

College Students' Social and Emotional Competence under the Background of Digital Intelligence: Deficiency Representation and Improvement Path

Minmin Zhang*

School of Economics and Management, Taishan University, Tai'an, Shandong, 271000, China

**Corresponding author*

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Abstract: Social and emotional competence is an important breakthrough in the development of high-quality education. Under the background of the digital intelligence era, digitization and intellectualization have changed the traditional way of education. College learning shows the characteristics of intelligence, systematization, and fragmentation, as well as the diversification of knowledge production and dissemination, which poses a new challenge to the cultivation of college students' social and emotional competence. At present, there are serious deficiencies in the social and emotional competence of Chinese college students, that is, the deviation of self-consciousness and self-management abilities, the lack of social consciousness and interpersonal skills, the weak ability to make responsible decisions, and so on. Combined with the characteristics of digital intelligence education, this paper puts forward some useful countermeasures to improve college students' social and emotional competence from six aspects. They are to establish the principles of student-centered education, to bring mathematical literacy and social and emotional competence into teachers' professional construction standards, to bring social and emotional education into the school curriculum, to integrate social and emotional education with an intelligent teaching environment, to take social and emotional competence as an important part of educational evaluation, to enhance students' sense of belonging on campus, and to build a new type of teacher-student relationship.

1. Introduction

In order to effectively cope with the challenges brought by the popularization of higher education, China has issued a series of policies to ensure and improve the quality of undergraduate education, with an emphasis on the development of quality education. The "China Education Modernization 2035" issued in 2019 further regards connotative development and high-quality development as the future development direction of China's higher education. In the new era of human capital theory, the influence of social and emotional competence on students' academic achievement and career development has been widely discussed. Research shows that social and emotional competence can help improve students' cognitive levels, adjust students' learning motivation, improve students'

academic performance, and also have predictive value for future career income. Therefore, improving social and emotional competence can be used as a breakthrough in quality education and high-quality development of education. At the same time, the transformation of digital intelligence has promoted the high-quality development of higher education. The large amount of data and intelligent convenience brought by digital intelligence are starting a major transformation of the times, which also brings new challenges to the cultivation of college students' social and emotional abilities. Based on the lack of social and emotional competence of college students, this paper makes an in-depth analysis of the influence of digital intelligence on college students' social and emotional competence and puts forward targeted improvement paths and measures.

2. Literature Review and Theoretical Analysis

2.1. About Social and Emotional Competence

The term "social and emotional competence" was first put forward by CASEL in 1994. It refers to a series of core competencies related to individual adaptation and social development mastered and applied by children or adults in complex situations of growth and development. This view emphasizes that social and emotional competence is the application of emotional intelligence in different fields, which can make people more intelligently deal with some problems in their social adaptation and development, and better coordinate their cognition, emotions, and behavior when facing social challenges and pressures. Based on Gorman's emotional intelligence theory, CASEL defines social and emotional abilities as "individuals identify and manage emotions, set and achieve positive goals, appreciate other people's views, build and maintain supportive relationships, make responsible decisions, and deal with personal and interpersonal affairs constructively", which is specifically divided into five abilities: self-awareness, self-management, social awareness, interpersonal skills, and responsible decision-making. The role of social and emotional competence in individual success even exceeds cognitive factors (Yuan *et al.*, 2021) [1]. The cultivation of social and emotional competence can significantly promote students' self-adjustment, improve interpersonal relationships, reduce problem behaviors, increase prosocial behaviors, and improve academic performance (Durlak *et al.*, 2011; Taylor *et al.*, 2017) [2-3].

2.2. Factors Affecting Social and Emotional Competence

Bronfenbrenner's moral ecosystem theory points out that the developing individual is nested in environmental system, and the system interacts with the individual and affects the individual development [4]. Social and emotional competence is cultivated and developed in the interaction of individuals, families, schools, and other systems. Existing studies have paid more attention to the cultivation of students' social and emotional abilities in the basic education stage, and found that school belonging (Tang *and* Huang, 2023) [5], growth, thinking and learning (Huang *et al.*, 2023) [6], and family rearing style (Yao *and* Chen, 2022) [7] can affect students' social and emotional abilities to varying degrees. In addition, the classroom environment is one of the main driving factors for the effective implementation of social and emotional education, complementing and strengthening the social and emotional abilities taught in the curriculum (Cefai *et al.*, 2018) [8]. In classroom teaching, physical safety and emotional safety, supportive peer relationships, sense of belonging, cultural response and tolerance, participation, cooperation, challenges and high expectations, student-centered discipline, and listening to students' voices are all key elements of the classroom social and emotional environment.

The social and emotional competence of college students is characterized by individualization, situationalization, and valorization. Chen *et al.* (2023) compiled a scale suitable for measuring the

social and emotional competence of Chinese college students, and defined the social and emotional competence of college students as their ability to construct triple relationships with themselves, others, and the collective and to make responsible decisions for themselves, others and the collective [9]. The investigation shows that enriching social feelings and experiences, establishing social understanding and social concepts, and developing social care and social responsibility are the main ways of social-emotional learning for college students.

3. The Deficiency of College Students' Social and Emotional Competence under the Influence of Digital Intelligence

The formation of college students' social and emotional competence is widely influenced by the classroom environment, school environment, and social environment. The development of digital intelligence in education and teaching has changed the classroom, school, and social environment, and affected the cultivation of college students' social and emotional competence in the formation, dissemination, and reception of knowledge.

3.1. The Characteristics of Digital Intelligence Teaching

3.1.1. The Intelligence and Systematization of Learning

Systematization is reflected in the fact that everyone can learn, learn from time to time, learn everywhere, and learn from the domain, which, respectively, reflects the subject dimension, time dimension, space dimension, and domain dimension of learning, which is also the fundamental requirement of the construction of learning society and the lifelong learning concept advocated by the state. Digital intelligence is embodied in the use of various digital intelligence means and technologies to learn, to improve the efficiency, effect, and frequency of learning.

3.1.2. The Fragmented Character of Learning

The large amount of data produced by the development of information technology is starting a major era of transformation. Facing the large amount of information resources, people need to cultivate the behavior and habits of online learning with a brand-new way of thinking. Learning in the era of big data is the disassembly and reconstruction of large amounts of network information. Fragmented learning in the field of learning science implies a change in learning behaviors and learning methods in the era of big data. The development of mobile Internet in the era of big data and the creation of new media and diversified machines have made the knowledge acquired in the learning process more fragmented and unsystematic, and are disorganized and unrelated fragments of knowledge. Fragmented learning can be divided into fragmentation of learning content and fragmentation of learning time. The phenomenon of fragmentation not only makes the reader segmentation present as a fragmented phenomenon, but also triggers the demand for reading personalized information, and the whole network communication presents as a fragmented context.

Fragmented learning is an indispensable part of building a new knowledge system in the era of big data, and the ideal new knowledge system has unlimited freedom to reprocess the information itself. Fragmented knowledge has infinite possibilities of disassembly, reorganization, and construction, and a single fragmented knowledge may be discarded at will. After systematic processing and management, unlimited knowledge fragments no longer bind our thoughts like integrity. Therefore, fragmented learning in the era of big data is beneficial for learners to use a brand-new way of thinking, obtain meaningful knowledge fragments from large amounts of information, and integrate with the original knowledge to complete the construction of a new knowledge system. In-depth study of the causes, learning process, and knowledge management of

fragmented learning is beneficial for learners to obtain valuable information and complete knowledge construction in the era of big data. However, faced with massive information, college students cannot identify and screen information, and can't systematically process and manage the knowledge casually. As a result, they are often in a passive and blind state of accepting information.

3.1.3. Diversification of Knowledge Production and Dissemination Subjects

All kinds of online courses, open platforms, and video platforms provide rich online learning resources, and the traditional talent training mode is challenged. Knowledge storage and organizational forms are more fragmented. Long-term learning of fragmented knowledge will cause trouble for the cultivation of deep learning and systematic learning ability, which will have a far-reaching impact on students' study habits. In addition, digital intelligence also puts forward higher requirements for teachers. In addition to accumulating professional knowledge, teachers also need to learn actively to adapt to new teaching scenes and master new teaching tools. The scientific research, teaching, management, and service of universities are facing new opportunities and challenges in an all-round way. Driven by digital intelligence, college students need to cultivate online learning behaviors and habits in a brand-new way of thinking. Online resources and online learning not only provide convenience, but also reduce face-to-face communication between teachers and students. The communication between people is more reflected in cold numbers or words, lacking emotional communication, which is not conducive to the cultivation of college students' social and emotional abilities.

3.2. The Deficiency Representation of College Students 'Social and Emotional Competence

Influenced by instrumental rationality and other factors, for a long time, Chinese education has formed an educational quality evaluation mechanism with the improvement of academic performance as the core, which leads schools to pay too much attention to the courses related to academic performance and pay attention to cultivating abilities related to IQ. In the process of education, the academic purpose of knowledge, indoctrination and intelligence training dominates all aspects of school life. The teaching objectives almost all revolve around students' cognitive development. It seems that the acquisition of students' scores is more important than the cultivation of students' self-confidence, self-esteem, self-improvement, friendly coexistence with others, benign cooperation, and other abilities needed to adapt to society. Behind the labels of intelligence, excellence, diligence, reason, and hard work, some students show inner apathy and lack of gratitude. That is, the lack of social and emotional competence is embodied in the following aspects.

3.2.1. The Deviation of Self-awareness and Self-management Ability

Under the traditional exam-oriented education, we pay attention to the improvement of professional knowledge and skills, attach importance to competition, and neglect cooperation and emotional communication. Teachers' authoritative role and traditional teaching habits, lack of caring emotional atmosphere between teachers and students, and lack of emotional arousal and communication teaching mode have separated the integration of emotion knowledge, and experience. Some college students pay attention to personal experience and are unwilling to passively accept and obey the views, experiences, and values of others. Self-centered, and lack care and tolerance for others. On the one hand, many college students lose their self-consciousness, which leads to frequent psychological phenomena such as confusion, emptiness, inferiority, complex, or anxiety. On the other hand, self-awareness is the basis of self-management, and the loss of college students' self-awareness will hurt the development of their self-management abilities. When students cannot accurately identify and evaluate their emotions and feelings, it is difficult for

them to effectively adjust their thoughts and behaviors to cope with challenging situations. Typically, some college students have insufficient emotional management ability and cannot deal with emotional problems.

3.2.2. Lack of Social Awareness and Interpersonal Skills

Influenced by the rapid development of the economy and society, there are deviations in the development of postgraduates' social consciousness and interpersonal skills. First of all, the loss of graduate students' social consciousness is manifested in the fact that social values tend to be utilitarian, self-centered, and unable to treat social problems objectively. Under the influence of "egoism" and "materialism", students will constantly materialize interpersonal relationships, ignore other people's ideas, and even make some immoral behaviors. Secondly, in interpersonal communication, graduate students mainly have the problems of lack of interpersonal skills, difficulty in communicating with others, and fear of communicating with others, which will also make graduate students have obstacles in identifying the resources around them. Under the unequal and alienated teacher-student relationship, trust and intimacy between teachers and students cannot be established. Over time, students are unwilling to seek help from their tutors and cannot actively use the learning resources provided by their tutors.

3.2.3. Less Ability to Make Responsible Decisions

Some college students are hesitant and swayed by considerations of gain and loss, which makes it difficult for them to weigh internal and external conflicts and make responsible decisions, among which "career decision-making difficulty" are a typical embodiment. Faced with various external conflicts and challenges, college students are often unable to accurately identify, analyze, and solve problems due to their personality and other reasons. "Slow employment" and "slow employment" are obvious manifestations. In addition, with the transformation of society and culture, some college students show alienation of self-values and a lack of ethical responsibility in problem decision-making. Unable to deal with the conflict between inner freedom and external convention reasonably. College students lack a sense of responsibility and ability to bear, often cannot fully bear their responsibilities and obligations, lack of self-management and control, resulting in more problems.

Compared with ignorance, knowledge without emotion may hide greater danger. Without guidance based on the social quality formed by positive emotional experience, people may release barbarism and hostility to society. Therefore, the understanding of human development in education should not pay too much attention to the mastery of systematic knowledge and the possession of specific professional knowledge, but pursue the formation of certain specific skills and become engaged in specific occupations.

4. Path to Improve College Students' Social and Emotional Competence

The fundamental purpose of education is to cultivate people by virtue and shape a better life and world. In the era of technological change, we should "know in our eyes and have someone in our hearts" to ensure that technological innovation always serves "learning to be an adult". Chinese traditional education highlights the dimension of morality and the cultivation of a gentleman's personality. In the era of attaching importance to science and technology, the humanistic dimension should be emphasized. Scientific work lacking humanistic care may lead mankind into an uncertain future. In higher education, scientific knowledge and social emotion education should not be neglected.

4.1. Principal of Focusing on Students' Growth

The online education platform in the era of digital intelligence can provide a large number of digital teaching resources, break the physical boundary between campus and classroom, shorten the time and space distance between people, and enable everyone to acquire knowledge anytime and anywhere. At the same time, more attention should be paid to promoting students to become the main body of learning through these technical means, emphasizing teacher-student interaction and collaborative creation, focusing on exploration and discovery, encouraging and helping students to make more independent choices, building a personalized knowledge system, improving their autonomous learning abilities, and truly learning to learn and learn for life.

4.2. Incorporate Digital Intelligence Literacy and Social and emotional competence into the Basic Standards of Teachers' Professional Construction

Teachers have a great influence on students' social and emotional abilities. On the one hand, teachers' own social and emotional abilities directly affect students; On the other hand, teachers' ability to cultivate social emotions directly affects students. Teachers' attention or not, being good at understanding, adjusting, and guiding students' feelings, emotions, personalities, interpersonal relationships, etc., are essential for the development of students' social and emotional competence. China attaches great importance to the professional level of teachers and regards the professional level as an important task in the construction of teaching staff. However, in the current, standards and research on teachers' professionalization, social and emotional abilities, and training abilities are almost vacant. We should bring social and emotional abilities and their training abilities into the basic standards and important contents of teachers' professional construction, and integrate them into the teaching practice of digital intelligence.

4.3. Incorporate Social and Emotional Education into the School Curriculum and Integrate it with the Intelligent Teaching Environment

Infiltrating social and emotional competence into daily teaching is an effective intervention measure to promote the development of students' social and emotional competence. Social and emotional education regards "personal ability, social ability, and learning ability" as the key abilities of lifelong learning, which should be an important direction and topic of school curriculum reform. Classroom teaching plays an important role in guiding students to carry out social emotion learning, forming correct social concepts, establishing social responsibilities, and developing social literacy. For example, for normal students, the effective implementation of emotional education courses can promote their recognition of normal majors and sublimation of professional ethics, and cultivate emotional education thinking based on understanding. We should strengthen the daily teaching of social and emotional competence from four aspects: a social sense of reason, a social sense of morality, a social sense of beauty, and social sense of responsibility.

4.4. Taking Social and Emotional Competence as an Important Content of Educational Evaluation

Evaluation is the direction of education and teaching, and it is also the goal guidance of teaching work. As a breakthrough in the development of quality education, it is of great significance to include social and emotional competence in the important content of educational evaluation to promote the practice of cultivating social and emotional competence. In the evaluation of social and emotional competence, we should systematically strengthen the evaluation of students' social and

emotional competence from the aspects of evaluation content, procedures, methods, tools, and means.

4.5. Enhance Students' Sense of Belonging on Campus

The school's sense of belonging reflects the school's student-centered concept and the degree of implementation of management. The research of SSES shows that school belonging is positively correlated with students' social and emotional abilities. According to the data of the International Student Academic Proficiency Test (PISA), Chinese students have excellent academic achievement, but their scores of school belongings are low. Schools should take enhancing students' sense of belonging to the school as an important goal of pursuit and effort.

4.6. Strive to Build a New Type of Teacher-Student Relationship

Teacher-student relationship is the basic relationship between the two main bodies in a school, which is of key significance to the formation of students' character. The teacher-student relationship has a high positive correlation with students' social and emotional competence. The teacher-student relationship of equality, democracy, justice, and tempering justice with mercy is an important feature of a positive and good teacher-student relationship. However, in real life, the relationship between student and teacher is often in a tense state, and it is particularly noteworthy that students and teachers often have different feelings and evaluations of the relationship between teacher and student. It is necessary to accurately understand the feelings and views of different subjects on the relationship between teachers and students, and consciously and scientifically improve the relationship between teacher and student.

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