

# Japanese students' perceptions of the role that shadow education plays in competition in education

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## RESEARCH ARTICLE

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### ABSTRACT

The relationship between shadow education and competition has been discussed and studied widely by educational experts and policy makers in Japan. One major topic has been the role that shadow education plays in social inequality by creating winners and losers. Another is related to competition and students' psychological health; and a third concerns the cause-and-effect relationships between cram/preparatory schools and competition. The present paper focuses on students' perspectives and describes an empirical study carried out with 211 Japanese senior high school students and 145 university students. The students answered open-ended questions about their cram/preparatory school attendance, and were asked to describe how they perceived the relationship between cram/preparatory schools and competition. The free descriptive answers were content-analysed and categorized. The majority of the respondents not only saw a relationship between the two but also listed a number of functions that increased students' competitive advantage. Educational experts' and sociologists' common criticism that shadow education has detrimental effect on fairness or equal chances in education was hardly at all expressed. Relatively few students expressed doubts or emphasized the negative or harmful side of cram/preparatory school attendance and competition. The results call the attention to the importance of studying different aspects of shadow education more in-depth from the direct "users" i.e. the students' perspective as well.

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**KEYWORDS**

shadow education, competition, Japan, students

**INTRODUCTION**

Bray and Lykins (2012) pointed out that education is widely seen as a core instrument to “win” in the competitive environment, and shadow education is especially about competition and creation of differentials. Although it has been well known since Bray’s 1999 book that shadow education is not only widespread in Japan and in other East Asian countries – such as South Korea, China, Singapore, and Vietnam – and also virtually everywhere in the world, somehow Japan has remained the *origo* of shadow education research to this day. It is difficult to reveal the exact reasons for this, but it may be because researchers of Japanese education recognized very early that there were two education systems functioning in the country in parallel: formal education and a supplementary segment of education what some researchers started to call shadow education (e.g. Marimuthu et al., 1991). In case of Japan, it became clear already in the 1990s that shadow education had grown to be a huge industry in the country, with significant economic, educational and thus significant social implications.

If the phenomenon of shadow education is inseparable from Japan as a country, perhaps the most important concept that is similarly inseparable from shadow education is *competition*. It is difficult to find a study in the literature on shadow education in which the phenomenon of competition would not be mentioned in one way or another. An earlier paper by Fülöp & Gordon Győri (2020) summarized ways in which authors of shadow education literature discuss the issue of competition. The list is long, ranging from how families compete for better positions for their children in the education system and society, to how shadow education companies compete with each other for market shares.

It is well known that with the start of national public education systems serving the needs of mass education, many forms of teaching and learning that existed in previous centuries did not disappear during the schooling processes. In addition to schooling and formal education, there have always been forms that complemented it (Zhang & Bray, 2020): private teachers, special learning courses run by different organizations, additional learning tools to help self-directed learning, and other opportunities.

In the English-language literature of the 1990s, two crucial works on shadow education appeared. Stevenson and Baker (1992) examined the importance of shadow education within the framework of Japanese education, while Bray (1999) addressed the topic from an international perspective. In this study, Bray’s (1999) definition of shadow education will be applied. Bray and colleagues have themselves pointed out over the past decade how many forms and characteristics of non-formal education can be identified that cannot be covered accurately with the original 1999-definition of shadow education (Bray, Kwo & Jokić, 2015). Nevertheless, based on Bray’s (1999) definition, we consider it shadow education when three features coexist:

- private, fee-based (profit-oriented)
- supplementary forms to mainstream formal education



- covers academic subjects which are taught at schools as well (mostly the main exam subjects in formal education: mathematics, foreign language - especially English -, and mother tongue and literature).

In addition to the metaphorical name “shadow education”, it is from these characteristics that another name for the educational phenomenon emerges: supplementary private education. When we go a little further and call it a supplementary private education industry (Gordon Györi, 2006, 2008), we do not mean that all actors in this educational segment operate at an industrial scale (many actors are doing only one-to-one or similar small-scale teaching in this field), but that in some societies the whole system of this educational activity has grown into an important industry that can be compared to electronics, the automotive industry or other such industries in the national and international markets.

This was exactly what early researchers in the field of shadow education had noticed in Japan: that shadow education was taking on industrial proportions and was as large system of teaching and learning as formal education is itself. It was already described in the very early reports (Gordon Györi, 1998; Rohlen, 1980; Ukai Russell, 1997), and it is regularly mentioned in more recent literature (e.g. Entrich, 2015, 2018; Roesgaard, 2006) that a rich system of various services in shadow education can be found in Japan. This ranges from the one-teacher-one-classroom jukus that offer lessons conducted after regular school hours, at weekends, and during school vacations to the large yobiko (preparatory school) companies<sup>1</sup> common in Japan when students prepare for the university entrance exam. Yobikos especially serve the so called “ronins” (masterless samurai) who failed the university entrance exams and attend these schools during their gap year(s). However, these supplementary forms of education remained on the periphery of education until the second half of the 20th century. And although studies emerged as early as the 1980s suggesting that, in addition to the activities of formal institutions of national education systems, these forms of learning and teaching could already influence educational justice and social equality (Inkei, Koncz & Pöcze, 1988; Rohlen, 1980), they were not widely addressed for a long time and did not evoke the attention of researchers and education policy makers (Gordon Györi, 2020). And by the time researchers began to talk about all the aforementioned educational activities as “shadow education” in the 1990s, in fact, these complementary forms of education were not only in the shadow of formal education, but had almost as much value and influence as formal education itself.

Supplementary private education industry can function at an industrial scale because of the mass consumer demand for it. Since the Second World War, Japanese education system has been built on the American model: 6 years primary school (shōgakkō) is followed by 3 years of

<sup>1</sup>The two most important institutional forms of Japanese shadow education are juku and yobiko. Although many authors have made efforts to make a precise definition and also a precise distinction between the two types of educational services, this has never been perfectly accomplished because what is called juku and what is called yobiko varies in Japanese language use itself as well.

Complicating matters further is the fact that there are two major basic versions of juku itself - jukus, which teach academic subjects and jukus that cover other, non-academic fields of knowledge (like calligraphy, piano, sport etc.). But there are also several sub-versions of both (Entrich, 2015; Roesgaard, 2006). Therefore, for the sake of simplicity, we will henceforth use juku (cram school), referring to only supplementary private education institutions that teach academic subjects.



lower secondary or junior high school (*chūgakkō*) and 3 years of upper secondary or senior high school (*kōtōgakkō*) education. This is followed by higher education, into which a large percentage of Japanese students go. For each level of education, it is important not only who moves on to the next level of education, but also who enters which institution as a student. The most important transition is the transition from junior high school to senior high school and access from senior high school to university. Although data on the use of shadow education are not fully reliable due to many difficulties of data collection on this phenomenon, it can be assumed that large masses of Japanese schoolchildren use shadow education in all age groups, but especially shortly before and during the main transition periods between different levels of education. [Shintani \(2014\)](#) refers to a survey conducted by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) about cram school attendance in 2007. It was found that 80% of junior high school students were attending private cram schools. One of the main reasons for studying at the private cram schools was that “school study alone is not enough to ensure success in entrance examinations”. This attendance rate is relatively stable. Using data from 2012, [Steve Entrich \(2015\)](#) states that 56,5% of Japanese schoolchildren used *juku* education during their primary school age, 61,5% during junior high and 35,5% in high school years. Those who failed in the university entrance exam or were not accepted into their top choice university and became “ronins” attended the preparatory schools in great number after finishing high school. Still, in this data any other forms of shadow education services – like correspondence courses, private tutoring and others – were not included.

### Cram/preparatory schools and competition

Japan produces high educational competition for the majority of students for advancing upper levels of education and prestigious colleges. According to [Entrich \(2018\)](#) the root of educational competition is the credentialist Japanese society that places emphasis on attaining certain degrees and cram schools are competitive and they are strategic investments of families in educational credentials. As [Courtenay \(2013\)](#) puts it, supplementary education is dominantly an enrichment strategy to improve chances for students for educational opportunities in a highly competitive educational system which as a consequence ensures future job opportunities in the equally competitive labour market.

The relationship between competition and supplementary education has been studied from a variety of aspects. One major topic has been the role that supplementary education plays in not only reproducing but also increasing social inequality creating winners and losers not based on merit but on family background. The other major concern has been the relationship between competition and students’ psychological well-being and health. Finally, social scientists and educational experts came to different conclusions in terms of the causal relationship between cram schools and competition, namely which is cause and which is effect. In the following section these three aspects will be presented in more detail.

According to [Choi \(2018\)](#) competition among students to enter privileged universities has been an issue in Japanese society since the 1920s. For a period of time the competitive test-based school system was considered to serve meritocracy with no bias of the family background. However, in the last decades one major concern in public and scholarly discourses in relation to shadow education in Japan has been its role in increasing inequality in the society by providing unfair competitive advantage to those who are able to afford the private educational services.



Families who do not possess the necessary cultural and/or financial resources cannot participate in the “race” which may start already at the earliest years of compulsory education, while families who have educational aspirations and are financially well-off can ensure their children’s participation in this high-stakes educational competition (Kariya, 2011). Bray and Lykins (2012) also point out that shadow education brings threats to government goals of social equality. According to Mawer (2018) discussions on social and educational inequalities have emerged frequently in public discourses in Japan referring to the country as “gap society” which implies the widening socio-economic differences and the difficulty of social upward mobility in contemporary Japanese society. Within this context cram schools are perceived as educational enterprises that contribute to maintaining and strengthening inequalities, placing into a competitively advantageous position families and students with sufficient financial freedom. Cram schools systemize social inequality by converting education from its original position as a basic social right into a consumer right (Jung, 2012).

The Japanese school system, both its formal and its supplementary form has been considered fiercely competitive. Therefore, another widely discussed topic has been how this overheated competition affect the psychological health of students. The expression “examination hell” (shaken jikoku) has been widely used in the mass media since 1927, referring to the stressful period before high-stakes competitive exams (Frost, 1991). Entrich (2015) describes two main arguments why the highly competitive entrance exam system has been seen positively by especially industry representatives and government officials: 1. students will become well prepared and will be at a high academic level; 2. intense competition has been considered character builder, namely citizens and future employees who are able to endure hard competition during their educational life are believed to provide the human capital to keep its economy competitive. However, since the 1990s educational experts’ attention was rather directed to the detrimental psychological consequences of excessive competition. Knipprath (2010) describes how the Japanese press before 2000 used to cover the alleged effects of overheated academic competition and extreme focus on testing and connected them with school violence, bullying, student suicide, students refusing to go to school, and classroom disorder. In a survey conducted by MEXT (1996 – referred to by Shintani, 2014) parents mentioned several problems caused by juku. More than half of the parents thought that children’s character formation, leisure activities, interactions with family members and peers, and health were adversely affected by long hours of juku being justified by the excessive competition (Shintani, 2014).

Many studies emphasized the negative psychological/mental health consequences of the excessive competition like depression, anxiety, irritation, and impatience (e.g. Amano, 1995). However, there have been, very few empirical studies that aimed at revealing how Japanese students themselves experience “examination hell”. LeTendre (1996) asked students about what they did not like at school, and the majority of them did not mention “exam hell” at all. They named certain school rules or the lack of sufficient time for club activities instead. Exams were viewed as normal parts of life and they considered their teachers and juku teachers very helpful, fighting together with them to bring the best out of themselves in the competition. He found no evidence either that Japanese adolescents committed suicide in excessive numbers due to competition in education. According to Zeng (1999) many of the problems with young people could be manifestations of a number of other factors, and not just competition in education.

Fülöp (2006) studied Japanese high school and university students’ experiences with competition in elementary, junior high and senior high school, and also students’ perception of



the role that competition plays in the school. She found that the great majority of students (ranging from 74% to 99% at the different school levels) experienced competition in the school. In contrast to most of the existing literature which was not based on empirical research, but in line with [LeTendre's \(1996\)](#) investigation, students considered the role competition played in school as predominantly positive and listed a number of positive functions i.e. improvement, motivation, providing will-power, increasing performance, increasing effort and improving concentration.

While statistics show no evidence of a direct cause-and-effect relationship between competition and students' psychological ill health, the media still sustains a belief that juku attendance and competition cause such pressure that young people are unable to cope with it. [Rappleye and Komatsu \(2018\)](#) referred to a study carried out in 2012 by the NHK Broadcast Culture Research Institute which found that over 95% of Japanese students said that they like school life, a significant increase from 1980s; and the proportion of those students who said they have to study unreasonably much or they feel too much pressure from parents or teachers has declined since the 1990s. The proportion of students, mothers and fathers who agreed with the statement that "a good life is to compete with others" has dropped also significantly and the proportion of those who agreed with "a good life is to enjoy your own life" has increased. The authors compared students' competitive exam anxiety in Japan and the UK, USA and Australia. They found that Japanese students do not experience more pressure and stress over entrance examinations to universities than their Anglo-American counterparts, while their achievement scores are high. They argue based on their research that the stereotypical image of Japanese exam hell does not reflect the current reality.

Another main discourse on the relationship between competition and shadow education in Japan is causal. Many blame the cram/preparatory school industry for fuelling competition to serve their profit and business goals. [Mawer \(2018\)](#) states that cram/preparatory schools are the result of the marketisation of education which emphasizes competition. Others consider these schools not the cause of competition but the result of competitiveness. [Entrich \(2016\)](#) attributes competition to scarce resources to access advantageous schools, which results in intense educational competition between students and between schools and as a consequence creates a high demand for shadow education to achieve a competitive edge in the educational race.

According to another perspective, cram schools do not incite, but merely serve the consumer needs created by already existing competition ([Roesgard, 2006](#)). [Courtenay \(2013\)](#), based on his study in Taiwan, argues that the high degree of competitiveness in East Asia is not merely a structural issue, a result of institutional or policy factors or a product of the scarce resource of prestigious universities or a competitive education market, but it reflects deeper cultural factors. The high degree of competitiveness and the heightened importance of high-stakes tests can be seen to be "symptomatic of an underlying cultural propensity to enhance the scale of competition" (p. 20.) Based on his interview study he also argues that the competitive nature of the educational environment is partly created and partly inflated, by the parents' competitiveness and desire to see their children to perform better than others. However this is intertwined with a less pragmatic attitude, the Confucian heritage which places high value on quality education and learning and effort in themselves (see also [Bray, 2010](#)).

[Roesgard \(2006\)](#) considers cause and effect bi-directional, meaning that successful juku education may increase the number of students who pass the entrance exam, therefore universities have to make the exams more difficult to be able to select, but in order to be able to pass



a more difficult entrance exam, more juku attendance is needed. A kind of co-construction is expressed also by Mawer (2018) stating that societal emphasis on credentials is both considered as reinforcing the system of entrance examinations and as being reinforced by this system.

### Students' perspectives

Compared to the prevalence of the discourse on the nature of the relationship between supplementary education and its role in competition, few studies have investigated how students, who are one of the main stakeholders, conceptualize this relationship. Research carried out with students on their views of cram/preparatory schools are scarce (e.g. in Hong Kong: Yung, 2015; South Korea: Kim & Jung, 2018). Courtenay (2013) conducted a qualitative interview study with teachers, parents and university students in Taiwan about what motivates participation in English language supplementary education. Most of the explanations that parents, teachers and students provided were related to competition and as Courtenay puts it to "survival" in a competitive context. Students' main topics were to serve parental competition (they have to achieve better than other parents' children), following the peers (everybody else is going, it is like a norm, not to be left out from the social group), accessing a competitive advantage (better grades, better school performance, better high school, better university, better job), to provide students with more confidence, which is also needed in competitive situations and to gain additional learning opportunities, as school is not enough to prepare properly for the entrance exam. A more process-oriented, less pragmatic aspect mentioned by the students was that they improve their abilities by the attendance. The main reason for non-enrolling was being satisfied with the regular school curriculum. While the role of supplementary schools in competition was brought up by the Taiwanese students, these topics were elaborated by the parents who were more pre-occupied with the themes of 'competitive advantage' (win at the starting line) and 'to avoid failure' (not to lose at the starting line).

In Japan, Ozaki's (2015) study is one example which gives voice to the children themselves and investigates their experiences in the juku, but without specific focus on the aspect of competition. She conducted semi-structured interviews and found that the majority of the participants liked or were neutral about juku attendance, and especially senior high school students had only a few reservations towards attending cram schools as they saw a direct relationship between attendance and their future. Those who mentioned negative aspects primarily referred to time constraints and not enough time to spend with friends. Among what they liked in juku were the more advanced and bigger variety of learning material, the social aspect of meeting a variety of peers and making friends, being motivated by others by sharing a sense of working hard together to achieve a similar aim, and juku teachers more effective teaching methods which made them find it easier to understand subjects there than at their regular school.

A study which investigated exactly how participant and non-participant students perceive the role of supplementary education in competition is a Hungarian study carried out by Fülöp & Gordon Gyóri (2020) who aimed to discover how Hungarian high school and university students perceive this with the presumption that students' views can be different from teachers', parents' and educational professionals' and may provide an insight of their own perspective. It was found that the vast majority of the respondents have had private tutoring and/or attended private university preparatory courses. Half of the Hungarian high school students, but almost



all participating university students stated that shadow education plays an inevitable role in competition, indicating a kind of growing reflection by age and educational level on the role of this educational practice in providing competitive advantage to the participants. The main functions of shadow education were considered to be providing extra knowledge, teaching test techniques and strategies, teach students how to cope with competitive situations, motivating students to be persistent and contributing to personal development i.e. increasing self-confidence and self-esteem. All of these provide an advantage compared to those competitors who do not participate in shadow education. Among the negative aspects there were hardly any that was related to the individual for example to a harmful effect on psychological health, but Hungarian respondents both at the high school and university level referred to a social justice aspect of shadow education. While they themselves participated and benefitted from it, they expressed their concern that it can only be afforded by those who have adequate financial resources, therefore they considered the family financial background one of the main source of the competitive advantage.

In Japan mostly educational experts, sometimes the parents, sometimes the entrepreneurs involved in the shadow education, sometimes teachers talk about competition, but students have not been directly asked about their views on the relationship between competition and juku/yobiko attendance. Therefore, in our present research we aimed at revealing how the students themselves conceptualize the significance of the cram/preparatory schools in competition. As participation in shadow education is decided not only by parents, but to a certain degree by the students themselves (Enrich, 2015), it is worth to investigate their vision of the role this participation means for them in their competition with their peers to attain their educational and life goals. The qualitative empirical research presented here aims at revealing these views and understandings.

The research results presented here were part of a bigger study that examined the personal attitude of Japanese senior high school students and university students towards competition in general and their perception of the role competition plays in the Japanese society.

## METHODS

### Participants

The research was carried out in a major prefectural city of Japan. In the present study 211, 16 and 17 year-old high school students (mean age: 16.5) and 145 university students (mean age: 21.2) participated (see Table 1). Senior high school students were from 6 different high schools including the First and the Second Boys' High School and the First and the Second Girls' High School (Ichiko, Niko, Ichijo, Nijo) of the city and two other not outstanding high schools.

Table 1. Participants

School	Girl/Female	Boy/Male	Total
High school	116	95	211
University	77	68	145
Total	193	163	356





University students were of different majors i.e. psychology, medicine and economics from one of Japan's top ranking governmental university and two average level, not top-tier private universities in the city (Table 1).

## Procedure

A questionnaire with open-ended questions was applied. The questions related to shadow education were the following: 1. *Did you attend a cram school or a preparatory school, or do you attend now?* 2. *In your opinion, do these schools play any role in competition?* 3. *Please explain your answer.*

The respondents provided free descriptive answers which varied in length. This method made it possible to explore how respondents themselves constructed the relationship between the shadow education and competition in education, if they perceived any connection at all, if they conceptualized participation as a competitive advantage, and how conscious and elaborated their understanding was about the function of these institutions in the educational market. The questionnaire was in Japanese, and students gave answers in Japanese. The answers were translated from the original Japanese both into English and into Hungarian. Since the authors are Hungarian, they could compare the meaning of the two different languages. In all cases the answers were read by two independent researchers and they were content analyzed and categorized independently. There were no previously established categories. Having read the answers several times the relevant categories were identified. The results were compared by the two researchers and consensual decisions were made about the arguable cases or a third, Japanese party was asked to decide about which category the given case fell into. This however occurred very rarely because the established categories and their content overlapped a great deal between the two experts.

## RESULTS

### Attendance of cram schools and/or preparatory schools

A great majority, altogether 88% (186) of the responding high school students and 80% (116) of the university students, indicated that they attended a cram/preparatory school previously or they currently attended (high school students). Basically all of those who indicated they had experience with cram school attended it in junior high school, especially in its third year when they had to take the entrance exam into the senior high school. Around one-third of the respondents (32%) said that they attended cram schools for several years.

A couple of students had started cram school already in kindergarten:

*„ I've been there since I was four years-old up to eight years-old to learn math. I was very small so I didn't really realise I was part of a kind of competing world. But in fact, I experienced there the happiness to win.”* (University student, male)

Others started juku in the elementary school, some at the age of 6, and continued up until the entrance exam to the university. Other students attended cram school only during the summer and winter vacation. Around 10% of the university students responded that they failed the college entrance exam and attended a preparatory school during their „ronin” year even 4 times a week before retaking the exam.



Table 2. Descriptive framework of the themes/categories and emerging categories from answers to the open-ended questions

Relationship between cram schools and competition	<ol style="list-style-type: none"> <li>1. Yes, there is</li> <li>2. No, there isn't</li> </ol>
General evaluation of the role of cram/preparatory schools	<ol style="list-style-type: none"> <li>1. Positive</li> <li>2. Negative</li> <li>3. Both</li> <li>4. Neutral</li> </ol>
The relationship between cram/preparatory schools and competition	<ol style="list-style-type: none"> <li>1. Providing students with competitive advantage</li> <li>2. Teachers' establishing a competitive atmosphere</li> <li>3. Societal perspective of the nature of relationship</li> </ol>
<ol style="list-style-type: none"> <li>1. <i>Providing students with competitive advantage</i></li> </ol>	<ul style="list-style-type: none"> <li>• Improve abilities</li> <li>• Teach how to win</li> <li>• Teach to be persistent and not to give up</li> <li>• Provide extra knowledge</li> <li>• Teach learning techniques</li> <li>• Motivate/stimulate</li> <li>• Opportunity of self-evaluation</li> <li>• Better teachers</li> <li>• Suitable rivals/enjoyment of competition</li> </ul>
<ol style="list-style-type: none"> <li>2. <i>Providing students with a competitive educational environment</i></li> </ol>	<ul style="list-style-type: none"> <li>• Explicit encouragement of competition</li> <li>• Test results are made public</li> <li>• Ability based grouping and seating</li> </ul>
<ol style="list-style-type: none"> <li>3. <i>Societal considerations: competition is a cause or an effect of cram school attendance</i></li> </ol>	<ul style="list-style-type: none"> <li>• Competitive/credentialist society is the cause</li> <li>• Parental competition is the cause</li> <li>• Competition fuelled by cram school industry is the cause</li> <li>• Competition contributing to social inequality</li> </ul>
Positive aspects of cram/preparatory schools unrelated to competition	<ol style="list-style-type: none"> <li>1. Positive, enjoyable atmosphere</li> <li>2. Socializing, making friends</li> </ol>

(continued)



**Table 2. Continued**

Negative aspects of cram/preparatory schools	<ol style="list-style-type: none"> <li>1. Negative emotional consequences</li> <li>2. Short-term goals/winning oriented learning</li> <li>3. Test results made public</li> <li>4. Harmful for peer relationships</li> </ol>
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Some students described that they tried the cram school only for a short period of time. They did not like it and did not continue attending in spite of being aware of their important role in competition.

*„I've been there but not now. The cram school didn't suit me, but I think those schools are the best places for competing at studies.” (Best Girls' High School)*

Only 12% of the senior high school students and only 20% of the university students indicated that they have never attended a cram or preparatory school. Approximately half of them did not do so because they did not see any function of them.

*„During winter holiday, I went there only once. It was boring. I think there are many people who say that those schools have important meaning in our competition, but I don't want to compete at these schools. Competing in the usual school is enough.” (First Girls' High School)*

### Relationship between cram/preparatory schools and competition

The analysis of the free descriptive answers to the open-ended questions resulted in a number of descriptive categories (see Table 2).

Among the high school students the majority (72%, 133) emphasized role and importance that cram schools and preparatory schools play in competition in education. Among the university students the proportion was even higher, 93% of the students postulated the connection.

*“I've been there, still now. I think cram schools have an important meaning and we can't talk about competition without cram school. There are not a few people who think that they can't win in competition if they study only in the regular school, so cram school as an institution exists.” (Best Girls' High School)*

*“By going to cram schools people must enter the world of competition deeply.” (University student, male)*

*“Cram schools were created to win the competition.” (University student, male)*

Those students who answered that they do not think that cram/preparatory schools have any role in competition (28% of the high school students and only 7% of the university students) were mainly among those who never attended such a school.



## General evaluation of the role of cram and preparatory schools

The answers were categorized according to the evaluation of the role of cram schools and preparatory schools in general, if the students mentioned only positive, only negative or both positive and negative aspects of these institutions or they were neutral and descriptive in their approach („it has a role”). See Table 3.

The responding high school and university students attributed to cram/preparatory schools mostly positive role, almost half of the senior high school students (46%) and the university student girls (47%) only mentioned its positive functions. This positivity was not that prevalent among the university student boys, among them almost equal number of respondents considered the role of cram schools only positive or only negative (30% and 25% respectively). The relationship between the two variables, gender and evaluation in case of the university students was significant ( $X^2(3, N = 145) = 8.6, p = 0.035$ ). If only the positive and negative answers are taken into consideration then university student girls are more likely than boys to have a positive attitude/opinion, ( $X^2(1, N = 80) = 8.3, p = 0.004$ ). In each sample and subsample around one-third of the respondents presented a neutral, descriptive, „taken for granted” attitude towards cram/preparatory schools. Except for the university student boys (25%) only less than (7–9%) or just over 10% (high school boys 11%) of the students expressed a purely negative view on cram schools. This shows that the majority of the students have either a positive perception about supplementary education or they simply take them as given as part of the existing reality and do not praise or question them.

An example of a purely positive attitude:

*„I went to that kind of school when I was in junior high school and before I entered university, after I had finished high school. Each time for two years. I think it's a good place for someone who wants to accomplish his/her goals. When I was there, after I had finished high school, I learned from teachers not only how to study but also about life. It changed my mind towards winning or losing as results.”* (University student girl)

An example of a neutral view is:

*„I've been there. Those schools are not different from ordinary schools.”* (First Boys' High School)

An example of a both positive and negative attitude:

Table 3. The evaluation of the role of shadow education

Participants	Evaluation			
	Positive	Negative	Both	Neutral
High school Girls (116)	46% (53)	7% (8)	9% (10)	38% (45)
High school Boys (95)	47% (45)	11% (10)	15% (14)	27% (26)
Highschool All	46% (98)	9% (18)	12% (24%)	33% (71)
University Girls (77)	47% (36)	9% (7)	12% (9)	32% (25)
University Boys (68)	30% (20)	25% (17)	15% (10)	31% (21)
University All (145)	39% (56)	16% (24)	13% (19)	32% (46)



*“If there is extreme competitive atmosphere, it’s not agreeable. But if pupils go there ‘just for studying’, I think there’s no problem. So, it depends on each place. Those schools exist based on competition but they can be both good and bad depending on the minds of each attending person. When I was in junior high school, I went to cram school for one year and a half. (I quit it in the middle.) After I finished high school, I went to preparatory school for one year to try the entrance exams of universities again.”* (University student, male)

Those who had a negative view on cram/preparatory schools reported that they were “forced to attend” such a school, they were “forced to compete”, these schools play “evil role” and they found it “meaningless” to attend.

An example of a purely negative attitude:

*„I attended it for one week. I was disappointed to know what is done there. Cram schools don’t have any meaning.”* (Best Boys’ High School)

### The perceived roles that cram/preparatory schools play in competition

In terms of the nature of the connection there were three main approaches: 1. These schools provide students with competitive advantage and make them better prepared for the two crucially important competitive entrance exams (to senior high school and to the university); 2. Cram school and preparatory school teachers deliberately create an intensely competitive atmosphere and environment in order to bring out the best from the students and also to make them able to cope with competitive situations the most adaptive way. They make arrangements to create competition in order to make them able to perform according to their best potentials in testing situation like the entrance exam. 3. Societal perspective on the relationship between society and shadow education, namely how these schools generate competition in education for financial profit versus how they serve the already existing competitive culture of the Japanese society and parents by offering extra preparation for those who want to be more successful than others in this competition. These different functions are presented in many answers in an intertwined way as they are strongly related and can be separated only for analytic reasons.

**Providing students with competitive advantages.** The respondents, both the senior high school and the university students, listed a great number of positive functions of these schools. They list both process-oriented (improvement of abilities) and result-oriented functions (better results in school tests and exams).

#### **Improve abilities.**

*“Cram schools do not influence competition directly, but before the students compete these schools develop and support the competitors’ abilities.”* (First Girls’ High School)

*“It was like a training room for me.”* (Best Girls’ High School)

**Winners.** Shadow education trains students to be able to compete and be „winners” in future competitions, “to gain power to win” and “be successful in competitions”.

*“We can’t talk about competition without cram school. There are not a few people who think that they can’t win in competition if they study only in regular school, so cram schools exist.”* (Second Best Girls’ High School)



„The purpose of cram schools and preparatory schools is to compete and nothing else. They only teach how to win. (University student, female)

**Teach to be persistent and not to give up.**

“They teach students that if there is any slight possibility, they should not be unwilling to make efforts.” (University student, female)

**Gaining extra knowledge compared to the regular school.** Cram/preparatory schools also teach learning techniques and as a consequence they are able to study more effectively.

“When I was a junior high school pupil, I went there for three years. I went there not directly to win in competitions but to acquire more knowledge than I learnt in school.” (Best Girls’ High School)

“I attended there when I was preparing for the entrance-exam of high school. They are catalyst to improve the academic ability of students. It’s up to the students if he can make effective use of them, but they teach learning techniques in order to pass the exam or win in the competition.” (Second Boys’ High School)

“As they specialize in entrance exam, they play the role of teaching us how to study in order to succeed in the entrance exam.” (University student, female)

“Efficient way of studying is necessary because for ‘entering university’ students have to win.

Cram schools and preparatory schools can teach children how to do it.” (University student, female)

**Motivating environment.** Shadow education provide a more motivating learning environment via a competitive stimulating atmosphere, that gives “impetus”, “increase willpower to study”, is a “strong spur”, “encourage to study”, “encourage to make an effort”.

„When I was in the third year of junior high school, I went there. In case of me, it was really good for me to go to cram school. I met people who were trying to enter the same high school and I studied harder with them. I thought ‘My friends are studying hard, so I also have to study hard, too, I want to pass the exam with them’. Those schools had important meaning to me.” (First Girl’s High School Student)

“It was just before taking entrance exams, so everybody around me seemed to be making a big effort and it gave me willingness. If cram school is a place where people who really want to study gather, it can stir up their willingness to study more and more.” (University student, male)

“Since everyone seemed to be trying harder than me, I was a little desperate. But it was a good driving force for me, I worked harder.” (University student, female)

**Self-evaluation.** Shadow education promotes self-evaluation, learning about their own position compared to others, measure their own academic ability via mock exams.

„Now, I’m a pupil of cram school. Cram school is for upgrading one’s ability. I think it’s necessary to know how much ability I have, and it’s also important to have aspiration after recognizing how much ability I have.” (High School Student, boy)



*“I think juku has great importance in competition because you have to compete with a lot of people, some of whom are excellent. In such an environment, one learns about her own strength, “looks within herself,” and is made to believe that she needs to be better prepared for the next time.”* (High school student girl)

*“When I was in junior high school, I went there. I could know my position by competing with pupils from other schools. It made me think of studying harder so I think those schools are good.”* (First Girls’ High School)

*“I attended only summer and winter holiday short courses. The mock examinations have significant meaning in that I can learn about my own academic ability.”* (First Boys’ High School)

**Better teachers.** Teachers in the cram/preparatory schools are better educated, are more knowledgeable, apply better teaching methods and have more attractive teaching style than teachers in regular schools that may also increase the competitive advantage of the attending students.

*“What impressed me most was the high academic level of the teachers working there.”* (Second Best Girls’ High School)

*“For me, teachers in cram school teach better than teachers in usual school.”* (First Girls’ High School)

**Suitable rivals.** Shadow education places to find suitable rivals to compare with and mutually motivate and improve each other, which makes competition enjoyable.

*“In juku, students from different schools get together and study together, which is a good stimulus. Juku has a great importance in the competition.”* (Second Best Girls’ High School)

*„ In cram school I find a good rival and compete for results in exams with that person and upgrade my school results.”* (First Boys’ High School)

*“In cram school, we can easily find someone to compete with, so in that sense, I think those schools have an important meaning in competition.”* (First Girls’ High School)

*“But, those schools are a place where people who have the same purpose gather and the atmosphere is often harmonious. This way children learn how to enjoy competition.”* (University student, female)

*Teachers establishing an educational environment and climate which initiate/encourage competition among the students*

**Open encouragement of competition.** According to the participants, teachers in cram/preparatory schools encourage competition openly and directly among students as opposed to the regular schools they attend, in which teachers encourage competition in a less explicit way. Respondents emphasize that the function of a cram school is *“to encourage competition”* and *“to plant a competitive spirit”*.

*„ It’s because of competitiveness that cram schools and preparatory schools exist. Teachers play the role of inciting competition among children. ”* (University student, female)

*“I went there for each half year before taking entrance exams of high schools and universities.*



*Teachers promote us to compete with other people. They have the best methods to accomplish those goals.*” (University student, female)

*“When I was a junior high school pupil I went there. Teachers in cram school always seemed to be saying ‘Don’t be defeated by people around you’, so I think this school has important meaning in our competition.*” (High school student, boy)

**Test results are made public, clear rank order.** Teachers apply practices that increase competition among the students. They make test results public, this way students can identify their place in the rank order, find the rivals that are the most informative to compare with.

*“In junior high school the grades are not made public, but the results of each test in the juku are put to the public account - that’s a difference.”* (Second Best Girls’ High School)

**Ability based grouping/seating.** In many cram school students are divided based on their abilities which also differs from the regular school practice. Ability based grouping and sometimes even seating also intensifies the competition and students prefer to study together with other students who are at the same level.

*“I’ve been going to a cram school. We are divided into classes according to our abilities not according to our high school classes. People are grouped together who have the same spirit to study and the same abilities. So there is a different kind of tension there.”* (High school student, boy)

*“The competition at cram school is very suitable and favourable because it takes place among the group of students with the same level of ability and this is some kind of a dream.”* (Second Boys’ High School)

*“In the cram school I attended, pupils were divided into classes according to their ability. The pupils in my class had almost the same level of abilities as I, so I think the school offered me a good place to compete. Considering these things, I think cram school had an important meaning in competing to me”*(First Girls’ High School)

**Societal perspective: cram/preparatory schools as end products of a competitive society and accelerators of competition in the society.** Some students went beyond interpreting the concrete/immediate significance of cram/preparatory schools in competition and they either considered them institutions that were set up to serve the competition existing in the educational area in the Japanese society and/or to serve parents’ competitive ambitions or they conceptualized them as institutions that serve a profit oriented educational industry which has a business interest to create competition and make it “*more radical*” and “*arouse the battle of entering schools*”. By offering extra training for students outside the traditional school system and “*giving them advantage over those who do not attend*”, “*giving them advantage over rivals in school*” they fuel competition and produce a vicious circle.

### **Cram/preparatory schools serving a competitive society.**

*„Cram school is what helps competition in a society which attaches an importance to scholastic abilities. We have a choice to enter or not to enter”* (First Girls’ High School)





*“Cram school and preparatory schools reflect Japanese society as a competitive society and those schools serve and promote this kind of society.”* (University student, female)

*“Cram schools and preparatory schools were made as a result of competing and not the opposite. It’s not correct for people to say that cram schools and preparatory schools are the root of this bad system.”* (University student, male)

*„Cram schools and preparatory schools were created to serve the competition among students and it’s wrong to think in the reversed way. Therefore, they are not promoting competition. The complete abolition of cram schools would not change the situation, because students’ and parents’ competitiveness would find its way. I attended cram school for 3 years in junior high school. And I’m a teacher of a cram school right now.”* (University student, male)

*“Cram schools make us aware of the competition that exists in the society. There are a lot of rivals.”* (University student, male)

**Cram/preparatory schools serve parental competition.** Students also reported that parents see cram/preparatory school attendance almost as an inevitable requirement, as they want their children to succeed and not to fail. Parents have strong concerns for test results and grades and they want their children gain a competitive advantage. Parental ambitions keep the cram school industry going.

*“Cram schools and preparatory schools are required because parents put excessive hopes on their children.”* (University student, female)

*“Preparatory schools exist in order to satisfy parents.”* (University student, male)

**Vicious circle by fuelling competition.** Cram/preparatory schools “fuelling” and “inciting” and “aggravating” competition in the educational sector creating a vicious circle

*„I attended there for one year after graduating from high school. They play the role of accelerating competition.”* (University student, female)

*„They play the role of ‘helping’ competition. However, they practically increase the overall requirement, which results in more severe competition.”* (University student, male)

*“I am surprised at the heat of the TV commercials carried out by cram schools and preparatory schools. They are stirring competition for sure for good or bad.”* (University student, female)

*„Those schools are companies which offer their services to upgrade the competitiveness of pupils who are in those schools. The more children go to those schools, the more severe competition becomes as a matter of course. Those schools are companies themselves and are each other’s rivals, this results in a more severe competition between the pupils of these schools.”* (University student, male)

*„Cram schools don’t have the potential to create competition, but have the potential to accelerate it. They have significant meaning in this sense.”* (First Boys’ High School)

**Contributing to social inequality.** A great deal of the social discourse on the cram school industry in Japan is focusing on the social inequality it may increase. However, educational experts’ and sociologists’ criticism that they have detrimental effect on fairness or equal chances in education was hardly at all expressed by the respondents of this study. Only one university



student brought this up in the context of the differences between urban and suburban areas and mentioned not only an increase but also a potential decrease.

*“The situation is different in urban areas and suburban areas. In the urban areas they expand the gap between winners and losers, while they reduce the gap in suburban areas.”* (University student, male)

### Positive aspects of cram/preparatory schools not directly related to competition

The biggest group among the respondents had a purely positive view of cram/preparatory schools, not only they appreciated that these schools help them to be successful competitors, but they highlighted other positive aspects of them as well.

*Positive atmosphere, enjoyable competition, positive emotional effects on students.*

*“Children of similar intellectual standard gather, so the competition is fun and I think it is especially useful for us.”* (High school student girl)

*“For me, juku was my spiritual refuge”* (High school student girl)

*“I think the competition in the juku calms me down.”* (High school student boy)

*“I wanted to learn stuff I didn’t understand and talking with the teacher was fun.”* (High school student, girl)

*The cram/preparatory schools are also places for socializing and making friends who are rivals at the same time.*

*“I attended juku when I was in the second and third grade of high school. In my case, the people were not rivals but colleagues, which was nice.”* (University student, female)

*“If you attend them, you can become friends with the surrounding students”* (University student, female)

*“Juku helps us to improve our learning ability and it becomes the gathering place of friends.*

*Juku is important to have a spiritual stability for me.”* (University students, male)

### Negative aspects of cram/preparatory schools

Compared to the big number of positive aspects and beneficial functions mentioned by the respondents, relatively few expressed doubts and emphasized the negative or harmful side of cram/preparatory school attendance. The main concern of students were the negative emotional effects, like stress, exhaustion and becoming depressed. Another major concern was that cram schools are just cramming for exams and students start to focus only on how to be good at tests which makes them narrow minded, they focus very much on the short-term results i.e. winning, therefore self-improvement and more long-term, process oriented learning becomes suppressed.



For most of the students the fact that in the cram schools test results are made public is a way to learn about the actual position among the students and evokes extra willingness to study, but other find it humiliating and are discouraged by the same practice. While the majority of students emphasize how cram/preparatory schools promote peer relationships and friendships, a small number of respondents speak about the opposite, how competition with others in the juku makes them enemies and how the competitive atmosphere can reach a degree that it jeopardizes friendships.

### **Negative emotional consequences.**

*„I've been to a short term winter holiday course only once. The atmosphere of the classroom was dense and nervous. It was stimulating but made me tired.”* (Best Girls' High School)

*“If the competition of entering a school is not too severe, it's acceptable, but today in Japan, it's too severe and I think it's made us tired. But as an exchange for it, the number of excellent people has increased.”* (First Girls' High School)

*„Joining the competition, we can have self satisfaction or we can be depressed.”* (First Girls' High School).

### **Result/winning-oriented, narrow minded students.**

*“But as a conclusion, it depends on the willingness of each pupil, but these schools can cause us to be narrow minded.”*

*“These schools are places which prepare students to win in competition, so I'm afraid that they let pupils forget the meaning of studying and a view of the future and they make pupils become people who attach an importance to only the results of competition.”* (University student, male)

*“However, they may be playing an unfavourable role because they push students to study only aiming at the success of entrance exam.”* (University student, female)

### **Test results made public are demotivating.**

*“I went there in the third year of junior high school. In the cram school that I attended they showed my exam results to everybody and everyone saw it, so I felt disgusted. I think cram school should just teach what we can't understand at school, not let pupils compete.”*

### **Excessive competition may make friends/peers enemies.**

*“I've never attended cram school. Most cram schools classify students' move from class to class according to the academic record from the test. This system may create competitiveness and produce students who merely concentrate on kicking others out.”* (Second Boys High School)

*“Cram school has an important meaning in children's competition. We just compete for our scholastic abilities. To obtain good scores and to be ranked higher, we compete and other people become rather enemies than friends.”* (Second Girls High School)



## DISCUSSION

Cram/preparatory schools have one clear goal: being admitted to the desired school at the next level. As [Enrich \(2015\)](#) points out, despite Japan's declining birth rates and the peak of entrance examination competition having passed in the early 1990s, the scale of the *juku* market remained stable with a valued of as well over 20.3 billion USD in 2015. In our study the great majority of senior high school and university students reported attendance these institutions, some from kindergarten to university, some only for a short period of time during winter or summer vacation.

The cram/preparatory school phenomenon in Japan has evoked huge national and international attention and lots of criticism from social scientists, educational experts and also parents. One main argument against these institutions has been their detrimental effect on students mental and physical health due to long hours of studying and stressful competition. Another strong criticism was more political, these schools serving neo-liberal ideas, the capitalist market economy, making profit and producing unfair access to higher education and widening of the gap between high and low achievers and students with rich or poor family backgrounds ([Mawer, 2018](#)). Another major discourse in relation to competition and shadow education in Japan if *jukus* are the result or the creator or the accelerator of competition.

The Japanese students' answers reflect a much more positive picture about their perception and experiences with cram schools than it is generally present in the national and international literature. Interestingly enough studies that show this more positive picture (e.g. [Fülöp, 2006](#); [LeTendre, 1996](#); [Rappelye and Komatsu, 2018](#)) take much less dominance. The participants in this study listed a big number of functions which cram/preparatory schools fulfil in order to promote and effectively increase the competitiveness of the students. They also understand those educational practices that evoke competition among the students and it is clear to them that the regular schools do not support educational arrangements (e.g. seating based on abilities) which explicitly encourage competition and deliberately direct attention to the ability differences among students in a class. It seems that for most of the students in this study these arrangements are more comfortable, attractive and stimulating (e.g. self-evaluation, finding the suitable rivals) than demotivating or humiliating. As [Fülöp \(2004, 2009\)](#) found, Japanese young people tend to consider their rivals as a means to improve themselves, and therefore they appreciate „good rivals”. In this research, several students explicitly wrote that cram schools are places where they can meet „good rivals” who help them to improve their performance and exam grades by mutual competition. As opposed to the mainstream literature, only a small number of students mentioned the negative psychological-emotional and interpersonal consequences of cram/preparatory school competition.

[Jung \(2012\)](#) summarized how the neoliberal educational policy in Japan leads to inequality and this is one of the major criticism in relation to the cram/preparatory school industry. However, the high school students and university students participating in this research did not mention this potential aspect of the relationship between cram schools and competition. Only one response referred to an urban/rural difference. This is especially interesting, because in case of the Hungarian high school students and university students in [Fülöp & Gordon Györi's \(2020\)](#) study especially the university students described in detail how private tutoring (which is common in Hungary) and preparatory courses lead to – according to them – unfair advantages of the participants in competition. The lack of such societal perspective or placing the relationship between



shadow education and competition into a wider perspective indicates that the Japanese students participating in this research tend to think about these issues primarily related to their own goals or to their parents' goals and how this effects the community is less important to them. While among the Hungarian students some explicitly said that they cannot afford this type of school there was not even one such explanation for non-attendance among those students answered that they haven't attended such schools. This may be related to the Japanese culture not being explicit about negative aspects of the family, but may also reflect the difference in terms standard of living between Hungary and Japan or the Japanese society and Japanese parents being highly education and credentials conscious prioritizing cost of education in the family budget.

This study confirms the importance to triangulate educational research and to investigate the experiences and perceptions of all the stake-holders: parents, teachers, policy makers and most importantly the students. Based on the present research – which has its own limitations being not a representative study – the cram/preparatory industry in Japan is able to survive because the main actors, the students are mostly agree with their goals and consider them useful to help them in reaching their educational goals in an intensely competitive educational system. The difference between the Japanese and the Hungarian respondents reflects to the possible cultural and structural differences in education and society in these countries.

Our research also clearly shows - what is often a missing aspect in the literature - that students who participate in shadow education are not only passive actors but active agents of everything that happens to them. They have their own experiences, emotions related to, and interpretive explanations on the characteristics and functions of what we call shadow education. As we do not yet have adequate research, we can only assume that when these children become parents, their views and decisions on formal and shadow education can also be influenced by their own experiences and explanations of these two worlds of education. Thus, we can assume a kind of transgenerational effect of shadow education, which would be worth examining despite the fact that many other factors and structural changes in education obviously play important role in parental decisions regarding the use of educational services. In any case, the study of the transgenerational characteristics of shadow education may be another valuable direction of shadow education research in the future.

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## REFERENCES

- Amano, I. (1995). The examination hell and school violence: The dilemma of Japanese education today. In Shields, J.J. Jr. (Ed.), *Japanese schooling: Patterns of socialization, equality, and political control* (pp. 111–123). Pennsylvania: The Pennsylvania University Press.
- Bray, M. (1999). *The shadow education system: Private tutoring and its implications for planners*. Paris: UNESCO International Institute for Educational Planning.
- Bray, M. (2010). Blurring boundaries: The growing visibility, evolving forms and complex implications of private supplementary tutoring. *Orbis Schoale*, 4(6), 61–73.



- Bray, M., Kwo, O., & Jokić, B. (2015). Introduction. In Bray, M., Kwo, O., & Jokić, B. (Eds.), *Researching private supplementary tutoring: Methodological lessons from diverse cultures* (pp. 3–19). Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Dordrecht: Springer.
- Bray, M., & Lykins, C. (2012). *Shadow education: Private supplementary tutoring and its implications for policy makers in Asia*. Hong Kong: Comparative Education Research Centre, The University of Hong Kong, and Mandaluyong City: Asian Development Bank.
- Choi, J. (2018). The hegemony of Tokyo imperial university and the paradox of meritocracy in modern Japan. *Journal of Japanese Studies*, 44(1), 89–116.
- Courtenay, M. J. (2013). *Culture & competition: A study of supplementary education in Taiwan*. Durham: Durham University. Durham E-Theses Online: <http://etheses.dur.ac.uk/6906/>.
- Entrich, S. R. (2015). The decision for shadow education in Japan: Students' choice or parents' pressure. *Social Science Japan Journal*, 18(2), 193–216.
- Entrich, S. R. (2016). *Shadow education in Japan: An instrument to neutralize disadvantaged family background: The second schooling system's contributions to educational opportunities*. Ph.D. dissertation. Potsdam: University of Potsdam.
- Entrich, S. R. (2018). *Shadow education and social inequalities in Japan: Evolving patterns and conceptual implications*. Cham: Springer.
- Frost, P. (1991). Examination hell. In Beauchamp, E. R. (Ed.), *Windows on Japanese education* (pp. 209–228). New York: Greenwood.
- Fülöp, M. (2004). Competition as a culturally constructed concept. In Baillie, C., Dunn, E., & Zheng, Y. (Eds.), *Travelling facts: The social construction, distribution, and accumulation of knowledge* (pp. 124–148). Frankfurt: Campus.
- Fülöp, M. (2006). Versengés a japán iskolában [competition in Japanese schools]. In Gordon Györi, J., *Az oktatás világa kelet és délkelet-áziában: Japán és szingapúr* (pp. 333–364). Budapest: Gondolat Könyvkiadó.
- Fülöp, M. (2009). Happy and Unhappy Competitors: What Makes the Difference? *Psychological Topics*, 18(2), 345–367.
- Fülöp, M., & Gordon Györi, J. (2020). Árnýekoktatás és verseny: Magyar középiskolások és egyetemisták nézetei az árnyekoktatás és a verseny kapcsolatáról [shadow education and competition: Hungarian high school and university students' views on the relationship between shadow education and competition]. *Magyar Pedagógia*, in print.
- Gordon Györi, J. (1998). Mitől hatékony még a japán oktatás: A hivatalos oktatási rendszer tanítási óráin kívüli képzés és oktatás Japánban [what makes Japanese education even more effective: Training and education outside of the formal education system in Japan]. *Magyar Pedagógia*, 98(4), 273–317.
- Gordon Györi, J. (2006). *Az oktatás világa kelet- és Délkelet-Ázsiában: Japán és Szingapúr* [The world of education in East and Southeast Asia: Japan and Singapore]. Budapest: Gondolat Könyvkiadó.
- Gordon Györi, J. (2008). Tömegoktatás és kiegészítő magánoktatás-ipar [Mass education and supplementary private education industry]. *Educatio*, 17(2), 253–274.
- Gordon Györi, J. (2020). Shadow education: Opportunity for development. *European Journal of Education*, 55(3), 305–310.
- Inkei, P., Koncz, G., & Pöcze, G. (1988). *The diversification of the educational field in Hungary*. Paris: UNESCO International Institute for Educational Planning (IIEP).
- Jung, H. (2012). *Education policy in Japan and neoliberalism: Focusing on the case of school choice*. Master Thesis. Graduate School of International Studies. Seoul: Seoul National University.



- Kariya, T. (2011). Japanese solutions to the equity and efficiency dilemma? Secondary schools, inequity and the arrival of 'universal' higher education, *Oxford Review of Education*, 37(2), 241–266, <https://doi.org/10.1080/03054985.2011.559388>.
- Kim, Y. C., & Jung, J. H. (2018). *Shadow education as worldwide curriculum studies*. Cham: Palgrave Macmillan.
- Knipprath, H. (2010). What PISA tells us about the quality and inequality of Japanese education in mathematics and science. *International Journal of Science and Mathematical Education*, 8, 389–408. <https://doi.org/10.1007/s10763-010-9196-5>.
- LeTendre, G. (1996). Youth and schooling in Japan: Competition with peers. *Berkeley Journal of Sociology*, 41, 103–136.
- Marimuthu, T., Singh, J. S., Ahmad, K., Lim, H. K., Mukherjee, H., Osman, S., et al. (1991). *Extra-school instruction, social equity and educational quality [in Malaysia]*. Singapore: International Development Research Centre.
- Mawer, K. M. (2018). *An investigation into the diversity of juku roles within Japanese education*. Osaka: Osaka University Knowledge Archive. <https://japanlinkcenter.org/jalc/linkSakiAnnaiOto/mRRidirect/index?doi=10.18910/72467>.
- Ozaki, M. (2015). *A juku childhood: Children's experiences in juku attendance and its relation to their well-being in Japan*. PhD Thesis. University of Bath.
- Rappleye, J., & Komatsu, H. (2018). Stereotypes as Anglo-American exam ritual: Comparisons of students' exam anxiety in East Asia, America, Australia, and the United Kingdom, *Oxford Review of Education*, 4(6), 730–754, <https://doi.org/10.1080/03054985.2018.1444598>.
- Roesgaard, M. H. (2006). *Japanese education and the cram school business: Functions, challenges and perspectives of the juku*. Copenhagen: NIAS Press.
- Rohlen, T. P. (1980). The juku phenomenon: An exploratory essay. *Journal of Japanese Studies*, 6(2), 207–242.
- Shintani, R. (2014). Juku as supplementary language education in Japan. *Waseda Global Forum*, 10, 347–374. <https://www.semanticscholar.org/paper/Juku-as-Supplementary-Language-Education-in-Japan-Shintani/6fa2c393d6b39ead0ecbfb0bddd2c5f4a4b64ec>.
- Stevenson, D. L., & Baker, D. P. (1992). Shadow education and allocation in formal schooling: Transition to university in Japan. *American Journal of Sociology*, 97(6), 1639–1657.
- Ukai Russell, N. (1997). Lessons from Japanese cram schools. In Cummings, W. K., & Altbach, P. G. (Eds.), *The challenge of Eastern Asian education* (pp. 153–170). New York: State University of New York Press.
- Yung, K. W. H. (2015). Learning English in the shadows: Understanding Chinese learners' experiences of private tutoring. *TESOL Quarterly*, 49(4), 707–732. <https://doi.org/10.1002/tesq.193>.
- Zeng, K. (1999). *Dragon gate: Competitive examinations and their consequences*. London: Cassell.
- Zhang, W., & Bray, M. (2020). Comparative research on shadow education: Achievements, challenges, and the agenda ahead. *European Journal of Education*, 55(3), 322–341.

