Influence of the Self-leadership Ability and Positive Psychological Capital of Design Major College Students on Their Future Maturity

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Abstract: This study explores the impact of the self-leadership ability and positive psychological capital of design major college students on their future maturity. Self-leadership ability refers to an individual's ability to guide their behavior through self-motivation, goal setting, and self-regulation, whereas positive psychological capital encompasses psychological traits such as self-efficacy, optimism, hope, and resilience. This study used a literature review and theoretical analysis methods, combined with relevant research at home and abroad, to verify the important role of self-leadership ability and positive psychological capital in college students' career planning and development. The results indicate that greater self-leadership ability and positive psychological capital can significantly enhance the future maturity of design students and help them better cope with career challenges. This study provides a theoretical basis for career education for design major college students and proposes corresponding training strategies.

Keywords: Self-leadership ability, Positive psychological capital, Maturity of the future, Design major, College student.

1. Introduction

With the popularization of higher education, employment pressure on college students is also increasing daily. The continuous increase in the number of college graduates has a direct effect on the difficulty of employment for graduates. According to statistics from the Ministry of Education, by 2025, the number of graduates from ordinary universities in China is expected to reach 12.22 million, exceeding 10 million for four consecutive years. The sharp increase in the number of people means that competition for positions becomes increasingly fierce. College students majoring in design face multiple challenges in their career development. How to enhance career maturity, which refers to an individual's level of preparation in career decision-making and development, has become an important issue in the field of education. Research has shown that self-leadership and positive psychological capital (PsyCap) are key factors affecting an individual's career maturity.

The design major has the characteristics of strong innovation and practicality, requiring students not only to possess professional skills but also to have good self-management abilities and positive attitudes. Therefore, this study focuses on design major college students and explores how self-leadership ability and positive psychological capital affect their future maturity to provide theoretical support and practical guidance for career education and the personal development of design major college students.

2. Literature Review

2.1 Concept and Measurement of Future Maturity

Career maturity is a core concept in the field of career psychology, first proposed by Super (1955), and is used to measure an individual's level of preparation and adaptability in the process of career development. Super suggested that career development is a dynamic process and that an individual's career maturity develops with age, experience, and environmental changes. Crites (1978) further divided future maturity into attitude maturity and cognitive maturity. The former focuses on an individual's attitude toward career decision-making (such as career exploration willingness and career decision-making confidence), whereas the latter involves practical abilities in career planning (such as information gathering and goal setting). In terms of measurement, Crites (1978) developed the Career Maturity Inventory (CMI), which became the primary tool for early assessment of career maturity. Subsequently, Savickas (1984) proposed the concept of "Career Adaptability", emphasizing an individual's ability to adjust during career changes, and developed the "Career Adaptation Abilities Scale" (CAAS). In recent years, with rapid changes in the professional environment, researchers have paid more attention to dynamic professional abilities, such as career resilience and lifelong learning orientation, which play important roles in modern career maturity assessment.

For college students majoring in design, the measurement of future maturity should focus not only on traditional career decision-making abilities but also on industry adaptability (such as the ability to respond to technological changes) and creative career identity (such as a sense of commitment to the design industry). Research has shown that the career maturity of design students is closely related to their self-awareness, industry awareness, and career exploration behavior. Therefore, future research can be combined with dynamic career environments to further improve the maturity assessment system for the creative industry.

2.2 Relationship between Self-leadership Ability and Future Maturity

Self-leadership refers to an individual's ability to actively guide themselves toward achieving goals through cognitive and behavioral strategies. It was first proposed by Manz (1986) in the field of organizational behavior and was gradually applied to educational psychology and career development research. This theory emphasizes self-influence processes, including core dimensions such as self-set goals, self-reward, self-observation, and self-regulation. In recent years, many studies have shown that self-leadership ability has a significant effect on the career maturity of college students, especially in dynamic and changing career environments. This ability can help students engage in more effective career planning and decision-making.

2.2.1 Self-goal setting and career decision-making ability

Research has shown that students with high-level self-leadership abilities are more inclined to set clear and feasible career goals and take structured actions to achieve these goals. Locke and Latham's (2002) goal setting theory suggests that clear career goals can enhance an individual's career motivation and improve the accuracy of career decisions. In the context of a design major, if students can independently set short-term (such as skill improvement) and long-term (such as career positioning) goals, their career maturity will be significantly improved. In addition, the self-talk strategy in self-leadership has been shown to optimize the career decision-making process and reduce anxiety and hesitation when career choices are made.

2.2.2 Self-regulation and Occupational Adaptability

Career maturity involves not only decision-making ability but also resilience to adapt to changes in the professional environment. The self-regulation dimension of self-leadership enables students to monitor their own behavior and adjust their career strategies according to industry needs. For example, in the creative industry, technology iteration is rapid, and design students with high self-regulation abilities can adapt to new tools (such as AI design software) faster and optimize their career paths. The study also revealed that students who adopt self-reward strategies exhibit greater resilience in the face of career setbacks, which is highly correlated with the "attitude maturity" proposed by Crites (1978) in career maturity.

2.2.3 Self-leadership ability and career exploration behavior

Another key indicator of career maturity is the proactivity and depth of career exploration. Hirschi et al. (2011) noted that students with strong self-leadership abilities are more inclined to actively collect career information, seek internship opportunities, and establish industry networks. This exploratory behavior not only enhances their professional cognitive level but also strengthens their confidence in career decision-making (career decision-making self-equity). For example, if design students can use self-leadership strategies (such as time management and task decomposition) to complete career exploration projects (such as portfolio optimization and industry research), their career maturity will be significantly better than that of their peers, who passively wait for opportunities.

2.3 The Relationship between Positive Psychological Capital and Future Maturity

Psychological capital was first proposed by American

economist Goldsmith, who believed that psychological capital includes multiple psychological characteristics and plays an important role in individual productivity and performance (Goldsmith et al, 1998). Luthans et al. proposed the concept of "positive psychological capital" on the basis of theories of positive psychology and positive organizational behavior, with individual "positive psychological strength" at the core (Luthans & Youssef, 2007). The concept of psychological capital has gradually been widely applied in economic development, healthy behavior, performance management, and educational psychology (Letcher, 2003; Mubarak et al, 2021; Qiao et al, 2022; Sealome & Chipunza (2020)) with the aim of revealing the impact of individual psychological characteristics on individuals. It mainly consists of four components: hope, self-efficacy, resilience, and optimism. In terms of commonality, all four components possess a sense of control, intentionality, and pursuit of subjective goals (Luthans & Youssef Morgan, 2017). People with greater psychological capital are more inclined to make positive evaluations of the probability of success through their own unremitting efforts. In terms of heterogeneity, hope is the belief in finding the path to achieve ideal goals, resilience represents the ability to overcome setbacks, efficacy is the confidence in performing specific tasks and achieving expected results, and optimism is maintaining a positive view of current and future situations. Moreover, with economic development and social progress, Luthans proposed ways to identify, develop and manage the psychological capital of Chinese workers in the context of China (Luthans et al., 2008), further clarifying the impact of psychological characteristics on Chinese behavior.

2.3.1 Self-Efficacy and Career Decision Confidence

Bandura's (1997) social cognitive theory emphasizes that self-efficacy is a key factor influencing individual occupational behavior. Design students with high self-efficacy often demonstrate greater confidence in career decision-making (career decision-making self-equity) and are able to evaluate career options more decisively and make reasonable choices. Empirical research has shown that successful experiences accumulated through project-based learning can significantly enhance the self-efficacy of design students, thereby promoting their career maturity development. Notably, in the creative industry, self-efficacy is also reflected in the level of "creative confidence", which refers to students' belief in their ability to generate innovative solutions, and this belief directly affects the depth and breadth of their career exploration.

2.3.2 Hope theory and career goal management

Snyder's (2002) hope theory states that hope consists of two components: pathway thinking and agency thinking. In the career development process of design students, high hope level students can develop diversified career paths (such as preparing for employment and entrepreneurship) and flexibly adjust strategies when encountering obstacles. Research has shown that students who participate in mentorship programs score higher on desirable traits, exhibit more systematic career planning abilities, and stronger goal persistence. Especially when facing common project failures in the design industry, it is hoped that traits can help students maintain a sense of direction in their career development and avoid abandoning their career goals too early.

2.3.3 Optimistic tendencies and career resilience

Optimism, as the core dimension of PsyCap, includes two levels: disposable optimism and explanatory style, which are universal expectations for future positive outcomes. In the field of design, optimistic students tend to attribute career setbacks to temporary, specific factors rather than permanent, universal defects. This positive attribution significantly enhances students' career resilience, enabling them to maintain a stable career development trajectory amidst industry fluctuations. Tracking studies have shown that after training with cognitive behavioral interventions, the optimism level of design major students has improved, and correspondingly, their occupational adaptability has also been significantly enhanced.

2.3.4 Resilience traits and sustainable career development

Career resilience emphasizes an individual's ability to recover and grow in adversity. In the rapidly changing design industry, resilience traits enable students to effectively address challenges such as technological iterations, project failures, and career transitions. Research has shown that design students who adopt a growth mindset exhibit stronger career resilience and are more inclined to view career difficulties as learning opportunities rather than threats. Educational practice has shown that methods such as failure case analysis and stress inoculation training can effectively cultivate students' resilience traits, thereby increasing their long-term career development potential.

3. Ways to Improve the Self-leadership Ability of Designing Major College Students

3.1 Building a Systematic Curriculum System for Cultivating Self-leadership

The curriculum is the direct carrier of university education, and with a rich curriculum, education can be comprehensive. In a sense, curriculum design essentially reflects the purpose of education and guides the direction of educational development. To emphasize the cultivation of students' professional knowledge and skills, public courses on self-development, career planning, and mental health education for college students are set up. Universities should develop a tiered self-leadership training curriculum tailored to the characteristics of design majors. In the initial stage, a "Fundamentals of Self Management for Creative Workers" can be established, with a focus on cultivating the ability to set goals (application of SMART principles) and manage time (use of tools such as Gantt charts and tomato work methods). In the intermediate stage, "Design Project Self Management" is offered, which simulates the real design process and trains students' abilities in self-observation (design log recording) and self-regulation (project progress monitoring). In the advanced stage, a 'Creative Leadership Practice' can be established, requiring students to independently complete a complete project from planning to implementation and cultivate comprehensive self-leadership skills.

3.2 Implementing the project-driven experiential learning mode

Research has shown that project-based learning can effectively enhance self-leadership skills. By establishing a project library for school enterprise cooperation, providing short-term design tasks and requiring students to independently form teams and manage the entire project process; implementing the "dual mentor system", where professional mentors are responsible for quality control, corporate mentors focus on process management, gradually reducing guidance intensity to cultivate student autonomy; and introducing agile development methods and strengthening self-management habits through mechanisms such as daily site meetings and iterative reviews.

3.3 Establishing a Multidimensional Self-leadership Evaluation Mechanism

The single result evaluation mode is changed to construct a process evaluation that includes examining self-management continuity through design logs, project milestone reports, etc. Peer evaluation focuses on evaluating the self-discipline and goal orientation of team members. Corporate mentor evaluation involves measuring professional self-management ability from an industry perspective.

3.4 Specialized training to strengthen metacognitive strategies

Focusing on the characteristics of design students, the key is to cultivate exclusive attention management skills for creative workers (such as "flow state" training), emotional regulation strategies (mindfulness meditation applied during creative bottleneck periods), and self-dialog techniques (reconstruction of positive language patterns).

4. Analysis of the Impact of Self-leadership Ability on Future Maturity

Self-leadership ability refers to the process in which an individual influences themselves through self-guidance and self-motivation to achieve job performance. The concept of self-leadership ability originated from the concept of self-management and first appeared in the field of management. Manz, a representative Western scholar who studies the theory of self-leadership, believes that self-leadership includes a series of strategic content designed to provide personal goals and self-rewards, involving both behavioral and cognitive aspects. The strategic content that emphasizes behavior includes self-setting goals, self-monitoring, self- rewarding, and positive self-criticism; above, one still needs to practice or practice on their own. The strategic content that emphasizes understanding in self-leadership includes designing self-work plans that fulfill responsibilities through various more personally motivating methods; establishing personal confidence and a sense of responsibility; establishing a personal spiritual image; and engaging in 'self talk' to develop a habit and mindset of positive thinking.

One of the core qualities of self-leadership is goal setting. If design students can clearly set short-term and long-term

career goals, their future maturity will be significantly improved. For example, developing a career plan on the basis of the SMART principle (specific, measurable, achievable, relevant, time bound) can increase the effectiveness of career decision-making. The design industry is highly uncertain, and self-regulation ability helps students adjust their mentality and adapt to industry changes. Research has shown that students with self-regulation abilities are more likely to recover from career setbacks and continuously optimize their career strategies.

5. Conclusion and Suggestions

This study confirms that self-leadership ability and positive psychological capital have a significant positive effect on the future maturity of design major college students. Universities can enhance students' career maturity in the following ways: offering self-leadership training courses to help students master goal-setting and self-regulation skills; strengthening the cultivation of positive psychological capital; enhancing students' self-efficacy and optimistic attitudes through psychological counseling and sharing successful cases; and providing industry practice opportunities to enhance students' career adaptability and decision-making abilities. Future research can combine empirical data to further validate the effectiveness of different cultivation strategies.

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