Perceived Postgraduate Occupational Downgrading and Household Education Spending Expectations in China

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ABSTRACT

This qualitative study examines how parents interpret postgraduate employment outcomes and incorporate those interpretations into household education spending decisions in China. Purposive and snowball recruitment yielded 32 parents with children in senior high school or higher education and 14 master's and doctoral graduates in Zhengzhou, Yancheng and a county town in Hunan. Semi-structured interviews were conducted between March 2025 and May 2026, with follow-up interviews involving 24 parents. Three-stage coding traced the connections between employment information, assessments of credential returns and spending decisions. Parents relied on cases within family and workplace networks, online reports and their own recruitment platform searches. Accounts considered comparable to their child's circumstances carried particular weight. Participants questioned postgraduate education when it appeared to offer limited additional earnings, occupational distinction or use of specialist training. However, similar observations supported different decisions: some parents emphasised the small pay premium after recruitment, whereas others viewed a postgraduate qualification as necessary for eligibility. Four spending patterns emerged: trimming expenditure, rerouting it towards occupational entry, reallocating funds reserved for postgraduate study and increasing investment to retain access. Follow-up accounts showed that

1. Introduction

On 24 November 2025, the Ministry of Education of the People’s Republic of China announced that registrations for the 2026 National Postgraduate Entrance Examination totalled 3.43 million, a decline of 450,000 from the previous year. This was the third consecutive annual decline and placed registrations 1.31 million below the 4.74 million recorded in 2023 (Ministry of Education of the People’s Republic of China [MOE], 2025c). Figures released four days earlier showed a contrasting trend: the 2026 cohort of graduates from regular higher education institutions nationwide was projected to reach 12.7 million, 480,000 more than the previous cohort (MOE, 2025b). Demand for entry into postgraduate education was declining while the number of higher education graduates entering the labour market was increasing.

Tuition, accommodation, living expenses, travel, examination coaching and a second entrance examination attempt can bring the illustrative direct cost of a three-year academic master’s programme to 100,000–250,000 yuan. This indicative range is not a representative national estimate. Three years of forgone earnings add roughly 200,000 yuan when valued at a bachelor’s graduate’s starting salary. Explanations for falling registrations commonly focus on candidates’ assessments of costs and benefits, alternative pathways and attitudes towards employment. Less attention is paid to the parents who finance further study. In the households interviewed, parents often financed postgraduate education and played a decisive role in whether it continued. A mother in Yancheng explained: “He’s twenty-three. If I can afford it he keeps going, if I can’t then he doesn’t. In the end it’s me that makes the call.”

What employment evidence informs these parents’ decisions? In 2024, postgraduate admissions totalled 1.3568 million, enrolment reached 4.0954 million and 1.0836 million postgraduates completed their degrees (MOE, 2025a).

Their employment outcomes become visible to relatives and neighbours in county towns, prefecture-level cities and provincial capitals. A survey by the recruitment platform Zhaopin (2024) found that, by mid-April, 56.6 per cent of junior-college respondents planning to seek employment had received a job offer, compared with 45.4 per cent of bachelor's graduates and 44.4 per cent of master's and doctoral graduates. Among master's and doctoral graduates who graduated from non-elite higher education institutions, the offer rate was 33.2 per cent, 17 percentage points below the previous year's rate and below the 43.9 per cent reported for bachelor's graduates from the same type of institution. Within this survey, higher qualifications were not associated with higher offer rates; these descriptive comparisons do not establish the effect of qualification level on employment outcomes. Research on higher education massification in mainland China distinguishes quantitative expansion from structural upgrading, providing context for examining the relationship between educational growth and employment opportunities (Gan, Xiao, Zhang, et al., 2026).

Earlier evidence addressed starting salaries. The National Survey of College Graduate Employment research group at Peking University reported arithmetic mean monthly starting salaries in 2021 of 14,823 yuan for doctoral graduates, 10,113 yuan for master's graduates, 5,825 yuan for bachelor's graduates and 3,910 yuan for junior-college graduates. It also described the long-term trajectory of relative starting salaries as L-shaped (Yue et al., 2023). The difference between the national means for master's and bachelor's graduates was 4,288 yuan per month. Parents interviewed in all three sites described much smaller differences in the local cases they knew. A father in Zhengzhou, employed as a maintenance fitter at a state-owned enterprise, reported that two master's graduates recruited by his plant in 2024 worked the same three-shift rota as he did and earned "800 yuan more than me".

Perceived reductions in credential returns can affect households that are still financing education. Parents of children in senior high school or higher education have already committed resources but retain some scope to revise future expenditure and educational pathways. The household survey conducted by the China Institute for Educational Finance Research at Peking University reported that education spending accounted for an average of 17.2 per cent of total household consumption expenditure nationwide (Wei, 2019). Revisions to expected credential returns may therefore affect a substantial component of household budgets.

This paper addresses three questions: through which channels do parents learn about the employment outcomes of master's and doctoral graduates; how do they interpret this information when considering their own child's prospects; and how do these judgements inform household education spending decisions?

2. Literature and analytical perspective

Human capital and signalling theories offer different explanations for the economic value of educational credentials. Human capital theory treats education as an investment in productive capacity: additional schooling can increase productivity and, consequently, earnings (Becker, 1964). Signalling theory instead explains how educational attainment can convey information about ability to employers, even when education does not itself increase productivity (Spence, 1973). In the signalling model, acquiring the credential must be less costly for individuals with greater ability. Enrolment expansion may weaken a credential's informational value if the qualification becomes less effective at distinguishing applicants, although expansion alone does not establish that the signalling condition has ceased to hold.

In Thurow's (1975) job competition model, employers rank applicants according to expected training costs, and credentials help determine their position in the employment queue rather than directly indicating an absolute level of productivity. As the pool of qualified applicants expands, the same credential may become less effective in securing a preferred position. Collins (1979) described a credential society in which educational requirements

increase as groups compete for occupational access. Credential inflation can therefore involve declining occupational returns to the same qualification without necessarily implying a decline in educational quality. A multilevel account of credential devaluation similarly links educational expansion with institutional absorption and labour market restratification (Gan, Xiao, & Zhang, 2026).

Geertz (1963) developed the concept of involution in his analysis of rice agriculture in Java, describing intensified inputs without corresponding gains in output per unit. Huang (1985) applied the concept to diminishing marginal returns to labour in the peasant economy of North China. In contemporary Chinese public debate, the term is also used to describe educational competition in which increasing individual effort yields limited collective gains because desirable positions remain constrained. This perspective offers a way to interpret postgraduate competition when enrolment expands faster than suitable employment opportunities; it does not, by itself, establish that additional postgraduate education produces no return.

Consumption economics provides a complementary perspective on household decisions. The permanent income hypothesis relates current consumption to expected long-term income and predicts a stronger response to persistent changes in income expectations than to temporary fluctuations (Friedman, 1957). The life-cycle hypothesis explains how households allocate resources across stages of life (Modigliani & Brumberg, 1954). Katona (1975) emphasised the role of subjective expectations, arguing that purchasing power must be considered alongside willingness to purchase, which is shaped by assessments of the future. Manski (2004) showed that subjective expectations can be measured and that the resulting distributions may differ from those assumed in economic models.

Education spending involves costs incurred before returns are realised through a child’ s subsequent earnings and occupational position; for some households, these returns may be more than a decade away. Bourdieu (1986) conceptualised educational investment as part of the accumulation of cultural capital through which families reproduce social position across generations. Parental spending decisions depend on both current financial resources and expectations of the child’ s future returns. The interviews illustrate how expectations can help explain divergent decisions: a county-town household with an annual income of 80,000 yuan was willing to spend 20,000 yuan a year on senior high school tutoring, whereas a provincial-capital household earning 300,000 yuan a year was reducing expenditure. These accounts suggest that household income alone does not explain spending intentions.

Research on postgraduate entrance intentions examines how rational choice and normative pressures shape students’ decisions (Gan et al., 2025). Research on credential returns commonly examines graduates’ job-search outcomes, while parental spending decisions receive less attention. Aggregate salary statistics identify differences in earnings, but interviews can examine how parents interpret particular employment cases and incorporate them into educational decisions. Some participants described replacing the expectation that a master’ s degree would double earnings with the expectation of an additional 500 yuan per month. This study takes parental decision-making as its analytical focus and traces three linked processes: obtaining employment information, reassessing credential returns and adjusting education spending.

3. Research design

The study used qualitative interviews to examine how parents interpreted postgraduate employment outcomes and related those interpretations to educational decisions within their own households. Parent interviews provided accounts of spending, expectations and educational plans; graduate interviews provided first-hand employment accounts with which some of the cases reported by parents could be compared. Two rounds of parent interviews added a temporal dimension, allowing initial intentions to be considered alongside subsequent accounts of decisions and expenditure.

3.1 Sampling and participants

The study combined purposive sampling with snowball recruitment. Parents were eligible if they had at least one child enrolled in an academic senior high school programme or full-time undergraduate or junior-college education, and if they were the primary or a joint decision-maker for household education spending. These criteria located the inquiry among parents who were already financing education but still faced decisions about further expenditure. Three sites were selected to capture different settings for those decisions: Zhengzhou, the provincial capital of Henan; Yancheng, a prefecture-level city in Jiangsu; and a county town in Shaoyang, Hunan, whose name is withheld. The selection sought variation in household income, expected credential returns and access to employment information rather than geographical representativeness.

The sample included 32 parents. Initial contacts were made through senior high school parents' groups, community grid workers and homeowners' groups in residential compounds; referrals from these contacts extended recruitment. Fourteen master's and doctoral graduates who completed their degrees between 2020 and 2025 were also recruited, from cases mentioned by parents and from the researchers' alumni networks. Their accounts offered a separate perspective on employment outcomes and enabled partial cross-checking of parents' second-hand reports. Table 1 summarises the participants.

The graduate participants comprised ten master's and four doctoral degree holders, with backgrounds spanning the social sciences, humanities, engineering, computing, natural sciences, pharmacy and agricultural science. Their employment situations included teaching, banking, manufacturing, commercial and technical work, university research, public sector employment and unemployment. This variation is analytically relevant: the graduate material included both limited returns and relatively favourable outcomes, so postgraduate employment was not treated as a uniform experience. Graduate pay figures refer to monthly take-home income after tax and social insurance contributions.

Table 1 Demographic Characteristics and Study Sample Composition

Characteristic	Category	n	%
Parent participants (N = 32)			
Child's stage of education	Senior high school	17	53.13
Child's stage of education	Full-time undergraduate or junior college	15	46.88
Interview location	Zhengzhou, Henan	12	37.50
Interview location	Yancheng, Jiangsu	11	34.38
Interview location	County town in Shaoyang, Hunan	9	28.13
Parent's occupation	Teacher, civil servant or public institution employee	7	21.88
Parent's occupation	State-owned enterprise or large private firm employee	6	18.75
Parent's occupation	Self-employed	8	25.00
Parent's occupation	Manual or service worker	9	28.13
Parent's occupation	Farming with casual work	2	6.25
Annual household disposable income (yuan)	Under 80,000	8	25.00
Annual household disposable income (yuan)	80,000–150,000	12	37.50
Annual household disposable income (yuan)	150,000–300,000	9	28.13
Annual household disposable income (yuan)	Over 300,000	3	9.38
Parent's highest qualification	Junior high school or below	9	28.13
Parent's highest qualification	Senior high or technical secondary school	13	40.63

Characteristic	Category	n	%
Parent's highest qualification	Junior college or bachelor's degree	9	28.13
Parent's highest qualification	Master's degree or above	1	3.13
Graduate participants (N = 14)			
Degree level	Master's degree	10	71.43
Degree level	Doctorate	4	28.57
Parent follow-up participants (n = 24)			
Child's education-stage group	Senior high school group	13	54.17
Child's education-stage group	University group	11	45.83

The graduate accounts made it possible to examine details that job titles alone did not convey, including work tasks, recruitment requirements and pay. Where parent and graduate accounts could be linked, they were compared; other graduate accounts offered contextual evidence rather than direct verification of a particular parent's report. An authorised permanent public sector post, a recurring concern in the parental accounts, is a budgeted position within the public staffing establishment with associated employment protections and benefits.

3.2 Interview procedures

Interviews were conducted between March 2025 and May 2026. The first round comprised semi-structured, in-depth interviews lasting 60–110 minutes. The guide covered five connected topics: household education expenditure; the child’s plans for further study; employment outcomes of master’s and doctoral graduates known to the parent; expectations of employment conditions when the child graduated; and intended education spending over the next three years. These topics connected the household’s current commitments with the employment cases informing expectations and the future expenditure under consideration. The accounts of expenditure established what parents were paying for, while accounts of further-study plans identified the decisions still open to them. Employment cases and expectations provided the context in which those decisions acquired meaning.

Follow-up interviews took place 9–14 months later. Twenty-four parents participated in this follow-up. The comparison across rounds focused on whether employment judgements had changed and whether the spending plans described initially had been implemented. This distinction matters because a revised expectation did not necessarily result in an immediate spending change. The follow-up accounts therefore provided evidence about the relationship between stated intentions and subsequent reported action, rather than treating an initial intention as an accomplished decision.

Participants selected the interview setting. Interviews took place in a snack shop’s kitchen, a truck cab in a freight yard, a supermarket staff room, a tea shop near a school entrance and participants’ homes. Parents often had expenditure and income records available in these settings, including WeChat transfers for tutoring fees, tuition receipts and screenshots of payslips shared by relatives’ children. Participants brought up these materials during the conversation, allowing oral accounts to be compared with records relating to particular payments or employment cases.

The records provided checks on specific parts of an account rather than a comprehensive verification of household finances or local employment conditions. A tutoring transfer or tuition receipt could support an account of educational expenditure, while a payslip screenshot related to the earnings of the particular graduate it concerned. These materials helped ground reported amounts, but did not by themselves establish how representative an employment case was or validate a parent’s interpretation of its implications for the child.

All interviews were recorded with participants’ written or oral consent. The corpus comprised 78 hours of recordings and approximately 960,000 characters of transcribed text. Personal names and the names of employers and

schools were anonymised. Parent participants were assigned identifiers H01–H32 and graduate participants G01–G14. These identifiers distinguish the parental and graduate accounts throughout the presentation of interview material.

3.3 Data processing and interpretation

The analysis drew on open, axial and selective coding procedures associated with grounded theory (Glaser & Strauss, 1967; Strauss & Corbin, 1998). During open coding, two researchers independently labelled the first 12 transcripts line by line, generating 417 initial labels. Merging synonymous labels produced 193 concepts. Axial coding organised these concepts according to relationships among phenomena, conditions, actions and consequences, yielding 12 subcategories. Selective coding integrated the subcategories into three main categories centred on parents' reassessment of credential returns: observing employment information, reassessing credential returns and adjusting education spending.

The three categories organise the analysis as an interpretive process. The first concerns how an employment case became available to a parent; the second concerns the significance the parent assigned to that case for the child's prospects; and the third concerns the educational or financial response described. They connect employment accounts to decisions without assuming that every parent followed an identical sequence. The contrasting accounts presented in the findings also show why an observed qualification requirement could support different decisions: some parents emphasised the limited earnings or occupational improvement after entry, while others emphasised the qualification needed to gain entry at all.

For a consistency check, the two coders independently coded six randomly selected transcripts. Intercoder agreement was .81 (Cohen's kappa), and a third researcher adjudicated disagreements. This assessment concerned the application of the coding categories; it did not convert the interviews into representative estimates of parental attitudes or spending patterns.

Saturation was assessed with reference to Guest et al. (2006). No new subcategory emerged after the 27th parent transcript; the remaining five transcripts supplied further examples within existing subcategories. This finding concerns the categories developed within the recruited sample. It does not establish that all possible household responses or employment experiences were captured.

The spending-related subcategories included changes to the child's educational pathway, mentioned by 26 parents; reductions in out-of-school tutoring, mentioned by 23; reallocation of education funds to savings, property or insurance, mentioned by 14; and additional expenditure to protect employment prospects, mentioned by nine. These codes record particular elements within accounts and can overlap. They differ from the four household patterns reported in Section 6, which describe the overall direction of a household's adjustment. In particular, mentioning an additional expense does not necessarily place a household in the three-household bidding-up group. Counts provide context for the material examined; the interpretation rests on what participants said and how their accounts relate to one another.

3.4 Research ethics and trustworthiness

The study followed the principles of informed consent, anonymisation and voluntary withdrawal. Participants could skip questions concerning household income and their children's examination results. Trustworthiness was considered using Lincoln and Guba's (1985) four criteria. For credibility, 21 parents reviewed and confirmed the coding summaries relating to their accounts. Transferability was supported by detailed descriptions of interview settings and the retention of dialect expressions, allowing readers to consider the circumstances in which a judgement was made. Dependability was supported by an audit trail comprising recordings, transcripts and coding memos. Independent coding and third-party adjudication contributed to

confirmability. The presentation of thematic relationships drew on Braun and Clarke (2006), and data presentation drew on Miles and Huberman (1994).

Interpretation also requires attention to the difference between an employment outcome and what a parent knew about it. The paired accounts of H22 and G12 illustrate this distinction: G12 described sampling work as work that someone with a vocational qualification could perform, whereas H22 recalled being told that a bachelor’s graduate could perform it. The difference matters because the household decision was informed by the account available to the parent. The analysis therefore treats parental accounts as evidence of how employment information was understood and used, while drawing on graduate accounts and available records to establish the limits of factual corroboration.

The three-site sample does not support national generalisation, and the county-town subsample was small. Only some of the employment cases reported by parents could be cross-checked against the 14 graduate interviews; unverified cases are identified in the text as parents’ own accounts. The recruitment routes also locate the material within the participating parents’ and researchers’ networks. The analysis accordingly distinguishes participants’ interpretations, their reported spending intentions and actions, and employment information corroborated in particular cases. It offers an account of household decision-making in these settings rather than a measure of nationwide occupational downgrading or a precise estimate of aggregate expenditure change.

4. How parents encounter employment outcomes

4.1 Examples from relatives and acquaintances

Parents made credential returns intelligible through accounts of specific people. Rather than beginning with an abstract judgement about postgraduate education, they described what a relative or acquaintance had studied, where that person now worked and how much they earned. Twenty-nine parents introduced such a person spontaneously during the interview; these examples rarely came from news reports. The following accounts show how a known graduate became a reference point for a child's imagined future.

H07, aged 48, is an intercity freight driver based in Zhengzhou whose son is in his second year of senior high school:

Mr Zhou's daughter, who lives upstairs from us, did a master's in materials at Zhengzhou University. She came back the autumn before last. Mr Zhou used to tell everyone he met that his daughter was doing a master's, and he would bring it up at every New Year and holiday meal. He doesn't mention it now. She works in quality inspection at a plant in Xinzheng, earning 6,300 yuan a month, with social insurance and housing fund contributions at the lowest level. Last month, while we were smoking in the stairwell, he said, if I'd known, I'd have had her take the rural teacher recruitment examination straight after her bachelor's, and she would have secured a permanent post by now.

H07's account moves from the father's earlier pride to his present silence, and then to a retrospective preference for entering employment after a bachelor's degree. This contrast suggests a reassessment of the family's investment extending beyond dissatisfaction with one salary. H07 made the example personally relevant by adding: "With my son's marks, the best he'll ever do is the same as her." Across the accounts, parents considered examples from family and acquaintance networks accessible to checking through payslips, housing conditions and conversations at holiday gatherings. They also compared academic results and family circumstances: the graduate and their own child had often attended the same senior high school, sometimes even the same class. These comparisons explain why a particular outcome mattered to the parent, without establishing how representative it was.

H21, aged 45, works as a hospital care worker in Yancheng. Her daughter is in her third year at university:

My daughter's cousin on her father's side has a doctorate in biology. He's thirty-one this year and still doing a postdoc, his second one, he says. He earns a little over 200,000 yuan a year, rents in Shanghai, and isn't married. His mother

tears up every time she sees me and says she put him through twenty-seven years of education. My husband's older sister used to be the most respected person in the village. Now she crosses the road when she sees people.

H21 gave a different meaning to an unfavourable outcome. Her account included an annual income of over 200,000 yuan, but also age, repeated postdoctoral appointments, rented housing and delayed marriage. Her phrase "crosses the road" located disappointment in the family's social relationships. We read this as an expectation that postgraduate achievement should produce a settled adult life and continuing parental recognition, as well as earnings. H07 compared a graduate with his own son's likely prospects; H21 described the loss of standing attached to a relative's educational success. Together, the cases show that parents evaluated returns through several expectations that a salary figure alone could not capture.

H30, aged 51, runs an agricultural supplies shop in a township in the county. His son is in his third year of senior high school:

Our township has produced four postgraduates altogether. The first two were back in the 2000s. One is a judge in Changsha, and the other runs a company in Guangdong. The last two graduated in the past couple of years. One came back to teach in the county, and the other has been at home for over a year and has taken the civil service examination three times. Everyone here can see it. The older people still tell children to study more. Younger parents don't talk like that any more.

H30 organised four graduates from the same township into a comparison across cohorts. The judge and company owner represented an earlier association between postgraduate education and advancement; the recent graduates provided a different set of destinations. His distinction between older people's encouragement and younger parents' reservations made the reassessment a shared local conversation. We interpret the chronology as the way he explained a changing expectation. It cannot establish a cohort effect, but it shows how parents connected individual biographies to a broader account of educational opportunity.

4.2 Workplace comparisons of earnings

Workplace accounts brought the expected advantage of a postgraduate qualification into a setting parents knew from their own employment. They compared duties, titles, salary grades and working conditions, using specific colleagues or colleagues' children as reference points. Twenty-four parents discussed wage comparisons. H12 and H03 illustrate different ways that workplace knowledge informed these judgements.

H12, aged 51, works as a maintenance fitter at a state-owned plant in Zhengzhou:

Two people with master's degrees joined our workshop last year, one from Central South University and one from Zhengzhou University. They work the same three shifts as me, round the clock. They just have a better-sounding title: technicians. I asked around. They earn 800 yuan a month more than me. I've worked for twenty-six years. He spent twenty years in education. However I calculate it, it doesn't seem right.

H12 placed twenty-six years of service alongside the graduate's twenty years in education. His emphasis on identical shifts and a better-sounding title suggests that the disappointment concerned the work itself as well as the 800-yuan difference. The comparison suggests a challenge to his expectation that further education would secure a different occupational position, such as office work rather than work on the shop floor. The account identifies the distinction he expected and could not see. It does not isolate the effect of education from work experience.

H03, aged 45, works in personnel at a public institution in Yancheng. Public institutions include state-funded schools, hospitals and research institutes; their established staff positions are separate from the civil service. She said:

I look at CVs all day in my job. Last year we hired five people. More than a hundred applied, and six in ten had a master's. Of the five we hired, four had master's degrees, and one had a bachelor's and connections. The salary attached to the post is the same for all of them. The master's graduates are graded half a

step higher and earn a little over 200 yuan more a month. I went home and told my son, even if you get a master's, you'll still start in this same position.

H03's account drew on applicants' CVs and salary grading schedules. She summarised her interpretation as follows: "A degree's a ticket in now. It's not a seat number." This distinction separates eligibility for recruitment from the position and pay secured after entry. H12 interpreted credential returns through shared working conditions; H03 interpreted them through a recruitment system in which qualifications could improve access without substantially changing the post. Their accounts converge on a limited perceived occupational advantage, while showing how parents' own work shaped the evidence they considered credible.

4.3 Online reports and independent searches

Online reports entered parents' accounts as information to question and sometimes investigate. Twenty-two parents mentioned short videos or news reports. H09's account is particularly useful because he described both his initial disbelief and the subsequent steps through which the reports became relevant to his son's plans.

H09, aged 50, runs a small decorating team in Zhengzhou. His son is in his second year at university:

The first time I saw a video of someone with a doctorate driving a taxi, I thought it was made up. You can make up anything online now. Then another one appeared a while later. One had studied agriculture, and another had studied history. So I started to believe it a little. You can make up one, but surely not three or five of them.

In H09's narration, repeated encounters with similar videos made dismissal more difficult, but did not by themselves provide a basis for deciding about his son. He then described searching recruitment advertisements. Eighteen parents reported downloading a recruitment app and conducting their own searches after encountering information that raised doubts. This was a move towards checking advertised opportunities directly, although advertisements themselves could not verify eventual employment outcomes.

H09 continued:

I installed one of those apps on my son's phone and searched the way he does. I typed in "master's" and scrolled through three pages of jobs in Zhengzhou. Administration, 6,000 to 8,000 yuan. Sales, base pay 4,000. I also searched for my son's subject, civil engineering. Half the jobs that came up involved working on site, and they said "must accept long periods away". I didn't sleep well that night after searching.

H09 concluded with a statement echoed in several interviews: "It used to be him telling me. Now it's me telling him." Read alongside his search for civil engineering vacancies and his account of losing sleep, the statement suggests both increased involvement and anxiety. The sequence suggests a change in the parent's role: information initially encountered as an online story became a search tied to a particular child's subject and local opportunities. Parents who had relied on their children's reports began checking vacancies themselves, which they described as strengthening their role in spending decisions.

H26, aged 47, supervises a production line at a clothing factory in Yancheng. Her daughter is in her third year at university:

I can barely read. My brother's daughter taught me to use the app. I only look at two things: the degree they require and the pay. After looking at enough adverts, I noticed something. Jobs paying over 10,000 yuan either say "master's or above" and add "985/211", or they require "three years' experience or more". My daughter has neither.

The labels 985 and 211 refer to national programmes that designated selected universities for priority funding. In the recruitment advertisements parents described, they served as shorthand for an elite institutional background. H26's account contrasts with H09's in how the search was conducted: she relied on a relative to learn the app and reduced advertisements to two questions, degree requirement and pay. Her conclusion nevertheless related additional requirements to her own daughter's position. The comparison shows how parents with different levels of familiarity with recruitment

platforms could use them to reassess the relevance of a postgraduate qualification.

4.4 How the four information channels interact

Examples from relatives and acquaintances provided personally relevant reference points; workplace comparisons highlighted earnings differences; short videos and news reports raised doubts; and recruitment platforms offered a means of checking advertised requirements and pay. Parents described these channels as reinforcing one another. Most presented the reassessment as gradual, saying that "it slowly started to feel wrong", rather than identifying a single decisive moment.

H14, aged 43, manages a chain pharmacy in Zhengzhou. Her son is in his first year of senior high school:

It didn't happen all at once. The year before last, my sister's son graduated and spent six months looking for work. I still thought he wasn't trying hard enough. Last year, someone with a master's in pharmacy applied to us. We offered her 6,500 yuan, and she accepted. That made me stop and think. At home, I thought again about my sister's son. This year I looked online myself, and my view changed.

H14's telling revisits the same relative at different points. Initially, she attributed his prolonged job search to insufficient effort. A master's graduate accepting the pharmacy's offer then caused her to reconsider that explanation; her own online search followed. This sequence suggests a shift from judging an individual to questioning the opportunities available to similar graduates. It also shows why the information channels cannot be treated as separate causes: a workplace encounter changed how she understood an earlier family example. None of the parents interviewed at follow-up reported reverting to their earlier assessment. This persistence applies to the observed follow-up period and does not establish that reassessment is irreversible.

5. How parents reassess credential returns

5.1 Revising the expected earnings premium

Parents often explained their expectations of postgraduate earnings by recalling educational success in their own youth. Twenty-seven described an expected earnings premium relative to completing education with a bachelor's degree, tracing it particularly to experiences of the 1990s and the early years of this century. H18's recollection shows how these expectations could persist even as the people used for comparison changed.

H18, aged 52, runs a hardware shop in Yancheng. Her daughter is in her first year at university:

When I was young, finishing technical secondary school could get you an established cadre position. Sometime in the nineties, a young man from our street passed the university entrance examination and then came back to work at a bank in the city. He earned more in a month than my father earned in a year. A postgraduate qualification was another matter altogether. Postgraduates were rare then. That expectation has stayed with me: one more level of education, double the money.

The phrase "one more level of education, double the money" appeared five times in the interviews. In the national sample reported by Yue et al. (2023), average monthly starting salaries in 2021 were 5,825 yuan for bachelor's graduates and 10,113 yuan for master's graduates, a difference of 4,288 yuan. These figures indicate a substantial average starting salary premium, although they do not establish that postgraduate study doubles earnings for any given individual.

The local comparisons reported by parents suggested smaller differences. H12 reported 800 yuan per month; H03 reported a little over 200 yuan; and H14 reported a 900-yuan difference between pharmacists with master's and bachelor's degrees. Across the comparison cases provided by the 32 parents, reported monthly income differences ranged from 200 to 1,500 yuan. Parents

contrasted these observations with expectations of a much larger premium. The national starting salary figures and the local accounts concern different populations, career stages and pay measures, including starting salaries and current take-home pay, and cannot be treated as a like-for-like estimate of a decline.

The national survey and the local accounts provide different reference points. The former concerns graduate starting salaries, whereas the latter concerns people parents knew in particular local workplaces and industries. The interview comparisons were not designed to establish an education-related wage premium. Their relevance lies in how parents selected examples they regarded as indicative of their own children's likely prospects.

H03 expressed this most directly:

Those averages online have nothing to do with us. They include people from Tsinghua and Peking University and people who join the big companies. Is my son going to be one of them? I know my son. I want to see how people similar to him are doing now.

5.2 Estimating the payback period

Parents also translated uncertain future returns into calculations they could use in a present spending decision. Twenty-one had independently estimated a payback period. They generally added the direct cost of three further years of study to three years of forgone earnings, then divided the total by expected additional earnings over the same time unit. H19's detailed account makes visible both the calculation and what its result meant to her.

H19, aged 43, stocks shelves at a supermarket in the county town. Her daughter is in her third year of senior high school. H19 gave the most detailed calculation:

I worked it out with a pen. She's in her final year now. If she gets into university, tuition is 5,800 yuan a year, accommodation is 1,200, and living costs are 1,500 a month. That's about 25,000 a year, or a little over 100,000 for four years. Then there are three years of a master's: tuition is 8,000 a year, living costs go up, and there's the coaching course. I asked around. There isn't one in our county; you have to go to Changsha, and a course costs 20,000 or 30,000. Three years will cost at least 160,000 or 170,000. If she could earn 4,000 a month after her bachelor's, three years would be over 140,000. Together, that's 300,000. If the master's earns her 1,000 more a month, that's 12,000 a year, so twenty-five years. Twenty-five years. I'll be dead by then.

H19's account moves through tuition, accommodation, living costs, coaching and forgone earnings before repeating the twenty-five-year result. The repetition and her reference to her own death place the calculation within a parent's remaining lifetime, rather than an abstract investment horizon. The account raises a question about whether she would be able to see the benefit of present sacrifice. Her arithmetic is approximate and omits earnings growth, differences in promotion and access to posts requiring postgraduate qualifications. Its analytical value lies in showing the costs and time horizon she used to make the decision, rather than supplying an independently verified estimate of returns.

In parents' accounts, longer expected payback periods reflected both higher perceived costs and smaller perceived earnings premiums. Costs included entrance examination coaching, a second attempt at the postgraduate entrance examination, and higher tuition for professional master's programmes. Against these costs, parents contrasted the earlier expectation of "double the money" with local differences of "200 to 1,500 more". Because the payback period is a ratio of costs to additional earnings, changes in both inputs can substantially lengthen it. H19 contrasted an inherited expectation of four or five years with her own estimate of twenty-five years.

5.3 Three dimensions of occupational downgrading

Parents' accounts distinguished between a qualification's formal level and the work it enabled a graduate to obtain. Twenty-five mentioned master's or doctoral graduates in jobs they believed did not require postgraduate

qualifications. They expressed this through phrases such as "all that study for nothing", "wasted in that job", and "she'd have been better off starting work straight away". Here, occupational downgrading refers to a mismatch between the expected status, pay or field of work associated with a qualification and the employment obtained; it need not involve a move from a previously held occupation. Comparing the graduate accounts below helps distinguish these meanings rather than treating every disappointing outcome as the same experience.

Occupational status. A higher qualification did not necessarily lead to a higher-level role. G03 completed a master's in mechanical engineering in 2021 and works at an electronics contract manufacturer in Suzhou:

The advert said "master's preferred". Only after I joined did I find out what that meant: the same post, but a master's puts you half a grade higher, with 500 yuan more a month. One of the people who joined with me has a bachelor's and started working three years before I did. Now he's training me. I follow him around learning how to set up the machines. He earns 1,200 yuan more a month than me.

G03 said his parents were unaware of these details: "My mum still tells people her son's an engineer in Suzhou. That's accurate. Engineer is my job title."

Pay. A postgraduate qualification could provide only a modest wage premium in a role also held by bachelor's graduates. G02 completed a master's in Chinese language and literature in 2023 and teaches Chinese at a county-run senior high school:

Our school recruited six Chinese teachers the year before last: four with master's degrees and two with bachelor's degrees. We have the same teaching load and the same class-teacher allowance. A master's puts you one salary grade above a bachelor's, with 600 yuan more a month. My take-home pay is 4,300 yuan, and even with performance pay, it comes to less than 70,000 a year. During my three years of master's study, my family gave me about 140,000. My mum still tells the neighbours I'm a postgraduate. I don't dare tell her that the teachers at our school with bachelor's degrees teach the same classes.

G02 also described a change in recruitment at the school. Around 2018, he recalled, "a bachelor's got you in, and they still had to beg people to come". His account suggests that recruitment became more demanding over six years without a corresponding increase in pay. However, the interview does not provide a matched historical salary comparison or establish why the school's recruitment practices changed.

Field and skill mismatch. Graduates described work that made limited use of their postgraduate training. G12 completed a master's in environmental engineering in 2024 and works as a sampling technician at an environmental testing firm:

Every day I drive to factory gates and riverbanks, collect water and soil samples, bottle and label them, and take them back to the laboratory. Someone from a vocational school could do this job. Nine of us do sampling at the company, and three have master's degrees. I haven't used any of the things I worked on in the laboratory during my degree.

G12's mother, H22, described his work as follows:

My son works for an environmental company on the technical side, earning 5,200 yuan a month. He's told me what he does, but I don't really understand it, something about going out to collect samples. I asked whether someone with a bachelor's could do it, and he said yes. So I didn't ask any more.

The paired accounts provide a closer view of how employment experience reached a parent. G12 described routine sampling and the non-use of his postgraduate laboratory training; H22 retained a broader description of technical work but asked whether a bachelor's graduate could do it. The accounts differ over the minimum qualification, yet both question the need for postgraduate study. Their convergence suggests a shared doubt about whether the job required postgraduate study, although the mother's account did not reproduce every detail of the son's. After this conversation, H22 cancelled the one-to-one English tuition booked for her younger daughter and enrolled her in

a large-group class. In this case, one child's employment account became relevant to another child's educational spending.

Other graduate circumstances provided a useful contrast. G11, who completed a master's in computer science in 2021, worked as an algorithm engineer at an internet company and reported monthly take-home pay of 31,000 yuan. G04, a 2023 doctoral graduate in materials science, taught physics at a key senior high school in a prefecture-level city and reported 15,800 yuan. These records show variation in the graduate sample and prevent the lower-paid cases from being read as its only employment experience. The interviews do not show what these graduates would have earned without postgraduate study, so these figures cannot establish the return caused by either qualification. Their analytical relevance is that parents' locally available examples offer a partial view of a varied employment environment.

5.4 Initial degree background as a recruitment threshold

Initial degree background emerged as a concern about whether further study could change an applicant's opportunities. Sixteen parents mentioned this informal category, which refers to the institution at which a person obtained their first degree, usually a bachelor's degree. The Department of Student Affairs at the Ministry of Education has stated that the term "initial degree" does not appear in national policy documents and that "educational qualification", in administrative usage, refers to a person's highest or most recent qualification (MOE, 2021). The interview accounts show how parents understood screening in everyday recruitment. H03 and H27 offer contrasting routes through which the undergraduate institution became important to their judgement.

H03, who works in personnel, provided a specific example:

We recruited last year, and the first page of the CV template had a box asking where applicants had completed their bachelor's degree. We didn't choose that; the template came from above. For some posts, there's an additional line: "Double First-Class institutions at both bachelor's and master's levels preferred". As soon as that line is added, the CVs we receive have a different profile.

For these parents, screening by initial degree background challenged the expectation that postgraduate study could compensate for an earlier university entrance examination result. The gaokao is China's national college entrance examination. “Double First-Class” refers to China’s initiative to develop world-class universities and disciplines.

H27, aged 46, manages a housing estate in Zhengzhou. His son is in his second year at a second-tier provincial university within the province:

I used to think, if the university entrance examination goes badly, it doesn't matter; you can make up for it with a master's. Now they screen you out on the first page. Even if he goes all the way to a doctorate, that line will still name this university. A relative told me this last year; he works in HR at a listed company. I went home and told my son, and he said he'd known for ages.

H03 encountered the undergraduate institution as a field in an official recruitment template; H27 heard about screening from a relative working in human resources and then discussed it with his son. Their routes to the information differed, but both accounts made the earlier institution consequential despite a later qualification. We interpret this as a weakening of the expectation that postgraduate study could compensate for a disappointing gaokao result. For parents holding that expectation, reassessment concerned both the earnings premium and access to desired jobs. H27's son's response also complicates a simple parent-child information hierarchy: the parent described learning something the child already knew.

6. Household education spending adjustments

Parents' accounts connected employment judgements to decisions about particular expenses, courses and educational pathways. Comparing the amount and purpose of spending produced four descriptive patterns: trimming expenditure in eleven households, rerouting it in twelve, reallocating funds reserved for postgraduate study in six and increasing investment in three. These patterns organise the interview accounts rather than estimate the prevalence of

each response. The following sections trace how participants explained the decisions and the forms those decisions took.

6.1 Trimming expenditure with uncertain long term returns

Trimming involved continuing to support education while becoming more selective about the costs parents were prepared to bear. Eleven households followed this pattern, eight with a child in senior high school. Their accounts retained expenditure directly connected to forthcoming examinations while questioning items with a long payback period or uncertain outcome. H14's account shows how such a decision could link an immediate change in tutoring to provision for life after graduation.

H14 manages a chain pharmacy in Zhengzhou and has a son in his first year of senior high school:

I cut the tutoring budget in half this year. One-to-one physics tutoring used to be 350 yuan an hour, twice a week, 2,800 a month. Now he goes to a large-group class at a tutoring centre, 80 yuan a session, 640 a month. I put the money I saved into a three-year fixed-term deposit, for when he graduates and needs to rent somewhere.

Reductions followed a broadly consistent sequence. Across the eleven households, competition coaching and study tours were cut first (nine households), followed by one-to-one tutoring (eight households) and arts training (five households). Large-group classes focused on examinations and expenditure on learning materials were retained.

H05 is 49, drives a taxi in Yancheng and has a daughter in her second year of senior high school:

It’s not that I don’t want her to study. I’m afraid she’ll feel worse after all that studying. If you have a bachelor’s degree and deliver parcels, people still say it’s hard for you, that a young person has to start somewhere. If you have a doctorate and deliver parcels, people laugh at you. You spend all that money and end up being laughed at. What’s the point?

H14 redirected the difference in tutoring costs towards future rent, connecting educational restraint to support for employment after graduation. H05 gave a different reason for restraint: the possibility that a highly qualified child would face ridicule if occupational expectations were disappointed. We interpret the contrast as two forms of parental protection, one centred on material provision and the other on anticipated social judgement. H05's account therefore adds a perceived social cost to the financial concerns evident elsewhere; it does not establish that graduates in such jobs are necessarily ridiculed.

H23 is 46, runs a breakfast shop in Zhengzhou and has a daughter in her third year of senior high school:

We run a breakfast shop. We’re up at four in the morning making dough and finish at ten at night. I don’t know about the big theories. I look at one thing: when she finishes school, will she have to work as hard as I do? I used to think she wouldn’t. With a master’s, definitely not. Now I can’t tell. If I can’t tell, I daren’t spend that much.

H23 framed the decision through her own working day, asking whether education would spare her daughter similarly demanding work. At follow-up, her daughter was studying nursing at university. H23 explained: “Nursing is good. She’ll have a skill, and hospitals always need staff. The entry marks aren’t high. She chose it herself, and I agreed.” The account links uncertainty about postgraduate returns to preference for an identifiable occupational pathway, while retaining the daughter's role in choosing the programme. Compared with H14's reduction in tutoring costs and H05's concern about social judgement, H23's case shows that restraint could also be expressed through programme choice. Across trimming households, parents generally favoured fields with clearer employment pathways.

6.2 Rerouting expenditure towards occupational entry

Rerouting retained educational expenditure while changing what it was intended to secure. The twelve households assigned to this pattern reported

little appreciable decline in total spending but redirected funds from further academic qualifications towards professional certificates, public sector recruitment examinations and vocational skills. H26, H11 and H29 illustrate different understandings of a more direct route into work.

H26 supervises a production line at a clothing factory in Yancheng and has a daughter in her third year at university:

I changed my mind. She was going to apply for a master’s at her own university, and the whole family agreed. Then some relatives talked about it over the New Year, and I changed my mind. Her cousin on her mother’s side finished a master’s and works in HR in Nanjing, earning 7,000 yuan a month and paying 3,200 in rent. I told my daughter to forget the master’s and apply for a government job. Once she gets in, it’s secure. A teaching job in our county pays less than 100,000 a year after deductions, but it’s steady.

H26 placed her relative's salary alongside the cost of rent, then compared that position with the security she associated with government employment. Her preference was therefore about the expected conditions of adult life, rather than salary alone. Across the twelve rerouting households, the word “steady” appeared 41 times and was associated with a predictable minimum income, protection against dismissal and improved marriage prospects. Its repeated use shows how parents explained the value of reducing uncertainty. The next part of H26's account brings that preference into a specific choice between preparation courses.

This preference was reflected in the allocation of expenditure. H26 described the revised budget:

You need a course for the government recruitment exam. I asked three providers. It’s 28,000 yuan for the full package, written test and interview, or 9,800 for the written test alone. I’ll enrol her in the written-test course. We’ll practise for the interview ourselves. If you spent that 20,000 on postgraduate exam preparation, it would only cover half a coaching course.

A second form of rerouting involved vocational skills and qualification certificates. H11 is 44, leads a shelf-stocking team at a supermarket in Zhengzhou and has a son at junior college:

He’s studying vehicle repair. The school has them take the technician certificates one level at a time. I worked it out. Moving from the intermediate to the senior grade takes two years and costs less than 10,000 yuan. Someone from the class above him qualified as a senior technician last year and earns 12,000 a month at a main dealership. That money is worth spending.

A third form involved contracted employment placements and employer-sponsored training cohorts at undergraduate level. In the former, students agree in advance to work for a designated employer. In the latter, a cohort is trained for a particular employer with an intended employment pathway on completion. H29 is 48, works in the facilities office at a secondary school in the county town and has a son in his second year at university:

His university has an agreement with a railway bureau. Students who sign the contract go straight into a job when they graduate. They have to pass all their modules and the medical examination. I told him he must apply. People said he would spend his whole life working at a station. I said, what’s wrong with that?

The three accounts sought a recognisable connection between expenditure and work, but the connection took different forms. H26 chose preparation for a recruitment examination; H11 described a sequence of technician certificates and a known graduate's earnings; H29 favoured an agreement linking study to employment, subject to academic and medical requirements. These distinctions matter because continuing to spend on education did not necessarily mean continuing to favour a higher academic qualification. Rerouting was especially common in the county-town sample, with six of nine households assigned to it, but the cases provide insight into the meaning of the choice rather than a population estimate of its prevalence.

6.3 Cashing out funds reserved for postgraduate study

Cashing out shifted support from further qualifications to other resources parents believed would protect their children. Six households reassigned funds previously reserved for postgraduate education; five had a child at university.

H21's account returns to the doctoral cousin discussed in Section 4.1, now explaining how that experience entered a decision about her own daughter's housing.

H21 works as a care worker at a hospital in Yancheng and has a daughter in her third year at university:

I had set aside 150,000 yuan for her postgraduate studies. After what happened to her cousin on her father's side last year, I changed my mind. I took 100,000 of it, added some money from her father, and paid the deposit on a small two-bedroom flat in Yancheng. It's in her name. I told her, your mother can't give you much else, but I can give you somewhere to live. When you look for work, you'll be under a little less pressure.

These parents viewed both education and housing as ways to protect their children against future insecurity. As their confidence in the protective value of a postgraduate qualification declined, they favoured housing as an asset with an immediate, tangible use. The reallocation reflected their perception of relative security rather than an objectively established difference in investment risk.

H08 is 50, drives a bus in Zhengzhou and has a son in his fourth year at university:

I bought him an annuity policy, 20,000 yuan a year for ten years. The agent calculated it for me: he starts receiving payments every year at forty-five. That money was going to pay for a master's. With postgraduate study now, I don't feel I have anything certain. The insurance terms are there in writing.

H21 and H08 both described replacing planned expenditure on postgraduate study with another form of provision, but their accounts emphasised different sources of assurance. H21 offered a place to live and less pressure during a job search; H08 relied on the written terms and future payment schedule of an insurance contract. We interpret these as attempts to make parental support more tangible or predictable. The accounts establish what the parents found reassuring, rather than an objective ranking of education, housing and insurance by investment risk.

Cashing out did not imply withdrawal from all educational expenditure. Four of the six households continued to pay for language courses, driving licences and computer proficiency tests. They curtailed investment in further academic qualifications while retaining relatively inexpensive training with an identifiable practical use.

6.4 Bidding up expenditure to retain access

Concern about credential devaluation did not always lead parents to reduce or redirect expenditure. Three households increased educational investment to protect their children's access to employment. H31's account provides a contrasting case: the same perception of increasingly common qualifications became a reason to spend more.

H31 is 49, teaches at a secondary school in Zhengzhou and has a daughter in her second year of senior high school:

The harder it gets, the further you have to push. There are as many people with bachelor's degrees now as there used to be high school graduates. Without a master's, you can't even get through the door. If the advertisement says master's or above, you can't submit a CV with a bachelor's. People say degrees are worth less. That means their children are worth less in the job market. Our daughter has to stay near the front. I'd sell everything to keep her there.

H31 treated the credential primarily as an eligibility requirement. If employers raise that requirement as the supply of qualifications increases, parents may regard additional spending as necessary to retain access, even without an accompanying wage premium. This interpretation is consistent with Thurow's (1975) job competition model, in which educational investment helps applicants maintain their position in a hiring queue.

The three households classified as bidding up had parents employed in education or the public sector: two were teachers and one worked at a public

institution. Their accounts drew on recruitment practices observed at work. H31 explained:

I’ve taught at this school for twenty-three years. In 2010, a bachelor’s degree was enough to get hired. Now a CV without a master’s doesn’t pass the screening. The threshold keeps rising. If you think a master’s is expensive today, it will cost more in five years.

Comparison with H03 clarifies why similar employment information could lead to opposing decisions. Both parents described rising qualification requirements through their own workplaces. H03 emphasised the limited difference in position and pay after entry, whereas H31 emphasised exclusion before an application could be considered. The contrast concerns what each parent expected the credential to secure. For H03, a small post-entry advantage weakened the case for expenditure; for H31, retaining eligibility remained worth a greater sacrifice. This contrasting case prevents credential reassessment from being equated with a uniform reduction in spending.

A related response appeared in H16's account of overseas study. It is discussed alongside bidding up while retaining the three-household count for that pattern. H16 is 47, runs a foreign trade business in Yancheng and has a son in his third year of senior high school:

I’ve worked out how things operate here. I plan to send him to England for a one-year master’s. It will cost over 400,000 yuan, and I can afford it. That year abroad isn’t for the degree. It gives him something people can’t easily compare. With a domestic master’s, you join the queue and they can immediately see your position. When someone returns from abroad, they can’t assess it so quickly.

H16's account adds a different response to comparison in the domestic recruitment system. Whereas H31 wanted to retain access within a recognisable queue, H16 hoped overseas study would make his son less readily comparable with domestic applicants. We interpret his planned expenditure as an attempt to obtain a distinctive educational signal (Spence, 1973). This is a related parental strategy, rather than an additional household in the three-case bidding-up classification. The account does not establish that overseas study actually produces a stronger signal or lacks human capital benefits.

7. Discussion

7.1 How observed cases shape credential reassessment

The findings suggest a sequence through which parents related graduates' employment experiences to decisions about their own children. Figure 1 presents this interpretation: encountering an outcome, judging what it implies for credential returns, revising expectations and adjusting planned or actual expenditure. H14's revisiting of her nephew's job search, H09's move from online reports to subject-specific vacancies and H21's reallocation towards housing illustrate different parts of the sequence. The figure organises these accounts; it does not imply that every parent followed identical stages or establish a statistically tested causal model.

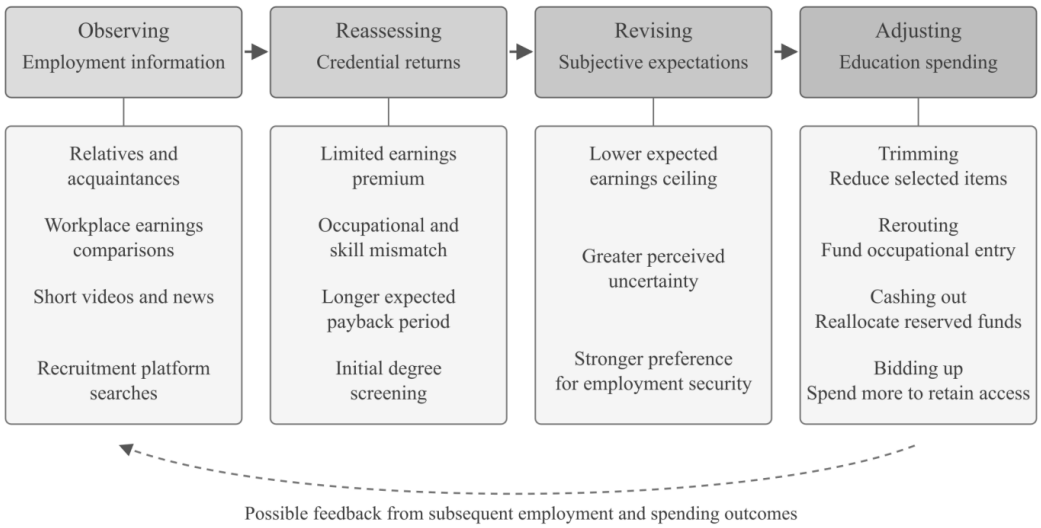


Figure 1 Four stages in parents' reassessment of credential returns and education spending Note. Developed by the authors from the three-stage coding of 32 parent interviews. Arrows represent the proposed sequence of interpretation and adjustment. The dashed arrow indicates possible feedback rather than a tested relationship.

Parents generally began their reassessment with identifiable individuals rather than aggregate estimates of educational returns. Examples included a neighbour's daughter, a newly recruited technician and a 31-year-old relative undertaking a second postdoctoral appointment. Cases perceived as comparable to their own child were especially influential. Statistics often entered later, as a way to assess or reinforce an impression formed through personal observation.

This finding extends the household perspective on educational signalling. In Spence's (1973) model, employers interpret credentials when selecting workers. Here, parents also interpreted the employment outcomes associated with credentials when deciding whether to finance further study. Their information depended on the people and workplaces they could observe. County-town households and those with relatively restricted occupational networks often encountered less favourable examples. Six of the nine county-town households rerouted expenditure, a larger proportion than in Zhengzhou or Yancheng. This association is consistent with differences in information access, but the sample cannot establish that network scope caused the spending pattern.

7.2 Differences by the child's stage of education

The child's educational stage shaped the decisions available within these accounts. Parents of senior high school students could still alter tutoring and programme preferences, whereas parents of university students discussed whether to finance another qualification or use the reserved funds differently. Eight of the eleven trimming households had a child in senior high school, and five of the six cashing-out households had a child at university. These counts describe the sample; the cases below explain how parents related educational stage to a feasible next step.

Parents of senior high school students still had considerable discretion over future expenditure and programme choice. They reduced tutoring, considered fields with clearer occupational pathways and explored public sector recruitment routes. H19's daughter, who had been interested in history, chose preschool education when submitting her university preferences. H19 had estimated a twenty-five-year payback period for postgraduate study and said she "didn't dare gamble on it".

Parents of university students had already incurred substantial undergraduate costs. They more often considered ending expenditure at graduation or transferring funds reserved for postgraduate study to housing, insurance and savings. H21, for example, reassigned 100,000 yuan from the

150,000 yuan reserved for her daughter’s postgraduate education to a housing down payment, explaining: “I’m giving you somewhere to live.”

The second-round interviews made it possible to distinguish changed expectations from reported action. H23's account, for example, moved from uncertainty about whether more education would protect her daughter from demanding work to agreement with her daughter's choice of nursing. Across the 24 parents interviewed again, nine of the thirteen with a child in senior high school reported implementing the reductions described in the first round. Four of the eleven with a child at university had implemented their plans. The remaining seven deferred decisions, saying "we'll see" or "if he wants to sit it, let him". These expressions show that willingness to continue financing study could coexist with doubts about its returns. Prior expenditure may have contributed to hesitation, but the accounts also leave room for parental accommodation of the child's wishes; they do not isolate a sunk-cost effect.

7.3 Changes in expenditure composition and aggregate growth

The reported reductions in selected educational investments coexisted with growth in aggregate consumption. In 2025, per capita expenditure on education, culture and recreation was 3,489 yuan, up 9.4 per cent year on year and accounting for 11.8 per cent of total per capita consumption expenditure. The corresponding amounts were 4,298 yuan for urban residents and 2,322 yuan for rural residents (National Bureau of Statistics of China, 2026). This broad statistical category is not equivalent to household expenditure on education alone.

The interviews document changes in the composition of expenditure. Parents reduced items such as one-to-one tutoring, competition coaching, study tours and postgraduate examination preparation, and planned enrolment in programmes with long study durations. Some redirected funds towards public sector recruitment courses, vocational certificates and employer-linked training; H16 considered a one-year overseas master’s as a distinct strategy. These alternatives differed in cost, duration and perceived employment value. Reallocation within education can therefore coexist with aggregate growth, although the interviews do not quantify its contribution to the national total.

Registrations for the postgraduate entrance examination declined from 4.74 million to 4.38 million, 3.88 million and 3.43 million over successive cohorts. The interview findings offer a possible household-level mechanism consistent with this pattern: parents reconsider costly, extended study when they perceive its returns as uncertain. They do not establish that spending reassessment caused the national decline. Changes in expenditure composition may reveal shifts in expectations that are obscured by an aggregate total.

7.4 Household responses to perceived signal erosion

The accounts show how parents connected perceived loss of credential distinctiveness with attention to other recruitment requirements, including initial degree background, work experience and project experience. H27 questioned whether further study could compensate for an undergraduate institution that would remain visible on a CV; H03 distinguished the qualification needed for entry from the position available afterwards. We interpret these accounts as concern about the limits of what an additional degree could change. H31's contrasting decision to invest more shows that the resulting spending response also depended on whether parents prioritised eligibility, occupational position or earnings.

Falling examination registrations need not immediately increase the distinctiveness of postgraduate qualifications. In 2024, postgraduate enrolment reached 4.0954 million and 1.0836 million students completed postgraduate degrees (MOE, 2025a). These figures indicate a continuing supply of graduates, although they do not determine future labour market outcomes. None of the parents interviewed at follow-up reported reversing an earlier downward

reassessment. This persistence applies to the observed follow-up period and should not be treated as an inevitable long-term trend.

The consequences also extended to programme choice. H23's daughter chose nursing for its occupational pathway, H19's daughter chose preschool education instead of history, and H16 favoured overseas study partly for perceived differentiation. These accounts suggest that risk management became more prominent in educational decisions. They do not imply that interests and abilities ceased to matter for all participating households.

8. Conclusions and recommendations

This qualitative study followed how 32 parents interpreted postgraduate employment and connected those interpretations to education spending, drawing on interviews with 14 master's and doctoral graduates and follow-up accounts from 24 parents. The findings identify a process of gathering information, reconsidering credential returns and negotiating spending decisions. Its contribution lies in explaining that process through participants' accounts and the differences between cases.

Parents drew on relatives' employment outcomes, wage comparisons, online media and their own searches of recruitment platforms. Personally comparable cases carried particular weight. Parents' reported local monthly pay differences of 200–1,500 yuan contrasted with a 4,288-yuan national difference between master's and bachelor's starting salaries in the 2021 survey (Yue et al., 2023). These figures are not directly comparable estimates, but their perceived discrepancy helps explain parental reassessment. Some parents revised simple payback estimates from four or five years to more than twenty. Occupational downgrading was described through limited occupational status, small pay premiums and underuse of specialist training. Screening on initial degree background further reduced confidence that postgraduate study could offset an earlier disadvantage.

The four spending patterns describe different ways of managing uncertainty. Trimming households retained near-term examination support while reducing expenditure with less certain long-term returns. Rerouting households favoured identifiable routes into work. Cashing-out households sought a more tangible form of support for the child, while bidding-up households treated further qualifications as protection against exclusion. The contrast between H03 and H31 is central: observations of rising recruitment requirements could support either reduced confidence in further study or a determination to spend more. Follow-up accounts also show that judgements and actions need not change together. These differences caution against treating parental doubt as a uniform withdrawal from education.

The findings support three areas for practical attention.

Employers should make qualification requirements proportionate to the tasks of a post and explain how qualifications, skills and experience affect selection and pay. Greater transparency would help applicants and families assess whether further study offers access or advancement. The Ministry of Education has stated that "initial degree background" is not a category used in national policy documents (MOE, 2021). Clearer scrutiny of how employers apply such screening criteria would help address the discrepancy identified in participants' accounts.

Postgraduate institutions should publish programme-level information on fees, duration, graduate destinations and starting salaries. Such disclosure would allow families to assess costs and outcomes against more relevant evidence than a few cases within their personal networks. Reporting by field and institution is particularly useful where aggregate salary averages conceal substantial variation.

Training providers should disclose prices, course content and the basis for employment or examination-related claims. H26 reported a 28,000-yuan package covering written-test and interview preparation, illustrating the substantial costs that can accompany rerouting. Comparable information on price and

quality would help households assess these alternatives and support oversight of the training market.

The study has several limitations. Purposive and snowball sampling across three sites cannot support national generalisation, and the county-town sample is small. Some employment cases relayed by parents could not be independently verified. The findings concern reported expectations, interpretations and spending adjustments rather than causal effects or representative changes in expenditure. Household panel data and comparable graduate employment measures would be needed to assess the scale and persistence of the proposed process.

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