

Studying the Dynamics of Learning Motivation of Students from the First to the Last Year of Study

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Abstract: This study looks at how learning motivation shifts across academic years for undergraduates and junior college students in China. We surveyed 275 students at Yunnan Technology and Business University using the College Student Learning Motivation Questionnaire (Tian & Pan, 2006). What we found: motivation isn't static. Undergraduates follow a U-shaped curve — motivation dips early, then spikes in the junior year, usually triggered by internship experiences that force students to confront the gap between classroom and workplace. Junior college students tell a different story: their motivation climbs steadily and peaks in the sophomore year, pushed by employment anxiety. The overall mean (4.15) sits in the moderately high range, with intrinsic motivation leading. But two problems keep showing up: students struggle to stay persistent, and some are clearly in it for the grades and job prospects rather than genuine interest. We trace these issues to three sources — vague personal goals, curricula that feel disconnected from real work, and family pressure. The paper closes with a four-part strategy involving students, instructors, universities, and families.

Keywords: Learning Motivation; Dynamic Evolution; Higher Education; Applied Universities; Cultivation Strategy

INTRODUCTION

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The old view, going back to early psychology, treated motivation like a personality trait — something you either had or didn't, fixed and unchanging. That's largely been abandoned. Today's consensus is that motivation moves. It shifts with context, with who's in the room, with what's happening in a student's life. Sociologically speaking, it's a product of its time — shaped by what society demands from education at a given historical moment.

The jump from high school to university is a big one. Teaching styles change. Students get more freedom. But that freedom backfires for a lot of freshmen. After years of grinding through the Gaokao — a system built on intense external pressure and rigid structure — many students hit a wall once they get in. The pressure vanishes. No one's breathing down their neck anymore. And without that external push, they're left floating, unsure of what they're working toward. Some try to adapt. They want to work hard. But university learning demands a kind of self-direction they've never had to practice, and the teaching methods don't look anything like what they're used to. Motivation drops. Sometimes gradually, sometimes all at once.

The study of motivation itself has changed dramatically over the decades. Woodworth (1918) and Hull (1943) got the ball rolling with drive and reinforcement ^[4]. Hull's Drive Reduction Theory argued

that we act to relieve tension — hungry? eat. Tired? sleep. It worked as a starting point, but it couldn't explain why someone would choose to read a difficult book or climb a mountain, both of which create tension rather than reduce it. The later 20th century saw a flood of cognitive theories that tried to fill that gap. Maslow (1943) built his famous pyramid, stacking needs from food and safety all the way up to self-actualization. McClelland and Atkinson showed how individual differences in achievement need play against situational odds to produce motivated behavior. Bandura's Self-Efficacy Theory (1977) shifted the focus to what people believe they can do — a huge move toward cognitive explanation. And Weiner's Attribution Theory added another layer, showing that how students explain their successes and failures (was it my fault? is it permanent? can I change it?) determines whether they'll try again next time.

In China, this line of research took off in the 1980s. Huang Xiting and Mao Jinping were the pioneers. Their work made one thing clear: Chinese college students' motivation isn't one simple thing, and it isn't fixed. Mao found a strong utilitarian streak — students were motivated by material gain and job prospects, not just learning for its own sake. Huang took a broader view, weaving value systems into the picture. He showed that learning needs stack up in layers, from basic survival all the way to belonging, esteem, and personal growth, and that these are tied up with students' life goals and career plans ^[7]. Later researchers like Chi Liping and Xin Ziqiang tested Bandura's ideas in the Chinese context and found the same thing: self-efficacy and motivation are tightly linked.

All that said, there's a hole in the literature. Plenty of studies look at motivation as a snapshot — how it connects to grades, self-efficacy, personality. But very few track how it changes across all four years of college. Most of the dynamic research that does exist is stuck in second language acquisition, following how motivation for learning English or another foreign language goes up and down over a semester or two (Dörnyei's work on L2 motivation is the big example here). The bigger question — how general learning motivation shifts across the distinct stages of college life, from freshman adjustment to sophomore exploration to junior specialization to senior transition — hasn't really been answered.

This study tries to fill that gap. We used a cross-sectional design to map motivation among undergraduates and junior college students, pinpoint patterns at each stage, figure out what's going wrong, and propose a strategy that involves multiple stakeholders. Three specific goals:

- a. Determine whether and how motivation evolves across academic stages;
- b. Identify the main problems and trace them back to root causes;
- c. Come up with practical strategies teachers can actually use to keep motivation alive.

The survey covers first- through fourth-year students at Yunnan Technology and Business University. By looking at how motivation strength and its drivers shift across years, this research maps out what stays the same and what changes in students' motivational profiles. That adds to the theory side — motivation as a moving, non-intellectual factor in higher education. On the practical side, it gives educators something they can actually use: ways to get students more engaged, teach more effectively, and improve learning outcomes across the entire undergraduate experience.

1. LEARNING MOTIVATION AND RELATED CONCEPTS

1.1 Concept and Classification

The word "motivation" traces back to the Latin *movere* — "to move." At its core, that's still what it means: something inside pushes you to start, keeps you going, and eventually tells you when to stop ^[8]. In a college setting, this shows up as the pull toward a goal — but it's never just one thing. Interest matters. So do needs, values, and yes, the occasional external incentive. Three things happen when motivation is working: you get off the couch (activation), you pick the library over the mall (direction), and you don't quit when the first paper comes back with a bad grade (maintenance) ^[8].

Two ways of slicing motivation matter for this study. The first is the intrinsic-extrinsic split. Intrinsic motivation is the "I actually want to know this" feeling — curiosity, challenge-seeking, that rush when something clicks. Extrinsic motivation is everything else: the grade, the scholarship, the job offer, the fear of failing. The catch? Students operating on extrinsic motivation tend to play it safe. They'll pick the easier task every time, because the goal isn't learning — it's the reward.

Ausubel's three-component achievement motivation model:

- a. Cognitive drive (need to acquire knowledge, the most stable intrinsic motivator);
- b. Self-improvement drive (need for social status and self-esteem, an extrinsic motivator);
- c. Affiliative drive (need for approval from elders or reference groups, prominent among younger learners)^[8].

1.2 Key Influencing Factors

Motivation is anchored in learning needs and learning goals.

Learning needs reflect the gap between a student's current state and desired outcomes, evolving hierarchically: lower-order needs dominate until satisfied, after which higher-order needs emerge. For example, a financially constrained student may first prioritize scholarships, later shifting to socially oriented goals like using knowledge to help others.

Learning goals only drive behavior when internalized. Effective goals are specific and short-term, sustaining self-efficacy better than vague long-term aims. For instance, "reading one economics monograph monthly" is more actionable than "reading more economics books."

1.3 Relationship Between Motivation and Learning Behavior

Motivation is a core non-intellectual factor shaping learning behavior, interacting with emotion and habit. It can only be observed via behavioral manifestations. The relationship is complex:

Different motivations can produce identical behaviors: diligent students in the same major may be driven by scholarships, parental repayment, or personal growth.

The same motivation can generate varied behaviors: students driven by personal development may focus on theoretical research, practical application, certification, or extracurricular capacity-building.

1.4 Two Research Perspectives

Static trait-focused approaches: Center on stable motivational structures, including Gardner's social education model (motivation as goal + effort + desire + attitude), Atkinson's achievement motivation theory (interplay of success pursuit and failure avoidance), and Ausubel's three-component model^[8].

Dynamic process-oriented frameworks: Prioritize diachronic evolution, arguing static traits alone cannot explain change. Dörnyei and Otto's procedural model divides the motivational process into pre-action (goal setting), action (implementation and maintenance, shaped by social context, environment, individual traits, and emotion), and post-action (reflection).

2. STUDY DESIGN

2.1 Research Content and Methods

This study adopts a mixed-methods approach integrating literature analysis, questionnaire survey, and statistical analysis. The core instrument is the revised College Student Learning Motivation Questionnaire (Tian & Pan, 2006), grounded in Ausubel's three-component model and adapted for Chinese higher education contexts. The original 34-item scale covers four dimensions: intellectual interest and ability pursuit (intrinsic motivation), reputation acquisition and altruistic orientation (extrinsic motivation), scored on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). Seven stage-specific items were appended to address contextual learning challenges, yielding a final instrument with three sections: demographic information, learning difficulties encountered, and motivation intensity measurement.

Statistical analysis was conducted using SPSS 26.0 and Excel 2021, combining descriptive statistics, one-way ANOVA, and correlation analysis.

Research Objects and Sample Distribution

The survey sample is a total of 275 students from Yunnan Industrial and Commercial College. The main statistical characteristics of the subjects are: 71 freshmen (25.82%), 52 sophomores (18.91%), 69 juniors (25.09%), 83 seniors (30.18%); 171 undergraduates (62.18%), 104 junior college students

(37.82%); 165 liberal arts students (60%), 110 science students (40%); 86 boys (31.27%) , 189 girls (68.73%)

A total of 300 questionnaires were distributed, 278 were recovered, and 275 valid copies were retained. Grade and gender distributions are shown in Tables 1 and 2:

Table 1 The distribution of the subjects' special books

	Undergraduate	Specialist	total
freshman	51	20	71
Sophomore	25	27	52
junior year	12	57	69
senior year	83	0	83
total	171	104	275

Table 2 The gender distribution of the subjects

grade	male	Female	total
Undergraduate freshman	13	38	51
Undergraduate sophomore	3	22	25
Undergraduate junior year	4	8	12
Undergraduate senior year	19	64	83
College freshman	2	18	20
College sophomore	8	19	27
Junior College	37	20	57
total	86	189	275

2.2 Result Analysis

2.2.1 Overall Descriptive Statistics of Learning Motivation

Undergraduate motivation followed a clear non-linear trajectory (overall mean = 138.41), sequenced as: junior (141.92) > senior (138.57) > sophomore (135.72) > freshman (137.43). The junior year peak aligns with internship exposure: students recognize the competitive value of academic competence after workplace contact, driving a motivation rebound. Seniors ranked second, with external motivators (reputation acquisition, altruistic orientation) outweighing intrinsic drivers amid graduation and employment pressure. Freshmen showed moderately high intrinsic motivation from post-Gaokao curiosity, while sophomores recorded the lowest scores as novelty faded and first-year adjustment ended (see Figure1).

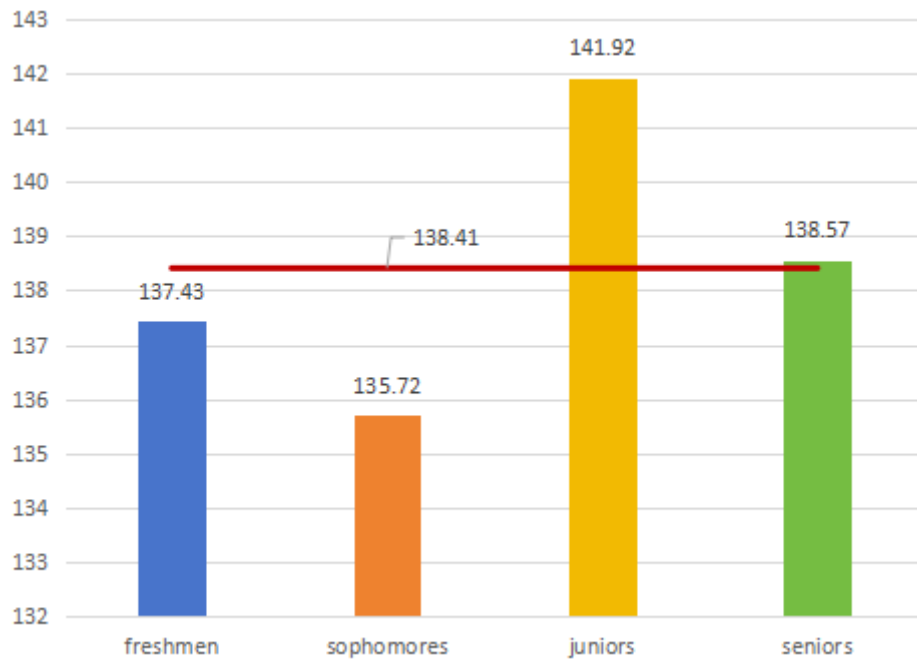


Figure 1 - Overall descriptive statistics of the motivation intensity for undergraduate learning

Junior college students exhibited a steady upward trend (overall mean = 145.74), sequenced as: sophomore (148.11) > junior (147.00) > freshman (142.10). The sophomore peak reflects dual pressure: imminent off-campus internships and the risk of delayed graduation from failed courses. Freshmen ranked lowest but placed first in ability pursuit, reflecting pragmatic emphasis on practical competence. By the junior year, students shifted focus to certification and employment preparation, maintaining strong but slightly reduced motivation (see Figure 2).

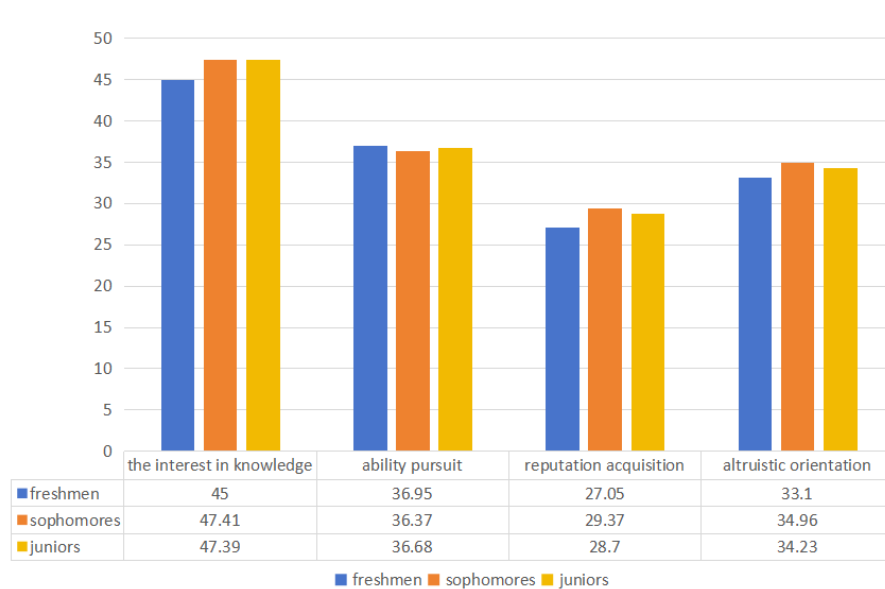


Figure 2 - Overall diagram of learning motivation in different learning stages of the junior college

2.2.2 Overall Motivation Status of the Full Sample

Descriptive statistics for the full sample (N=275) are shown in Table 3:

Table 3 Descriptive statistics of the overall situation of college students' learning motivation

dimension	N	Min	Max	M $\pm$ SD	ranking
interest in knowledge	275	1	5	4.10 $\pm$ 0.77	3
Ability pursuit	275	1.38	5	4.51 $\pm$ 0.63	1
reputation gain	275	1	5	3.89 $\pm$ 0.93	4
altruistic orientation	275	1	5	4.10 $\pm$ 0.79	2
internal motivation	275	1.21	5	4.27 $\pm$ 0.66	
extrinsic motivation	275	1	5	4.00 $\pm$ 0.82	
Overall Learning Motivation	275	1.26	5	4.15 $\pm$ 0.70	

The total score (4.15 $\pm$ 0.70) exceeds the scale midpoint of 3, indicating moderately strong overall motivation. Intrinsic motivation outperforms extrinsic motivation, consistent with prior research emphasizing knowledge interest and self-reward as core drivers. Dimension rankings reflect alignment with Maslow's self-actualization needs, Chinese collectivist traditions, and persistent pragmatic tendencies.

2.2.3 Group Difference Tests

Gender differences: No significant overall difference existed ($p>0.05$), but males scored significantly higher in intellectual interest ($p<0.05$). Both groups showed ability pursuit as the top dimension, with minimal gaps across other dimensions, reflecting narrowing gender disparities in educational access and aspiration.

Undergraduate vs. junior college differences: Junior college students reported significantly higher overall motivation (4.30 $\pm$ 0.60 vs. 4.06 $\pm$ 0.73, $p<0.05$), with higher scores across all dimensions except ability pursuit (no significant difference). This aligns with junior college students' heightened employment pressure amid a credential-conscious labor market.

Science vs. liberal arts differences: No significant overall difference ($p>0.05$), but liberal arts students scored higher in intellectual interest and intrinsic motivation ($p<0.05$), likely tied to their curriculum emphasis on knowledge accumulation and stable employment expectations.

Grade-level differences: One-way ANOVA showed no statistically significant differences across grades for either undergraduates or junior college students ($p>0.05$), likely attributable to uneven sample distribution across majors and the cross-sectional design. Descriptive trends nonetheless confirm dynamic evolution.

2.2.4 Learning Difficulties Survey

When analyzing the difficulties that college students may encounter in their studies, the author also asked an open-ended question to the part of the difficulties that students encountered in their studies, that is, "What difficulties did you encounter in the process of university study?" According to the survey results, in the process of university study, the difficulties commonly encountered by students of Yunnan Technology and Business University mainly include the following aspects:

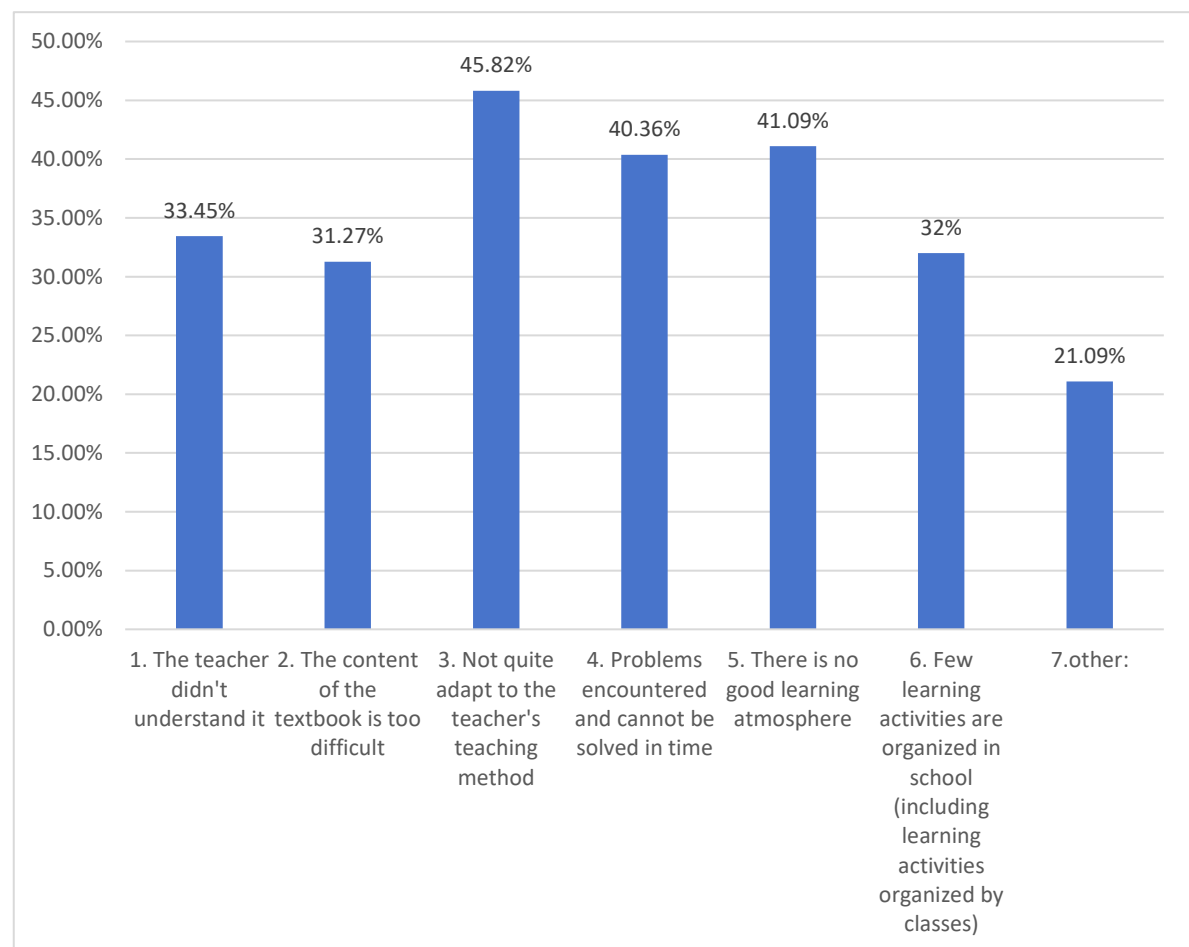
- a. The teacher can't understand the lecture.
- b. The textbook content is too difficult.
- c. Not suitable for the teacher's teaching method.
- d. Problems cannot be solved in time.
- e. There is no good learning atmosphere.
- f. There are too few activities related to learning in the school (including the learning activities organized by the class).
- g. Other:

The textbook content is a little much, to review in time, otherwise it can not keep up with the rhythm; My foundation is not so good, my self-discipline is not particularly strong, and I will want to earn some living expenses through part-time jobs, reduce the pressure of my parents, and relatively reduce my study time; Poor self-control; High school is a science student, the university of liberal arts

class difficulties; It is difficult to adapt to the changing learning methods; Too few classes; No clear study plan; Self-imposed reasons.

The students of Yunnan Technology and Business University thought that they were "not suitable for the teacher's teaching method", "no good learning atmosphere" and "Problems cannot be solved in time" is the biggest difficulty they encountered in the process of university study, the proportion of people who agree with it are 48.82%, 41.09% and 40.36% respectively; the proportion of people who feel that "the teacher does not understand the lecture" is also relatively high, reaching 33.45%; The difficulty of the fifth and sixth place is "Too few activities about learning are organized in the school (including learning activities organized by the class)" and "Textbook content is too difficult", the proportions were 32% and 31.27% respectively, and 21.09% of the students had other difficulties.

The following conclusions are drawn:



3. CONCLUSION

3.1 Dynamic Evolution of Motivation

While no statistically significant grade differences emerged, descriptive trends confirm motivation is non-static. Undergraduates follow a U-shaped curve, with the junior year peak driven by internship awakening. Junior college students show steady upward growth, with the sophomore year peak driven by internship and graduation pressure. These patterns are shaped by developmental transitions, institutional contexts, and socio-economic factors.

3.2 Core Problems and Underlying Causes

Core problems:

- a. Absence of motivation among a minority of students;
- b. Lack of persistence, with effort heavily reliant on external pressure;
- c. Heteronomy of motivation, with learning oriented toward others' expectations rather than self-purpose;
- d. Utilitarian deviation, with pragmatic goals (employment, material gain) overshadowing self-actualization and social contribution.

Underlying causes: Individual factors (weak social responsibility, unclear goals, poor self-discipline); school factors (curriculum disconnect from real-world demands); socio-familial factors (family messages devaluing effort, imperfect employment systems undermining belief in meritocracy).

3.3 Multi-Stakeholder Cultivation Strategies

Stakeholder	Core Measures
Students	Link theory to practice to build interest; set tiered short/medium/long-term goals; build self-efficacy via strength recognition; establish sound life values; develop healthy setback coping mechanisms.
Teachers	Provide ideological guidance at key moments; build supportive teacher-student relationships; prepare rigorous, interactive lessons; innovate heuristic teaching methods; assign ability-matched tasks with constructive feedback.
Universities	Strengthen study and teaching style construction; implement student learning objective management; deepen year-round professional cognitive guidance; advance structured career planning education; organize inclusive discipline competitions; integrate gratitude and forward-looking employment guidance.
Families	Foster harmonious home environments; avoid messages devaluing academic effort; model positive attitudes toward learning.

3.4 Research Limitations

This study has three limitations:

- a. Uneven sample distribution across majors and modest sample size, limiting representativeness;
- b. Consideration of influencing factors was incomplete, focusing only on select demographic and motivation variables;
- c. Cross-sectional design and September survey timing may mask grade differences, as early-semester pressure is relatively low.

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