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Current Status of Career Maturity of Clinical Medicine Students and Its Correlation with Professional Commitment and Emotional Intelligence

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Abstract: *Objective:* To explore the current status of career maturity among undergraduate students majoring in clinical medicine and examine the relationship between professional commitment and expectations of emotional intelligence. *Methods:* The study employed the Career Maturity Scale for Undergraduates, Professional Commitment Scale, and Emotional Intelligence Scale to investigate 423 undergraduates majoring in clinical medicine. *Results:* Gender, grade level, and being an only child were found to affect the career maturity of these students. Furthermore, professional commitment and emotional intelligence were significantly and positively correlated with career maturity ($P < 0.05$). *Conclusion:* Professional commitment and emotional intelligence are identified as positive predictors of career maturity among undergraduates majoring in clinical medicine.

Keywords: Clinical medicine; Professional commitment; Emotional intelligence; Career maturity

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1. Introduction

Professional commitment refers to the degree to which an individual identifies with and enjoys their major, as well as their willingness to work hard in the process of learning it [1]. Emotional intelligence, on the other hand, pertains to an individual's ability to monitor their own and others' emotions and feelings, and to recognize and utilize this information to guide their thoughts and behaviors [2]. Career maturity denotes the degree to which an individual accomplishes the developmental tasks appropriate to their stage of career development, understanding what is required to make career decisions and the realism and consistency of those choices [3].

Relevant studies have documented that professional commitment and emotional intelligence can influence college students' career maturity [4]. The present study focuses on undergraduates majoring in clinical medicine at a medical school in Henan Province. Intending to provide insights into the career planning of such undergraduates and guide reforms in medical education and teaching, this study analyzes their current

level of career maturity and explores the mechanisms through which professional commitment and emotional intelligence impact career maturity.

2. Materials and methods

2.1. General information

Students of clinical medicine from a medical school in Henan Province were selected as the research object via convenience sampling. A total of 450 questionnaires were distributed, and 423 valid questionnaires (94%) were returned. Among the respondents, 200 (47.28%) were male, and 223 (52.72%) were female. Regarding academic year distribution, there were 88 (20.80%) first-year students, 78 (18.44%) second-year students, 86 (20.33%) third-year students, 88 (20.80%) fourth-year students, and 83 (19.62%) fifth-year students. In terms of residence, 152 (35.93%) were from urban areas, while 271 (64.07%) were from rural areas. Moreover, 120 (28.37%) of the subjects were only children, while 303 (71.63%) had at least one sibling.

2.2. Research tools

2.2.1. Career maturity scale

This study utilized the scale revised by Zhang *et al*., which was originally developed for Chinese college students [5]. The scale comprises six dimensions: career goals, career self-confidence, career value, career autonomy, family and friend dependence, and career references, totaling 34 items. The Cronbach's coefficient for this scale is 0.925, indicating good internal consistency reliability. Responses are rated on a scale of 1 to 5, with a total score ranging from 34 to 170, where higher scores indicate a higher level of career maturity.

2.2.2. Professional commitment

The Professional Commitment Scale for College Students, compiled by Lian *et al*. [6], was employed in this study. It consists of 27 items divided into four dimensions: emotional commitment, aspirational commitment, normative commitment, and continued commitment. Higher scores denote higher levels of professional commitment. The internal consistency reliability alpha coefficient for the scale was found to be 0.927.

2.2.3. Emotional intelligence

The scale, translated by Wang [7], comprises 33 questions covering four dimensions: emotional perception, self-emotional management, others' emotional management, and emotional utilization. Higher scores indicate higher emotional intelligence levels. The scale demonstrates a retest reliability of 0.91 and an internal consistency coefficient of 0.88.

2.3. Statistical analysis

Career maturity, professional commitment, and emotional intelligence scores of undergraduate clinical medicine students with different characteristics were analyzed using independent samples *t*-test, one-way analysis of variance (ANOVA), and correlation analysis via SPSS 25.0. A significance level of $P < 0.05$ was considered statistically significant.

3. Results

3.1. Career maturity of undergraduate clinical medicine students

Table 1 shows that the mean total career maturity score of clinical medicine students (3.36 ± 0.47) was slightly

higher than the high school equivalency threshold (3.00). The scores for each dimension were as follows: career autonomy (3.63 ± 0.62), career reference (3.56 ± 0.66), career goals (3.47 ± 0.50), career self-confidence (3.23 ± 0.65), career choice value (3.14 ± 0.84), and family and friends dependence (3.14 ± 0.74), in descending order.

Statistical analysis of demographic variables revealed differences in career maturity and its dimensions among clinical medicine students based on gender ($P < 0.05$). Significant differences were also observed for career maturity and most dimensions based on grade level, except for career self-confidence and career worthiness ($P < 0.05$). Post hoc multiple comparisons using the LSD method showed a significant difference in career goals between freshmen and fifth-year students ($P < 0.05$). Additionally, only children scored lower than non-only children in total career maturity score and all dimensions, with a significant difference ($P < 0.05$).

Table 1. Career maturity scores of undergraduate clinical majors with different demographic characteristics (mean ± SD)

Variant	Professional goal	Professional confidence	Professional value	Professional autonomy	Reliance on family & friends	Occupational reference	Total score
Male	3.48 ± 0.54	3.21 ± 0.66	3.26 ± 1.01	3.68 ± 0.64	3.11 ± 0.82	3.57 ± 0.74	3.39 ± 0.53
Women	3.39 ± 0.46	3.24 ± 0.65	3.01 ± 0.63	3.58 ± 0.61	3.17 ± 0.65	3.55 ± 0.58	3.33 ± 0.41
t	1.802*	-0.529**	2.818**	1.560*	-0.925*	0.370*	1.391**
P	0.012	0.007	0.005	0.020	0.035	0.011	0.005
1st-year student	3.46 ± 0.56	3.27 ± 0.68	3.16 ± 1.26	3.65 ± 0.72	3.07 ± 0.87	3.56 ± 0.67	3.37 ± 0.57
2nd-year student	3.45 ± 0.47	3.31 ± 0.59	2.98 ± 0.77	3.68 ± 0.50	3.21 ± 0.68	3.71 ± 0.92	3.39 ± 0.42
3rd-year student	3.45 ± 0.49	3.08 ± 0.69	3.06 ± 0.74	3.79 ± 0.56	2.99 ± 0.77	3.62 ± 0.49	3.33 ± 0.43
4th-year student	3.27 ± 0.51	3.21 ± 0.76	3.15 ± 0.61	3.34 ± 0.67	3.14 ± 0.60	3.31 ± 0.60	3.24 ± 0.50
5th-year student	3.54 ± 0.44	3.29 ± 0.47	3.32 ± 0.59	3.71 ± 0.54	3.32 ± 0.69	3.62 ± 0.49	3.47 ± 0.38
F	3.466**	1.755	1.927	7.144***	2.573*	4.592***	2.750*
P	0.008	0.137	0.105	0.000	0.037	0.001	0.028
Only child	3.35 ± 0.56	3.22 ± 0.72	3.17 ± 1.13	3.51 ± 0.68	3.12 ± 0.70	3.47 ± 0.86	3.31 ± 0.53
Has sibling(s)	3.46 ± 0.47	3.23 ± 0.62	3.13 ± 0.69	3.68 ± 0.59	3.15 ± 0.75	3.59 ± 0.56	3.37 ± 0.44
t	-2.053*	-0.180**	0.457*	-2.322*	-0.380**	-1.734*	-1.340*
P	0.041	0.007	0.048	0.021	0.004	0.034	0.011
Rural	3.46 ± 0.53	3.27 ± 0.71	3.23 ± 1.04	3.68 ± 0.63	3.21 ± 0.78	3.58 ± 0.80	3.40 ± 0.52
Urban	3.42 ± 0.49	3.21 ± 0.61	3.09 ± 0.69	3.60 ± 0.62	3.11 ± 0.71	3.55 ± 0.57	3.33 ± 0.44
t	0.825	0.975	1.658	1.245	1.393	0.488	1.543
P	0.060	0.530	0.248	0.304	0.054	0.066	0.074

*$P < 0.05$, **$P < 0.01$, ***$P < 0.001$

3.2. Professional commitment and emotional intelligence in undergraduate clinical medicine students

The total professional commitment (3.54 ± 0.55) and emotional intelligence (3.61 ± 0.53) scores of undergraduate students majoring in clinical medicine were slightly higher than the medium threshold (3.00). The dimensions of professional commitment scored as follows: normative (3.85 ± 0.81), aspirational (3.55 ± 0.69), emotional (3.49 ± 0.56), and continued commitment (3.33 ± 0.49), in descending order. Emotional intelligence dimensions scored as follows: management of other's emotional management (3.71 ± 0.61),

emotional utilization (3.70 ± 0.62), self-emotional management (3.62 ± 0.60), and emotional perception (3.50 ± 0.58), in descending order.

3.3. Correlation between professional commitment, emotional intelligence, and career maturity of clinical medicine students

Pearson's correlation analysis, using the total score of professional commitment and emotional intelligence and each of their dimensions as independent variables and the dimensions of career maturity and the total score as the dependent variable, revealed a significant positive correlation between professional commitment, emotional intelligence, and career maturity dimensions, as well as the total score (**Table 2**).

Table 2. Correlation analysis of professional commitment and emotional intelligence with career maturity of clinical medicine students (r)

	Professional goal	Professional confidence	Choice of employment value	Professional autonomy	Reliance on friends & family	Occupational reference	Total career maturity score
Emotional commitment	0.475**	0.177**	0.208**	0.523**	0.207**	0.419**	0.452**
Ideal Commitment	0.485**	0.189**	0.168**	0.553**	0.112*	0.375**	0.397**
Normative commitments	0.379**	0.164**	0.037	0.463**	0.120**	0.369**	0.283**
Continued commitment	0.532**	0.280**	0.371**	0.417**	0.366**	0.350**	0.534**
Total professional commitment score	0.531**	0.163**	0.210**	0.570**	0.169**	0.437**	0.469**
Emotional awareness	0.558**	0.216**	0.264**	0.501**	0.261**	0.415**	0.506**
Self-emotional management	0.523**	0.250**	0.158**	0.607**	0.198**	0.482**	0.494**
Managing the emotions of others	0.513**	0.176**	0.177**	0.562**	0.143**	0.491**	0.465**
Emotional use	0.487**	0.170**	0.115*	0.580**	0.192**	0.456**	0.422**
Total emotional intelligence score	0.589**	0.232**	0.212**	0.623**	0.209**	0.510**	0.535**

*$P < 0.05$, **$P < 0.01$ (two-tailed)

4. Discussion and analysis

4.1. Situation of career maturity among undergraduate clinical medicine students

The career maturity of clinical medicine students appears to be higher among male students compared to female students, with the difference being significant. This finding may be attributed to traditional gender roles, where male students may feel a greater responsibility to support their families, leading to a deeper understanding of their career development [8]. Additionally, significant differences in career maturity were observed between only-child and non-only-child college students. This discrepancy could be influenced by differing family ideologies and the degree of parental guidance and education [9]. Moreover, competition for resources within families may contribute to non-only-child college students exhibiting a stronger sense of utilitarianism [10]. Furthermore, fifth-year students demonstrated higher career goal scores compared to first-year students, possibly due to their deeper understanding of the profession's development prospects and career paths after

completing apprenticeships and internships [11].

4.2. Professional commitment and emotional intelligence of clinical medicine students

Overall, clinical medicine students exhibited moderate to high levels of professional commitment, with the highest scores observed in the normative commitment dimension. This suggests a strong recognition and desire to pursue a career in the clinical profession. Similarly, emotional intelligence levels among clinical medicine students ranged from moderate to high, with the strongest dimension being the management of others' emotions. This reflects students' ability to effectively manage interpersonal interactions, which is crucial for future clinical work.

4.3. Correlation analysis of professional commitment, emotional intelligence, and career maturity among clinical medicine students

A positive correlation was found between professional commitment, emotional intelligence, and career maturity among clinical medicine students. Higher levels of professional commitment were associated with increased interest in the specialty and better coping abilities, leading to a deeper liking for the specialty [12]. Additionally, a multi-loop positive feedback mechanism exists between professional commitment and career maturity, where increased professional maturity enhances the sense of commitment and vice versa [13]. Similarly, higher emotional intelligence levels allow students to better understand their specialty and cope with challenges, thereby increasing enthusiasm for the specialty. Again, a positive feedback loop exists between emotional intelligence and career maturity. Therefore, focusing on cultivating professional and emotional intelligence among undergraduate clinical medicine students can enhance their career maturity.

In conclusion, this study highlights the medium level of career maturity among undergraduate clinical medicine students at a medical school in Henan Province. Factors such as grade level, gender, and sibling status were found to influence career maturity. Moreover, professional commitment and emotional intelligence positively predicted career maturity. Thus, it is crucial to consider these factors in professional education and career development planning to develop a scientific and reasonable career development education system. Furthermore, focusing on cultivating professional commitment and emotional intelligence can enhance career maturity levels among clinical medicine students. Future research should encompass institutions in other regions to broaden the sample scope.

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Disclosure statement

The authors declare no conflict of interest.

References

[1] Li J, Hao J, Hao H, et al., 2021, Impact of Rural Order-Oriented Free Medical Students' Professional Commitment on Professional Maturity: Mediating Role of Emotional Intelligence. Journal of Capital Medical University, 42(3): 431–435.

[2] Li J, 2020, Relationship Between Emotional Intelligence, Self-Esteem and Subjective Well-Being of Clinical Medicine Undergraduates. Journal of Capital Medical University, 41(3): 428–432.

[3] Liu Y, Li J, Gao X, et al., 2022, Influence of Craftsman Psychology on Career Maturity of Clinical Medical Students: The Mediating Role of Career Decision-Making Self-Efficacy. Chinese Journal of Health Psychology, 30(2): 261–266.

[4] Liu D, 2018, Mediating Effect of Professional Commitment Between Career Maturity and Core Self-Evaluation of Nursing Students in Higher Vocational Colleges. Journal of Nursing, 25(17): 31–35.

[5] Zhang Z, Rong Y, Guan Y, 2006, The Reliability and Validity of a Chinese Version of the College Students' Career Maturity Inventory. Journal of Southwest University (Social Science Edition), 32(5): 1–6.

[6] Lian R, Yang L, Wu L, 2005, Relationship Between Professional Commitment and Learning Burnout of Undergraduates and Scales Developing. Journal of Psychology, 2005(5): 632–636.

[7] Wang C, He Z, 2002, The Relationship Between Parental Rearing Styles with General Self-Efficacy and Emotional Intelligence in Middle School Students. Chinese Journal of Mental Health, 16(11): 781–782.

[8] Chen Y, Li Z, Guan B, et al., 2019, Influence of Psychological Resilience on Career Maturity of Nursing Undergraduates. Nursing Research, 33(2): 208–213.

[9] Chen X, Huang M, Tan Y, et al., 2022, Current Status of Vocational Maturity of Higher Vocational Nursing Students and Its Influencing Factors. Journal of Nursing, 29(21): 49–54.

[10] Liu F, Yuan H, 2019, Study on the Correlation Between Career Planning and Professional Maturity and Professional Identity of Nursing Students. Medical Information, 32(3): 137–139.

[11] Zheng H, 2006, A Study on the Developmental Characteristics of Career Maturity of Chinese College Students, thesis, Southwest University.

[12] Liu J, Kou D, 2017, The Relationship Between College Students' Professional Commitment and Career Maturity: The Mediating Role of Career Decision Self-Efficacy. Education Guide, 2017(6): 30–34.

[13] Tan J, Cai J, Wang S, 2017, Correlation Analysis of Medical Interns' Career Maturity and Personality Traits. Health Career Education, 35(1): 110–112.