Abstract

Professor Howard Gardner’s theory of multiple intelligences believes that human intelligence is composed of at least eight abilities such as language intelligence, mathematical logic intelligence, and introspective intelligence. Introspective intelligence is the individual’s recognition of self’s behavior and psychological state. It is very important for personal self-understanding and constructing a correct self. It plays a significant role in human learning, employment and development. The development level of self-cognition is different at different stages. The article compiles a questionnaire based on the characteristics of Campbell’s self-cognition. By collating and analyzing the data collected in the questionnaire, the basic status of self-knowledge of Chinese college students in the emerging stage can be obtained: College students' self-awareness is maturing, but self-awareness is high; College students have average emotional management skills, poor emotional expression, and emotional fluctuations; Undergraduates have clear learning goals, but their self-fulfilling channels are confused; College students have their own value system, but the values are immature; Career ideals are seriously ahead of schedule, not in line with professional abilities. The countermeasures to improve college students' self-cognition are: Educate students to build good interpersonal relationships; Strengthen the education of college students' self-awareness and strengthen career guidance; Create a good and positive mood; Educate students to strengthen self-improvement strategies in multiple ways and promote the healthy and harmonious development of college students.
Investigation and Improvement Strategies of College Students' Self-cognition

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Abstract

Professor Howard Gardner's theory of multiple intelligences believes that human intelligence is composed of at least eight abilities such as language intelligence, mathematical logic intelligence, and introspective intelligence. Introspective intelligence is the individual's recognition of self's behavior and psychological state. It is very important for personal self-understanding and constructing a correct self. It plays a significant role in human learning, employment and development. The development level of self-cognition is different at different stages. The article compiles a questionnaire based on the characteristics of Campbell's self-cognition. By collating and analyzing the data collected in the questionnaire, the basic status of self-knowledge of Chinese college students in the emerging stage can be obtained: College students' self-awareness is maturing, but self-awareness is high; College students have average emotional management skills, poor emotional expression, and emotional fluctuations; Undergraduates have clear learning goals, but their self-fulfilling channels are confused; College students have their own value system, but the values are immature; Career ideals are seriously ahead of schedule, not in line with professional abilities. The countermeasures to improve college students' self-cognition are: Educate students to build good interpersonal relationships; Strengthen the education of college students' self-awareness and strengthen career guidance; Create a good and positive mood; Educate students to strengthen self-improvement strategies in multiple ways and promote the healthy and harmonious development of college students.

Keywords: College Students; Self-awareness; survey; analysis; Countermeasure

1. Introduction

In 1983, the book "The Structure of Intelligence" published by Professor Howard Gardner, a well-known psychologist and educator at Harvard University, put forward the theory of multiple intelligences for the first time. He believed that: Intelligence is not a kind of ability, but a set of abilities composed of language
intelligence, mathematical logic intelligence, spatial intelligence, body intelligence, music intelligence, introspective intelligence, interpersonal intelligence, natural observation intelligence, and existential intelligence. These capabilities exist in a mutually independent manner\(^1\). The difference between individual humans is that there are differences and combinations of intelligent strengths and weaknesses. Each student has his own intellectual field of strength, which can only be brought into full play in appropriate situations. As long as the education is successful, each student can become a talent in a certain field and may gain a certain expertise\(^2\).

Introspective intelligence, also known as self-awareness, is an individual's awareness of their existence, including their behavior and mental state and cognition\(^3\). That is, the ability of an individual to understand himself, analyze and reflect, and to construct a correct self-perception. The development level of self-cognition is different at different ages. As a special social group whose intellectual development is about to mature, college students also have their specific development situation and problems in the development process. Self-cognition affects college students' learning, career selection and development. In order to understand the current level of self-cognitive development of college students and explore strategies to improve the overall development of college students, the author conducted a survey and research using questionnaire surveys. Through the analysis of the data, it is found that there are some problems in contemporary college students' self-cognition, and targeted improvement measures and strategies are put forward in order to get the attention of educators.

2. Preparation of questionnaires, questionnaires and statistics

2.1 Preparation of the questionnaire

According to Campbell, a person with good self-awareness may have some of the following characteristics: Be aware of the range of your emotions; Find ways to express your emotions and ideas; Forming a correct self-model; Motivation to identify and pursue goals; Motivation to identify and pursue goals; Able to work independently; Interested in the "big problems" of life, such as: meaning, care and purpose; Motivate yourself for continuous learning and growth; strive to discover and understand the inner experience; be able to understand the complexity of the self and human situation; strive to achieve self-realization; stimulate the vitality of others\(^4\).

According to self-recognition evaluation indicators, refer to relevant questionnaires, a questionnaire for this study was prepared. Including: self-knowledge, emotional life, motivational system, life and its value, it is composed of 34 questions, and the gender and specialty of the respondents are counted in secret.

<table>
<thead>
<tr>
<th>Measuring</th>
<th>Typical problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-knowledge</td>
<td>Do you know what are your strengths and weaknesses?</td>
</tr>
<tr>
<td></td>
<td>When others point out your shortcomings, would you be happy to accept them and would you think of ways to correct them?</td>
</tr>
</tbody>
</table>
Emotional life

| Are you able to handle your emotions well and know what treatments are most effective for you? |
| Is it difficult for you to say something in front of others that makes you angry, happy, sad, and jealous? |
| When you are unhappy, do you know exactly why? |

Human power system

| Do you always learn from success or failure? |
| Have you always believed in your ability to overcome difficulties? |
| Do you always have clear learning goals and learning plans? |
| Do you think you have achieved self-realization? |

Life and its value

| Do you have a clear employment direction? |
| Are you working for your ideal? |

2.2 Issuance and collection of questionnaires

In order to facilitate the collection and statistics of the questionnaires, the author purposefully selected fourth-year students from professional universities such as Chinese, foreign languages, sports, and computers to conduct questionnaire surveys by class. 150 questionnaires were distributed and all were recovered, and 146 valid questionnaires were returned.

2.3 Statistics

The data obtained from the questionnaire survey were statistically analyzed by major, gender, summary, etc. The results are shown in Table 2.

| Table 2. Statistics of introspective intelligence development of college students |
| --- | --- | --- | --- | --- |
| Object | Self Conscious | Emotional management | Self-actualization | Value System |
| | strong | general | weak | strong | general | weak | strong | general | weak |
| Chinese | 66.1 | 26.1 | 7.8 | 47.6 | 21.7 | 30.7 | 40.6 | 35.7 | 23.7 |
| English | 65 | 23.8 | 11.2 | 44.8 | 31.3 | 23.9 | 37.8 | 45.1 | 17.1 |
| Computer | 67.4 | 28.9 | 3.7 | 49 | 25.5 | 25.5 | 36.1 | 47.8 | 16.1 |
| physical education | 71.7 | 24.4 | 3.9 | 46.6 | 27.4 | 26 | 44.7 | 37.8 | 17.5 |
| male | 68.7 | 23.9 | 7.4 | 46.4 | 24.2 | 29.4 | 46.2 | 37.3 | 16.5 |
| female | 67.2 | 26.4 | 6.4 | 52.1 | 25.2 | 22.7 | 40.6 | 42.6 | 16.8 |
| overall | 67.7 | 25.6 | 6.7 | 47 | 26.1 | 26.9 | 40.3 | 40.6 | 19.1 |

3. An Analysis of the Development of Self-cognition of College Students

3.1 College students' self-awareness is maturing, but self-awareness is high

From the overall statistics, 67.7% of students with strong self-awareness, and only 6.7% of students with poor self-awareness; From the statistics of specific problems, 71.2% of college students think that they...
know themselves, know their advantages and disadvantages, and have a certain "knowledge". Among the majors surveyed, those with the strongest self-awareness were sports students, and 88.9% of the students thought that they knew themselves. In contrast to the high level of college students 'self-knowledge, others' evaluations or objectivity evaluations are significantly lower. Many teachers think that contemporary college students believe in themselves too blindly, and overestimate themselves, so far away and unrealistic. There is a large gap between the subjective self and the objective self.

3.2 College Students’ emotional management ability is not outstanding, and have poor emotional expression and are volatile

On the whole, college students' emotional management ability is not outstanding. Only 47% think that their self-emotional management ability is strong, and 26.9% are weak. Girls are better than boys. From the statistics of specific problems, 87.7% of college students clearly know their own personality and temper, 69.8% of college students can clearly understand the reasons when they are down or happy, 50.8% of college students can handle their emotions and Knowing what method is most effective for them, 65.9% of college students can overcome the bad mood, get rid of the problems of excessive tension and negative emotions, and be able to control their emotions.

It is also found in the survey that the emotional expression of college students is still poor. 32.9% of college students think that emotions and moods are not always well expressed, and 30.1% of college students think that it is difficult to say things that make them angry and sad in front of others. 57.5% of students said that their lives, studies, and work are always affected by emotional fluctuations. 45.2% of students sometimes feel frustrated because small things are not done well. 45.9% of students said that when they are in a good mood, they have a high degree of self-identification, they also have a high self-evaluation, and are confident in themselves[5].

3.3 College Students have clear learning goals, but confused self-realization

Through surveys, 53.4% of college students can set their own learning goals, and 60.3% of students have always believed that they can overcome the difficulties in completing the goals; 68.5% of students said that they can always adjust their learning methods appropriately to achieve the ultimate goal. At the same time, college students are also willing to reflect. 51.4% of students said that they often reflect on what they have done, and can also learn from success or failure. According to survey statistics, 77.4% of college students are not satisfied with their current self, and feel that they have not achieved their expected goals and have not completed self-realization. The self-awareness of male students is 34.8%, which is significantly higher than the 17% of female students. The self-realization of sports students and computer application students are 34.2% and 25.9%, which are significantly higher than the 13.4% and 18.8%. But overall, the degree of self-realization of college students is still very low. 22.6% of college students think they have achieved self-realization, 25.2% of college students think they have not achieved self-realization, and 52.2% of college students have uncertain answers.

3.4 College students have their own value system, but the values are immature

In terms of thinking about life, many college students can work independently and have a set of ethical
values in their lives\cite{6}. In the survey, 75% of college students said they like to be alone and meditate, and like to work and study independently. 86.6% of college students have their own ideals and are fighting for their ideals. 69.9% of college students always have positive opinions on the questions of "what kind of life to live" and "what is the meaning of life". However, some students still face study and life negatively, do not think aggressively, and dare not face up to reality\cite{7}.

3.5 Career ideals are seriously ahead of schedule, not in line with professional abilities

Nearly 80% of students in career goals choose to do business and start a business, which is basically close to online surveys\cite{8}. Regarding the direction of entrepreneurship and how to start a business, only 10.3% of the students answered positively. As for the knowledge of the employment situation, 89% of the students considered the situation serious and not optimistic. Nearly 30.1% of the students did not like their major. Confused about careers, girls are much bigger than boys.

4. Countermeasures to improve college students' self-awareness

4.1 Educate students to build good relationships

A good interpersonal environment is the first element of self-awareness and the foundation for future careers\cite{9}. In addition to providing a platform for students to understand things and develop majors, the university also provides a network for expanding interpersonal relationships, constantly making new friends, learning to communicate with others, treating others in good faith, and knowing themselves through their evaluation.

4.2 Schools should strengthen the education of college students' self-awareness and strengthen career guidance

During the study of college students in school, teachers also need to create opportunities for students to make them an autonomous person with unique life experience and strong self-awareness. On the one hand, it can provide students with opportunities for self-reflection and deep thinking through lectures, discussions or other activities, and also provide a platform for others to understand themselves and correct their shortcomings. On the other hand, strengthen career guidance, encourage students to establish practical goals, and strive to find their own problems and promote their development through continuous reflection on the process of achieving the goals, the level of effort, and the success or failure. The purpose is to accumulate knowledge and skills for the ideal career.

4.3 Create a good, positive mood

Since most college students are only children, they have grown up under the care of many parents since childhood. They have not experienced many setbacks. They are still immature in terms of emotional control and difficult tolerance. So some are arrogant, others are self-defeating and cannot integrate well into the extended family of classes, schools, and society. Therefore, parents should set a good example. In addition to discovering and developing their children's talents and potentials early, they must also encourage them to be brave in their performance. Children should be treated with equal status, paying attention to their
emotional and emotional expressions, so that in a healthy, relaxed, harmonious, democratic, and equal environment, they can gradually cultivate children's positive and peaceful mentality, stable emotions, and methods of correctly expressing emotions. For the unfavorable factors that increase their psychological burden, such as their learning and emotional troubles, difficulties in life, employment pressure, parents and teachers should actively communicate with them to help them properly manage their emotions, overcome impulse, and maintain a steady state of mind. Encourage them to establish an optimistic and confident attitude, face the reality, establish their ideals, and work hard to form a correct outlook on life, values, and career.

4.4 Educate students through multiple ways to strengthen self-improvement strategies

4.4.1 Multi-channel recording
In the final analysis, human development depends on itself, who is the master of destiny. The development of technology and the widespread application of the Internet also provide a platform for self-improvement of college students. College students can record their growth through blogs, QQ logs, etc. and share with friends. They can also learn from their failures and gain experience and motivation from their success.

4.4.2 Broadly borrowed
The ancients said: "Take bronze as a mirror, you can dress up; use ancient as a mirror, you can know what to do; use a human as a mirror, you can gain and lose." Contemporary college students must continue to expand their knowledge, strive to improve their comprehensive quality, and learn from others. Knowing and grasping yourself can guide your life and thus dominate your life.

4.4.3 Active development
strengthen the cultivation of willpower, take the initiative to develop, break self-closure, expand the scope of life, increase life experience, expand the space for interaction, actively participate in various activities and social practices, and find a more correct self. In particular, female college students must build confidence, recognize their physical, psychological, and social selves, accept themselves, actively accept themselves, accept their strengths and weaknesses, and objectively evaluate and affirm their value.

5. Conclusion
Self-awareness is the fundamental premise of self-transcendence. The mental development of college students is basically mature and stable, and their self-awareness, value system, and emotional management have a high level of development. There are also discordant factors due to the influence of social environment, personal character and other factors. As an educator, we must arouse enough attention and take targeted measures to promote the healthy and harmonious development of college students, establish a correct professional outlook, make them have higher emotional intelligence and intelligence, and better adapt to future social needs. The future workplace has its own blue sky.

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7. References