation in private supplementary education (PSE) is linked to increased symptoms of depression, especially among regular attendees. Despite potential academic gains during their transition to high school, these students face a higher risk of depression compared to their peers. Moreover, the intensely competitive academic environment cultivates a culture of comparison and perfectionism, which exacerbates self-doubt and fear of failure among students. Concerns about failing to meet academic objectives and future prospects align with the Stress and Coping theory's emphasis on stress. The pressure from shadow education amplifies these fears, complicating students' ability to effectively manage their stress and emotional responses. Emotional resilience becomes vital in countering the negative effects of academic stress and anxiety. Developing a positive outlook on setbacks, maintaining motivation, and fostering perseverance are crucial for effectively managing academic challenges. The competitive nature of shadow education leads to frequent comparisons with high-achieving peers, intensifying feelings of inadequacy and impacting self-esteem. This aligns with Social Comparison Theory, which suggests that such upward comparisons can heighten anxiety and diminish self-worth. Nervousness and restlessness often reflect the underlying psychological strain, manifesting as performance pressure, self-doubt, and difficulties with focus. Attentional issues, such as managing distractions and biases towards exam scores, further impact students' cognitive functioning and academic performance. Additionally, shadow education emphasizes short-term memory and rote learning, sometimes at the expense of meaningful and enduring learning experiences. Yu and Zhang (2022) highlight that excessive after-school tutoring and parental intervention adversely affect students' physical and mental health. Thus, the hidden costs of shadow education extend beyond financial concerns, having significant implications for students' psychological and cognitive well-being. Addressing these challenges necessitates a comprehensive approach that balances academic achievement with the mental and emotional health of students.

5.1.1 Qualitative findings

Following the presentation of quantitative findings, this section explores the qualitative dimension of the study through in-depth interviews. This part of the research aims to provide a deeper understanding of the quantitative results and explore personal experiences and perceptions related to shadow education. These interviews were conducted to gain a richer, more nuanced understanding of how shadow education impacts students' psychological well-being. While the quantitative data provides a broad overview of psychological well being of students, the interviews offer personal insights and contextual details that illuminate the underlying reasons behind these trends and patterns.

Interview with 'Candidate A': Dropout

To provide a deeper perspective on the psychological impact of shadow education, the study present an interview excerpt from a student who has experienced firsthand the intense pressures and emotional challenges associated with it. This student's narrative offers valuable insights into the personal and emotional dimensions of shadow education, illustrating the human side of the quantitative findings discussed earlier.

"Last year, I took the JEE exam with great expectations, hoping to gain admission to my dream institution, IIT Bombay. Unfortunately, my rank wasn't sufficient, and the *disappointment* was overwhelming. It felt as if my aspirations were slipping away. Despite this setback, I was *determined* to *persevere*. I chose to take a gap year after Class 12 to *concentrate* entirely on my studies. Now, I've *secluded* myself in a room, distancing from family and friends, and avoiding social events like birthday parties. The *pressure* I'm under is immense, nearly *unbearable*. Every day, I grapple with a constant *conflict* between *hope and anxiety*. The *fear of failing* again is daunting, but my intense drive to succeed propels me forward. My daily experience is an *emotional rollercoaster*. Success in mock tests brings a surge of confidence, making me feel unstoppable. However, this confidence is often short-lived, as *self-doubt* and *despair* quickly overshadow my moments of achievement. The stakes are incredibly high, and I am ready to *sacrifice* everything to secure a spot at IIT Bombay. Although the path is *arduous*, the pursuit of my dream justifies every challenge."

Interview with 'Candidate B': Peer Pressure

To further explore the psychological effects of shadow education, the study presents an interview excerpt that highlights the intense personal and societal pressures faced by students. This account provides a poignant illustration of how external expectations and personal struggles intersect within the context of shadow education.

"I chose the non-medical stream due to *peer pressure*, but now the engineering coaching is proving to be *overwhelming*. My parents live in a remote area of Punjab and have sent me to Chandigarh for coaching. I'm *struggling* to keep up, but I can't admit it; I fear it would bring shame to my family in our community. I feel *trapped* and *suffocated* by the expectations placed on me. Every day is a challenge, and I don't know how to break free from this cycle of

stress. I'm caught between my own well-being and the *societal pressures* weighing down on me. It's a *lonely fight*, and I feel utterly *helpless.*"

Interview with 'candidate C': Financial constraints

To gain a deeper understanding of the financial and emotional challenges associated with shadow education, the study presents an interview excerpt from a student navigating significant economic obstacles while striving for academic success. This account illustrates the profound dedication and resilience required to overcome financial barriers in the pursuit of educational goals.

"I come from a small village in Punjab with the ambition of becoming a doctor. However, the cost of NEET coaching is *expensive* and beyond my family's means. My parents are hardworking farmers, and they *cannot afford* the expense. Despite this financial challenge, I remain *determined to succeed.* I study rigorously, hoping to secure a scholarship that will make my dream achievable. As the exam date approaches, I feel a blend of *nervousness* and *excitement.* I am fully aware of the hurdles ahead, but I am committed to giving my best effort. I will pour my heart and soul into my preparation, and I hope for favorable results."

Therefore, the interviews reveal deep insights into the complex challenges students encounter in their pursuit of academic success. These accounts shed light on the intense pressure, societal expectations, and financial constraints that frequently intersect and impact their educational experiences. From unwavering determination to overcome setbacks to the struggle of balancing personal well-being with external pressures, and resilience despite financial hurdles, these stories underscore the socio-economic, psychological and societal factors shaping student lives. The adjectives used by the students in these narratives vividly illustrate the immense pressure faced by students as they navigate their academic journeys.

5.2 Underlying challenges related to shadow education in India

Shadow education introduces a range of underlying challenges, including significant psychological stress, social disparities, economic burdens, compromising academic integrity, and diminishing engagement in traditional education. Each of these affect students, families, and the broader educational landscape in complex ways, as revealed by the findings of the study. The demographic profile of the participants revealed that the average expenditure on coaching institutes is approximately INR 8 lakh over a combined two-year period, highlighting the significant financial commitment required for shadow education services. This considerable cost reflects the high value placed on academic success in competitive fields by both parents and students. Additionally, the average annual income of parents in the sample is between INR 8-9 lakh, providing context on the economic background of the families. Although this income suggests a moderate financial status, the allocation of a substantial portion of household income towards coaching fees demonstrates the high priority these families place on shadow education. This study explores the underlying challenges which are less visible, yet profoundly impactful, associated with shadow education. Such challenges are impacting various dimensions of students' lives and their broader

socio-economic environment. These complexities highlight the profound implications of shadow education beyond its financial cost, revealing a need for in-depth analysis.

i. **Economic Disparities**: Economic disparities refer to the unequal distribution of financial resources and opportunities among individuals or groups. Affluent families are better positioned to access high-quality shadow education services, which exacerbates educational inequalities. Students from lower-income backgrounds face barriers that limit their access to these services, reinforcing existing educational disparities. This divide not only affects immediate educational opportunities but also has long-term implications for social mobility and career prospects (Kumar and Chowdhury, 2021). The financial pressure to invest in shadow education often forces lower-income families to divert resources from other essential areas, further entrenching socio-economic inequalities.

ii. **Impact on Family Dynamics**: The impact of shadow education on family dynamics encompasses the ways in which the demands and financial burdens of supplementary education affect family relationships and overall well-being. The financial strain of private coaching severely impacts family dynamics. Families experience increased economic stress, leading to conflicts over resource allocation and heightened parental anxiety. The need to fund expensive coaching can also lead to compromised household budgets, affecting the family's ability to spend on other necessities, such as health care or leisure activities. This stress often results in strained family relationships and diminished overall family well-being (Mahmud, 2021). Furthermore, the focus on securing funds for coaching can place an additional burden on already struggling families, potentially exacerbating financial instability.

iii. **Impact on Academic Integrity**: refers to the adherence to ethical standards and principles in the educational environment. Unethical practices by some coaching institutes, such as inflating success rates or making deceptive claims about their services, compromise the integrity of the educational system. These practices mislead students and parents, leading to misguided expectations and potential disillusionment. The competitive pressure fostered by shadow education may also drive students towards academic dishonesty, including cheating and plagiarism, as they strive to meet unrealistic standards set by both their coaching institutes and societal expectations (Eaton, 2020). This erosion of academic integrity undermines the value of education and can have long-lasting effects on students' ethical development.

iv. **Decreased Engagement in Traditional Education**: **Traditional Education** refers to the conventional system of learning that typically occurs within formal educational institutions such as schools and colleges. It involves a structured curriculum delivered by teachers in classroom settings. An overemphasis on shadow education often results in students becoming disengaged from their regular classroom learning. This reliance on private coaching can lead to reduced participation in school activities and a diminished focus on the broader educational curriculum. The misalignment between shadow education content and the school curriculum may also create gaps in knowledge, leaving students underprepared for

holistic learning experiences. This disconnection from traditional education can undermine students' overall educational development and limit their intellectual growth (Kumar and Chowdhury, 2021).

v. **Long-Term Career Dissatisfaction and Misalignment**: The intense focus on achieving high scores through shadow education can narrow students' educational objectives, leading to a limited perspective on their broader intellectual and personal development. The high-pressure environment may also push students toward career choices influenced by external expectations rather than genuine personal interests or aptitudes. This pressure can result in long-term dissatisfaction and misalignment between career choices and personal fulfillment, affecting overall career success and happiness (Yu and Zhang, 2022). Additionally, students may sacrifice opportunities for exploring diverse academic interests and personal growth in favor of achieving narrowly defined academic goals.

vi. **Quality of Coaching Services**: Quality in coaching services involves a combination of effective teaching, well-designed curriculum, adequate student support, consistency, ethical practices, and adherence to regulatory standards. The variability in the quality of coaching services is a significant concern. While some coaching institutes provide high-quality instruction, others deliver inadequate or ineffective teaching despite charging premium fees. The lack of stringent regulation within the coaching industry contributes to inconsistent service quality and potential exploitation of students and their families. This variability not only impacts the effectiveness of the coaching but also raises concerns about the ethical practices of coaching providers (Bray, 2024). The absence of standardized quality control measures further exacerbates the problem, leading to unequal educational support and outcomes.

vii. **Community and Social Impact**: The emphasis on private coaching creates social divisions within communities, as disparities in access to coaching services lead to differing levels of educational success (Majumdar, 2014). This divide may foster feelings of inadequacy and social fragmentation among families with limited access to coaching. Additionally, the intense focus on private coaching can reduce students' involvement in community and social activities, affecting their social development and sense of community engagement. As students dedicate more time to academic preparation, they may miss out on valuable social interactions and community contributions, impacting their overall social well-being and community cohesion (Entrinch, 2021).

In summary, the underlying challenges related to shadow education in India reveal a complex web of economic, social, and educational issues that significantly impact students and their families. Economic disparities exacerbate educational inequalities, placing lower-income families under substantial financial strain and contributing to deeper socio-economic divides. The strain on family dynamics and the ethical concerns surrounding academic integrity further complicate the landscape of shadow education. Additionally, the overemphasis on shadow education often leads to disengagement from traditional schooling and narrows students' educational goals, potentially causing long-term dissatisfaction and misalignment in

their careers. The variability in the quality of coaching services adds another layer of complexity, highlighting the need for improved regulation and standards. To address these challenges effectively, it is crucial to adopt a holistic approach that balances educational goals with the well-being of students and families.

6. Conclusion

The current examination of shadow education in India reveals a dual landscape: one marked by potential opportunities and another marred by significant challenges. As students pursue academic excellence through supplementary learning, they encounter hidden costs and obstacles. While shadow education can enhance academic performance and provide additional learning opportunities, it also highlights systemic issues and inequalities within the formal education system. The financial strain on families and the deepening of educational disparities underscore the urgent need for reforms to ensure equitable access to quality education for all students. Our investigation into the psychological and cognitive impact on students involved in shadow education underscores the critical need to prioritize their well-being and holistic development. Addressing the negative effects on mental health, through strategies such as encouraging work-life balance, promoting critical thinking, and mitigating academic pressure, is crucial for fostering a supportive and inclusive educational environment. Resolving the complexities of shadow education necessitates a collaborative effort from policymakers, educators, and stakeholders to build an educational system that values equity, excellence, and student well-being.

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