



## Pathways to college admissions: student strategies and class variations in activating cultural knowledge in Taiwan

Ruo-Fan Liu

To cite this article: Ruo-Fan Liu (2022) Pathways to college admissions: student strategies and class variations in activating cultural knowledge in Taiwan, *International Studies in Sociology of Education*, 31:3, 284-304, DOI: [10.1080/09620214.2020.1852882](https://doi.org/10.1080/09620214.2020.1852882)

To link to this article: <https://doi.org/10.1080/09620214.2020.1852882>



Published online: 04 Dec 2020.



Submit your article to this journal [↗](#)



Article views: 141



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 2 View citing articles [↗](#)

ARTICLE



## Pathways to college admissions: student strategies and class variations in activating cultural knowledge in Taiwan

Ruo-Fan Liu

Department of Sociology, University of Wisconsin at Madison, Madison, WI, USA

### ABSTRACT

Students attain cultural knowledge to navigate college admissions, yet few studies investigate when and how students activate this knowledge in a relatively transparent system. Drawing upon 26 Taiwanese student interviews, this study unveils how students strategically use available information to illuminate each step of the admission process. I compare how middle- and working-class students activate cultural knowledge in high-, average-, and low-scoring segments. I show that the notion of cultural knowledge varies according to institutional contexts. In Taiwan, it refers to basic knowledge of explicit, yet complex rules which are taken for granted by the privileged, rather than implicit knowledge of the opaque, behind-the-scenes aspects of the system. I find Taiwanese middle-class students with average test scores take advantage of the information transparency to dramatically modify their strategies to gain admissions from prestigious universities. Students in high- and low-scoring groups, however, utilize this knowledge at much lower levels.

### ARTICLE HISTORY

Received 26 June 2020  
Accepted 9 November 2020

### KEYWORDS

Cultural knowledge; college choice; information transparency

## Introduction

Cultural knowledge, the understanding of how institutions function, helps students negotiate with key institutions (Lareau, 2015; Lareau & Calarco, 2012). Students benefit from decoding the ‘rules of the game,’ including selection criteria, admission procedures, and implicit ways that rules operate in a given system (Calarco, 2014, 2018; Lareau, 2015; Lareau et al., 2016; McDonough, 1994, 1997, 2005; Reay, 1998). Many studies examine how students navigate the college admission process in opaque systems where rules are not explicitly addressed, and information is not widely available. Scholars presume that the information transparency will make the system more equitable, eliminating the role that class often plays in the college

**CONTACT** Ruo-Fan Liu  [mikki.liu@wisc.edu](mailto:mikki.liu@wisc.edu)

This article has been republished with minor changes. These changes do not impact the academic content of the article.

© 2020 Informa UK Limited, trading as Taylor & Francis Group

admissions process (Barone et al., 2017; Lareau, 2015; Lareau et al., 2016; McDonough, 2005; L. W. Perna, 2006; Silver & Roksa, 2017). Yet, little research is conducted on how students learn admission rules, apply such knowledge to play the game, and improvise strategies to procure favorable admission outcomes in a relatively transparent system. This study goes one step further to examine whether information transparency shifts the class landscape in admission competitions.

Drawing on in-depth interviews with 26 Taiwanese high schoolers who have completed the process, I investigate how students play the admission game in a relatively transparent system, where college entrance exam scores are key determinants and admission criteria are publicly accessible. I adopt Bourdieu's notion of field as a network of objectified relationships between occupants who possess different capital (Bourdieu & Clough, 1996, p. 141). Defining a field requires rules that regulate competitions, stakes which are competition products between players, and beliefs that players hold in investing in the game (Bourdieu & Wacquant, 1992). I further investigate whether alternative admission channels and information transparency of the Taiwan system equalize the game by designating alternative paths for the disadvantaged and by illuminating the opaque part of the system.

Scholars have addressed how cultural guiders transmit knowledge to assist students' college navigation; for example, middle-class parents teach children how to classify and judge higher education institutions to choose among available options (Ball & Vincent, 1998; Ball et al., 2002; Reay & Ball, 1998) and to search for information to illuminate opaque admission procedures (Hamilton et al., 2018; Lareau, 2000). Counselors guide students to package application materials and offer scarce information to expand the range of college possibilities (McDonough, 1994, pp. 432, 2005). In contrast, students who lack support often end up with fewer options and are misguided by meager, vague, and incorrect information (W. Perna & Jones, 2013; Person et al., 2006). However, these studies emphasize the role that adults play in transmitting knowledge, placing little emphasis on the students who receive and further activate knowledge to obtain admissions. When every player has equal access to admission information, how students activate such knowledge requires further scrutiny to understand the process of cultural reproduction.

Taiwan is the appropriate case to examine this issue for three reasons. First, since Taiwan expanded its higher education in 2000, the percentage of high school graduates who have successfully matriculated into a college increased from 67.7% in 2000 to 87% in 2017 (Shavit, 2007; Tsai et al., 2017). Thus, it is worthwhile to understand how students take advantage of these expanded opportunities. Second, Taiwan shifted from an exam-based admission system to a multi-channel system, which introduced alternative criteria, such as performance, extra-curricular activities, leadership, and

affirmative action policies (Chang et al., 2005; Jheng, 2017; Tien & Fu, 2009). The multi-channel reform not only creates leeway for the privileged to maneuver the system (Wong, 2017) but also allows indigenous and rural students to more easily obtain admissions from selective universities (Yap, 2018). How students, given their class, race, and regional backgrounds, improvise strategies after these spaces were created deserves further scrutiny. Third, Taiwanese policymakers made the admission criteria transparent and published it annually in a standardized format. The transparency presents the rules of the game to schools, families, and students and allows researchers to observe how students utilize available information to navigate through college.

I argue that despite the information transparency of the system, cultural knowledge plays a role and results in unequal outcomes when admissions are uncertain but not at risk. In this study, I sort students by high-, middle-, and low- scoring status by their college entrance exam scores to examine the opportunity structures they faced, and to what extent cultural knowledge alters their admission outcomes. I show that middle-class students rely considerably on cultural knowledge to gain admission to top-tier universities and desirable majors in the middle-scoring group, but less so in the high- and low-scoring groups. Second, among each group, the activation of cultural knowledge varies considerably by class. Middle-class students decode the rules of the game thoroughly and read beyond what institutions have revealed, whereas working-class students take rules at face value and sometimes are misguided by inconsistent information. These small missteps accumulate through time and modify students' admission outcomes. Third, I show that the levels of information transparency vary. To prevent affirmative action from being a targeted resentment and perceived as a backdoor by other social groups, the system reveals minimum information regarding affirmative action. As a result, indigenous students who are likely to benefit from information transparency are less likely to be able to activate such knowledge.

### **Playing admission games: cultural capital and college navigation**

I draw upon Bourdieu's theory to explain how students activate their cultural knowledge to navigate the system. Bourdieu views higher education as a field of power that reproduces the academic orders of institutions as well as the differentiation of disciplines (Bourdieu & Clough, 1996, p. 141). Following Bourdieu, scholars defined the transition of an individual from high school to college as the fields of college admissions (McDonough, 1994) where students compete for admission, pass screening phases by mobilizing their capital, and land themselves

a favorable future outcome in a competitive environment (Bathmaker et al., 2013).

Bourdieu was drawn to the metaphor of game to convey this sense of social life. He distinguishes ‘following the rules’ from ‘playing it well’ while identifying good from bad players. A good player has a sense of playing, knowing opponents’ strategies, and anticipating future actions of other players to improvise strategies (Bourdieu, 1990). Moreover, he views timing as crucial because each player improvises the next strategy after receiving the feedback on a prior action (Lamaison & Bourdieu, 1986). Players also face uncertainties as new situations emerge, which require the activation of knowledge (Bourdieu, 1990). This temporal process reveals how activating knowledge results in irreversible educational attainment outcomes between social classes.

I adopt Lareau’s notion of cultural knowledge to specify this type of cultural capital, specifically the understanding of formal rules and how rules operate (Lareau, 2015). I term the mobilization of cultural knowledge into two ways – self-aware about acquiring and mobilizing it versus an internalized understanding of the game and play it well without considering its operations (Bathmaker et al., 2013). I show how cultural knowledge is activated on the basis of the transparency levels in the admissions system and the consequences of activating such knowledge at each juncture in the process.

### **A level playing field: levels of transparency in multi-channel admission reforms**

Higher education in Taiwan is a centralized and state-governed field. In 2018, there were 126 universities in Taiwan, including 45 public universities and 81 private universities. Public universities are more selective than private universities, given that the state funds public universities more to educate nation elites (Yu, 2018). The average tuition of a public university is around 49,294 TWN dollars (1,699 USD), whereas the cost of a private university is double. College selectivity is determined by the minimum level of entry scores, and it determines the hierarchy of universities and the ranking of majors.

Previously, students relied on their exam scores to be admitted to a college. Yet, the multi-channel reform created opportunities for advantaged and disadvantaged students to maneuver the system. Among the total 107,753 slots in 2018, 48.65% were from the self-application channel, 13.94% were from the school nomination channel, and 37.94% were from the examination channel.<sup>1</sup> In this system, students are able to select among suitable channels to apply for college and assess their chances of being admitted in multi-phase selections

(Chou & Ching, 2012). Each channel has its own criteria, selection rules, and screening stages.

Taiwanese high schoolers are required to take the General Standard Academic Test (GSAT) before selecting a channel. The GSAT is held annually in February to test students' academic abilities on the basis of what they learned in the first and the second years of high school. The GSAT tests five exam subjects, namely, Chinese literature, English, math, natural science, and social science. Students receive three score indicators on their official transcript: GSAT substantial scores, GSAT score, and GSAT score rank. GSAT substantial score has 100 points total. GSAT score is calculated by the total substantial scores divided by 15 levels. Each exam subject is worth 15 points, and the total GSAT is 75 points. GSAT score rank is counted by the percentage of exam takers who received the same GSAT score. GSAT score rank is divided by five, including top rank (12 percentile), second rank (25 percentile), third rank (50 percentile), fourth rank (75 percentile), and fifth rank (12 percentile). Students rely on these GSAT score indicators to decide which channels to pursue.

The self-application channel allows students who have specific interests but did not score well to provide supplemental materials for consideration. This channel comprises two selection phases. The first-round relies on GSAT score thresholds, which will automatically exclude some candidates. The second-round selection relies on non-test materials, such as résumé, personal statements, academic essays, and oral interviews. A student's total score from the two stages will be combined on the basis of the ratios constructed by each university department, and the composite score determines whether students will be admitted. Students apply for six college options, and only those who pass the first-round selection can advance to the second-round selection. Most of the first-round selection criteria are explicit, such as GSAT score thresholds and the ratio of composite scores set up by each department. The second-round criteria are implicit, such as evaluation criteria for non-test performances.

The school nomination channel aims to reduce the opportunity gap between rural and urban students. It allows high schools to nominate candidates for a few slots that prestigious universities have reserved for each high school (Luoh, 2018; Yap, 2018). This channel prioritizes school rank, an accumulative rank comprised of student grade point averages earned in the first and the second years of high school, over GSAT scores. Depending on the criteria constructed by each university, students who score in the top 50% of a school cohort are eligible to be

nominated. However, each school can only nominate one student for each school within each university. Once students have passed the first-round selection, which uses school rank to determine whom to be nominated, students compare their GSAT scores to candidates who are nominated by other high schools for limited admission openings. Students can access information about their own school rank and competition rules. However, other candidates' preferences and their scores is difficult to access.

If high schoolers do not attain admissions via two early admission channels, they take a Joint College Entrance Examination (JCEE) in July and utilize the late admissions channel. The JCEE is harder than the GSAT and tests what students have learned in three years of high school, including subject exams in chemistry, physics, biology, history, and geography, which were integrated into the GSAT as natural and social sciences. The full score in each JCEE subject exam is 100 points. Students who utilize the late admissions channel apply for 100 college options at maximum through a system known as 'submission through guessing' (Wang & Huang, 2010). The system matches each student with a particular department on the basis of score-weighting scales designated by departments and the students' preference lists. In the examination channel, information on the minimum acceptable score and weighing scales constructed by each department in previous years is accessible. However, the number of competitors and their scores this year are not accessible.

The system includes affirmative action options, which can be utilized by students of indigenous heritage. These options include 'boosting admission scores' or 'mandatory quotas' (Tsai, 2005). After legally certifying their indigenous heritage, indigenous students can choose 'mandatory quotas' that reserve seats for people with indigenous heritage via the self-application channel or the 'boosting admission scores' option via the examination channel, which multiplies their scores by 1.35 to boost their chances of being admitted at a selective university. The former lacks transparency because students will never know score thresholds because the information is not publicized, whereas the latter is explicit.

Ultimately, the multi-channel reform creates a setting that clearly distinguishes explicit and implicit parts of the system – formal rules are widely recognized but how rules operate are not. Such transparency varies as students undergo multiple phases of the selection process. The levels of transparency of the system and each phase of the selection process creates a setting where students could activate cultural knowledge to negotiate admissions from selective universities and prestigious majors.

**Table 1.** Multi-channel college admissions.

Stages of Selection	Self-Application	School-Nomination	Examination
Total Seats Available in 2018	48.65%	13.94%	37.40%
Selection Mechanisms	1st stage: a qualifying round based on applicants' GSAT score. 2nd stage: departments demand additional items (e.g., interviews, personal statements, essays, and so on) and evaluate them.	1st stage: a qualifying round based on applicants' percentile rank of their high school accumulated grades. 2nd stage: departments compare applicant's GSAT scores and school rank to decide which school nominators to be admitted.	1st stage: students fill out their preference lists (maximum 100 options). 2nd stage: each department weighs subject scores and the system matches students' scores with departments' weighing scale.
Affirmative Action Final Criteria	Indigenous quota GSAT scores and non-test-based scores	N/A School rank and GSAT scores	Multiply JCEE scores*1.3 JCEE weighted total scores

## Data and methods

### Research design

I interview 26 12<sup>th</sup> graders who graduated in 2018 and have gone through the admission processes to explore their college-going trajectories. I place students into three groups on the basis of their self-reported GSAT scores: a high-scoring group who scored above the top 10 percentile; a middle-scoring group who scored above the average but has not reached the top score status, which ranged from the 50th percentile to top 10 percentile; and a low-scoring group who are below the 50th percentile, which is equal to or under 50 points out of 75 points.<sup>2</sup> Within each score-status group, I recruited middle- and working-class students to compare class variations in knowledge activation. I define students' social class in terms of the highest level of education attained by a household member, to further distinguish whether parents could offer support or transmit cultural capital to guide students in the admission processes.<sup>3</sup> Middle-class is defined by at least one of their parents with a college degree, whereas working-class is defined by no parents with college degrees. Among the 26 individual interviewees, eight scored high, 13 scored in the middle range, and five scored below average.

To recruit students who scored high, I posted a recruitment statement on my Facebook wall. I reached out to high-scoring students via personal networks because many of my Facebook friends graduated from prestigious universities and were willing to share my invitation. To recruit middle-scoring and low-scoring groups, I asked two rural



high school teachers to post the recruitment statement on their Facebook walls.<sup>4</sup> Each interview takes one hour in a public space. I asked about college admission experiences, the channels by which they attained admissions, GSAT scores and JCEE scores (if applicable), and how they analyzed information. I separated students' backgrounds into two ethnic categories: Han, the majority population in Taiwan, and the indigenous population who lived in Taiwan before the Han arrived. One-third of the students are from elite high schools in northern Taiwan, whereas two-third of them are from rural high schools in eastern Taiwan. I transcribed each interview verbatim and identified students' each step of activation and the consequence of the selection process to see whether the knowledge activation results in favorable outcomes in each scoring group.

### *Sample description*

Table 2 describes each student's score status, social-class background, and admission channels. Middle-class students are overrepresented in the high-scoring group. Only two of the students who scored high are working-class, and none is indigenous. Among students who scored in the middle range, half are middle class and the other half are working class. For the low-scoring group, working-class and indigenous students are overrepresented. Most of the students in the high-score status group attained admissions via early admission channels. Students in the middle-ranged scoring group utilized various channels to apply for college. For students who scored below the average, they mostly obtained admissions through affirmative action and the late admission channel.

### **Mapping success to college admissions**

I identified three types of college-going pathways on the basis of students' score-statuses: a college highway, a bumpy pathway, and an unmapped backroad to further examine how cultural knowledge operates when students receive high, average, and low scores. I highlight eight of the 26 cases to showcase how middle- and working-class students activate their knowledge to procure favorable outcomes. Although middle-class students, with their familiarity of the rules of the game, are likely to have smooth-sailing experiences (Botas & Huisman, 2013; Davies et al., 2014; Dirk & Gelderblom, 2017; Sullivan, 2017), I find that middle-class students benefit dramatically by decoding the rules of the game in a bumpy pathway but less so in the college highway or unmapped backroad.



Table 2. Interviewee backgrounds.

Score Status	Name	University	Major	Scores	Admission Channel	Social Class	Race/Ethnicity
High	Jia-Min	Private Medical School	School of Medicine	74	Self-Application	Middle	Han
	Zong-Yi	Top-tier public university	Mechanical Engineering	73	Self-Application	Middle	Han
	Jing	Top-tier public university	Foreign Literatures	72	Examination	Middle	Han
	Yun-Syuan	Top-tier public university	Psychology	72	Self-Application	Middle	Han
	Han-Chen	Top-tier public university	Sociology	71	Self-Application	Middle	Han
	Li-Sing	Top-tier public university	Chemistry	70	Self-Application	Middle	Han
	Guan-Yi	Top-tier public university	Math	73	Self-Application	Working	Han
	Jia-Jia	Top-tier public university	Political Science	70	Self-Application	Working	Han
	Yen-Kai	Top-tier public university	Engineering	68	School-Nomination	Middle	Han
	Syun-Yu	Second-tier public university	Education	68	Self-Application	Middle	Han
Middle	Fan-Kan	Top-tier public university	Agriculture	68	Self-Application	Working	Han
	Kai	Top-tier public university	Human Science	65	Self-Application	Middle	Han
	Li-Hong	Second-tier public university	Math	59	Examination	Middle	Han
	Pei-Yu	Second-tier public university	English Literature	55	Examination	Middle	Han
	Chun	Second-tier public university	Adult Education	55	Self-Application	Middle	Han
	Yi-Jhen	Top-tier public university	Social Science	61	Self-Application	Working	Han
	Jyu-Wei	Third-tier public university	Agricultural Chemistry	60	Examination	Working	Han
	Yin-Ting	Top-tier public university	Pharmacy	68	Affirmative	Working	Indigenous
	You-Peng	Top-tier public university	Economics	66	Self-Application	Working	Han
	Jhen	Second-tier public university	Social Work	59	Examination	Working	Han
Low	Yi-Fang	Top-tier public university	Physics	69	Examination	Working	Han
	Yi	Third-tier private university	French	50	Examination	Middle	Han
	Zhi-Min	Third-tier private university	Marketing	50	Self-Application	Working	Han
	Yu-Ting	Second-tier public university	Sociology	46	Affirmative	Working	Indigenous
	Peng-Jia	Second-tier public university	Physical Education	27	Affirmative	Working	Indigenous
	Ting	Third-tier private university	Finance	30	Self-Application	Working	Indigenous

### *Accessing a college highway*

High-scoring students navigate through college smoothly, regardless of their social background. Jia-Jia was a working-class student who earned a GSAT score of 70 out of 75 points. She received full points in Chinese literature, English, and social science, but obtained 14 points in math and 11 points in natural science. After receiving her transcript, Jia-Jia decided to apply for college by the self-application channel, which prioritizes GSAT scores rather than school rank because her school rank is far below the 90 percentile of her GSAT score rank. She compared her subject scores with prior admitted scores and submitted six college applications. However, she only passed five and was turned down by her top choice, the Sociology Department at the National Taiwan University (NTU) because the score threshold increased one point that year. When she entered the second-round selection of the oral exam, she borrowed alumni's application essays from the school counselor and imitated the structure of those admission essays. She was interviewed by the political science, anthropology, and journalism departments from NTU and gained admissions at her second choice, the political science department at NTU, the most prestigious university in Taiwan. Although she had no familial resources to either hire tutors or pay for private college counselors, she navigated through college admissions by mostly relying on school resources and available information in college brochures.

“I was surprised I did not pass the first round of my top choice because I compared prior admitted scores with my scores this year. I read through successful examples borrowed from the counselor office, learned how to structure admission essays, and practiced mock oral interview questions to prepare for the second-round of competition. I was confident throughout the whole process that I feel if I prepare step by step, I will achieve my goal.”

Compared to Jia-Jia, Zong-Yi, a middle-class student with a score of 73 on the GSAT, utilized a wider variety of resources and looked for information beyond the published information. He decided to apply via the self-application channel, and evaluated his chances of passing through the first-round competition case-by-case. He carefully examined the rules of the game and prioritized his score rank rather than score points to assess his chances for success before sending out six applications.

“I lost a point in math and a point in social science. I converted my GSAT scores into 100 substantial points to assess my admission possibilities. I earned 93 points out of the total 100 in GSAT exam. If math is hard, 93 points will be converted into 15 GSAT points. But I only got 14 points, which means this year everyone competed with me earned 100 substantial points to pass through the first-round competition. I decided not to waste my admission slot for electronic engineering in NTU because I know I would not pass. I prepared oral examinations with ease and enjoyed the

conversation. I read through my essays by adopting professors' views and let professors ask questions I was able to showcase my ability. I got everything, and we call people who earn five admissions 'five champions'."

Zong-Yi received full support from family and school. Both of his parents were college graduates and have cultural and social capital to guide him through the process. His father invited his friend, who is a dentist, to share career information in the medical school, despite his reluctance to be a dentist. Not only his parents helped him prepare for oral exams at home, but also the admission knowledge accumulated by the counselor's office supported him to access sample essays, oral exam questions, and mock answers to illuminate the opaque part of the second selection phase. He compared himself with other competitors by using his GSAT score rank to assess his relative competition standing. He, too, ended up at NTU, given the sufficient support of economic, social, and cultural capitals from his family.

Middle- and working-class students with high GSAT scores navigate through college admissions smoothly, although the process works somewhat differently due to their class backgrounds. Jia-Jia and Zong-Yi attended elite high schools and chose the self-application channel to apply for college and obtained early admissions at NTU. Zong-Yi's ability to read through the rules of the game helped him gain admittance at all six schools in the first-round competition, compared to Jia-Jia who lost out on one, by only evaluating the explicit information that institutions revealed. When they encountered situations in which personal performance admissions criteria were not explicit, Jia-Jia worked hard to imitate successful admission essays, whereas Zong-Yi also utilized his cultural capital. For high-scoring students, knowledge is sufficient but not necessary to navigate through admissions. The small missteps of Jia-Jia did not change her educational attainment outcomes. With minimum amount of information and high scores, both of them navigated through college and attained early admissions.

### *Encountering a bumpy pathway*

I use the bumpy pathway to describe hurdles that the middle-scoring group encounters. In Taiwan, most of the top-tier universities require students to earn a GSAT subject score rank of at least above the 75th percentile in Chinese Literature, English, and Math. However, in 2018, only 25% of exam takers earned subject scores equal to or higher than the 75th percentile (which means 13 GSAT points). These criteria create the first hurdle for students who scored above average but not at the top. Although scores are non-negotiable, channels through which to apply for college and

departments which give five exam subjects different weights are negotiable. In this context, students rely on their cultural knowledge to foresee which college option in which channel is a better filter to package themselves as competitive candidates and further activate their cultural knowledge to smooth the bumps in the pathway.

Among students who scored above average but not at the top, middle-class students expand their options with various strategies. Yen-Kai's parents are cram school teachers who offer supplemental education for middle schoolers and both earned college degrees. Yen-Kai earned a 68 GSAT points. His aimed for engineering departments in top-tier universities. However, his scores were insufficient to apply for engineering or computer science departments at NTU via the self-application channel. Those departments have a minimum threshold of 70 based on previous admission records. Realizing that his score was weak, Yen-Kai consulted with a school counselor to understand the rules of each admission channel to seek other alternatives. While comparing the school-nomination channel and self-application channel, he noticed that he was in the top 1% in his school, which offered him another institutional avenue, school rank, to improve his chance of being admitted. If he prioritized 'school rank' over 'GSAT scores' in the screening process, he could expand his chances of being admitted to top-tier universities by superseding his lower GSAT scores.

Yen-Kai: I considered the rules of the game carefully for the school nomination channel because if I made the wrong decision, I would lose my only chance. I checked with school teachers to understand whose school rank is higher than mine and figured out my competitor's university-major options. I know that students in the top 1% wanted to get into medical schools, and they did not want to go to engineering schools. The number six ranked student wanted engineering at NTU, so I could not compete with him because he had already claimed the seat. I was the top seventh ranked student so I declared for the electronics engineering department at National Chiao-Tung University, which is also a top-tier university, but ranked lower than NTU.

Yen-Kai's cultural knowledge not only smoothed his bumpy pathway but also eliminated some of the uncertainties he may encounter. He activated cultural knowledge before applying for college and gathered information related to each channel's selection process and his likely competitors. The former is accessible for all high schoolers, whereas the latter is not publicized. He actively sought help from multiple actors and identified key actors, such as school counselors and classmates, to discover other individuals' preferences and competitors' school rank. He then matched individual information with institutional information to predict his chances of success. Using cultural knowledge, he played the game thoroughly step by step, and each resulted in the next successful

outcome. He chose a way to signal his school academic performance to avoid potential disadvantages from his GSAT scores. Then, he surveyed his likely competitors to anticipate his chances of getting into his top choice. He was admitted into electronic engineering at NCTU, which requires 73 GSAT in the self-application channel, much higher than his score of 68.

In contrast, Jyu-Wei, a working-class student, gave up the early admission channels. His father is a truck driver and his mother works irregularly at restaurants; neither had a college degree. Jyu-Wei's parents did not offer guidance throughout the process. He obtained 60 GSAT points, but he was unsatisfied with that score and turned to the late admission channel, which required him to take a second test – the JCEE exam. When I asked him why not take advantage of the early admission channels, he explained:

“The self-application channel is unfair. Elite high schoolers have done multiple things that can be listed on their CVs, but I had nothing and had to prepare in a very short time. But I regretted I did not try because I am good at talking and professors will like me during the oral examination.”

Jyu-Wei took the rules at the face value rather than attempting to understand rules deeply. His inability to read beyond what institutions have revealed prevented him from seeking early admission opportunities. He gave up early admissions because he thought his GSAT scores are weak, yet 60 points is above the 80th percentile of exam takers based on official statistics. Failing to assess his ‘real’ chances of getting in through early admissions, he relied on his perceptions about the fairness of each channel in determining whether to use it. When it came to the second selection phase, he thought the ‘oral examination’ on admission brochures tests people’s common oral skills. However, he failed to understand that faculty members look for candidates who ‘fit’ the discipline rather than people who are talkative. He failed to compare the ratio of exam scores and non-test performance scores constructed by university departments to find his best matches, which may prioritize exam scores in favor of his competition standing and requires minimum preparation of non-test performance. Jyu-Wei deferred early admission opportunities and turned to the JCEE exam. However, his score was not as good as his GSAT scores and ended up at a lower-tier university with a non-lucrative major.

The diverging outcomes between middle- and working-class students resulted from two essential differences. Yen-Kai and Jyu-Wei went to the same high school, but Yen-Kai actively sought help from school counselors, whereas Jyu-Wei relied on himself. Both obtained the same information provided by admission brochures, which presented score thresholds

and weighting scales from previous years. But Yen-Kai examined score indicators that each channel prioritized, whereas Jyu-Wei fixated on what he viewed as a low GSAT total score without considering his relative standing compared to others. Both scored above average but slightly below the threshold for the top-tier universities. However, when deciding application channels, middle-class students strategically choose channels which filter weaknesses that may hurt their applications, whereas working-class students tend to rule out opportunities that appear uncertain. When selecting and applying for specific departments, middle-class students not only utilize the available information, but also sought further information to decode the implicit part of the system. Working-class students' lack of tacit knowledge induced them to avoid risk, which compounded his uncertainty in subsequent steps. This suggests that when 'the rules of the game' are partially transparent, what varies is whether students can see what institutions do not actively reveal and take advantages of the transparency and the ambiguities of the rules to play the game thoroughly. For students who scored in the middle range, knowledge is not sufficient but necessary to navigate through the admission process.

### *Ending up on an unmapped backroad*

An unmapped backroad describes how students who scored below the average navigate the admissions process. Their chances in early admission competitions are low given that their scores are below the established thresholds. Regardless of whether they were to meet a score threshold or not, their supplemental materials must be strong to beat others in the second screening in the self-application channel. Even if they rank close to the 50% among their school cohorts, their chances of beating other applicants who earn better GSAT scores for the second round in the school nomination channel is low. Consequently, middle- and working-class students who scored low deferred their college goals and waited for the later JCEE exam in July. Taking the harder exam to earn better scores was their only strategy to snatch victory from the jaws of defeat.

While not much class variation exists in the low-scoring group due to score constraints, applying through an indigenous heritage may surmount the hurdles that result from low test scores. Indigenous students are eligible to utilize affirmative action in each channel. This specific screening mechanism establishes yet another layer of cultural knowledge that those with indigenous heritage can utilize. However, students who are likely to benefit from the cultural knowledge are less likely to obtain such knowledge.

Yu-Ting, a working-class, indigenous student, received a GSAT score of 42. Both her parents are from indigenous tribes and worked on tribal farms.

After getting her GSAT score, Yu-Ting looked at college brochures and decided to select departments which offered indigenous quotas. Since she did not know the minimum score thresholds her choices were based on little more than guesswork. She utilized the self-application channel and sent out six options. In the regular selection process, Yu-Ting competed with Han students and failed. In the indigenous quota competition, she competed with other indigenous students and was admitted. She attained an admission to the sociology program at a second-tier public university, which requires at least 55 points for Han students, but admitted her with the score of 42 points. This outcome was far better than the lower-tier private universities where her score would normally have been accepted. Even though she ended up being quite successful, she still suffered from opaque aspects of the process.

“There were a lot of things untold when I thought about ‘indigenous quotas.’ If I choose the self-application channel in a regular competition, I am sure about the score thresholds as well as lowest score requirements for each department. I would not waste my chance to apply for departments require higher scores than mine. However, you never know what scores you will need to win admissions for indigenous quota competitions. You never know who will compete with you and minimum scores are never released. You guess and pray before applying.”

To choose the affirmative action route is choosing to limit your access to information. Yu-Ting could not know the score requirements because that depends on other indigenous students who applied to the same department at the same university, which is unpredictable. She chose between departments that offered indigenous quotas, but have no options from engineering, nursing, and law departments which offer careers with high salaries. Without advice from her main teacher who had several indigenous students that have previously used this channel, she may end up in a fourth-tier private university without utilizing affirmative options.

Unlike Yu-Ting, who was lucky despite feeling constrained by the lack of information, Yi, a middle-class Han student who also scored low on the GSAT, was unable to overcome constraints from her low scores. Yi received a 50 on the GSAT and turned to the JCEE exam for later admissions. She explained after receiving her JCEE transcript, ‘I used several websites to predict my 100 options, assessed my likely competitors and compared prior admitted scores and my score ranks. But there is not much difference and I cannot decide beyond what my scores permit.’ Yi sought her best matches to bypass her poor math subject scores by looking for departments which do not weigh math in the examination channel. She assessed different types of weighting scales to seek for higher-tier universities, but she ended up in the Department of Languages at a fourth-tier private university. For low-scoring



groups, knowledge is insufficient but sometimes, especially for indigenous students, necessary to obtain better admission outcomes.

## Discussion and conclusion

High schoolers are first-time drivers on the road college. Cultural knowledge can act as a map for driving this road. Some drivers are better positioned to read this map than others; they are better at first accessing the map, and then reading the routes and deciding which one will bring them where they want to go. This study argues that knowledge activation matters and results in unequal outcomes when admissions are uncertain but not at risk. By comparing middle- and working-class students in three score-status groups, I show that class advantage is mediated by the activation of cultural knowledge and such advantages vary with students' score statuses.

The Taiwan case shows that the notion of cultural knowledge should be contextualized by institutional contexts. In the US, cultural knowledge refers to less explicit but subtle knowledge of how institutions operate (Calarco, 2014, 2018; Lareau, 2015; Lareau et al., 2016; McDonough, 1994, 1997, 2005; Sullivan, 2017). In Taiwan, cultural knowledge refers to more basic knowledge of explicit and complex rules that are taken for granted by the privileged (Byun et al., 2012; Chiang, 2018; Gao, 2011; Yamamoto & Brinton, 2010). This suggests that we should look at another dimension of cultural knowledge, not about the ability to illuminate the opaque part of the system, but about how to 'read' codified rules in a 'right way' and apply it 'correctly' into competition standings, which is often taken for granted by the dominant groups but requires effort to decode it.

Through contextualizing how cultural knowledge works in Taiwan, I argue that even though the system aims at transparency by informing students admission criteria, the rules of the channels, and selection phases, still, not all students are able to utilize this information transparency equally. Among three score-status groups, middle-class students learned how to prioritize different GSAT indicators to anticipate their relative positions compared with national competitors, carefully select different channels to surpass their insufficient scores, and further identify where to seek additional information. In contrast, working-class students take the rules at surface value and may be misguided by the explicit rules, such as using absolute score points to assess admission chances as well as perceiving oral exam as looking for 'talkative' candidates. This restates Bourdieu's distinction between knowing the rules versus playing the game well. A good result cannot be achieved by mechanically following explicit rules, but by playing according to

rules, acting it to their interests while giving the appearance of obeying the rules(Lamaison & Bourdieu, 1986).

Regarding resources such as family and school, compared to the US, where middle-class parents actively participate in students' application processes and help children step by step (Lareau, 2015), the Taiwan case shows that families engage in students' college navigation in a more implicit way. Instead, schools serve as crucial avenues for college information. School teachers and counselors accumulate and pass on admission information from recent alumni. However, students must seek out such accumulated resources, and those who actively seek resources are middle-class students because they have a sense of entitlement of receiving help and getting accommodation(Lan, 2018).

Although knowledge activation varies by social class, other attributes, such as race and regional background also come into play in the affirmative options. This opens up another layer of institutional disadvantages for indigenous students. To prevent affirmative options from being a targeted resentment by other social groups, the Taiwan system reveals little information regarding affirmative action options, compared to regular channels. This creates a barrier because indigenous students who need those opportunities receive less information to activate it.

While this study mainly draws upon three typologies of score-status groups to examine whether activating cultural knowledge alters admission outcomes, I do not argue for causal inference. Further research is needed to test the intersections of score status, types of knowledge activation, and admission outcomes to better understand how institutional transformation changes the mediating roles that cultural knowledge play in sustaining class advantages.

## Notes

1. Cited from 2018 higher education statistic released by Taiwanese Education Bureau.
2. I term top 10 percentile as high score status because most of the top-tier universities require students to score above the 88 percentile to pass the first-round of selection. I define scores below 50 as low score status because this is below most of the score thresholds in the first-round of selection.
3. I share Putnam (2000), Calarco (2014), and Lareau (2015)'s definition of social class, using parental educational attainment to define student's social class. I adopt this approach because parental educational level is a strong indicator for the cultural environment that cultivates children's class behaviors.
4. Recruiting students via social network is beneficial because I can easily find middle- and working-class within the same high school to further examine family impacts. However, recruiting students via teachers' personal network may exclude students who do not closely interact with teachers or are unsatisfied about admission outcomes.

## Acknowledgments

My sincere thanks to those who have helped me frame this paper, particularly professors Mustafa Emirbayer, Eric Grodsky, Myra Marx Ferree, Lesley Barlett, Ting-Hong Wong, for their advice and encouragement. I am indebted to 26 Taiwanese students who shared their stories and two high school teachers who helped me recruit students. I would also like to thank the editor and the anonymous reviewers for their helpful feedback.

## Disclosure statement

No potential conflict of interest was reported by the author.

## Funding

This work was supported by the Institute for Regional and International Studies, University of Wisconsin at Madison [Fieldwork Award]; North America Taiwanese Professors' Association [Professor Liao-Shutsung Research Award].

## Notes on contributor

*Ruo-Fan Liu* is a Ph.D. candidate from the Department of Sociology at the University of Wisconsin at Madison. Her research focuses on higher education, student choices, and cultural reproduction. She examines how family members, teachers, and peers influence teens' college decision-making after higher education expansion and admission reforms, and how the processes are driven by social psychological mechanisms.

## References

- Ball, S. J., Davies, J., David, M., & Reay, D. (2002). 'Classification' and 'judgement': Social class and the 'cognitive structures' of choice of Higher Education. *British Journal of Sociology of Education*, 23(1), 51–72. <https://doi.org/10.1080/01425690120102854>
- Ball, S. J., & Vincent, C. (1998). 'I heard it on the grapevine': 'hot' knowledge and school choice. *British Journal of Sociology of Education*, 19(3), 377–400. <https://doi.org/10.1080/0142569980190307>
- Barone, C., Schizzerotto, A., Abbiati, G., & Argentin, G. (2017). Information barriers, social inequality, and plans for higher education: evidence from a field experiment. *European Sociological Review*, 33(1), 84–96. <https://doi.org/10.1093/esr/jcw050>
- Bathmaker, A.-M., Ingram, N., & Waller, R. (2013). Higher education, social class and the mobilisation of capitals: Recognising and playing the game. *British Journal of Sociology of Education*, 34(5–6), 723–743. <https://doi.org/10.1080/01425692.2013.816041>
- Botas, P. C. P., & Huisman, J. (2013). A Bourdieusian analysis of the participation of Polish students in the ERASMUS programme: Cultural and social capital perspectives. *Higher Education*, 66(6), 741–754. <https://doi.org/10.1007/s10734-013-9635-7>
- Bourdieu, P. (1990). *The logic of practice*. Stanford University Press. [http://tulips.ntu.edu.tw:1081/record=b1077644\\*cht](http://tulips.ntu.edu.tw:1081/record=b1077644*cht)
- Bourdieu, P., & Clough, L. C. (1996). *The state nobility: Elite schools in the field of power*. Stanford University Press.

- Bourdieu, P., & Wacquant, L. C. J. D. (1992). *An invitation to reflexive sociology*. University of Chicago Press.
- Byun, S. Y., Schofer, E., & Kim, K. K. (2012). Revisiting the role of cultural capital in East Asian educational systems: The case of South Korea. *Sociology of Education*, 85(3), 219–239. <https://doi.org/10.1177/0038040712447180>
- Calarco, J. M. (2014). Coached for the classroom parents' cultural transmission and children's reproduction of educational inequalities. *American Sociological Review*, 79(5), 1015–1037. <https://doi.org/10.1177/0003122414546931>
- Calarco, J. M. (2018). *Negotiating opportunities: How the middle class secures advantages in school*. Oxford University Press.
- Chang, D.-F., Yeh, L.-C., & Chang, I.-H. (2005). The multiple entrance programs for the universities and their impacts on the equality of opportunities. *Educational Policy Forum*, 8(2), 1–23. [http://db1n.sinica.edu.tw/textdb/tssci/listsrchpr.php?\\_op=?paperID:10602](http://db1n.sinica.edu.tw/textdb/tssci/listsrchpr.php?_op=?paperID:10602)
- Chiang, Y.-L. (2018). When things don't go as planned: contingencies, cultural capital, and parental involvement for Elite University Admission in China. *Comparative Education Review*, 62(4), 503–521. <https://doi.org/10.1086/699566>
- Chou C.P., Ching G. (2012) *East Asian and Taiwan Education in the Context of Worldwide Education Reform*. Taiwan Education at the Crossroad. International and Development Education. Palgrave Macmillan, New York. [https://doi.org/10.1057/9780230120143\\_4](https://doi.org/10.1057/9780230120143_4).
- Davies, P., Qiu, T., & Davies, N. M. (2014). Cultural and human capital, information and higher education choices. *Journal of Education Policy*, 29(6), 804–825. <https://doi.org/10.1080/02680939.2014.891762>
- Dirk, W. P., & Gelderblom, D. (2017). Higher education policy change and the hysteresis effect: Bourdieusian analysis of transformation at the site of a post-apartheid university. *Higher Education*, 74(2), 341–355. <https://doi.org/10.1007/s10734-016-0051-7>
- Gao, L. (2011). *Impacts of cultural capital on student college choice process in China*. Lexington Books.
- Hamilton, L., Roksa, J., & Nielsen, K. (2018). Providing a “Leg Up”: Parental involvement and opportunity hoarding in college. *Sociology of Education*, 91(2), 111–131. <https://doi.org/10.1177/0038040718759557>
- Jheng, Y.-J. (2017). Student's self-selection processes in a multi-channel admission system: A rational choice theory approach. *Taiwan Education Review Monthly*, 6(9), 248–254. <http://www.ater.org.tw/journal/article/6-9/free/13.pdf>
- Lamaison, P., & Bourdieu, P. (1986). From rules to strategies: An interview with pierre bourdieu. *Cultural Anthropology*, 1(1), 110–120. <https://doi.org/10.1525/can.1986.1.1.02a00060>
- Lan, P.-C. (2018). *Raising global families: Parenting, immigration, and class in Taiwan and the US*. Stanford University Press.
- Lareau, A. (2000). *Home advantage: Social class and parental intervention in elementary education*. Rowman & Littlefield Publishers. [http://tulips.ntu.edu.tw:1081/record=b3333327\\*cht](http://tulips.ntu.edu.tw:1081/record=b3333327*cht)
- Lareau, A. (2015). Cultural knowledge and social inequality. *American Sociological Review*, 80(1), 1–27. <https://doi.org/10.1177/0003122414565814>
- Lareau, A., & Calarco, J. M. (2012). Class, cultural capital, and institutions: The case of families and schools. In S. T. Fiske & H. R. Markus (Eds.), *Facing social class: How societal rank influences interaction* (pp. 61–86). Russell Sage Foundation.
- Lareau, A., Evans, S. A., & Yee, A. (2016). The rules of the game and the uncertain transmission of advantage: middle-class parents' search for an urban kindergarten. *Sociology of Education*, 89(4), 279–299. <https://doi.org/10.1177/0038040716669568>

- Luoh, M.-C. (2018). Who are NTU students? (2001-2014)-the effects of the multi-channel admission program. *Taiwan Economic Review*, 46(1), 47–95. [https://doi.org/10.6277/TER.201803\\_46\(1\).0002](https://doi.org/10.6277/TER.201803_46(1).0002)
- McDonough, M. (1994). Buying and selling higher-education - the social construction of the college applicant. *Journal of Higher Education*. 65(4), 427–446. <https://doi.org/10.2307/2943854>
- McDonough, M. (1997). *Choosing colleges: How social class and schools structure opportunity*. State University of New York Press.
- McDonough, M. (2005). Counseling matters: knowledge, assistance, and organizational commitment in college preparation. In Z. B. C. J. E. C. William & G. Tierney. (Eds.), *Preparing for college: Nine elements of effective outreach*. State University of New York Press (pp. 69–88). <https://search.library.wisc.edu/catalog/999975696702121>
- Perna, L. W. (2006). Studying college access and choice: a proposed conceptual model. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research* (pp. 99–157). Springer Netherlands. [https://doi.org/10.1007/1-4020-4512-3\\_3](https://doi.org/10.1007/1-4020-4512-3_3)
- Perna, W., & Jones, A. (2013). *The state of college access and completion: Improving college success for students from underrepresented groups*. Routledge.
- Person, A. E., Rosenbaum, J. E., & Deil-Amen, R. (2006). Student planning and information problems in different college structures. *Teachers College Record*, 108(3), 374–396. <https://doi.org/10.1111/j.1467-9620.2006.00655.x>
- Reay, D. (1998). 'Always knowing' and 'never being sure': Familial and institutional habituses and higher education choice. *Journal of Education Policy*, 13(4), 519–529. <https://doi.org/10.1080/0268093980130405>
- Reay, D., & Ball, S. J. (1998). Making their Minds Up': Family dynamics of school choice. *British Educational Research Journal*, 24(4), 431–448. <https://doi.org/10.1080/0141192980240405>
- Shavit, Y. (2007). *Stratification in higher education: A comparative study*. stanford University Press.
- Silver, B. R., & Roksa, J. (2017). Navigating uncertainty and responsibility: understanding inequality in the senior-year transition. *Journal of Student Affairs Research and Practice*, 54(3), 248–260. <https://doi.org/10.1080/19496591.2017.1331851>
- Sullivan, A. (2017). Cultural capital, cultural knowledge and ability. *Sociological Research Online*, 12(6), 1–14. <https://doi.org/10.5153/sro.1596>
- Tien, F.-H., & Fu, -T.-T. (2009). Multi-channel college entrance system: Relationship between family background, academic achievement and entrance channels. *Journal of Research in Education Sciences*, 54(1), 209–233. <https://doi.org/10.3966/2073753X2009035401008>
- Tsai, S.-L., Smith, M. L., & Hauser, R. M. (2017). Families, schools, and student achievement inequality: A multilevel MIMIC model approach. *Sociology of Education*, 90(1), 64–88. <https://doi.org/10.1177/0038040716683779>
- Tsai, W.-S. (2005). The study from the sociology of education to investigate the educational selection mechanism of college and senior high school of Taiwan. *Bulletin of Research on Elementary Education*, 13, 147–161. <https://doi.org/10.7038/BREE.200506.0147>
- Wang, -H.-H., & Huang, -C.-C. (2010). The application of self-determination theory on students' career choice and learning outcomes under the multiple college admission system. *Journal of Research in Education Sciences*, 55(2), 1–27. <https://doi.org/10.3966/2073753X2010065502001>
- Wong, T.-H. (2017). *Nine lectures on critical sociology of education*. Social Science Academic Press.

- Yamamoto, Y., & Brinton, M. C. (2010). Cultural capital in east asian educational systems: The case of Japan. *Sociology of Education*, 83(1), 67–83. <https://doi.org/10.1177/0038040709356567>
- Yap, K.-H. (2018). Does multi-channel college admission system benefit the upper middle class? *Taiwanese Journal of Sociology*, 64, 171–195. [https://dx.doi.org/10.6786/TJS.201812\\_\(64\).0004](https://dx.doi.org/10.6786/TJS.201812_(64).0004)
- Yu, P. (2018). The stratification of higher education in the USA and Taiwan: A comparative analysis of students' college-choice outcomes. *Compare: A Journal of Comparative and International Education*, 49(5), 1–23. <https://doi.org/10.1080/03057925.2018.1448971>