ACADEMIA International Journal for Social Sciences
Volume 4, Issue 3, 2025 ISSN-L (Online): 3006-6638

The Role of Shadow Education in Shaping Students' Study Behaviors

Dr. Nighat Ara
nighatarashams@gmail.com
Lecturer Education, Govt. Graduate Islamia College (W), Cooper Road Lahore

Dr. Nasir Mahmood
mahsir1@yahoo.com
Vice Chancellor, AIOU Islamabad

Sidra Shafi
seedrashafi@gmail.com
https://orcid.org/0009-0009-7607-9062
Assistant Professor, English, PhD Scholar, Lahore College for Women University Lahore

Amjad Hussain
amjadmsba@gmail.com
Director Program, Punjab Education Initiatives Management Authority
Corresponding Author: * Dr. Nighat Ara nighatarashams@gmail.com

Received: 12-05-2025 **Revised:** 25-06-2025 **Accepted:** 10-07-2025 **Published:** 06-08-2025

ABSTRACT

Shadow education institutions are regarded as significant for students' academic performance. Consequently, the demand for these institutions is on the rise in nearly all major cities. This research suggests that shadow education institutions not only impact students' grades but also shape their attitudes towards learning. The book-related insights indicate that the overall environment in which a student grows and the nature of their future career influence their study habits. There is a lack of comprehensive research regarding the effect of shadow education on students' learning approaches. To investigate this influence, students who have attended shadow education institutions were selected as the sample units. A total of 230 second-year students participated in the study to provide the necessary information. A questionnaire was created based on three factors (rote learning, grades, and tutor dependence) to assess the students' study approaches. After pilot testing, sixteen items were ultimately chosen for data collection. The questionnaire utilized a six-point scale, ranging from strongly disagree to strongly agree. The results indicated that shadow education is promoting a surface approach to learning among students. The development of students' creative abilities is being overlooked, leading them to follow conventional paths. The growing reliance on tutors may have significant implications for the new generation.

Keywords: *Shadow Education, Study Approach, Rote learning, Tutor dependence*

INTRODUCTION

The concept of shadow education has evolved and improved over time, having been originally defined by Stevenson and Baker (1992) in relation to private tuition centers specifically (Ehrenberg, 2001). Currently, the phenomenon of shadow education is widespread across various countries (Kim, 2015; Subedi, 2018). There are several forms of private teaching, such as one-on-one instruction from privately compensated educators, home tutoring, online teaching platforms, and profit-driven educational organizations (Tok, 2013). The fourth category of shadow education institutions not only operates alongside formal educational systems but has also developed into a significant industry, particularly in urban areas. In some countries, the student enrollment in these shadow education institutions exceeds 80 percent (Giedel & Marzo, 2015). According to the Once-a-year Status of Education Report (2011), the number of shadow education institutions is rapidly increasing in major cities of Pakistan. The proportion of students

receiving shadow education surpasses one-third in various countries, including Japan, Malta, Poland, and much of East Asia (Yell, 1999; Dang & Rogers, 2008). High school students, in particular, are heavily involved in shadow education institutions (Loyalka & Zakharov, 2014; Gupta, 2022). This growing participation among students is attributed to several factors, including inadequate quality of schooling, insufficient facilities, lack of public engagement, disinterested teachers, outdated curricula, and less dedicated management. Consequently, these shadow educational systems are gaining recognition as a superior alternative to traditional or formal education and are operating as a rapidly expanding franchise.

Related to this, Southgate (2009) felt, "Like a shadow, it generally goes unnoticed and it takes the shape of formal school in (school courses) and purpose" (p. 2). Patel (2008) stated that "every next student, whether gifted or average, rich or poor, is taking tuitions which has taken root in the present system of education" (p. 2).

Shadow education represents an unregulated global market. Its overarching structure and system are largely consistent across different regions. Individuals engaged in information gathering have documented the overall landscape of shadow education institutions in various ways. Students enroll in private tutoring centers to receive assistance in preparing for university entrance examinations and to obtain guidance on how to approach the exam papers (Stevenson & Baker, 1992; Raccah & Danna, 2015). A fundamental component of the shadow education system is the teacher, who provides notes on specific subjects and regularly conducts test sessions. These tutoring establishments may or may not align with the established educational objectives; nevertheless, they compel students to remain engaged in test preparation. Students often resort to rote memorization, believing it to be an effective strategy for achieving or enhancing their grades. College peers encourage one another to attend tutoring centers, viewing their exam preparation environment as a valuable opportunity for success.

It is evident from various books and research studies that shadow education plays a significant role in achieving improved or increased grades. For example, Stevenson and Baker (1992) utilized data from a long-term study involving Japanese high school students to investigate the impact of private tuition centers. The sample comprised 7,240 students who were selected through multistage, fair sampling methods. The results indicated a positive effect of private tutoring on student grades and a higher level of achievement. Similar positive effects on student grades were also observed in Mauritius. Kulpoo & Maya (2005) focused on sixth-grade students and administered a reading and writing ability test. The findings revealed that the primary factor contributing to variations in test scores was the tuition center. Additionally, in Greece, a weak yet positive correlation between academic success and tutoring was identified in the research conducted by Polidorides (1986).

Buchmann (2002) sampled 13- to 18-year-old students in Kenya and found increased (related to school and learning) (action of accomplishing or completing something challenging) with reduced chances of grade repetition. Unal et al. (2010) carefully studied the data of program for international student test/evaluation (2006) in Turkey and found positive effects of the shadow education on the students' (action of accomplishing or completing something challenging) in Maths. Choi, Calero and Escardibul (2011), put into numbers the same PISA (2006) data in Korea to (ask lots of questions about/try to find the truth about) the hit/effect of time spent in private tuition center on (related to school and learning) performance. Its hit/effect was found to be conditioned by the clearly stated/particular smart ability like positive on Mathematics, weak on reading and not significant on science.

Similarly, two studies revealed the beneficial impacts of private tuition centers on students' academic performance and grades, as documented in the research conducted by Rothman & Henderson (2011) in Portland and Hayes (2012) in Missouri, which involved a survey of 137 families. Byun and Park (2012)

utilized data from the long-term Education study in America. The researcher linked shadow education to the academic achievements of East Asian American students. The outcomes indicated positive and elevated grades for American students. The results demonstrated favorable and high scores for American students. Likewise, Mori (2015) analyzed the PISA data from the 2006 study to investigate the influence of supplementary teaching on students' performance in Mathematics. The researcher compared the findings from two countries, Japan and the United States. The background information indicated that private tuition is predominantly utilized by middle-class students to enhance their academic performance.

These shadow schools are so powerful that today parents think that their kids can't make it in life tomorrow without shadow education. The parents are satisfied and happy when they (see/hear/become aware of) that their kids are learning the notes, without caring for their plans/desires to learn. Are they actually learning the material or simply memorizing for marks? Do they know how to handle the unexpected issues by themselves without any guide from a teacher? The students' increasing enrollment and demand of private tuition centers show that there is an effect on their grades (Byun, 2012) but an ignored factor is the student intent of learning. It could be that there is a poor understanding of how important it is to study and the hit/effect of factors on it. This study would argue that shadow education centers are not only influencing the grades of students, but also changing their study style. According to literature, the surrounding (surrounding conditions) in which a student grows up and changes (and gets better) affects ones' study style. As Grant, Kinersley and Field (2012) stated that "The big picture in which learning happens (uses/puts into action) a powerful effect on the approach learners take to their work. In some events, learners will be forced by the nature of a job to put into use a less-favorite approach" (p. 1). The importance of big picture on students' study approach has also been talked about/said by Richardson (2005). According to him, the choice of study method is (depending on and needing) three elements: content, needed things of particular tasks and big picture.

Regarding Richardson's assertion, it can be argued that the existing evaluation system in Pakistan necessitates a mechanical repetition of texts (Kiani, 2011). Teachers at tuition centers provide selected materials and also insist on repetition. Students transcribe the provided notes without questioning, as the social and cultural environment in Pakistan compels children to be obedient and to adhere to all directives and regulations. Parental pressure on children to attend tuition centers contributes to increased dependence and diminishes their confidence and judgment. Consequently, Kwok (2004) perceives shadow education institutions as "entities that gradually deplete and undermine other aspects." This term indicates that shadow education centers can adversely affect students' academic and social lives. Furthermore, students receiving shadow education often experience mental and emotional distress. They are becoming increasingly competitive with each passing day. Although various studies and research have identified some positive impacts of shadow education on students' academic performance, these effects are not necessarily viewed positively from the students' perspectives regarding what is truly important. For example, Madsen and Ingram (2010) conducted a pilot study to investigate the impact of Mathematics instruction in Texas.

There was no distinction in the grades of students who attended shadow education centers compared to those who did not. Sulieman (2012) conducted a case study on the business Mathematics course at a high school in the UAE. Surprisingly, the study's results indicated that students who consistently engaged in private tutoring during high school performed poorly in university, facing a higher likelihood of failure in comparison to their peers. Dang and Rogers (2008) utilized a study to investigate the impact of shadow education on the academic achievements of students at both the primary and secondary levels in Vietnam. The results revealed an enhancement in students' academic performance at the primary level, while a decline was observed at the secondary level. Furthermore, to assess the influence of shadow education on

students' creative potential, Choi (2011) analyzed data collected by the Ministry of Education (2006) involving 86,000 students across all grades.

Various methods of assessment revealed that the impact of private tuition centers was beneficial for early education levels, yet detrimental to the learning and creative abilities of high school students. In this context, fostering the ability to innovate is a crucial objective of education. Particularly at advanced levels, students are evaluated on their comprehension rather than mere memorization of facts. It is essential for students to engage in novel and stimulating contributions at higher educational tiers. Wijentunge (1994) observed in Sri Lanka that the shadow education system overlooks the talents and capabilities of students, leading to a superficial approach to learning. Furthermore, while education was once centered on nurturing talents, individual identities, and moral development, the current emphasis has shifted towards merely achieving high grades. This approach neglects the holistic personal development of individuals, including social interactions with peers and adherence to ethical standards and values (Yell, 1999; Kwok, 2004). In a logical analysis, Kwok (2001) linked the examination-driven knowledge paradigm to the value transformation within mass education. He ardently argued that private tuition centers alter students' learning attitudes and values. Khan and Shaikh (2013) investigated the efficiency of the shadow education system in Punjab, Pakistan. Their research indicates that while it aids students in enhancing their learning, it cannot replace formal education.

1.To what degree do the students practice rote learning?
2. In what ways do the students practice selective exam-oriented study?
3. To what extent do the students depend on the teacher for studying?
4.Is there an important/famous hit/effect of time in private tuition centers on students' study style?

Way(s) of doing things

A descriptive research design was utilized to investigate the impact of shadow education on students' study methods. The nature of the research was survey-based and quantitative in character. This study focused on students from Lahore, Pakistan, as the literature indicates that the highest concentration of tuition centers is found in urban areas, particularly in Lahore, which ranks at the top of this list. The sample was selected using a purposive sampling method, targeting students who had attended shadow education institutions as the sampling units. A total of 230 second-year students participated in the study to provide the necessary information.

Three factors—tutor dependence, academic performance, and rote learning—were identified to formulate a set of questions. The content validity and face validity of the question list were ensured through the feedback of experts in the education field. Ambiguous items were revised based on student feedback during the pilot testing phase. The question list underwent pilot testing with sixty students from a shadow education institution. Following the pilot test, a total of sixteen items were ultimately chosen for data collection. The scale employed consisted of six points. Each statement in the question list was assigned a code corresponding to possible responses: strongly agree (6), agree (5), somewhat agree (4), somewhat disagree (3), disagree (2), and strongly disagree (1). Additional details regarding the question list are provided in Table 1.

The individuals engaged in information gathering personally obtained the data from shadow education institutions with the assistance of relevant heads and principals. The objective of the study was communicated to the students during the data collection process, and the confidentiality of the

information was assured with a sense of calm and confidence. The data was gathered within classroom environments to enhance the response rate.

Inter-item Correlation and Reliability of the Scale

Sr. No.	Factors	Sample Items	Cronbach's Alpha	No. of Items
1	Surface Learning	I often memorize content for exams without fully grasping the concept.	0.76	10
2	Performance Focus	I prioritize topics that are most likely to appear on the test.	0.58	4
3	Instructor Reliance	I depend heavily on my tutor to explain complex topics.	0.60	3
4	Inter-item Correlation		0.62	3

There were ten items on the questionnaire related to the first factor, Surface Learning. The reliability coefficient (Cronbach's Alpha) of 0.76 shows high internal consistency between these items. The alpha value of 0.58 for the second factor, Performance Focus, and 0.60 for the third factor, Instructor Reliance, also show good internal consistency, especially considering that there are fewer items within each. As argued by Chaudhary (2010), a scale's reliability will be influenced by aspects such as the length, type, and number of items. Generally, the inter-item correlation measure of 0.62 confirms that the scale employed in the study was reliable.

Analysis and Interpretation of the Data

The data were meticulously examined utilizing SPSS-16 (Statistical Package for the Social Sciences) software. A reliability analysis was conducted to assess the internal consistency of the items within the questionnaire. Descriptive statistics, including the mean and standard deviation, were computed as shown in Table 2. Furthermore, inferential statistics, such as the t-test and ANOVA, were employed to evaluate the differences.

Impact of Shadow Education System on Students' Study Style

Table 2

Descriptive Statistics: Influence of Shadow Education on Students' Study Approaches

No.	Sub-construct	No. of Items	No. of Participants	Mean	SD
1.1	Surface Learning	10	230	4.06	0.738
1.2	Performance Focus	4	230	4.39	0.836

No.	Sub-construct	No. of Items	No. of Participants	Mean	SD
1.3	Instructor Reliance	3	230	4.49	0.948
—	**Total**	**17**	**230**	**4.06**	**0.732**

Table 2 illustrates the average and variability in students' responses concerning the effects of shadow education on their study habits. The mean score of 4.06 suggests that students are less concerned about grasping the fundamental meaning of the lessons. They tend to favor direct memorization of a limited number of terms presented in the academic notes. The standard deviation (SD) of 0.738 indicates minimal variability in the students' responses. Similarly, the mean score of 4.39 suggests that, due to shadow education, students are primarily focused on achieving high marks. They rely heavily on the selected content from the academic notes and engage in exam-oriented study practices to a significant degree. The SD value of 0.836 reflects low variability in their responses. In addition, the average score of 4.49 indicates that students typically avoid tackling difficult topics independently and prefer to learn from their tutors. They believe that without the tutor's guidance, they are unlikely to perform well. The SD value of 0.948 shows reduced variability in the students' responses. The overall average score of 4.06 across the sixteen items indicates that shadow education is promoting a surface approach to learning among students to some extent. Furthermore, the SD value of 0.732 for the first factor demonstrates limited variation in the students' responses.

Table 3

Differences in Students' Study Approaches Based on the Number of Subjects Studied at Shadow Education Centers

Factor	Tutoring Subjects	N	Mean	SD	df	t	p
Study Approach	All Subjects	150	68.06	9.606	125.845	2.054	0.010*
	One Subject (Supplementary)	80	64.66	13.028			

*$p < 0.05$

Table 3 highlights the variation in students' study approaches depending on the number of subjects for which they received tutoring at shadow education centers. A statistically significant difference was observed between the two groups, as indicated by the p-value ($p = 0.010$), which is less than the 0.05 threshold.

Students who received tutoring in **all subjects** demonstrated a **higher mean score (M = 68.06, SD = 9.606)**, suggesting a stronger inclination toward surface learning. In contrast, those who received **supplementary help in only one subject** had a **lower mean score (M = 64.66, SD = 13.028)**, reflecting a relatively lesser tendency toward surface-level study approaches. The **t-test result**, $t(125.845) = 2.054$, confirms that the difference between the two groups is statistically meaningful. This suggests that

extensive reliance on shadow education across multiple subjects may be associated with a more surface-oriented approach to learning.

Table 4

One-Way ANOVA: Study Approaches by Time Spent in Shadow Education

Source of Variance	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	15,544.85	2	772.427	6.688	0.002*
Within Groups	26,217.737	227	115.497		
Total	**27,762.591**	**229**			

*p < 0.05

Table 4 presents the results of a one-way ANOVA managed and did/done to examine differences in students' study approaches based on the number of hours they spent in shadow education institutions. The analysis showed/told about an (a big change in numbers that means something important) effect, F(2, 227) = 6.688, p = 0.002, pointing to/showing that the time spent in these institutions has a meaningful hit/effect on how students approach their studies. Given the importance level (p < 0.05), it can be decided that not all groups shared the same study behaviors. To identify the particular group differences, a post hoc test was carried out for further analysis..

Table 5

Post Hoc (LSD) Test: Differences in Study Approaches Based on Hours Spent in Shadow Education

Source	Variance Type	Sum of Squares	df	Mean Square
Study Approaches	Between Groups	15,544.85	2	772.427
	Within Groups	26,217.737	227	115.497
	Total	**27,762.591**	**229**	

*The mean difference is significant at the 0.05 level.

The post hoc (LSD) test revealed significant differences in study approaches based on time spent in shadow education. Students attending **5–6 hours** showed a higher tendency toward surface learning compared to those studying **1–2 hours** (mean difference = **8.388***). Similarly, those studying **5–6 hours** also differed from the **3–4 hour** group (mean difference = **-3.566***), indicating that longer durations in shadow education are linked to more surface-oriented study habits. In contrast, students spending fewer hours showed less reliance on surface learning.

END RESULT AND DISCUSSION

According to the preliminary findings, which are subject to modification, it appears that the majority of students' responses tend to favor granting permission for or agreeing to the items listed in the questions. In other words, shadow education influences their study habits. For these students, comprehending the underlying meanings of concepts is neither necessary nor required. They favor selective study methods that facilitate the achievement of high grades. Students seek guidance for challenging or thought-provoking questions to be clarified by their teachers. Consequently, their dependence on teachers is increasing.

They are not afforded the opportunity to cultivate their intellects and become autonomous learners. They are not engaging their cognitive abilities or experiencing genuine learning within shadow education institutions. Conversely, acquiring creative talent and critical thinking skills is one of the educational objectives. Such competencies are enhanced through extensive reading, critical thinking, and collaborative learning sessions. It is evident that students' initial contributions to their studies are diminishing progressively as their study approaches become superficial. These findings align with the research conducted by Choi (2011) and Wijentunge (1994). They found that students who receive shadow education may perform better in introductory classes but struggle in advanced courses, particularly where innovation is required. This observation was further corroborated by additional research findings.
For instance, the amount of time spent in shadow education institutions significantly affects students' study habits. Students who allocated 5-6 hours to shadow education across various subjects were more likely to utilize surface-level study techniques (strategies aimed at achieving their objectives). These results are somewhat consistent with the research conducted by Choi, Calero, and Escardibul (2011), which emphasized the impact of time spent in shadow education on students' abilities. It has been determined that engagement with shadow education consistently promotes a surface study approach among students. In other words, it cultivates dependence and affects their academic performance (methods of thinking and processing information).

SUGGESTIONS

It is advisable that the primary emphasis of shadow education is on enhancing students' grades, with a strong focus on examinations. The leaders of formal educational institutions have the opportunity to broaden the understanding of both students and parents regarding the roles and impacts of shadow education on students' learning strategies. This can be achieved by arranging courses or meetings for parents within the school environment. Initially, it is essential to clarify the concept of study approach and how the broader context influences it. By doing so, parents will gain insight into the shadow education system and will be better equipped to advise their children on the significance of pursuing a college education.

*This research work is adapted from the MS Education thesis completed by Dr. Nighat Ara.

REFERENCES

Annual Status of Education Report (Rural) Pakistan (2011). Retrieved from http://www.aserpakistan.org/document/aser/2011/Total%20PDF%20Aser%20Report.pdf

Aslam, M., & Mansoor, S. (2011). The Private Tuition industory in Pakistan: An Alarming Trend. Idara Taleem o Agahi: Lahore.

Aslam, M., & Atherton, P. (2014). The shadow education sector in India and Pakistan: Opening Pandora's box. In I. Macpherson, S. Robertson, & G. Walford (Eds.), Education, privatization and social justice: Case studies from Africa, South Asia and South East Asia (pp. 137–158). Oxford: Symposium Books.

Bray, M. (1999). The Shadow Education System: Private tutoring and its implications for planners. *Fundamentals of Educational Planning*. doi: 92-803-1187-5.Retrieved from http://www.unesco.org/iiep.

Bray, M. (2020). Shadow Education in Europe: Growing Prevalence, Underlying Forces, and Policy Implications, ECNU Review of Education.

Buchmann, C. (2002). Getting ahead in Kenya: social capital, shadow education, and achievement. *Research in the Sociology of Education*, 13, 10.1108/S1479-3539(2002)0000013008

Byun, S. & Park, H. (2012). The academic success of East Asian American youth: the role of shadow education. *Sociology of Education*, 85 (1), 40-60.

Choi, A., Calero, J. & Escardibul, J. (2011). Hell to touch the sky? Private tutoring and academic achievement in Korea. Spain: Institut d'Economia de Barcelona. Retrieved from www.ieb.ub.edu

Dang, H. A. & Rogers (2008). How to Interpret the Growing Phenomenon of Private Tutoring: Human Capital Deepening, Inequality Increasing, or Waste of Resources? (Working Paper No.4530). Retrieved from http://elibrary.worldbank.org/doi/book/10.1596

Ehrenberg, R.G. (2001). Tuition Rising: Why College Costs So Much. In Delvin, M. & Meyerson, J. (Series Ed. J.) Vol.3. Exploring the future of higher education, 2000 papers. John Wiley & Sons, Inc.

Geidel, A.R. & Marzo, P.F. (2015). Shadow education in Spain: Examining s0cial inequalities through the analysis of PISA results. European Education, 47 (2).

Grant, A. Kinnersley, P. & Field, M. (2012). Learning contexts at Two UK medical schools: A comparative study using mixed methods. *BMC Research Notes*. Retrieved from: http://link.springer.com.

Gupta, A. (2022). A Shadow Education Timescape: An Empirical Investigation of the Temporal Arrangements of Private Tutoring Via-a-Via Formal Schooling in India. British Journal of Educational Studies,

Hayes, K. (2012). Running head: tutoring to increase student achievement. Using tutoring to increase student achievement on end of course assessments. Retrieved from www.nwmissouri.edu/library/researchpapers/.../Hayes,%20Kathryene.pdf.

Khan, B. H. & Shaikh, S.A. (2013). Analyzing the market of shadow education in Pakistan: Does private tuition affect the learning gap between private and public schools? .*The Lahore Journal of Economics,* 18, 129-160.

Kiani, M.A. H. (2011). A Study to evaluate the examination system at grade-V in the Punjab, based on SOLO taxonomy (Doctoral dissertation). Retrieved from:

kim, J.H. (2015). Effect of family poverty on self-regulated learning ability and academic achievement mediated by school learning activities and private tutoring hours of adolescents. *Advanced Science and Technology letters*, 101.

Kulpoo, D. & Maya, S. (2005). A Study of the Conditions of Schooling and the Quality of Education. Retrieved from www.sacmeq.org/sites/default/files/.../mal_sacmeq_iii_report-_final.pdf

Kwok, P. (2001). Local knowledge and value transformation in East Asian mass tutorial schools. *International Education Journal,* 2 (5). Retrieved from http://ehlt.flinders.edu.au/education/iej/articles/v2n5/7kwok/paper.pdf

Kwok, P. (2004). Emergence of demand for private supplementary in Hong Kong: argument, indicators and implications. *Hong Kong Teachers' Centre,* 3.

Loyalka, P.K. & Zakharov, A. (2014). Does shadow education help students prepare for college. Higher School of Economics Research Paper No. WP BRP 15/EDU/2014. Retrieved from: http://ssrn.com/abstract=2385856.

Madsen, J.N. & Ingram, P. (2010). Mathematics tutoring and student success. Paper presented at the International Conference on Mathematics Education Research. Abstract Retrieved from: www.sciencedirect.com

Mori, I. (2015). The Effects of Supplementary Tutoring on Students' Mathematics Achievement in Japan and the United States. Retrieved from: http://www.iss.u-tokyo.ac.jp/publishments/dpf/pdf/f-178.pdf.

Patel, B. (2008, December 11). *The Tuition Culture.* The Dawn. Retrieved from http://ecommons.aku.edu/cgi/viewcontent.cgi?article=1111&context=pakistan_ied

Polidorides, G. (1986).The determinants of educational achievement at the end of secondary schooling: The case of Greece. Paper presented at the annual meeting of the American Educational Research Association, San Francisco, 16-20. Abstract Retrieved from: www.sciencedirect.com

Raccah, A.A. & Dana, O. (2015). Private tutoring intensity in schools a comparison between high and low socio-economic schools. *International Studies in Sociology of Education, 25 (3).*

Rothman, T. & Henderson, M. (2011). Do School-Based Tutoring Programs Significantly Improve Student Performance on Standardized Tests?. Research in Middle level Educaion, 34 (6).

Richardson, J.T.E. (2005). Students' Approaches to Learning and Teachers' Approaches to Teaching in Higher Education. *Educational Psychology*, 25 (6).

Bray, M. & Silova, I. (2006). The hidden marketplace; private tutoring in former socialist countries. In Silova, I., Budiene, V. & Bray, M. (Eds.). *Education in a Hidden Marketplace: Monitoring of Private Tutoring*. New York: Open Society Institute.

Southgate, D.E. (2009). Determinants of Shadow Education: A Cross-National Analysis.

Stevenson, D. L., & Baker, D. P. (1992). Shadow education and allocation in formal schooling: Transition to university in Japan. *American Journal of Sociology*, pp. 1639-1657.

Sulieman, H. (2012). Shadow learning in undergraduate mathematics: an exploratory study. *International journal of Modern Education Forum,* 1 (2), 70-75.

Subedi, K.R. (2018). Shadow Education: A role of private tutoring in learning. *International Journal of Humanities and Social Sciences, 1* (2).

Tok, T. N. (2013). The shadow education System: private courses. *International Journal of Soc.Sci. & Education*, 3 (3).

Unal et al. (2010). The effect of private tutoring on performance in mathematics in Turkey: a comparison across occupational types. *Social and Behavioural Sciences, 2.* Retrieved from www.sciencedirect.com

Wijetunge, S. (1994). Some psychological aspects of the private tuition system. *Economic Review*, 20 (2), 15-17.

Zhang, Wei (2014). The demand for shadow education in China: mainstream teachers and power relations. *Asia Pacific Journal of Education, 34 (4).*