

Original Paper

The Moderating Effect of Proactive Personality on the Transition Shock and Career Self-confidence of Undergraduate Nursing Interns

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Abstract

Objective: To explore the relationship among the Transition shock, proactive personality, and career self-confidence of undergraduate Nursing interns, and to examine the moderating mechanism of proactive personality between the Transition shock and career self - confidence, so as to offer a reference for relieving the role - transformation pressure and enhancing the career self-confidence of undergraduate Nursing interns. **Methods:** Convenience sampling was employed to conduct a survey on nursing undergraduates from four undergraduate institutions in Henan Province. **Results:** The mean score of the Transition shock of undergraduate Nursing interns was (2.81 ± 0.58), with relatively higher scores in internship workload (3.09 ± 0.60) and the conflict between theory and practice (2.87 ± 0.63). The Transition shock was negatively correlated with career self - confidence ($r = -0.29$, $P < 0.01$), and the interaction term of transformation shock and proactive personality could predict career self-confidence ($\beta = 0.174$, $\Delta R^2 = 0.023$, $P < 0.001$). **Conclusion:** Proactive personality plays a positive moderating role in the relationship between the Transition shock and career self-confidence of undergraduate Nursing interns. That is, proactive personality can mitigate the negative influence of the Transition shock on career self-confidence

Keywords

Proactive personality, Transition shock, career self-confidence, Undergraduate nursing intern

1. Introduction

Clinical practice not only acts as a bridge for undergraduate nursing students to transition from theoretical learning to practical application but also marks the beginning of their gradual shift from a

student role to a professional one, which has a profound impact on their future career development (Li, R., Chen, Q. L., Li, H. Y. et al., 2024, pp. 64-67). Career self-confidence pertains to an individual's self-assurance in their capacity to resolve career-related issues and their conviction in career self-efficacy. It is a typical indicator reflecting an individual's career adaptability and exerts a positive impetus on individual career development (Zhao, X. Y., Tan, D. L., & Guo, C., 2015, pp. 463-469). Prior research has demonstrated that career self-confidence is not only associated with the clarity of an individual's future work identity (Yao, S. Y., Yong, K. Q., Meng, S. Y. et al., 2024, pp. 87-89, p. 92) but also impacts an individual's future career satisfaction (Zheng, D. D., & Chang, S., 2017, pp. 3075-3077) and work well-being (Rudolph, C. W., Lavigne, K. N., & Zacher, H., 2017, pp. 17-34). Nevertheless, during the clinical practice phase, undergraduate nursing students frequently encounter the phenomenon of transition shock due to maladaptation. That is, individuals may experience issues such as fear, confusion, and self-doubt owing to a dearth of clinical experience and the absence of corresponding knowledge and skills, rendering them unable to adapt effectively to the nurse role and leading them to opt out of the nursing profession after clinical practice (Huang, Y. X., Mu, S. Y., Zhu, J. L. et al., 2021, pp. 727-732). The research by Li Jing et al. (Li, J., Huang, W. H., Guo, R. et al., 2022, pp. 740-744) suggests that transition shock can have a negative effect on the professional cognition of undergraduate nursing interns, specifically causing ambiguity in the positioning of the nursing profession and cognitive biases. Based on this, this study posits that transition shock may have a negative impact on the career self-confidence of undergraduate nursing interns. Proactive personality refers to a relatively stable personal trait or behavioral tendency of individuals to actively take actions to alter the external environment (Kong, L. N., Yang, L., Pan, Y. N. et al., 2021, pp. 690-695). Individuals with a high-level proactive personality are less likely to be impeded by the surrounding environment and tend to respond positively to challenges, whereas those with a low-level proactive personality often exhibit the opposite behavior (Zhu, H., Zhang, H., Tu, A. et al., 2021, p. 609050). Proactive personality is not only closely related to an individual's career development but may also offer a certain buffering effect when individuals confront negative events. Meng Li et al. (Meng, L., & Lang, Y. M., 2024, pp. 610-614) suggested that nursing students with a strong proactive personality are more likely to actively address the problems encountered in their career development, explore their own potential, and enhance their career self-confidence. Therefore, this study further hypothesizes that proactive personality plays a moderating role between transition shock and career self-confidence in undergraduate nursing interns. Herefore, this study was conducted to: (1) assess the level of transition shock among undergraduate nursing interns; (2) analyze the relationship between transition shock and career self-confidence; and (3) test the moderating role of proactive personality in this relationship. The findings may provide insights for interventions aimed at mitigating the negative effects of transition shock.

2. Participants and Methods

2.1 Participants

From January to May 2025, a convenience sampling method was employed to select undergraduate nursing students (Class of 2021) from four undergraduate institutions in Henan Province for a questionnaire survey. Among the 230 nursing undergraduates surveyed, 42 were male (18.3%) and 188 were female (81.7%); the average age was 21.53 ± 1.02 years. Among these participants, 34 were only children (14.8%), while 196 were non - only children (85.2%). Their hometowns were distributed as follows: urban areas (68, 29.6%), towns (56, 24.3%), and rural areas (106, 46.1%). Inclusion criteria: full - time undergraduate enrollment; informed consent and voluntary participation. Exclusion criteria: students on leave during the survey period.

2.2 Methods

2.2.1 Research Instruments

(1) General Information Questionnaire: Self - developed, encompassing variables such as gender, age, place of origin, and only - child status.

(2) Transition Shock Scale for Undergraduate Nursing Interns: A revised edition developed by Huang Yuxuan et al. (Huang, Y. X., Mu, S. Y., Zhu, J. L. et al., 2021, pp. 727-732), consisting of 18 items. It consists of six dimensions: the conflict between theory and practice, excessive internship workload, lack of social support, tense interpersonal relationships, confusion regarding nursing professional values, and the incompatibility between clinical internship and personal life. A 4 - point Likert scale is employed; higher scores signify stronger transition shock experienced by undergraduate nursing interns. In this study, the Cronbach's α coefficient of the scale was 0.949, and the coefficients of individual dimensions ranged from 0.772 to 0.905.

(3) Proactive Personality Scale: The Chinese version revised by Shang Jiayin et al. (Shang, J. Y., & Gan, Y. Q., 2009, pp. 548-554), based on the original scale developed by Bateman and Crant. This unidimensional scale consists of 11 items rated on a 7 - point Likert scale; higher scores indicate more pronounced proactive personality traits. In this study, the Cronbach's α coefficient of the scale was 0.963.

(4) Career self-confidence Scale: The career self-confidence sub - scale extracted from the Career Adapt - Abilities Scale, revised by Zhao Xiaoyun et al. (Zhao, X. Y., Tan, D. L., & Guo, C., 2015, pp. 463-469), containing 6 items rated on a 5 - point Likert scale; higher scores represent better career adaptability. The Cronbach's α coefficient of this scale was 0.900.

2.2.2 Procedure

Initially, the purpose of this study was explained to the participants. Subsequently, after obtaining informed consent, instructions on questionnaire completion and precautions were provided. Electronic questionnaires were then distributed via the Wenjuanxing platform, and participants were instructed to complete them independently and submit them promptly. All items in the electronic questionnaire were

set as mandatory to prevent omissions. After collection, two members of the research team conducted repeated cross - verifications on the data and excluded questionnaires completed in less than 60 seconds or those showing obvious response patterns. In total, 271 questionnaires were distributed; 41 invalid or ineligible questionnaires were excluded, resulting in 230 valid responses, with an effective response rate of 84.9%.

2.2.3 Statistical Analysis

The data were organized and analyzed using SPSS 26.0 software. The descriptive statistics of general information included frequencies and percentages. The scores of transition shock, proactive personality, and career self-confidence were presented in the form of means and standard deviations. Pearson correlation analysis and hierarchical regression analysis were conducted to explore the relationships among key variables. Statistical significance was defined as $P < 0.05$.

3. Results

3.1 Common Method Bias Test

Given that this study utilized self - report questionnaires, the results might be prone to common method bias. Consequently, Harman's single - factor test (Tang, D. D., & Wen, Z. L., 2020, pp. 215-223) was carried out to evaluate common method bias. Exploratory factor analysis disclosed four factors with eigenvalues exceeding 1, and the first factor accounted for 32.2% of the variance, which was below the critical threshold of 40%, suggesting that there was no severe common method bias in this study.

3.2 Scores for Transition Shock, Career Self-Confidence, and Proactive Personality among Undergraduate Nursing Interns

The overall mean score of transition shock among undergraduate nursing interns was 2.81 ± 0.58 , with a standardized score rate of 70.3%. In terms of dimensions, the scores were ranked from highest to lowest as follows: excessive workload during the internship, disparity between theory and practice, ambiguity regarding nursing professional values, strained interpersonal relationships, deficiency in social support, and incongruity between clinical internship and personal life. Refer to Table 1 for detailed information.

Table 1. Transition Impact Scores for Undergraduate Nursing Interns (n = 230)

Dimension	Number of projects	<i>M</i>	<i>SD</i>	Scoring Rate (%)
Transition Shock	18	2.81	0.58	70.3
Excessive workload during internship	3	3.09	0.60	77.3
Conflict Between Theory and Practice	3	2.87	0.63	71.8

Professional Values in Nursing	2	2.80	0.70	70.0
strained interpersonal relationships	3	2.76	0.70	69.0
Lack of social support	5	2.72	0.77	68.0
Clinical internships conflict with personal life	2	2.50	0.80	62.5
Proactive personality	11	5.46	1.01	78.0
career self-confidence	6	3.18	0.85	63.6

3.3 Correlation among Transition Shock, Career Self-Confidence, and Proactive Personality of Undergraduate Nursing Interns

The findings of Pearson correlation analysis indicated that transition shock exhibited a negative correlation with career self-confidence ($r = -0.29$, $P < 0.01$), and all dimensions of transition shock were negatively correlated with career self-confidence ($P < 0.01$). Proactive personality was positively correlated with career self-confidence ($r = 0.40$, $P < 0.01$). Nevertheless, there was no significant correlation between transition shock and proactive personality ($P > 0.05$).

3.4 Test of the Moderating Effect of Proactive Personality between Transition Shock and Career Self-Confidence among Undergraduate Nursing Interns

Hierarchical regression analysis (Wen, Z. L., Hou, J. T., & Zhang, L., 2005, pp. 268-274) was employed to examine the moderating effect of proactive personality between transition shock and career self-confidence of undergraduate nursing interns. Initially, the independent variable, transition shock, and the moderating variable, proactive personality, were centered. Subsequently, the product of transition shock and proactive personality was regarded as the interaction term to mitigate the potential multicollinearity between variables. Prior to establishing the regression model, gender, student origin, and whether the student was an only child were considered as control variables. The results of the moderation test are presented in Table 2. As shown in Table 2, the interaction term between transition shock and proactive personality was a significant predictor of career self-confidence ($\beta = 0.174$, $p < 0.001$), accounting for an additional 2.3% of the variance ($\Delta R^2 = 0.023$). Therefore, proactive personality plays a moderating role between transition shock and career self-confidence among undergraduate nursing interns. Data suggests that proactive personality exerts a positive moderating effect on the relationship between transition shock and career self-confidence. The higher the level of proactive personality, the weaker the negative predictive effect of transition shock on career self-confidence.

Table 2. Testing the Moderating Role of Proactive Personality in the Relationship between Transition Shock and Career Self-Confidence among Undergraduate Nursing Interns (n=230)

	Variable	career self-confidence (β)		
		Regression Equation 1	Regression Equation II	Regression Equation III
Step 1: Control Variables	Gender	-0.068	0.005	0.014
	Age	-0.036	-0.008	-0.012
	Place of origin	-0.009	-0.058	-0.051
	Are you an only child?	0.015	0.068	0.043
Step2: Primary Function	Transition Shock		-0.260	-0.345 ***
	Proactive personality		0.389	0.386
Step3: Regulatory Function	Transition Shock $\times$ Proactive Personality			0.174
	<i>F</i>	0.307	11.164 ***	10.793
	<i>R</i> ²	0.005	0.231	0.254
	ΔR^2	—	0.226	0.023

Note. ** indicates $P < 0.01$; *** indicates $P < 0.001$. Coefficients are standardized results.

4. Discussion

4.1 Undergraduate Nursing Interns Experience Relatively High Levels of Transition Shock

In this study, the overall mean score of transition shock among undergraduate Nursing interns was 2.81 ± 0.58 , which is consistent with the findings of previous research (Li, J., Huang, W. H., Guo, R. et al., 2022, pp. 740-744; Pan, Q. W., Xu, D., & Wang, X., 2024, pp. 140-143). This indicates that the transition shock scores of undergraduate nursing students are at a moderate - to - high level. Among the various dimensions of transition shock, the dimension of “excessive internship workload” obtained the highest score, suggesting that excessive workload has the most significant impact on the transition shock of undergraduate nursing students. Specifically, this excessive workload is manifested physically, such as feelings of fatigue and decreased sleep quality, which is in line with the findings reported by Wang Lei et al. (Wang, L., Guo, Q. X., Wang, Y. F. et al., 2019, pp. 4251-4254). This implies that nursing managers and clinical instructors should assign tasks appropriately and scientifically to assist interns in better adapting to clinical work. Additionally, the dimension of “theory - practice conflict” also had a relatively high score, reaching a rate of 71.8%. Although university education equips undergraduate nursing students with abundant theoretical knowledge, such teaching often lags behind the complex and dynamic realities of the clinical practice environment (Yang, F., Wan, Y. W., & Guo,

Q., 2015, pp. 10-13). Consequently, achieving a genuine integration of theoretical knowledge and clinical practice usually requires interns to go through an adaptation period.

4.2 Transition Shock Negatively Predicts Career Self-Confidence among Undergraduate Nursing Interns

The results indicate that transition shock negatively predicts career self-confidence among undergraduate Nursing interns. The clinical internship stage is the initial endeavor of nursing undergraduates to transition from the student role to the professional nurse role. High workloads, difficulties in integrating theory with practice, and intricate interpersonal relationships jointly impose pressure. This not only erodes their expectations of the nursing profession but also prompts them to re-evaluate their career choices and positioning (Ding, Z., Weng, H., Yang, L. et al., 2024), potentially reducing career self-confidence. Essentially, transition shock emphasizes the disparity between the psychological expectations of nursing undergraduates towards the nursing profession and their actual clinical internship experiences. Wu Junyan and Xu Yan (Wu, J. Y., & Xu, Y., 2018, pp. 35-38) contend that such disparities may give rise to feelings of frustration among undergraduate nursing interns, thereby influencing their professional attitudes and subsequent employment decisions. Similarly, Wei Yulian et al. (Wei, Y. L., Wang, S., Zhang, L. Y. et al., 2022, pp. 2417-2423), in their study on newly-employed nurses, discovered that transition shock has a negative predictive effect on work readiness. Among the components of work readiness, future role identification is a crucial factor. Therefore, both career self-confidence and work readiness reflect, to a certain degree, individuals' preparatory cognition regarding future clinical roles, which is closely associated with future work behaviors. Excessively high transition shock experienced by undergraduate Nursing interns hinders the formation and development of such preparatory cognition, thus exerting negative impacts on their career planning and job-seeking behaviors. This indicates that nursing educators and managers should start by comprehending interns' work-life situations and psychological states, regularly organizing discussion forums, offering timely guidance, enhancing interns' expectations for future work, and assisting them in clarifying future career development paths.

4.3 Proactive Personality Moderates the Relationship between Transition Shock and Career Self-Confidence among Undergraduate Nursing Interns

Results clearly indicate that proactive personality plays a moderating role in the relationship between transition shock and career self-confidence among undergraduate Nursing interns. Specifically, the more distinct and prominent the proactive personality traits of undergraduate Nursing interns are, the more efficiently they can alleviate the negative and adverse impact of transition shock on their career self-confidence. According to Proactive Motivation Theory (Liu, M., Long, L. R., & Zu, W., 2007, pp. 333-337), proactive personality acts as an internal and intrinsic driving force that stimulates individuals' work attitudes and behaviors. It enables them to enhance self-perception and make improvements in their current environment by setting clear goals and surmounting various obstacles.

Individuals who possess proactive personalities are able to create opportunities for themselves. They actively search for work - related information, take the initiative to acquire occupational support, formulate corresponding and well - thought - out career plans, and make strenuous efforts towards the self - defined career goals (Parker, S. K., Bindl, U. K., & Strauss, K., 2010, pp. 827-856). Research findings suggest that proactive personality helps nurses to successfully adapt to the workplace (Wu, X. Y., Peng, S. H., Ma, L. S. et al., 2022, pp. 2160-2164), which in turn promotes their work engagement. Although transition shock poses a significant and substantial challenge during the clinical internships of nursing undergraduates, proactive personality functions as a “buffer” in two main ways. Firstly, individuals with a high level of proactive personality tend to make full use of the available resources and conditions to minimize the negative influence of transition shock. Secondly, such interns are more likely to adopt positive coping strategies when confronted with difficulties. They actively engage in career exploration, which consequently enhances their career self-confidence. Therefore, nursing educators and managers should give top priority to cultivating proactive personality traits among students. They should encourage students to actively participate in a wide variety of activities during their academic study, clinical internships, and daily life. In particular, when students encounter difficulties, more emphasis should be placed on developing their ability to solve problems proactively, so as to better equip them to deal with transition shock.

5. Conclusion

This study found that undergraduate nursing interns experience moderate to high levels of transition shock, which negatively predicts their career self-confidence. This transition shock is not a trivial matter, it exerts a significant and negative predictive effect on their career self-confidence. Specifically, the more severe the transition shock they encounter, the lower their confidence in their future nursing careers. Furthermore, proactive personality has been identified as playing a positive moderating role between these two variables. A proactive personality can enable interns to better handle transition shock and maintain a certain degree of career self-confidence. These significant findings suggest that nursing educators and managers should not neglect the transition shock experienced by undergraduate nursing students during their internships. They should implement effective measures to assist these students in clarifying their future career development trajectories. One effective approach is to cultivate proactive personality traits among the students. By nurturing a proactive attitude, students can be more adaptable to the challenges during the internship and have a clearer understanding of their future in the nursing field. Regarding future research, it is advisable to consider expanding the sampling scope. A wider sample can encompass a more diverse group of undergraduate Nursing interns, which will render the research results more representative. Additionally, employing longitudinal research designs can track the changes of interns over an extended period, thereby enhancing the generalizability and applicability of the findings.

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