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Original Article

Innovative behaviour and career success: Mediating roles of self-efficacy and colleague solidarity of nurses

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ABSTRACT

Objectives: The purpose of the study is to explore the relationships amongst innovative behaviour, self-efficacy, colleague solidarity of nurses and career success of nurses in Mainland China.

Method: This study used the cross-sectional investigation method and nurses were recruited from eight tertiary hospitals and four secondary hospitals in Tianjin, China. A convenience sample of 848 nurses was included in this survey. Structural equation model analysis was performed as well.

Results: Results revealed that the nurses' career success score was at the medium degree, whilst innovative behaviour and self-efficacy were in the medium–high level and had high level of colleague solidarity. The four variables include innovative behaviour, self-efficacy, colleague solidarity of nurses and career success; each dimension showed positive correlation ($r = 0.145$ to 0.923 , $P < 0.05$). Independent sample T-test showed no significant differences between the two types of hospitals in the main variables ($P > 0.05$). Multiple linear regression analysis showed that innovative behaviour, self-efficacy and academic solidarity entered the career success regression equation ($\beta = 0.091$ to 0.560 , $P < 0.05$), thereby possibly explaining 52.0% of the total variation. Hierarchical regression analysis and path analysis model showed that self-efficacy and colleague solidarity of nurses played mediating roles between innovative behaviour and career success ($\beta = 0.132$ to 0.221 , $P < 0.05$).

Conclusion: The level of career success of nurses remains to be improved. Additionally, high innovative behaviour, self-efficacy and colleague solidarity of nurses can improve the career success of Chinese nurses.

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1. Introduction

The shortage of nurses is a global problem. Data [1] indicated that by 2020, the shortage of nurses will reach 590,000 in Europe and 800,000 in the US. In China, the number of registered nurses per 1000 persons was only 2.36 in 2015. This ratio still had a huge gap with international standards [2]. However, the high turnover indicates a pessimistic outlook on the professional development of nurses [3]. Research has shown that nurses' career success plays an important role in increasing job satisfaction, thereby reducing turnover and improving the quality of nursing service [4]. Career success is defined as the positive psychological feelings and work-related achievements accumulated by individuals in their work experience [5]. Early studies have substantially focused on

objective indicators, including wages, positions, promotions and career development on career success [6]. However, recent studies have determined that high income and high positions are not necessarily linked to the success of career development; subjective standards, such as the working atmosphere amongst colleagues or job satisfaction, are gradually considered [7]. Accordingly, individuals should undergo career planning (e.g. continuous learning, training of innovation consciousness and enhancement of their self-efficacy) based on their different career development needs. Organisations also need to create an atmosphere of unity and innovation to enhance nurses' career satisfaction and perceived organisational support [8].

Recent studies have generally analysed the influencing factors of career success from organisational characteristics. For example, academic groups and perceived organisational support were significantly and positively associated with career success [9,10]. The lack of organisational support was detrimental to professional development, thereby increasing job burnout and turnover [11]. Thus, a supportive work environment assists nurses establish

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career goals, achieve high career satisfaction and make them reluctant to leave their current position.

Colleague solidarity of nurses refers to gaining support from colleagues and the sharing of professional knowledge, methods and skills amongst members [12]. Evidently, having colleagues to trust is beneficial to academic performance and career development [13]. Solidarity with colleagues enhances the efficiency of employees by enabling efficient coordination and protecting them from destructive and undesirable behaviours [14] [15]. By contrast, an environment characterised by lack of unity makes nurses feel worthless and disappointed and increases their turnover [16].

Innovative behaviour is defined as an individual's actions that generate beneficial and novel ideas and extend them to the members of the organisation [17]. Self-efficacy is a personality trait that refers to individuals' belief that they have the ability to exercise control of cognitive resources and motivate their behaviour for the successful completion of a specific task. This trait emphasises the need for achievement, thereby affecting the nurses' actions (e.g. career success). Previous studies have shown that innovative behaviour is positively associated with self-efficacy [18], organisational solidarity [13] and employee's professional success [19]. We used comprehensive research conclusions to hypothesise that the colleague solidarity of nurses and self-efficacy play a mediating role between innovative behaviour and career success.

Research has also shown that the antecedents of career success include organisational and individual factors [20]. However, only a few studies have focused on the influence of colleague solidarity (i.e. organisational factor), innovative behaviour and self-efficacy (i.e. individual factors) on career success. Thus, the current study aims to explore the relationships of the four variables.

2. Method

2.1. Design and sample

This study uses convenience sampling with a descriptive cross-sectional survey design. The participants were recruited from eight tertiary hospitals and four secondary hospitals in Tianjin. A tertiary hospital is defined as cross-regional facility that provides comprehensive and specialised medical care and undertakes certain teaching and scientific research tasks. Secondary hospitals are institutions that provide comprehensive medical and health services to many communities in counties and districts [21,22]. The current researchers randomly selected four departments in each hospital to investigate all the nurses working in these sections. The exclusion criteria are as follows: (1) internship or probationary nurses and (2) nurses for sick or maternity leave. A total of 480 questionnaires were distributed in the tertiary hospitals, whilst 368 questionnaires were given in the secondary hospitals. A total of 848 registered nurses participated in this survey.

2.2. Instruments

The research tools used in this study include five components: (a) demographic information, (b) personal innovation behaviour scale, (c) self-efficacy scale, (d) colleague solidarity of nurses' scale and (e) career success scale.

2.2.1. Demographic information of the characteristics

The demographic information sheet was designed by the researchers. The demographic information mainly reflected individual differences amongst the participants. Previous studies were used to determine potential demographic variables that may affect career success. Eventually, seven variables were considered, namely, age, gender, marital status, educational level, professional

title, job tenure and purpose for work.

2.2.2. Personal innovation behaviours

Innovative behaviour was measured using Scott's [23] personal innovation behaviour scale, which contained 6 items (e.g. 'Seeking identification, support, and participation of colleagues or leaders'). The participants responded to each item using a 5-point Likert scale, which ranged from 1 (strongly disagree) to 5 (strongly agree). The sum of the scores of each item represented the total score of the innovative behaviour. The total scores of the innovative behaviour ranged from 6 to 30, with a higher score indicating higher levels of innovation behaviours. The Cronbach's α reliability coefficient for the scale was 0.89, whilst the test–retest reliability was 0.88. In this study, the Cronbach's α of the total scale was 0.88.

2.2.3. Self-efficacy

The Chinese version of the self-efficacy scale [24] was translated from the General Self-Efficacy Scale developed by Schwarzer et al. [25] and is suitable for measuring the self-efficacy of Chinese nurses. The developed scale had 10 items and single dimension (e.g. 'I can face the difficulties calmly because I can rely on my ability to deal with problems'). The responses were rated using a 4-point Likert type scale, which ranges from 1 (completely wrong) to 4 (absolutely right). The items were combined to provide a total self-efficacy score; a higher score indicates a higher level of self-efficacy. The Cronbach's α reliability coefficient of the Chinese version was 0.87, whilst the test–retest reliability was 0.83. In this study, the Cronbach's α of the total scale was 0.81.

2.2.4. Colleague solidarity of nurses

Colleague solidarity of nurses was measured using the Chinese version of the Colleague Solidarity Of Nurses' Scale (CSNS) [26]. CSNS comprised 21 items and 3 subscales: emotional solidarity (9 items), academic solidarity (7 items) and negative opinions on solidarity (5 items) (e.g. 'When colleagues tell me the difficulties they face, I don't want to help'). A 5-point Likert scale was used to set up the answers. The dimensions of the emotional and academic solidarities used a positive scoring from 1 (never) to 5 (always), whilst the dimension of the negative opinions on solidarity used reverse scoring from 5 (never) to 1 (always). The sum of the scores in the three dimensions were combined to create a colleague solidarity of nurses; a higher score indicates a higher level of colleague solidarity of nurses. The Cronbach's α reliability coefficient was 0.892, split-half reliability was 0.84, and test–retest reliability was 0.865. In this study, the Cronbach's α of the total scale was 0.842.

2.2.5. Career success

The Chinese version Career Success Scale [27] comprised 11 items and 3 subscales: career satisfaction (5 items), perceived organisational competitiveness (3 items) and perceived external organisational competitiveness (3 items). (e.g. 'I am satisfied with the success of my career' and 'Because of my skills and experience, other organisations view me as a value-added resource'). The responses to the 5-point Likert scale were rated from 1 (strongly disagree) to 5 (strongly agree); a higher score indicates a higher level of career success. The overall Cronbach's α coefficient was 0.88, Cronbach's α coefficients of each dimension ranged from 0.82 to 0.90 and correlation coefficient of each item and total scores of scale were from 0.76 to 0.93. In this study, the Cronbach's α of the total scale was 0.87.

2.3. Ethical considerations

This study had gained approval from the Ethics Committee of Tianjin University of Traditional Chinese Medicine.

2.4. Date collection

The data collection was undertaken from February to May 2017. We distributed questionnaires at the time of the nurses' meetings or group learning time. To ensure the authenticity and reliability of the questionnaire survey, the participants were informed that the survey was anonymous and the results of the survey will be used solely for scientific exploration. The participants devoted approximately 20–25 min to complete the questionnaire. The researchers checked the forms to ensure that valuable information was not missed before questionnaire forms were involved and analysed. A total of 848 sets of questionnaires were sent out. From this total, 79 (9.32%) were excluded from the initial data owing to the evident regularity and potential similarity answers to different items in a the questionnaire. Eventually, 769 (90.68%) sets of questionnaires were collected and analysed.

2.5. Date analysis

Descriptive and inferential statistics were calculated using Statistical Package for Social Sciences (SPSS, version 17.0). Descriptive statistics were used to describe the sample characteristics and average scores for the innovative behaviour, self-efficacy, colleague solidarity of nurses and career success. Independent sample T-test was used to evaluate the difference amongst the main variables between nurses in two types of hospitals. Pearson correlations were used to test the relationships amongst all variables. Hierarchical linear regression analyses were performed to test the mediating effects of the colleague solidarity of nurses and self-efficacy in the relationship between innovative behaviour and career success. Structural equation modelling (SEM) was used to analyse the hypothetical models. SEM is a method of comprehensive test model relations amongst variables and particularly advantageous for theory testing. Moreover, the analysis of Moment Structures (AMOS, version 17.0) was used.

3. Results

3.1. Demographic characteristics

The majority of the participants were women ($n = 756$, 98.3%) and married ($n = 587$, 76.3%), and hold a bachelor's degree ($n = 486$, 63.2%). Additionally, the majority of the participants were primary nurse ($n = 398$, 51.8%) and had 4–10 years nursing experience ($n = 298$, 38.8%). Table 1 presents the demographic characteristics of the participants.

3.2. Innovative behaviour, colleague solidarity of nurses, self-efficacy and career success of nurses

Table 2 presents the descriptive statistics for the study variables. The innovative behaviour and self-efficacy of the participants were in medium-high level (i.e. above the intermediate score of 3.0 and 2.5, respectively). Nurses had high level of colleague solidarity (i.e. above the intermediate score of 3.0). Amongst the three dimensions of colleague solidarity, the level of emotional solidarity was the highest. The score of the nurse's career success was at the medium degree (i.e. slightly above the intermediate value of 3.0). Amongst the three dimensions, the score of the perceived career satisfaction was the highest.

Independent sample T-test was used to compare innovative behaviour, self-efficacy, colleague solidarity of nurses and career success of nurses working in tertiary hospitals and secondary hospitals (Table 3). No statistically significant difference was found between these variables of nurses working in the two types of hospitals.

Table 1
Characteristics of the participants ($n = 769$).

Characteristics	Frequency	Percent (%)
Gender		
Male	13	1.7
Female	756	98.3
Age		
18–25	148	19.2
26–30	142	18.5
31–35	153	19.9
36–40	158	20.5
>40	168	21.8
Marital status		
Married	587	76.3
Single	182	23.7
Educational level		
Bachelor's degree	486	63.2
Associate degree	184	23.9
Secondary technical certificate	99	12.9
Professional title		
Senior nurse	57	7.4
Junior nurse	314	40.8
Primary nurse	398	51.8
Nursing experience (years)		
<1	29	3.8
1–3	156	20.7
4–10	298	38.8
11–20	141	18.3
>20	145	18.9
Purpose for work		
Personal interest	345	44.9
Parents' will	96	12.5
Work for living	288	37.5
Others	40	5.2

3.3. Correlation analysis amongst innovative behaviour, self-efficacy, colleague solidarity and career success of nurses

Pearson's r test was constructed to test the correlation of innovative behaviour, self-efficacy, colleague solidarity and career success of nurses (Table 4). The results revealed that significantly strong positive correlations amongst these variables ($P < 0.01$).

3.4. Multiple linear regression analysis of factors influencing nurses' career success

Multiple linear regression analysis was used to further reveal the relationships amongst nurses' career success and these variables (see Table 5). In the regression equation, career success was considered the dependent variable, whilst the other variables were independent variables. Self-efficacy entered the regression equation, thereby possibly explaining 22.1% of the variance. Thereafter, academic solidarity and innovative behaviour were also included in the regression

Table 2
Innovative behaviour, colleague solidarity of nurses, self-efficacy and career success of nurses in Tianjin ($n = 769$).

Variable	Score range	Score (Mean \pm SD)
Innovative behaviour	1–5	3.594 \pm 0.812
Self-efficacy	1–4	2.760 \pm 0.654
Colleague solidarity of nurses	1–5	4.538 \pm 0.450
Emotional solidarity	1–5	4.757 \pm 0.374
Academic solidarity	1–5	4.365 \pm 0.776
Negative opinions on solidarity	1–5	4.349 \pm 0.557
Career success	1–5	3.247 \pm 0.854
Career satisfaction	1–5	3.453 \pm 0.921
Perceived organisational competitiveness	1–5	3.090 \pm 1.004
Perceived external organisational competitiveness	1–5	3.082 \pm 0.962

Table 3
Comparison of innovative behaviour, colleague solidarity of nurses, self-efficacy, and career success of nurses in different grades of hospitals (Mean \pm SD, $n = 769$).

Variable	Tertiary hospital	Secondary hospital	<i>t</i>	<i>P</i>
Innovative behaviour	3.596 \pm 0.802	3.591 \pm 0.792	0.981	0.322
Colleague solidarity of nurses	4.530 \pm 0.448	4.541 \pm 0.435	0.723	0.542
Self-efficacy	2.768 \pm 0.653	2.754 \pm 0.634	0.876	0.454
Career success	3.250 \pm 0.843	3.239 \pm 0.798	0.985	0.398

equation, thereby improving the variation rate of career success by 29.9% and explaining the 52.0% total variation rate.

3.5. Testing the mediating role of self-efficacy and colleague solidarity of nurses

Hierarchical regression analysis was used to test the mediating effect of self-efficacy and colleague solidarity of nurses based on our hypothesis and the preceding results (Table 6). In model 1, career success was considered a dependent variable, whilst innovative behaviour was an independent variable. The results showed that innovative behaviour had a positive impact on career success ($\beta = 0.682$, $P < 0.001$). Model 2 was constructed to investigate the effect of the independent variable on the mediator variable. The results showed that innovative behaviour had a significant impact on self-efficacy ($\beta = 0.432$, $P > 0.001$). Model 3 was constructed using career success as the dependent variable and innovative behaviour and self-efficacy as independent variables. Accordingly, we determined that innovative behaviour and self-efficacy had a positive influence on career success ($\beta = 0.612$ to 0.221 , $P < 0.001$). When self-efficacy was introduced as a variable, the regression coefficient of innovative behaviour on career success has declined compared with that in Model 1. This result indicates that self-efficacy played a mediating role between innovative behaviour and career success. Models 4 and 5 were constructed using the same method to verify whether colleague solidarity of nurses played an intermediary role. The result showed that innovative behaviour had a significant impact on colleague solidarity of nurses ($\beta = 0.523$, $P < 0.001$) and innovation behaviour and colleague solidarity of nurses had a positive affect on career success ($\beta = 0.643$ to 0.132 , $P < 0.05$). When colleague solidarity of nurses was introduced as a variable, the regression coefficient of the innovative behaviour on career success has declined compared with that in Model 1. This result indicated that colleague solidarity of nurses played a mediating role between innovative behaviour and career success.

3.6. Constructing the structural equation model

This study established a cross layer comprehensive path analysis model based on the correlation and regression analysis of the

variables. After modification, the final model was fitted to the data ($\chi^2/df = 1.811$, GFI = 0.993, AGFI = 0.963, RMR = 0.019, RMSEA = 0.047, NFI = 0.981, RFI = 0.971, IFI = 0.996, TLI = 0.984, CFI = 0.997, PGFI = 0.269). All the revised indexes showed that the model was well suitable and all the path coefficients reached a significant level. Subsequent Sobel tests supported the mediating role of self-efficacy and colleague solidarity of nurses in the relationship between innovative behaviour and career success ($z = 2.43$, $z = 2.13$; $P < 0.05$). Innovative behaviour, self-efficacy and colleague solidarity of nurses had a positive predictive effect on career success, with the path coefficients at 0.63, 0.19 and 0.13, respectively ($P < 0.01$) (Fig. 1).

4. Discussion

Our results indicated that the 21.8% of the participants were over 40 years old and the proportion of job tenure at each span was approximately the same. Over half of the participants thought personal interest was their main purpose for work. These results showed that the majority of the nurses in Tianjin love their specialties and do not want to leave their position. This result was inconsistent with those of Meng [28], which determined that the majority of the participants had 1–3 years of nursing experience and their main aim was to work for a living. Recent studies have presented that the occupational benefit and professional identity of in-service nurses were at a high level in Tianjin hospitals. The higher the job satisfaction of nurses is, the more they can take work as their interest rather than a way of making a living [29]. Our study also revealed that over half of the nurses hold a bachelor's degree, thereby showing that the educational level of Chinese nurses has been substantially improved and people are considerably focusing on nursing education. A few elderly nurses, whose initial qualifications may be secondary technical certificate or associate degree, are willing to obtain a bachelor's degree through continuing education. This result also reflects the increasing demand for nurses' knowledge reserves in the current society.

The results of this study revealed that nurses' innovative behaviour was in medium-high level, which was consistent with Chang's research [30]. In the face of a globally challenging circumstance, nurses should adapt to new ideas or technologies, encourage development and provide the highest quality of services to patients. The scores of nurses' self-efficacy were similar to finding of Fida et al. [31] on 587 Canadian nurses but substantially lower than finding of Tao et al. [32], who investigated the self-efficacy of enterprise employees. This result indicated that the self-efficacy level of nurses were lower than that of other vocations. Bandura [33] explained that self-efficacy is the individuals' faiths on their capability to mobilise cognitive resources to successfully perform a task. Self-efficacy is a subjective assessment of an individual's ability to accomplish certain aspects of work. Lower self-

Table 4
Correlation analysis amongst innovative behaviour, colleague solidarity of nurses, self-efficacy and career success of nurses ($n = 769$, r value).

	1	2	3	4	5	6	7	8	9	10
1. Innovative behaviour	1									
2. Self-efficacy	0.425**	1								
3. Career satisfaction	0.575**	0.364**	1							
4. Perceived organisational competitiveness	0.653**	0.423**	0.779**	1						
5. Perceived external organisational competitiveness	0.623**	0.347**	0.547**	0.686**	1					
6. Career success	0.689**	0.458**	0.920**	0.912**	0.824**	1				
7. Emotional solidarity	0.236**	0.189**	0.223**	0.145**	0.176*	0.923**	1			
8. Academic solidarity	0.436**	0.334**	0.347**	0.389**	0.335**	0.425**	0.576**	1		
9. Negative opinions on solidarity	0.467**	0.323**	0.357**	0.368**	0.345**	0.379**	0.336**	0.446**	1	
10. Colleague solidarity of nurses	0.558**	0.368**	0.358**	0.338**	0.356**	0.434**	0.767**	0.897**	0.721**	1

Note: ** $P < 0.01$; * $P < 0.05$.

Table 5
Multiple linear regression analysis of factors influencing nurses' career success.

	Variable	B	β	t	P	R ²	F
Level 1	(Constant)	19.865	—	12.675	0.000	0.221	123.110
	Self-efficacy	0.698	0.450	11.498	0.000		
Level 2	(Constant)	6.560	—	3.220	0.049	0.295	90.812
	Self-efficacy	0.501	0.351	8.210	0.000		
	Academic solidarity	0.531	0.312	7.107	0.000		
Level 3	(Constant)	0.230	—	0.152	0.891	0.520	146.796
	Self-efficacy	0.297	0.197	5.102	0.000		
	Academic solidarity	0.156	0.091	2.298	0.032		
	Innovative behaviour	1.078	0.560	13.687	0.000		

efficacy is not conducive to individual career development. Thus, self-efficacy should be considered when exploring the factors affecting the professional development of nurses. The score of nurses' career success was at the medium degree, which was consistent with previous studies [34]. Nurses had high level of colleague solidarity, but only academic solidarity was included into the regression equation of career success. One possible reason is that position is the objective index to evaluate a person's career success. In China, the promotion of the nurses' position is closely related to the publication of papers and scientific research projects undertaken. An excellent academic achievement requires collaboration with members.

The proposed mediating model of self-efficacy was supported by data in this study. The results showed that innovative behaviour had a positive effect on career success through self-efficacy. Moreover, this result indicated that nurses with high self-confidence and self-worth are likely to achieve successful results when they have an innovation consciousness and implemented in their workplace. Feng [35] surveyed employees in 336 service enterprises and the results showed that individual innovation behaviour had a direct and significant impact on self-efficacy. Dimotakis [36] indicated that individuals with higher self-efficacy were likely to accept challenging tasks and set a high goal to improve their job performance and career opportunities. These results were consistent with those of our study.

Our mediation model of nurses' solidarity has been supported by our data. A nursing team, if members unite and help each other, will likely to achieve successful results in their workplace when they possess innovative behaviour [37]. Moreover, working in a team with solidarity atmosphere will encourage nurses to obtain higher level of career success in the workplace, thereby preventing negative experience and occupation burnout, as well as enhancing their willingness to remain in the organisation [38]. The psychological factors of employee trust and empowerment have a positive impact on organisational productivity. When analysing the challenges faced by nursing, we should consider the internal thinking, innovative behaviour, self-efficacy and organisational structure of nurses as the key factors.

Table 6
Mediation effect of self-efficacy and colleague solidarity.

Model	Dependent variable	Independent variable	B	β	t	P
Model 1	Career success	Innovative behaviour	1.315	0.682	19.275	<0.001
Model 2	Self-efficacy	Innovative behaviour	0.586	0.432	9.783	<0.001
Model 3	Career success	Innovative behaviour	1.137	0.612	16.967	<0.001
		Self-efficacy	0.296	0.221	5.545	<0.001
Model 4	Colleague Solidarity	Innovative behaviour	1.012	0.523	12.567	<0.001
Model 5	Career success	Innovative behaviour	1.321	0.643	15.335	<0.001
		Colleague Solidarity	0.112	0.132	2.578	0.014

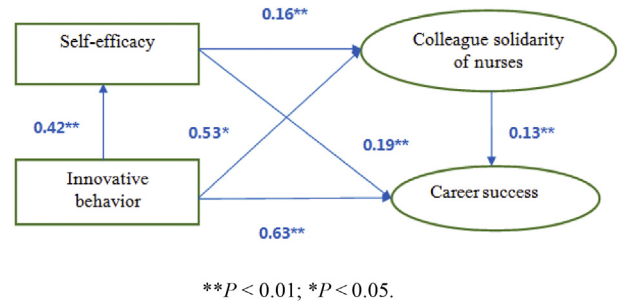


Fig. 1. Final model.

5. Implications for nursing

Given the evidence that associates career success with innovative behaviour, self-efficacy and colleague solidarity of nurses, tactics to strengthen career success were pivotal for nursing managers, administrators and organisations. Nursing administrators who yearn to ensure that nurses perceive career success should cultivate the innovative consciousness of nurses, support their meaningful innovative ideas, encourage nurses to contribute valuable views and allow them to participate in the procedure of formulating policy and strategies, as well as provide incentive mechanisms and rewards for meaningful innovation. Furthermore, the relationship amongst nursing members should be facilitated. Moreover, enhancing the degree of trust amongst colleagues, fair treatment and strengthening communication with employees are good methods to promote these relationships.

Our results can be used as bases to suggest that nursing managers should adopt strategies that increase the self-efficacy of nurses. Managers should cultivate the nurses' right to speak, praise the excellent performance of nurses and help them to realise their worth. Nurses with low self-efficacy should be encouraged to enhance their confidence. Amongst the keys to improve nurses' sense of self-efficacy are respecting their decision-making, focusing on their personality characteristics and eliminating passive rules. In the nursing shortage and quality care needs of the times, these methods facilitate the mitigation of the high turnover rate of nurses, ensure the quality of care, reduce hospital costs and attract new nurses into the hospital.

6. Limitations

This study has a few limitations. Firstly, this study did not include demographic characteristics of participants that might influence the dependent variable for regression analysis. Secondly, the current research is a cross-sectional study, thereby reducing the reliability of the findings. Thirdly, the sample size comes from Tianjin and lacks an investigation of hospitals in other cities. Given that the participants came from only eight tertiary hospitals and four secondary hospitals, the results of the study cannot represent the level of all Chinese nurses, which is not the purpose of the study.

7. Conclusion

The present study demonstrates the relationships amongst innovative behaviour, self-efficacy, colleague solidarity of nurses and career success. These findings highlight the importance of positive innovation behaviour in increasing nurses' career success. Furthermore, innovative behaviour can enhance career success by mediating self-efficacy and colleague solidarity of nurses. The application of these findings could contribute to nurses' career success, which is desirable to managers and administrators.

Conflicts of interest

No conflict of interest was declared.

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Appendix A. Supplementary data

Supplementary data related to this article can be found at <https://doi.org/10.1016/j.ijnss.2018.07.003>.

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