



Examining the Disconnect Between College Access and Choice: Low-income Chinese Students Amid Massification

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Abstract

Transitioning to higher education opens various possibilities. This qualitative inquiry adds depth to college choice processes by looking into the lives of low-income Chinese students. Semi-structured interview data obtained from 41 college borrowers representing diverse tiers of higher education was described and interpreted using reflexive thematic analysis. The findings, grounded in a conceptual framework that integrates economic and sociological constructs, indicate that student borrowers perceive college as a life-changing tool. Aligned ambitions, encompassing personal effort, parental commitment, and pursuing family honor, pave the way to college. Nonetheless, financial and sociocultural barriers stand in the way of progress. They go down alternative educational trajectories as opposed to the highest possible option. These include enrollment in inappropriate programs at unsuitable institutions caused by budget constraints and limited college knowledge. Thus, inequality reproduces through college admissions, undermining policy efforts to expand education access and equity. Low-income students need more than student loans to fulfill their full academic potential. Sustained, targeted outreach is required to expand access to and choice in higher education.

Keywords Cultural capital · Social inequality · College access · College choice · Student loans

Introduction

Massification has long boosted college access and choice (Tight, 2017), paralleling an increasingly diverse student population. Yet transitioning from high school to higher education is an intricate maze, particularly for those from socioeconomically

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disadvantaged backgrounds (Page & Scott-Clayton, 2016). Misinformation and sub-optimal decision-making are their primary obstacles (Ye, 2023). Those obstacles to massification have existed for decades, albeit in varying ways across admissions systems.

Following the massification that began at the turn of the century, China today possesses the world's largest centralized college admissions market (Ye, 2019). While a mandated entrance examination and a simplified application procedure characterize centralized admissions, college applicants are not guaranteed streamlined processing and placement. Often, it necessitates more sophisticated, strategic applications than decentralized systems. According to Ye (2019), three million applicants experience under-matching yearly. The majority belongs to marginalized demographics, including individuals from low-income households, underrepresented minorities, and those who are the first in their families to attend college.

These marginalized students often coincide with college borrowers. More than 5.3 million college students, primarily low-income students from less-developed midwestern provinces and ethnic minority regions, obtained student loans in 2021 (China's Ministry of Education, 2022). State-sponsored student loans are classified as need-based aid and are restricted to economically disadvantaged students with annual loan levels of RMB 12,000 (USD 1,715). Interest is fully subsidized during college and discounted after graduation.

Prior literature (Zhang, 2023) has addressed debt attitudes and solutions under massification, but much less is known about the decision-making process: Whether and where to go to college. College choice is inextricably tied to their college experience and career outcome (Patnaik et al., 2022). It can affect repayment arrangements (Zhang, 2023) by shifting the debt burden and related risks to borrowers. Given the cohort's size and uniqueness, studying college borrowers can provide valuable insights into unequal education through massification. This qualitative study aims to add depth to the complexities of their college choice. Two research questions guide the inquiry: What motivates low-income Chinese students to borrow for college? How do they decide on their college?

Policy Context

On June 7th and 8th every year, millions of Chinese teenagers sit for perhaps the most important exam of their lives—the *gaokao*, China's national college entrance examination. These *gaokao* candidates and their re-sitting peers represent some 10 million students nationwide who compete for over 8 million college seats (Howlett, 2022b; Ye, 2019). As a more direct gauge of meritocracy, the *gaokao* is seen as facilitating fair competition, a societal commitment to education equity. In anthropological discourse, the *gaokao* symbolizes a fateful rite of passage, an expression of Chinese national identity (Howlett, 2022a).

Chinese authorities cast the *gaokao* as a scientific selection procedure that has become an integral and even more central part of a centralized college admissions system. College admissions proceed by institutional tier. Though varying from province to province, candidates must often fill out a form ranking their preferred

institutions and majors in multiple tiers once the *gaokao* results are posted. The top tier in the Chinese higher education landscape contains Project-985, 211, and double first-class national universities. Regional public and private four-year institutions are situated in tiers 2 and 3, respectively, with three-year technical colleges close after.

At most, five percent of universities are ranked top tier, making competition extremely fierce. In contrast, admission to private four-year universities and three-year vocational colleges is often practically open (Ye, 2019). This relates to stratification: Marginalized individuals face greater barriers to college admission, as evidenced by the underrepresentation of rural students at prestigious universities (Yeung, 2013).

Behind this increasing stratification are entry quotas. Institutions assign their college-major, or sometimes college-then-major, quotas by province. Students compete for college admissions with peers from the same province in the STEM/liberal arts track. Thereby, each province operates as an independent admissions district. Intra-provincial competition has also been accused of regional favoritism, with applicants from their home province getting more space than those from distant places (Liu, 2015).

Local financing for educational institutions has contributed to such protectionism (Liu, 2019) since the 1994 tax-sharing reform. In another aspect, local protection measures expose imbalances in regional socioeconomic development. The preeminent educational institutions, encompassing both secondary and tertiary levels, are predominantly in metropolitan cities. This effectively means that students privileged enough to reside in those areas are more adequately equipped for the *gaokao* and can enter the country's top-tier universities with scores lower than those required from other inland provinces (Liu, 2018). Put more bluntly, one to two percent of candidates from ordinary provinces now enter China's forty top universities (Project-985). Still, that proportion could double or even quadruple in municipalities, such as Beijing, Shanghai, and Tianjin (Howlett, 2022b).

Diverse educational services complicate matters further. Decades-long public tuition has averaged between RMB 5000 and 8000 (USD 715 to 1150) per year, owing primarily to direct state and local subsidies that maintain it below the total cost of provision. Yet private tuition is soaring. The average private program costs RMB 15,000 (USD 2150), with certain high-profile and advanced programs charging RMB 100,000 to 200,000 (USD 14,285 to 28,570) each year. Despite the availability of 22-year repayment options with a 5-year grace period, college borrowers still struggle to make informed decisions due to uncertainties surrounding cost-benefit calculations.

Alongside the sluggish economy, China's educated unemployment and under-employment rates are surging. Youth unemployment is four times higher than the national average, growing from 13.1% in 2019 to 21.3% in 2023 (Li, 2023). This erodes the connection between academic degrees and social standing, compromising the very essence of meritocracy and upward mobility (Howlett, 2022b).

Consequently, China's *gaokao* reform, in its endeavors to reinforce this cultural belief in meritocratic society and resolve the ongoing debate, exhibits a pendulum-like movement. The admissions system swung from a historically decentralized to a centralized approach. The current trend has evolved beyond the conventional binary

model into a phase of *soft centralization*. Eight versions of the 2022 college entrance examination were available countrywide in the name of better tailoring approaches to local knowledge and conditions. Moreover, the reforms revoked numerous local rules for playing bonus points. Candidates from rural and poverty-stricken areas may also benefit from special college enrollment programs designed to mitigate regional disparities. Nonetheless, the *gaokao* is still more challenging in provinces with dense populations than in others (Liu, 2018).

College applications also exemplify *soft centralization* reform. Previously, candidates were obligated to decide on their college and major preferences prior to their *gaokao* results, a pairing process that resembled a lottery (Howlett, 2022b). Now, colleges accept applications after students receive their scores, and some students are admitted without declaring their majors (college-then-major choice).

Centralized processing cuts application costs when applying to multiple colleges simultaneously but requires skilled data collection and analysis. Candidates must research, compare, and contrast hundreds of college possibilities within three to five days. While big data services can help equate individual *gaokao* scores with admission scores from prior years (Ye, 2019), additional variables require to be factored into a prediction of admission probability. The housing slump, for example, has reduced demand for civil engineering, whereas an economic downturn has made school teaching attractive. Individuals who exhibit conservative behavior may encounter academic undermatch. Overconfidence, however, multiplies the risk of rejection. Candidates must be more strategic to win.

Theoretical Framework

This study employs human capital theory and Bourdieu's cultural capital and reproduction framework to interpret disparities in higher education investment arising from unequal resource distribution. Human capital models attach particular importance to the willingness to invest in education and training that yields substantial economic returns to those directly involved. As an investment decision, educational attainment is subject to financial constraints and changing market circumstances (Becker, 1993). Individuals, for example, make college decisions when the prospective benefits surpass the expenditures. However, economic disparity can exacerbate financial restrictions for low-income households.

Responding to this, efficiency and equity concerns may justify subsidized student loans. Student loans compensate those vulnerable to financial market failures and convert latent demand into actual enrollment (Zhang, 2023). Student borrowing may create positive social externalities by targeting interventions to specific populations, such as first-generation college students or low-income households.

Nevertheless, the binding constraint remains noticeable. Those from lower socioeconomic backgrounds may be less motivated to pursue higher education (Dynarski, et al., 2022a). Colleges charging fees upfront can pose challenges, forcing potential benefits to be financially backloaded. Plus, intricate processes, unpredictable financial returns, and the obligation to repay debts can encourage present-oriented mindsets to stray from college (Dynarski, Nurshatayeva, et al., 2022b).

Creating liquidity through borrowing is insufficient to compensate for the underlying inadequacies that cause underinvestment in higher education. Further, increased college attendance through massification cannot, on its own, close the socioeconomic gap in educational achievement if inequalities persist (Blanden et al., 2022). Non-financial barriers to college have thus become debated not only in economics but also in sociological studies.

Conceptualizing cultural capital has been at the forefront of attempts to explain social reproduction through schooling (Davies et al., 2014). Bourdieu extended economic capital into a more symbolic realm, called cultural capital, by claiming that possession of capital forms the basis of social status (Bourdieu & Johnson, 1993). Middle- and upper-class people possess the most valuable forms of cultural capital (McDonough, 1997), whereas those lacking the requisite cultural capital may experience lower returns on education (Bourdieu & Passeron, 1990).

Bourdieu understood the legitimacy of particular capital through the field. Field functions as a social space containing different expressions of power (Bourdieu & Johnson, 1993). Agents with greater power dominate the field, while those with less power are subject to domination, resulting in a hierarchical power dynamic. Social agents draw on a range of capital to preserve or transform their inherent positions within existing power relations (Howlett, 2023).

The durable but transposable dispositions of social agents, or their habitus, affect practice and competition for interests in a given field (Bourdieu, 2002). The analogy “feel for the game” best characterizes habitus in Bourdieu’s metaphor (Bourdieu, 1990, p. 56). Habitus could be passively inherited family upbringing qualities, or a way of thinking affected by surrounding members. Social agents sense habitus only when there is a disjunction between habitus and field. Habitus–field disjuncture explains, from a Bourdieusian perspective, why working-class students struggle in college, an unfamiliar middle-class field.

In sum, economic and sociological explanations for expanding college access are often presented as conflicting. If, rather than just referring to college admission, access is defined as giving applicants a solid start at a college that corresponds to their interests and talents, then each theoretical perspective accounts for part of the story (Dynarski, Nurshatayeva, et al., 2022b). Cost-benefit reasoning and class-based habitus can be coupled as complementary approaches to understand the phenomenon further (Glaesser & Cooper, 2014; Liu, 2019; Perna, 2006). As explored in this study, college access is rational, but decision-making is often tied to available information, personal sentiment, and social connections. Unfortunately, few candidates know or can identify those nonmonetary aspects of college choice.

Literature Review

Perna (2006) proposed an integrated conceptual model for analyzing multiple pathways to college. Still rooted in human capital theory, this model anchored sociological analysis in four contextual layers: individual habitus, organizational habitus, higher education settings, and broader social, economic, and political contexts. Multiple context layers provide a rich lens for researching academic decision-making.

The government adheres to human capital kernels, narrowly conceptualizing college applicants as rational calculators whose choices are determined by tuition, quality, expenditure, and expected income (Callender & Dougherty, 2018).

The academic community has obtained better knowledge of heterogeneity in choice. According to Jacob et al. (2018), affluent students are more willing to pay for amenities, whereas high-achieving students prioritize academic quality. By contrast, an affordable college is of greater concern to students from more deprived backgrounds (Forsyth & Furlong, 2003). The cost of living is a major factor in whether an individual attends college (Rasmussen, 2006). Consequently, lower-income students attend colleges closer to home (Hoxby & Avery, 2013), and low-achieving students attend low-cost colleges, often for financial or familial reasons (Callender & Jackson, 2008; Ye, 2019).

Aside from financial constraints, students experience unequal access to information. Middle-class families can access more information sources, including college catalogs, parental guidance, peer networks, college reps, and private counseling services. Contrast this with low-income students' reliance on high school counselors and lower counselor-to-pupil ratios (Cabrera & La Nasa, 2000). Another aspect of information scarcity is the tendency to trust informal and word-of-mouth sources, potentially overwhelming rational decision-making (Callender & Jackson, 2008). Both scenarios can cause arbitrary college choices and, as a result, enrollment in inappropriate programs at improper institutions (Forsyth & Furlong, 2003).

Also, empirical evidence indicates that families with lower socioeconomic status exhibit reduced parental involvement, leaving underprivileged students with inadequate information and supervision for decision-making (Castleman & Goodman, 2018; Page & Scott-Clayton, 2016). There are two dimensions to parental involvement. The motivational dimension emphasizes that parents maintain high academic expectations for their children. The proactive dimension involves parental participation in school-related matters, college planning discussions, and college savings (Blanden et al., 2022). Lowered expectations and reduced participation lead to less ambitious educational pathways than privileged counterparts (Blanden et al., 2022; Liu, 2019). In this regard, delivering relevant information and intensive college counseling (Castleman & Goodman, 2018) to non-academic students is crucial.

China's situation is similar. Disadvantaged students with the most need for college information and expertise are, in fact, the least informed (Sier, 2021). Ye's (2019) large-scale randomized experiments also validated that the existing admissions system triggers widespread student-college undermatch. A good academic match is thus more likely to reflect divine favor (Howlett, 2022b). The influence of fate or luck renders arbitrary college choices more socially acceptable. Even so, research and policy have also called into question the college-going process and its capacity to serve a more diverse student body adequately. In Liu's (2015, 2018, 2019) research, the existing quota structure may already be unfair. Structural constraints restrict opportunities for higher education: Students from lagging regions cannot translate their academic success into the same educational aspirations as their more privileged peers.

Echoing Perna's (2006, p. 145) call for more research into "the experiences of more narrowly defined populations," research on college borrowers for reasons

of their vulnerable economic position, as well as historical and cultural factors (e.g., the cultural revolution, reform and opening up) in a Chinese context, makes this particular group more representative and inclusive. However, limited literature on the *undermatching* phenomenon among low-income Chinese students is available. This study aims to fill the gap by probing how student loan borrowers perceive their sociocultural positions during the application process.

Data and Method

This study explores the meanings that student borrowers constructed throughout the admissions procedure. To this end, it permits a constructivist paradigm and qualitative inquiry into participants' experiences. The constructivist paradigm posits that multiple realities are constructed through historical, social, and cultural interactions (Lincoln & Guba, 2016). Through reflexive analysis and interpretation of participants' narratives, sense-making activities enable the researcher to identify and characterize the parallels or underlying patterns of shared experience (Braun & Clarke, 2019).

Participant Recruitment

As the phenomenon under inquiry is targeted at gaining insight into college choice processes, this study relies primarily on semi-structured, face-to-face interviews to elicit active responses and intrinsic perspectives from study participants. After obtaining approval from the Human Research Ethics Committee, I proceeded to recruit student participants through WeChat and QQ groups (Chinese super social media apps), with permission from two levels of gatekeepers at the study site: college finance officers and student counselors.

Participants were recruited via stratified purposeful sampling based on specific criteria: They are undergraduates from various tiers of higher education who have borrowed out state-sponsored student loans. The rationale is that student borrowers may have diverse institution or program options as tuition burdens vary. Annual tuition fees in our samples ranged from 4500 to 45,000 yuan (USD 645-6450). This complexity adds layers to college choice processes.

The semi-structured interview protocol probed into decision-making processes and directed the conversation toward research questions. Data were gathered in three rounds: November 2019, April 2020 (pandemic outbreak), and February 2021 (data saturation). Forty-one participants were recruited from eight midwestern institutions in Chengdu, Chongqing, Hefei, and Wuhu, representing the main institutional types in Chinese higher education: three 4-year public universities, two 3-year public technical colleges, two 4-year private universities, and one 3-year private vocational college.

Participant Demographics

Twenty-two females and 19 males were the total participants. Thirty-seven participants were ethnic Han Chinese, and four belonged to minorities: the Tujia, Tibetan, and Uighur. The gender and ethnic distribution matched the Ministry of Education data: 51.7% of college students were female, and 9.7% were ethnic minorities as of 2019. They ranged in age from 21 to 23 years. Sixteen pursued humanities and social sciences degrees, and 25 entered STEM fields. Thirteen attended their associate degrees, and 28 were enrolled as undergraduates. Undergraduates who matriculated in Project-985, 211 institutions represented over half (15). The 41 participants qualified as first-generation college students for whom neither parent attended college. Over 85% of households comprised either an urban migrant laborer or a rural farmer. The household registration system, or *hukou*, categorized them into seven urban and 34 rural *hukou* holders. All potentially identifiable information is removed from the results, and individual names are pseudonymized during data reporting.

Data Analysis

Following a constructivist stance, I drew on Braun & Clarke's (2006, 2019) six-phase reflexive thematic analysis (TA) to describe and interpret data. The analytical process followed an organic and iterative nature of reflexive TA, in which guiding theories work as a lens through both latent and semantic coding, and the orientation of data interpretation is a combination of inductive and deductive reasoning.

The first phase of data familiarization occurred during transcription. All interviews were audio-recorded and transcribed verbatim using iFlyrec 3.0. Nonverbal cues like pauses, breaks, laughter, and tones of voice were also inserted from handwritten field notes. Each interview lasted fifty-five to seventy-five minutes. Transcripts from Word files (.docx) were imported into NVivo 11 Plus (Windows) to create memos in NVivo format. Such memos recorded my initial thoughts, feelings, and reflections on the data and their connections.

After a deep dive into the data, the workflow advances to phase two: generating initial codes. Coding identifies patterns of meaning across the dataset through details that participants disclose in their narratives and the similarities (or discrepancies) researchers interpret in their understanding (Braun & Clarke, 2006). The interview transcripts provide thick, thorough accounts of the phenomena under investigation, facilitating a two-layer coding procedure: line-by-line open coding and immediate focused coding (Corbin & Strauss, 2014).

Qualitative data contains multiple layers of meaning, and semantic and latent coding are integral to developing (sub-) themes. Latent coding becomes rather interpretive as it necessitates a more creative and reflexive role on the part of the researcher in eliciting hidden meanings (Braun & Clarke, 2019). Thus, in the third phase of generating themes, a collection of codes that share comparable qualities across individual narratives can be collated to form a (sub-) theme for presenting qualitative findings.

Theme development is a process that involves iteration and recursion. Candidate themes are not uncommon to be segmented, merged, or otherwise modified into new themes to expedite the fourth phase of refining themes. The refinement process is like data familiarization and coding in that the more thoroughly I read the transcripts and (re-) coded the data, the more diverse the thematic possibilities became.

During the fifth phase, I extracted engaging material from the descriptive content of participants' statements or the analytical interpretation of their comments to define and name themes. However, labeling one or two words and short phrases as themes in reflexive TA seems problematic because a single word cannot convey the meaningfulness of concepts and their interplay (Connelly & Peltzer, 2016). In this way, the participants and the researcher have become storytellers in qualitative inquiry, expressing factual details of life experiences through their narratives and interpretations. The iterative and recursive coding and theme development process has prepared the groundwork for documenting research outcomes. This is the final stage of reflexive TA, in which thematic maps logically and meaningfully organize (sub-) themes.

Results

Massification commonly sees access to college. Yet, it remains a national obsession. Howlett (2022a) notes that China's *gaokao* is a fateful rite of passage. Government backing, interest-free status, and manageable repayment schedules have all contributed to the image of student loans as low-risk financial products (Zhang, 2023). Thus, the passion for college has never waned; it offers life-changing chances and lucrative returns. Lower-income families prioritize equipping their children with a college education for this reason. The following details their college access and choice:

Borrowing Your Way to College

The impetus for student borrowers to pursue higher education stems from their desire for personal and professional development. The process entails human and social capital accumulation. Family commitment is another crucial factor. Additionally, massification makes access to higher education a necessity. Figure 1 depicts the themes and sub-themes related to college access.

College Education Perceived as Human Capital Accumulation

One primary motive for pursuing higher education is to establish oneself in the workforce. Our participants stated that more education would expand career options. From an optimistic perspective, the college degree, at best, was their open sesame to high-paying careers; pessimistically, it still represented a prerequisite for teaching and government work positions. Despite borrowing for education, they believed they

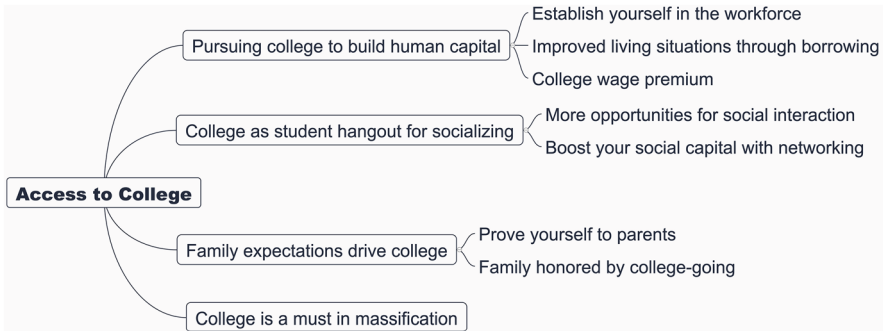


Fig. 1 Thematic map on college access

were better off than their non-college peers. As DU Fei spoke out about his bachelor's degree:

In my job search, it has become clear that [college] education is essential. The market is crowded with applicants. A college degree is not everything, but without one, you are promptly sent home for unqualified reasons ... Hiring starts with academic qualifications.

Moreover, participants commonly cited improved family living situations due to college borrowing. DING Xiang, a female student from rural Yunnan, used the metaphor of *carp leaping over the dragon's gate* to describe her college entry:

Very few villagers seized the chance to escape the mountains, ventured into big cities, and earned a living as physicians, civil servants, and white-collar officers. Those neighboring highfliers all went to college [borrowed] ... college is the best way out of the village.

Surprisingly, they disagreed on whether higher education results in higher incomes (college wage premium). SU Miao, a biology student, responded, "College is not about earning more money. Instead, college allows you to expand your horizons through engaging experiences." YU Ci, an economics major, observed an income gap between bachelor's degree holders and high school graduates. "My [non-college] peers are earning low wages. It could be five years or more before they are paid the same as me. I feel like where I start [my career] is where they end." He concluded, "Borrowing for college is worth it."

College as Student Hangout for Socializing

The second dominant motive is socialization. Many participants expressed excitement at the opportunity to be in a new place, make new friends, develop new social connections, and experience a new way of living. In that sense, student debt alleviated financial concerns and expanded opportunities for a full college experience. Part of this shift toward individual autonomy is a growing sense of personal well-being. YANG Yi, an art student, responded:

College is about more than doing lectures and assignments. The campus features a laid-back environment with free time ... Student loans free me from long hours. I can explore new things. I've met many interesting people around campus. We have similar values. We end up becoming buddies ... not like my childhood companions back home.

Socializing is identified as a means of acquiring social capital. DU Fei credited his quick job placement to his extensive social network. He used his 1500 social media friends from extracurricular activities to connect with alum groups: friendships and professional contacts open doors to future careers.

Parental Expectation and Family Honor Drive College

Eighteen out of 41 participants specified that parental contributions, including expenses related to private tutoring, facilitate access to college. For example, factory-working parents paid for LU Bo's weekend tutorials. "My parents are working themselves to the bone," she said. "They always pushed me to study hard ... That's a great fight to prove myself. I sweated blood trying to get into a top university, and I did."

In rural China, attending college is also a matter of *face* (social prestige), one of the glories of an extended family. WU Yue compared two large neighboring families with different educational pathways.

We were raised to study hard, enroll in college, and look for work [in the city]. But a nearby family often criticized us for borrowing money to send girls to college ... Their kids are now factory workers. One man was even jailed for drug abuse. ... We are different. Going to college is an honorable thing for my [extended] family. Putting education first saved us from having to live like that.

Therefore, access to higher education has become a family consensus. Parents perceive higher education as a route to economic mobility. Upward mobility is also tied to family honor. Children, in turn, internalize these messages and strive to get into college. Their mutual trust is reaffirmed when the children pass the *gaokao*. Despite their poverty, low-income families can borrow their way through college.

College is a Must

Surprisingly, some participants argued they probably had no option but to ride the wave. In an era of credentialism, "where any job requires a college degree." Massification has made higher education necessary for adulthood, so "you must do what everyone else does." They came to college straight out of high school for *compliance and conformity*. "College is now a must-have," ALAN Dorma from Shigatse, Tibet, remarked:

I've been confined to coursework and exams from grade school to high school, unprepared for real-life situations. Too long have I been battling to pass the

gaokao, so college is the only option. I'm unsure what to study, but I know I should go.

College Decision-making Process

Candidates apply to colleges based on their *gaokao* scores in China's educational meritocracy. Following acceptance, a uniformly produced brochure outlining available financial aid will be sent out with the admission letter. Despite the existence of *gaokao* as a robust social placement mechanism, our participants agreed that college choice is more than just academic transcripts. It pertained to individual preferences, family traditions, and career paths. However, their college selection process proved stressful, overwhelming, and involved.

Financial Constraints Restrict College Choice

Even if student loans can cover practically all public tuition and certain private courses, college expenses remain a major consideration. Over 65% of participants cited budget constraints as an impediment in picking a college or academic program, particularly among high-achievers admitted to Project-985, 211 institutions. HU Jing received a thirty-point reduction through independent enrollment, a supplement to, not a substitute for, *gaokao*. Financial constraints forced him to reconsider the cost of moving more than 2,000 miles from his rural home in Guangxi to reside in the capital city. He turned down the chance to study in Beijing.

It should be noted that the independent enrollment in which HU participated is precisely characterized by *soft centralization*. However, such devolution is widely perceived as succumbing to unscrupulous politics and special interests (Howlett, 2022a, b). Special admissions programs tailored to students residing in rural and impoverished regions have gradually supplanted independent enrollment.

Remarkably, high-achieving, low-income students make no bones about their preference for Sino-foreign cooperative programs. Six high-achievers specified that a joint international program would be their first choice if they were not cash-strapped. As ZHANG Yuan responded,

What I expect the most is to study abroad. I've been learning about the [co-op] program that entails a 50-50 split of time in China and overseas. Very attractive. I would have prepared for the TOEFL or IELTS by now if my family was well-off. Who wouldn't hold out for something bigger?

Average students also described their dilemma with college choice. With no access to public universities, the *gaokao* scores narrowed options to three-year vocational or four-year private academic education. The total tuition for an associate degree is less than RMB 20,000 (USD 2850). A bachelor's degree from a private program can cost double or even triple that amount. Credential inflation has meant that only those with bachelor's degrees or higher can compete for solid government or teaching employment. Conversely, an associate degree may not provide a pathway to an urban white-collar existence. However, deciding between affordable

tuition, higher name recognition, and greater emphasis on practical skills posed a real dilemma. WANG Hao from a technical college explained his way:

A few scores separated me from a [public] undergraduate program. The private university called me to see if I would study. A bachelor's sounds better, but I worry about no hands-on training there and the expensive RMB 18,000 (USD 2550) annual tuition. Technical [college] is practical. I can master something there.

Absence of Parental Involvement in Decision-making

As with any consequential life decision, college candidates should thoroughly weigh enrollment alternatives before making a well-considered decision. Candidates across provinces followed a similar approach, simultaneously applying to multiple colleges categorized as *reach*, *peer*, and *safe*. This delicate task requires expertise to verify details and content, adding another layer of complexity for low-income students. Our participants relied on word-of-mouth information, including what people they knew (e.g., neighbors, relatives, peers) were saying, to determine what and where to attend college. In this scenario, parental involvement was far less than anticipated. HUANG Yun, an agriculture major at a leading university, described his decision-making experience.

I've never heard of [tailored] admissions counseling ... Students like us need help getting information. Many excellent universities were within reach beyond the top dozen. But I'd never heard of those names, let alone know which program was a better fit ... Neither had my parents. They didn't get much schooling. They wanted me to get a secure job, maybe a government job. That's all they suggested.

ZHANG Yuan agreed that his family lacked college knowledge, "No, not in my book. Neither parent was helping," he added, "I'd go to a higher-ranked university if more [family] guidance were available."

Limited College Knowledge Causes Undermatch

Current admissions procedures often require applicants to declare a major upon application. Selecting a college major that corresponds with personal interests and long-term job aspirations can be formidable. Low-income families know little about college, much less what to major in. Only fifteen percent of participants (six out of 41) matriculated in their first-choice major at non-selective colleges. Many were reassigned to a less desirable option near the bottom of application lists. This is the trade-off for applying to multiple colleges concurrently, increasing acceptance but potentially getting into inappropriate programs.

Further, two-thirds of participants admitted that they decided on academic programs for less than adequate reasons: "I applied to college not knowing much about myself or my interests." Their approach to decision-making is naïve (Ye, 2019). "It

was just picking a major based on the names [listed in the college catalog],” recalled KUANG Jie. “I didn’t know biomedical science wasn’t training doctors.”

All this suggests that the old-fashioned strategy of relying on a brick-and-mortar college catalog for college information has failed. For starters, the college catalog is generic, not customized. The catalog includes enrollment figures and sticker prices but lacks curriculum, placement, and salary information. Second, inexperienced students often feel overwhelmed when sifting through brick-thick college catalogs. Worse, information gaps and the digital divide impede their access to practical knowledge needed for making more thoughtful choices. “Not every student owned a home computer, and cell phones were purchased in the first [college] year,” Huang Yun explained. Thus, many participants haphazardly made their college choices.

Some, however, proceeded in the sequence of much deliberation. Regrettably, undermatching still haunts them. In SHEN Meng’s case, he thoughtfully selected his program: personal interest, career path, and family finances. His father bitterly opposed his proposed plan. That opposition arises from families’ limited exposure to college and may be related to different parenting styles.

I was to sign up for a teacher training program, non-tuition-based, with a monthly living stipend. That way, I’d be financially independent. But my father thought I couldn’t confine myself to a teaching job [requiring six years of service] ... Ironically, the binding job [schoolteacher] my parents didn’t want me to do is now only open to individuals who have completed teacher training programs. I don’t even qualify.

Geography Matters

Again, it is a decision to attend a college close to home versus far away. The data suggest that staying close to home while attending college dominated the interviews. Twenty participants were in-province students, with eleven attending college in a neighboring province. Only nine participants belonged to out-of-province students who attended highly selective public universities.

Lower-performing students were more likely to remain in their home province. ZHU Xu was denied admission to a public university in Heilongjiang, China’s northernmost and easternmost province. “*Gaokao* scores limited [college] options,” he continued, “I couldn’t get into a good university. So I stayed in and saved on flying.”

In addition to round-trip tickets, participants examined living expenses in first-tier and well-developed coastal cities. “The living cost in Shanghai is far different from, say, Chongqing [in western China].” XIAO Mi traveled from Guizhou to the neighboring Chongqing for higher education, but still inside the southwest living circle. Higher *gaokao* scores indicate more educational options, while her geography perspective represents the propensity of high-achieving students who attended a nearby institution.

So, like, I started my application by crossing out universities in Shanghai and Fujian, where I’d heard living would cost much more ... The hustle and bustle of the city doesn’t interest me. Many institutions are clustered there. The com-

petition [for work] gets tougher. I favored Chongqing or Chengdu, cities that were less competitive, less expensive, and less homesick.

In contrast, out-of-staters considered college away from home an opportunity to satisfy their adolescent curiosities. In high school, DING Xiang set her sights on getting into a top university as a senior schoolmate informed her, “College is a chance to experience life far away. It may be your only shot. Grab it and see what’s out there.” She voiced a desire to explore urban living and viewed college as the time to make it happen. She unexpectedly pursued employment in her hometown following graduation. Perhaps *working-class localism*, namely interdependence, family obligations, and community connections, dissuades her from relocating (Callender & Jackson, 2008). Figure 2 illustrates the themes and sub-themes involved in college choice.

Discussion

The results illustrate that market principles come into play in college admissions (Becker, 1993). As education economists predicted, our participants recognize that attending college will bring financial and personal benefits. Degrees earned upon graduation are the critical differentiators that drive long-term returns in today’s knowledge-based economy.

As higher education transitions from elite to mass to universal, college-going culture also shapes a seating capacity in higher education. Higher education can be demand- and supply-driven, with student borrowing as a booster. This directly contributes to college graduate inflation in Chinese society. Hence, even those from lower socioeconomic backgrounds often take college education for granted.

Their personal and family aspirations resonate with Howlett’s (2022b) life-altering observations. The solid, opportunity-oriented belief is echoed in Liu’s (2019) findings on the link between college and career prospects. In our cases, college access positions these borrowers on a path to higher life opportunities. This follows economically underprivileged individuals striving to better their lives and scabble

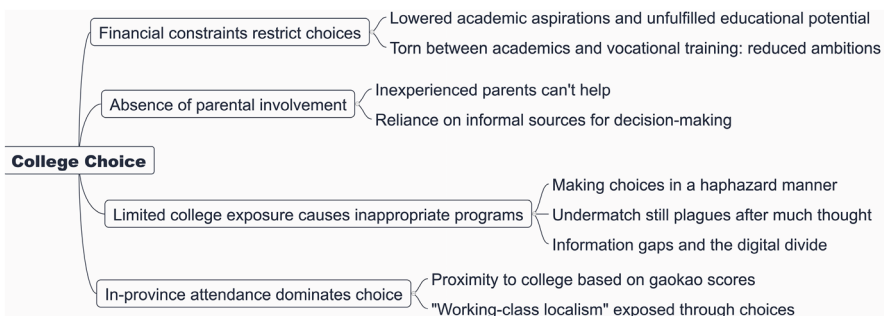


Fig. 2 Thematic map on college choice

up the social ladder (Sier, 2021). It parallels the view that the current Chinese class structure is less rigid than projected despite a *crystallization* trend (Hu & Wu, 2019).

The younger generation, in particular, internalizes their parents' selfless giving or altruism as a sense of self-efficacy in their personal aspirations and hard work. Their desire for upward mobility is part of an individualistic focus on self-improvement: pursuing happiness and personal satisfaction. This runs parallel to filial reciprocity tied to family responsibilities (Howlett, 2023). It is *aligned ambitions* (Ryan, 2012): family commitment and individual student effort make college possible.

Above all, *aligned ambitions* transcend amassing human capital. Borrowing for college is not simply contingent upon securing decent employment or a better living (traditional human capital understandings). It is also a pathway to new horizons, personal happiness, and social connectedness. *Aligned ambitions* ultimately translate social labor, including family input and personal endeavors, into *gaokao* scores. College access is then perceived as a steppingstone to upward mobility.

It may sound paradoxical, but it is true: securing admission to college does not guarantee success. Getting students into college and getting them a seamless transition to a college that suits their aptitudes and interests are two sides of the same coin (Dynarski, Nurshatayeva, et al., 2022b). Regrettably, the existing college admissions process fails to accommodate both.

If getting into college resembles a marathon race, then massification-era *gaokao* reforms foster more inclusive and expansive meritocratic competition. This meritocracy is mapped to the household level via *aligned ambitions* that get economically disadvantaged students through the first half. In the second half, though, arbitrary college choices deviate from the projected trajectories. The decision-making process of non-academic individuals is akin to an *accomplishment of natural growth* (Larreau, 2011).

This seemingly contradictory combination of *organic development* and *deliberate effort* abounds in accessing college for low-income families. For example, parents' aspirations for their children can range from paying for private tutoring to being left to decide on college without supervision. Likewise, the child may prove their worth to the parents by getting into college, or the child may haphazardly choose a college major not well-aligned with their academic and other potential. Consequently, access to higher education is sometimes an oxymoron: the *gaokao* allows mobility while reinforcing existing hierarchies.

Financial barriers to college are a very plausible explanation for this. This is especially true for high-achievers who, despite being academically competent, restrict their alternatives by overestimating living expenses (McDonough, 1997) outside their home province and by lacking relevant financial aid information to balance costs (Perna, 2006). Average students, on the other hand, assess college expenses against the short-term rewards of graduation rather than completing a bachelor's degree and maximizing their lifetime earning potential (Ye, 2019). Taken together, low-income students may experience real or perceived financial barriers that prohibit them from attending well-matched colleges and, as a result, lower their academic aspirations and fail to attain their educational potential.

Added to the puzzle is the timing of the financial aid brochure. The brochure is delivered alongside the acceptance letter long after submitting college applications.

Given that financial aid information arrives late in the choice process, student loans may fortify their determination to attend college (Zhang, 2023) while having minimal impact on early, consequential decisions about what and where to attend.

Information friction obscures college costs and benefits, not to mention that low-income students may possess limited knowledge about the process required to prepare for, apply to, and select a college (Dynarski, Page, et al., 2022a). Many students may lack access to practical information due to the digital divide. Others may feel overwhelmed by inadequate guidance or an authoritative parenting style (Blanden et al., 2022). These information silos and communication barriers create academic undermatch, altering their skill composition and future career trajectories (Patnaik et al., 2022).

From this perspective, information and knowledge accessibility have grown more crucial in influencing college choice as academic programs and financing options have multiplied under massification. Unfortunately, low-income students are ill-informed about their college-going opportunities (Sier, 2021). The results indicate that financial barriers are not the only ones causing concern. Non-financial barriers also contribute to this burdensome or confusing decision process, as those navigation skills are class-bound. For this reason, Bourdieu's sociological thinking about habitus, cultural capital, and the ways in which hierarchical society reproduces itself offers explanatory potential for understanding inequalities in college admissions.

College admissions is a sub-field of higher education that involves a thoughtful sorting process. Official and unofficial admission rules, or *intangibles*, can create barriers, not bridges, for underprivileged students. Individuals with reduced cultural capital are less likely to succeed in college admissions (Glaesser & Cooper, 2014) because their test scores cannot be translated into the same aspirational college choices as their more affluent peers (Liu, 2018). For instance, rarely do our participants realize that graduating from a more prestigious institution carries cultural capital. This institutionalized cultural capital (i.e., a bachelor's degree) symbolizes prestige, status, and identity.

Their middle-class peers, who possess more forms of capital, adopt a proactive and sophisticated information-seeking process to secure the best-fit tertiary choice, knowing that doing so will pay out in terms of social prestige and career advancement. They now largely monopolize purchasing customized admissions services. The issue is not the expense of admissions counseling but rather the level of awareness and willingness to pay for college guidance. In this context, class-based habitus delineates what is achievable for an individual's college choice (Horvat & Davis, 2011). Despite lessening liquidity constraints, college borrowers fail to unlock their full potential, resulting in continued underinvestment in higher education. College admissions then reinforce an unstated ideal of ruling-class privilege, offsetting policy efforts to expand access and choice (Fryer, 2016).

Conclusion

One approach to expanding college enrollment and diversity is through state-sponsored student loans. Massification offers less privileged Chinese a conceivable, albeit circuitous, route to social mobility (Howlett, 2023), where *aligned ambitions*

eventually make college possible. However, stratification in higher education can make two students with close *gaokao* scores vastly different: They would attend two campuses, go through unique college experiences, and ultimately receive separate returns on those college experiences. In this sense, meritocracy expands room for cultural capital in college admissions, thereby intensifying social reproduction (Liu, 2018, 2019).

Low-income households, as opposed to middle-class *concerted cultivation* (Larreau, 2011), rely more on *organic development* and *deliberate efforts* to access college. Lacking forms of capital, low-income students often experience challenges upon entering college: financial barriers, information friction, behavioral realities, and structural constraints (Dynarski, Nurshatayeva, et al., 2022b). These challenges are not mutually exclusive but may become more pronounced for particular individuals. Consequently, they are more likely to make errors in their decision-making process. Academic aspiration is sometimes stifled, resulting in underutilization of educational potential. Such academic undermatch exposes enduring socioeconomic disparities.

The tension between college access and choice implies that reliance on mass higher education alone cannot eliminate sociocultural inequalities in educational attainment. Likewise, simply equating college entry with upward mobility masks the complex nature of college decision-making processes. This study deconstructs the complexities surrounding constructs, factors, and patterns that may impede low-income students' success in college admissions. Exploring this complexity contributes to understanding college access and equity in China and elsewhere.

The study results also point to personalized counseling as the most promising policy lever to facilitate college choice (Ye, 2019). Empowering low-income families with college knowledge can guide them to the best fit for their interests, academics, and circumstances. Follow-up research, however, should examine the zero-sum consequences of competitiveness and exclusivity in college admissions that may restrict the efficacy of large-scale, tailored advising. Customized counseling can smooth college application processes, but structural constraints in higher education, such as navigating college as part of a continuum, require constant attention: how well their institution positions them for campus life and subsequent employment.

Some methodological limitations may have influenced the study results. Addressing tuition and institution-type variances adds layers of meaning to decision processes, but the results are time-, region- and group-specific. Self-selection bias in interview volunteers needs to be acknowledged in the absence of material incentives for study participants. Their stated motivation and dedication to attending college may be personal. Further, this study puts forth descriptive evidence and cannot assert that attending a selective college guarantees a more utility-based academic match. Therefore, study participants' real-life experience and daily practice may lack generalizability to a broader population of low-income students (e.g., non-borrowers and their college arrangements). Still, the results can "evoke in readers a feeling that the experience described is lifelike, believable and possible" (Ellis, 2004, p. 124); this storytelling approach may be of some use to underserved students contemplating college enrollment and to those who have already embarked on their college voyage.

Declarations

Conflict of interest The author declare that they have no conflict of interest.

Ethical approval This study was approved by the University of Hong Kong Human Research Ethics Committee (HREC) regarding the ethical aspects of the research endeavor (ref.: EA1904011).

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