

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

Min Liu*

Yunnan Technology and Business College, Kunming, 651700, China

*Corresponding author: 15368185416@163.com

Abstract: This study investigates the dynamic evolution of learning motivation among Chinese undergraduates and junior college students across academic stages. Utilizing the College Student Learning Motivation Questionnaire (Tian & Pan, 2006), data were collected from 275 students at Yunnan Technology and Business University. Results indicate that learning motivation is a non-static, cyclical process. Undergraduate motivation follows a "U-shaped" curve, peaking in the junior year due to internship awakenings, while junior college students exhibit an upward trend, peaking in the sophomore year driven by employment pressure. The overall motivation level is moderately high ($M=4.15$), with intrinsic motivation dominating. Issues such as "persistence deficit" and "utilitarian deviation" persist, stemming from individual goal ambiguity, institutional curriculum disconnects, and socio-familial pressures. A four-pronged collaborative strategy involving students, teachers, universities, and families is proposed to sustain long-term motivation.

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

INTRODUCTION

In the field of educational psychology, learning motivation is universally acknowledged as the cornerstone of academic engagement and the primary predictor of scholastic success. Far from being a peripheral factor, it constitutes the central driving force that initiates, directs, and sustains learning activities^[5]. Scholars emphasize its dual nature: relationally, it represents the subjective intention guiding students' academic pursuits; intrinsically, it operates as an internal psychological process whose intensity governs the direction, vigor, and persistence of learning behaviors.

Historically, early psychological theories often conceptualized motivation as a static personality trait—a fixed reservoir of drive. This perspective has been largely superseded by contemporary research framing motivation as a dynamic, fluid, and context-dependent construct. Sociologically, learning motivation is inherently a social product, reflecting the objective demands of society and the educational system within a specific historical period.

The transition from high school to university marks a critical juncture in students' educational trajectories, characterized by a pronounced shift in pedagogical approaches and personal autonomy. Yet this transition also introduces new challenges. Many freshmen, having endured the intense, highly structured pressure of the Gaokao (college entrance examination), experience a "post-admission motivational slump." Upon entry, the sudden removal of external regulatory pressure leaves them without clear academic goals or intrinsic drive. Struggling to adapt to the autonomous, self-regulated learning environment demanded by universities, some students—despite initial intentions to work hard—find themselves unable to decode shifting teaching methodologies or deploy effective learning strategies, leading to a gradual and often precipitous decline in motivation.

The landscape of motivational research itself has undergone a paradigm shift. Early foundational works, such as those by Woodworth (1918) and Hull (1943), introduced concepts of drive and reinforcement^[4]. Hull's Drive Reduction Theory posited that behavior is motivated by biological needs to alleviate tension—a framework that, while foundational, struggled to explain curiosity or thrill-seeking behaviors that increase tension. The latter half of the 20th century witnessed an efflorescence of cognitive theories: Maslow's Hierarchy of Needs (1943) reframed motivation as a pyramid of ascending human requirements, from basic physiological needs to the apex of self-actualization; McClelland's Need for Achievement and Atkinson's Risk-Taking Model illuminated

how individual differences in need strength interact with situational probabilities to determine motivated behavior; Bandura's Self-Efficacy Theory (1977) marked a monumental shift toward cognitive mediation, underscoring the role of an individual's belief in their own capability to execute required actions; and Weiner's Attribution Theory demonstrated how causal explanations for success or failure (locus, stability, controllability) critically shape future motivation.

In China, systematic research on learning motivation gained traction in the 1980s, led by pioneering scholars such as Huang Xiting and Mao Jinping. Their empirical work revealed that Chinese college students' motivation is neither monolithic nor static, but exhibits complex, multi-layered characteristics. Mao Jinping highlighted a pronounced utilitarian tendency, driven largely by material interests and labor-market pragmatism. Huang Xiting integrated value systems into motivational inquiry, demonstrating that learning needs are hierarchically structured—ranging from basic physiological and safety needs to higher-order needs for belonging, esteem, and development—and deeply intertwined with students' broader life values and career aspirations^[7]. Subsequent scholars, including Chi Liping and Xin Ziqiang, have corroborated Bandura's assertions within the Chinese cultural context, confirming robust linkages between self-efficacy and motivation.

Despite these rich contributions, a critical gap persists in the literature. While numerous studies have examined the static correlates of motivation (e.g., its associations with academic performance, self-efficacy, or personality traits), research focusing on its dynamic evolution across the entire academic lifespan—from freshman to senior year—remains scarce. Much existing dynamic research is confined to second language acquisition, exploring fluctuations in foreign-language learning motivation over semesters or years (e.g., Dörnyei's extensive work on L2 motivation). The broader question of how general learning motivation transforms across distinct academic stages—freshman adjustment, sophomore exploration, junior specialization, and senior transition—remains underexplored.

This study aims to fill this void. Employing a cross-sectional design, it maps the motivational landscape of undergraduates and junior college students, identifies stage-specific patterns, diagnoses underlying problems, and proposes a comprehensive, multi-stakeholder cultivation strategy. Specifically, it pursues three objectives:

- a. To determine whether and how college students' learning motivation evolves across academic stages;
- b. To identify prevalent problems and root causes underlying motivational deficits;
- c. To formulate actionable strategies for teaching practice to sustain and enhance motivation.

The survey targets students from the first to fourth years at Yunnan Technology and Business University. By analyzing the strength and determinants of learning motivation across stages, this research clarifies commonalities and variations in motivational profiles, thereby contributing to theoretical understandings of motivation as a dynamic, non-intellectual factor in higher education. Practically, it seeks to equip educators with insights to mobilize student initiative, optimize teaching efficacy, and improve learning outcomes across the full undergraduate cycle.

1. LEARNING MOTIVATION AND RELATED CONCEPTS

1.1 Concept and Classification

Motivation originates from the Latin *movere* ("to move"), referring to internal processes that initiate, direct, maintain, and terminate behavior^[8]. In education, learning motivation is the tendency driving students toward learning goals, integrating interest, needs, values, and external incentives. It performs three core functions: activation (shifting from static to active states), direction (orienting behavior toward targets, e.g., choosing the library over recreation), and maintenance (sustaining goal-consistent behavior amid setbacks)^[8].

Two classification frameworks are central to this study:

Intrinsic vs. extrinsic motivation: Intrinsic motivation arises from interest in learning itself, manifesting as curiosity and preference for challenge; extrinsic motivation stems from external incentives (e.g., scholarships, avoiding punishment), often leading to low-risk task selection.

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).

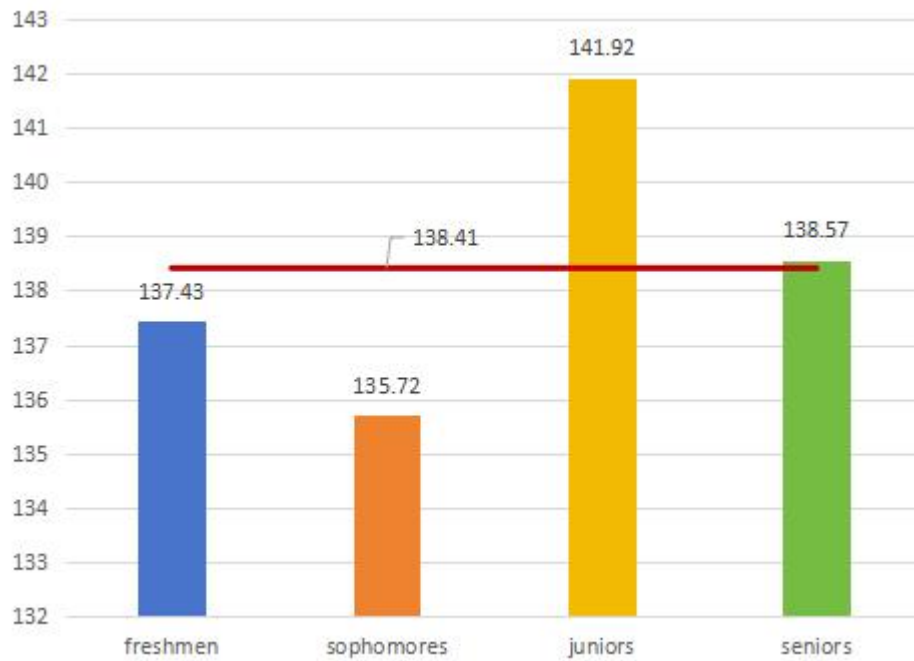


Figure 1 - Overall descriptive statistics of the motivation intensity for undergraduate learning

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).

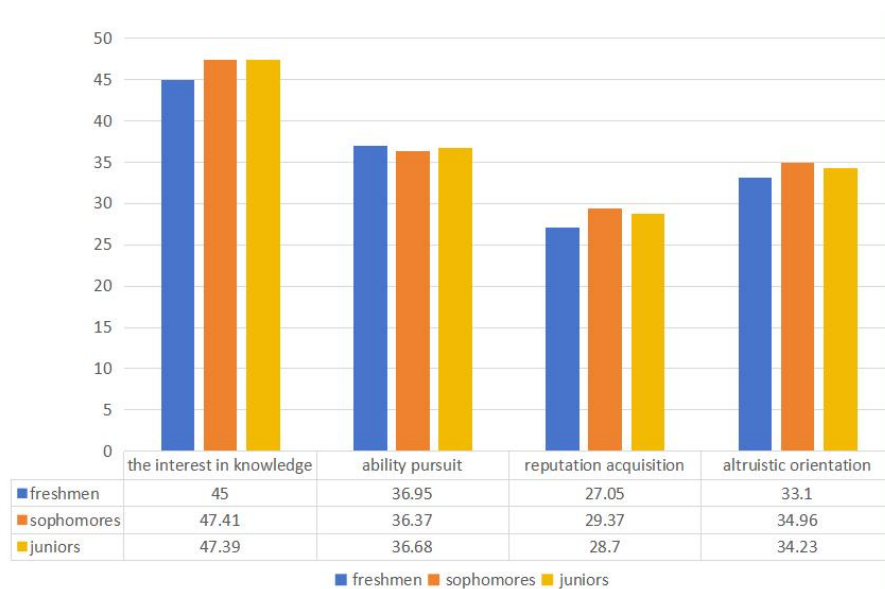


Figure 2 - Overall diagram of learning motivation in different learning stages of the junior college

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

The total score (4.15±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±0.60 vs. 4.06±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:

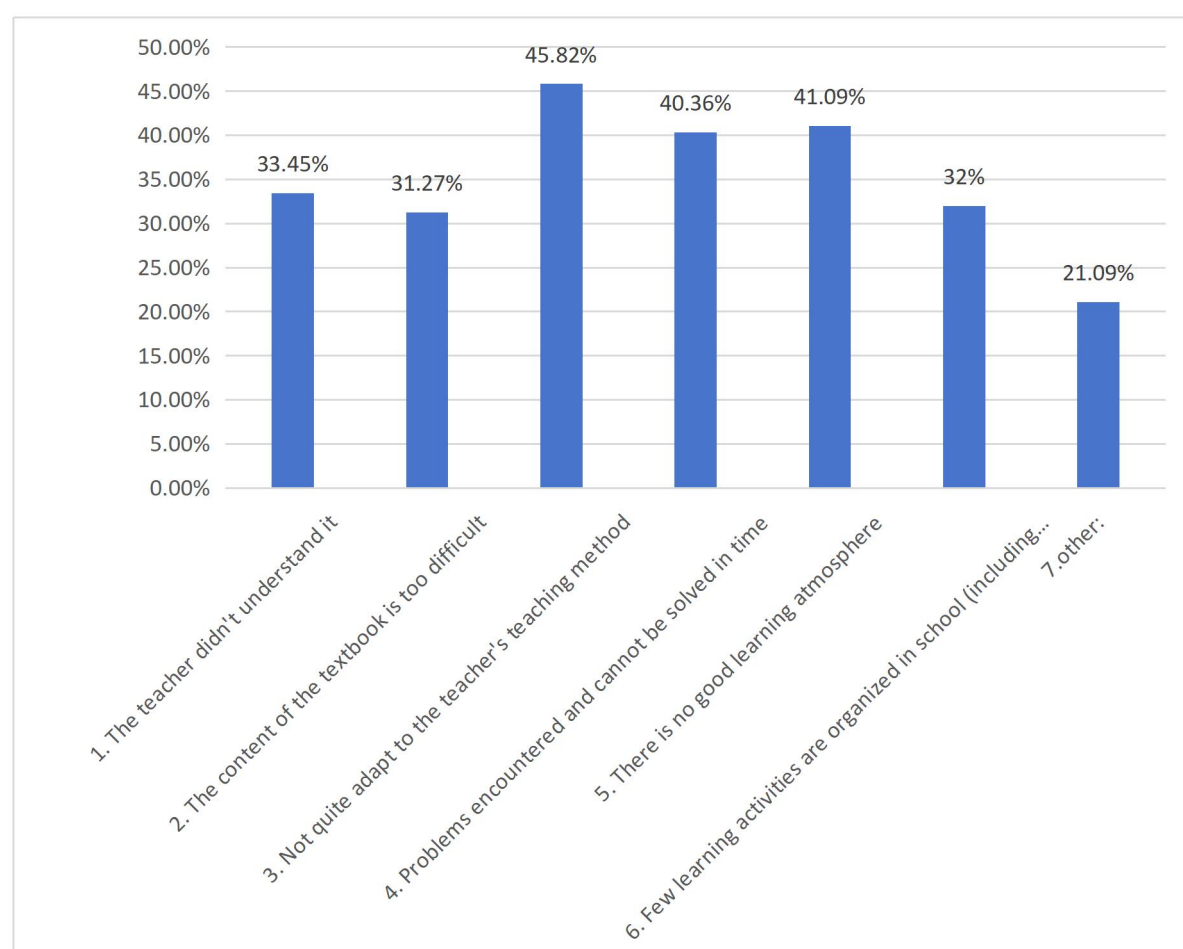
- a. The teacher can't understand the lecture.
- b. The textbook content is too difficult.
- c. Not suitable for the teacher's teaching method.
- d. Problems cannot be solved in time.
- e. There is no good learning atmosphere.
- f. There are too few activities related to learning in the school (including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

BIBLIOGRAPHY (SELECTED)

- [1] Guo Dejun, Li Yuan. Goal structure and learning motivation. *Psychological Science*, 1994, 17(6): 340-345.
- [2] Zhang Chengfen. *Educational Psychology*. Jinan: Shandong Education Press, 2006:343.
- [3] Huang Xiting et al. *Psychology of College Students*. Shanghai People's Publishing House, 1988.
- [4] Chen Qi, Liu Rude. *Educational Psychology*. Beijing: Beijing Normal University Press, 2007:210-242.
- [5] Zhang Dajun. *Educational Psychology*. Beijing: People's Education Press, 1999.
- [6] Maslow. *Motivation and Personality*. Translated by Ma Liangcheng et al. Shaanxi Normal University Press, 2010.
- [7] (US) Franken, translated by Guo Benyu et al. *Human Motivation*. Shaanxi Normal University Press. 2005, 10.
- [8] Tian Lan, Pan Weigang. Preliminary Development of the College Student Learning Motivation Questionnaire. *Social Psychological Science*, 2006, 21(6):42-46.