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# The influencing factors of turnover intention among pediatric healthcare workers: a moderated mediation model

Qingwen Jia<sup>1</sup>, Wenkang Shi<sup>2</sup> and Hao Yuan<sup>1\*</sup>

## Abstract

**Background** Turnover intention (TI) is significant for stabilizing the pediatric healthcare workforce and ensuring sufficient pediatric healthcare human resources. This study focuses on the impact and potential mechanisms of person–organization fit (POF), hierarchical plateau (HP), and person–group fit (PGF) on TI.

**Methods** The data set was collected from the Children's Hospital of Hebei Province on the Wenjuanxing online platform using the convenience sampling method in September and October 2023. 546 questionnaires were collected, with 371 valid questionnaires (effective rate: 67.95%). Model 4 and Model 14 of the PROCESS macro (version 3.3) in SPSS were used to construct mediation and moderated mediation models, respectively, and the significance of mediation and moderation effects in the theoretical model was verified using the Bootstrap method (sample size = 5000).

**Results** The results of Model 4 indicate that POF has a negative impact on the HP ( $B = -0.1414, p < 0.01$ ) and TI ( $B = -0.3616, p < 0.001$ ), while the HP has a positive impact on TI ( $B = 0.2528, p < 0.001$ ), and HP can mediate the relationship between POF and TI ( $B = -0.0358, 95\% \text{ CI } [-0.0678, -0.0049]$ ). The results of Model 14 show that the POF has a negative impact on the HP ( $B = -0.1414, p < 0.01$ ) and TI ( $B = -0.2827, p < 0.001$ ), while the HP has a positive impact on TI ( $B = 0.2747, p < 0.001$ ), and index of moderated mediation shows that the PGF can moderate the indirect effect of POF on TI (Index = 0.0305, 95% CI [0.0020, 0.0582]).

**Conclusions** This study constructed a moderated mediation model and found that POF can negatively affect the TI of pediatric healthcare workers, the HP can mediate the relationship between POF and TI, and PGF can moderate the second part of this mediating process. This emphasizes the important role of employee fit with the organization and group, as well as the significant impact of employee career development on TI.

**Keywords** Turnover intention, Person group fit, Hierarchical plateau, Person organization fit, Moderated mediation model

## Introduction

To promote the healthy growth of children, the National Health Commission has issued the Implementation Plan for the Development of Women and Children in China from 2021 to 2030. It is pointed out that by 2030, the mortality rates of newborns, infants, and children under 5 years in China are expected to decrease to below 3.0 ‰, 5.0 ‰, and 6.0 ‰, respectively. At the same time, to ensure the achievement of this goal, a development goal

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of 1.12 pediatric practicing (assistant) doctors per thousand children has been proposed [1]. However, existing data indicates that although there has been an increase compared to 2020, the number of pediatric practicing (assistant) doctors per thousand children in China in 2021 was only 0.78 [2]. Compared with the set development goals, there is still great room for improvement in enriching pediatric health human resources. To ensure the total number of pediatric professionals, some medical colleges in China (such as Fudan University) have resumed undergraduate-level teaching in pediatrics to meet the increasing demand for children's health care services [3]. In addition, the turnover intention (TI) of medical staff should be given more attention. The loss of medical personnel not only damages the quantity of human resources but also leads to potential resource waste [4], as hiring new personnel means generating new employment and training costs [5, 6]. Even worse, a higher turnover rate may lead to a "vicious cycle" of personnel turnover, further damaging health human resources [7].

Considering the adverse effects of TI [4, 7], researchers have focused on how to avoid the loss of existing pediatric health human resources and ensure a sufficient number of pediatric human resources. Some researchers have focused their attention on employees and found that job satisfaction is negatively correlated with employee TI [8, 9], while job burnout [10, 11] and perceived stress [12, 13] are positively correlated with employee TI. Some researchers have also focused on environmental factors. Relevant studies have shown that unsafe working environments [14, 15] and unfavorable working conditions [16] can positively predict employee TI. We attempt to explore the impact mechanism of TI in pediatric health human resources from the perspective of person–environment fit, by combining the joint influence of individuals and the environment. The person–environment fit is considered a match between the values, norms, and other attributes that people possess with the environment, and has been used to explain and study the specific attitudes and behaviors of employees [17]. The research in the field of person–environment fit includes many dimensions, such as person–organization fit (POF), person–job fit, and person–group fit (PGF), which are among them [18]. Currently, many studies focus on POF [19]. Researchers believe that POF is organization-centered and conceptually closer to resignation decision-making. Therefore, POF is included as an important antecedent in the conceptual model of resignation [20]. Some researchers have pointed out that job satisfaction mediates the effects of POF on TI [21], and hierarchical plateau (HP), as an important criterion affecting job satisfaction [22], we expect it to have the same effect. However, current

researchers have paid less attention to PGF [19], and most medical practices are team-based, requiring coordination between healthcare providers from the same or different departments. Therefore, the important role of PGF cannot be ignored [18]. Based on this, this study constructs a moderated mediation model to explore the specific mechanisms of the relationship between POF, HP, PGF, and TI.

## Theoretical background and hypothesis

### *Person–organization fit and turnover intention*

The POF is evaluated by the consistency between the values that individuals adhere to and the content advocated by the organization [23]. Previous studies have shown that the degree of consistency between individuals and organizations can affect the attitudes and behaviors exhibited by individuals within the organization, as individuals exist in specific organizational environments [24]. When individuals are in an organization that aligns with their values, they prefer to exhibit more proactive work performance, such as higher levels of organizational identity and organizational citizenship behavior [20]. POF can also significantly affect employee TI [21, 25]. Liu et al.'s research shows that employees who align with organizational values are more satisfied with the working conditions provided by the organization and have a lower tendency to resign [26]. Similarly, research has found that healthcare workers have a negative association between their perception of POF and TI, and the inconsistency in values between individuals and organizations can lead to higher TI [27].

Based on the above research, hypothesis 1 is proposed: POF negatively predicts TI.

### *The mediating role of hierarchical plateau*

The HP is considered "the point at which the possibility of obtaining additional promotion in the career is very low" [28, 29]. Many studies have found that a perceived HP positively correlates with poor work attitudes, states, and outcomes, such as decreased organizational commitment and job satisfaction, emotional exhaustion, and increased stress [22, 28, 30, 31]. Moreover, research has pointed out the positive correlation between HP and employee TI [22, 31–33], and the more stable the employee's hierarchical plateau, the higher their willingness to resign [34, 35].

This is because HP means that there is a gap between employee resource investment in work and expected promotion benefits [28]. According to the Conservation of Resources theory, the pressure caused by insufficient expected resource returns is an important influencing factor of employee TI [12, 13, 36]. Previous studies have shown that employees feel higher organizational support

in a suitable organization [37], and receive career guidance and challenging work tasks [38], which are important resources that can promote employee promotion [39]. Therefore, individuals who are more suitable for the organization are more likely to be promoted within the organization, thereby reducing the TI due to HP.

Based on the above research, hypothesis 2 is proposed: HP mediates the relationship between POF and TI.

### *The moderating role of person–group fit*

We emphasize the crucial role of PGF, because most medical practices require coordination between medical service providers in the same or different departments [18]. Good compatibility between individuals and work-groups is often associated with more positive outcomes. The previous meta-analysis pointed out that job satisfaction and colleague satisfaction can be positively predicted by PGF, while TI can be negatively forecasted by PGF [40]. Similarly, in the medical context, it has been found that better teamwork among nursing staff means higher job satisfaction with their current position and profession [41].

PGF is a very important resource for employees, as a better fit with the group means more social support from the group can be obtained [42]. This important resource can bridge the gap between resource investment and promotion expectations brought about by HP [28, 36], thereby alleviating to some extent the adverse effects caused by insufficient resources [12, 13, 36]. Moreover, studies have found that individuals at an HP perceive less support from organizations and supervisors [43], and the lack of support from organizations and supervisors is significantly correlated with TI [44–47]. The substitution hypothesis suggests that when different resources meet common needs, they can replace each other [48]. Given that social support from organizations, supervisors, and groups can alleviate employee TI [46, 47, 49], we believe that when employees perceive insufficient organizational or managerial support at an HP, social support from colleagues can serve as a substitute, thereby regulating the association between the HP and TI.

This study proposes hypothesis 3, based on the above research and theory: PGF can significantly moderate the second part of the mediating process (the association between the HP and TI), specifically, the indirect impact of POF on TI through HP can be alleviated through PGF.

### **Research model**

This study explores the influencing factors of TI in pediatric health human resources from the perspective of person–environment fit, combining the Conservation of Resources theory and substitution hypothesis. Specifically, by constructing a moderated mediation

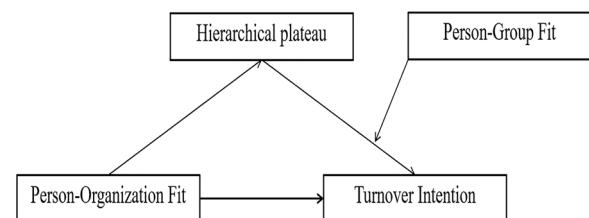
model (Fig. 1), the mediating role of HP in the association between POF and TI was examined, as well as the moderating role of PGF in this mediating process.

## **Materials and methods**

### **Data collection**

The data was collected from the online survey platform Wenjuanxing at the Children's Hospital of Hebei Province in September and October 2023, and volunteers were recruited using a convenience sampling method. Specifically, the link to the survey questionnaire was distributed through our partners to the WeChat group so that potential respondents could participate in this study. The Medical Ethics Committee of Hebei Children's Hospital approved this project. Moreover, during the questionnaire survey process, respondents need to express informed consent to this study and authorize the use of research data before answering formal items.

In this project, we collected a total of 546 questionnaires. Strict quality screening standards are used for the quality control of the collected questionnaires. Specifically, it includes the following steps. First, the IP address of the questionnaire is used for quality control. If two or more questionnaires are sourced from the same IP address, these questionnaires will be excluded from this study. Through this step, we had excluded 97 questionnaires. Second, we exclude questionnaires with potential quality defects by checking whether the options for the forward and reverse questions set in the scale are consistent. Specifically, we set up three scales in the questionnaire that included both forward and reverse questions. If the respondent's answer is completely consistent on a scale that includes both forward and reverse questions, it will be marked. If all three scales that include both positive and negative questions are marked, the questionnaire data will be excluded from this study. Through this step, 78 questionnaire data were excluded from this study. Finally, after the quality control process, out of the 546 questionnaires collected, 175 were excluded, and the remaining 371 questionnaires in this study had an effective rate of 67.95%.



**Fig. 1** Moderated mediation model

### Sample characteristics

The 371 data included in this study were composed of doctors, nurses, pharmacists, and medical technicians. Among them, there were 108 doctors (29.11%), 164 nurses (44.20%), 43 pharmacists (11.59%), and 56 medical technicians (15.09%). Among the respondents, females accounted for the majority ( $n=314$ , 84.64%), while there were 57 males, accounting for 15.36%; The educational background is concentrated at bachelor's degree or below ( $n=241$ , 64.96%), with a total of 130 people holding a master's degree or above, accounting for 35.04%.

### Research tools

#### Person–organization fit

The evaluation of POF is conducted using the POF scale formed by Cable and DeRue [20]. This scale consists of three positive questions that measure the degree of POF based on the consistency of values. A typical question is “My personal values match my organization's values and culture”. In this study, the Likert-5 scoring system was used (1=strongly disagree, 5=strongly agree), with higher scores indicating higher fit between individuals and organizations. The Cronbach's alpha of the original scale is 0.91. Cronbach's alpha is 0.936 in this study, indicating high reliability.

#### Hierarchical plateau

The HP scale developed by Chinese scholars is used to measure the degree of career development limitations of respondents, which is widely used in Chinese research [50]. The measurement of the HP consists of three forward questions and one reverse question (“I get limited space to be promoted in my work unit”; “I can never get a higher position in my work unit”; “The possibility of getting promoted is little in my work unit” and “I still can get promoted from superiors”). In this study, the Likert-5 scoring system was used (1=strongly disagree, 5=strongly agree), where previously, higher scores usually meant higher HP (after manually assigning reverse scores to reverse questions). The Cronbach's alpha of the original scale is 0.84. Cronbach's alpha is 0.777 in this study, indicating acceptable reliability.

#### Person–group fit

The PGF scale formed by Vogel and Feldman was used to evaluate the degree of fit between people and groups [51]. The scale consists of four forward questions and one reverse question. This study used the Likert-5 scoring method (1=strongly disagree, 5=strongly agree), with higher scores indicating higher fit between individuals and groups (after manually assigning reverse scores to

reverse questions). The Cronbach's alpha of the original scale is 0.76. Cronbach's alpha is 0.717 in this study, indicating acceptable reliability.

#### Turnover intention

This study used the TI scale formed by Farh et al. to evaluate the TI of respondents [52]. The scale consists of three forward questions and one reverse question. This study used the Likert-5 scoring method (1=strongly disagree, 5=strongly agree), with higher scores indicating higher TI (after manually assigning reverse scores to reverse questions). The Cronbach's alpha of the original scale is 0.81. Cronbach's alpha is 0.788 in this study, indicating acceptable reliability.

#### Control variables

Similar to previous studies, gender and education were selected as covariates [53–55]. We encoded education (0=bachelor's degree or below, 1=master's degree or above) and gender (0=male, 1=female) as dummy variables and placed them in the regression analysis model to control for their potential confounding effects.

#### Statistical analysis

All data analysis in this study was completed in SPSS 22.0. First, Harman's single-factor test results indicated that there are four factors with eigenvalues greater than 1. The total variance explained by the first common factor is 36.437%, which is below the critical value of 40%, indicating no serious common method bias [56, 57]. In addition, kurtosis and skewness indicate that the continuity data in this study roughly follow a normal distribution [58, 59]. Use mean  $\pm$  standard deviation ( $M \pm SD$ ) to statistically describe the continuity data involved in this study. In addition, use the Pearson correlation coefficient to evaluate the correlation between variables. Finally, the hypothesis model proposed in this study was validated using Model 4 and Model 14 of the PROCESS macro (version 3.3) in SPSS, with gender and education as control variables. Using the Bootstrap method (sample size=5000) to test the mediating and moderating effects in theoretical hypotheses, the 95% confidence interval (CI) does not include zero, indicating statistical significance.

### Results

#### Descriptive statistics and correlations for variables

The mean, standard deviation, and correlation matrix of the variables in this study are shown in Table 1. The results showed that the POF was negatively related to TI, the POF was negatively related to the HP, and the HP was positively related to TI. As a moderating variable, the PGF was negatively related to TI.

**Table 1** Description statistics and correlation analysis

Variables	M±SD	POF	HP	PGF	TI
POF	3.84±0.82	1			
HP	3.01±0.79	-0.150**	1		
PGF	4.07±0.62	0.543**	-0.075	1	
TI	1.97±0.77	-0.423**	0.286**	-0.350**	1

POF: Person–organization fit; HP: Hierarchical plateau; PGF: Person–group fit; TI: Turnover intention; \*\*:  $p < 0.01$  (two-tailed)

### Test of mediation

We used Model 4 from the PROCESS macro to validate the mediation hypothesis in this study. After controlling for gender and educational variables, evaluate the mediating role of the HP on the association between POF and TI. It was found that the POF can negatively predict HP ( $B = -0.1414$ ,  $p < 0.01$ ) and TI ( $B = -0.3616$ ,  $p < 0.001$ ). Moreover, the HP can positively predict TI ( $B = 0.2528$ ,  $p < 0.001$ ). A mediation model that includes both predictor variables and covariates explained 24.38% of TI ( $R^2 = 0.2438$ ,  $p < 0.001$ ). As shown in Table 2. The Bootstrap method (sample size=5000) was used to verify the significance of the mediating effect. The results indicate that POF directly affects TI ( $B = -0.3616$ , 95% CI  $[-0.4660, -0.2589]$ ), while HP can mediate the association between POF and TI ( $B = -0.0358$ , 95% CI

$[-0.0678, -0.0049]$ ), and the mediating effect accounts for 9.01% of the total effect, which is a partial mediating effect. As shown in Table 3. Hypotheses 1 and 2 are supported.

### Test of moderated mediation

In this study, we used Model 14 from the PROCESS macro to validate the moderate mediation hypothesis, and the Bootstrap method (sample size=5000) was used for significance testing. After controlling for gender and educational variables, evaluate whether PGF moderates the second part of the process mediating by the HP. As shown in Table 4, POF negatively predicts TI ( $B = -0.2827$ ,  $p < 0.001$ ), HP positively predicts TI ( $B = 0.2747$ ,  $p < 0.001$ ), and PGF negatively predicts TI ( $B = -0.2344$ ,  $p < 0.001$ ), and PGF can moderate the association between HP and TI (HP \* PGF:  $B = -0.2155$ ,  $p < 0.001$ ). A moderated mediation model that includes both covariates and predictor variables explained 28.97% of TI ( $R^2 = 0.2897$ ,  $p < 0.001$ ). Meanwhile, Table 5 show the indirect effect of POF on TI through the HP at different levels of PGF. In addition, the moderated mediation index is significant (index=0.0305, 95% CI  $[0.0020, 0.0582]$ ), as 95% CI does not include 0. Hypotheses 3 are supported.

**Table 2** Regression analysis results of the mediating model

Variables	HP			TI		
	B	SE	t	B	SE	t
Sex	0.1201	0.1109	1.0832	-0.0189	0.0986	-0.1922
Education	-0.4097	0.0830	-4.9337***	0.1943	0.0761	2.5520*
POF	-0.1414	0.0487	-2.9054**	-0.3616	0.0437	-8.2724***
HP				0.2528	0.0463	5.4542***
F	12.0452***			29.5010***		
R <sup>2</sup>	0.0896			0.2438		

POF: Person–organization fit; HP: Hierarchical plateau; TI: Turnover intention; \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

**Table 3** Results and bootstrap analysis of mediation effects

Variables	Effect	SE	t	p
Total effect of POF on TI	-0.3974	0.0449	-8.8540	<0.001
Direct effect of POF on TI	-0.3616	0.0437	-8.2724	<0.001
	Effect	BootSE	BootLLCI	BootULCI
Indirect effect of POF on TI	-0.0358	0.0160	-0.0678	-0.0049
POF on HP	-0.1414	0.0618	-0.2602	-0.0178
HP on TI	0.2528	0.0476	0.1598	0.3467
POF on TI	-0.3616	0.0521	-0.4660	-0.2589

POF: Person–organization fit; HP: Hierarchical plateau; TI: Turnover intention; Bootstrap sample size = 5000



**Table 4** Regression analysis results of the moderated mediation model

Variables	HP			TI		
	B	SE	t	B	SE	t
Sex	0.1201	0.1109	1.0832	0.0034	0.0963	0.0355
Education	− 0.4097	0.0830	− 4.9337***	0.1776	0.0742	2.3946*
POF	− 0.1414	0.0487	− 2.9054**	− 0.2827	0.0502	− 5.6357***
HP				0.2747	0.0455	6.0427***
PGF				− 0.2344	0.0655	− 3.5762***
HP * PGF				− 0.2155	0.0580	− 3.7181***
F	12.0452***			24.7475***		
R <sup>2</sup>	0.0896			0.2897		

POF: Person–organization fit; HP: Hierarchical plateau; PGF: Person–group fit; TI: Turnover intention; \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

**Table 5** Conditional direct and indirect effects of person–organization fit on turnover intention at different values of person–group fit

Variables		Effect	SE	LLCI	ULCI
Conditional effects of the focal predictor at values of the moderator	Low-level PGF	0.4094	0.0618	0.2878	0.5309
	Middle-level PGF	0.2747	0.0455	0.1853	0.3640
	High-level PGF	0.1400	0.0542	0.0334	0.2465
		Effect	BootSE	BootLLCI	BootULCI
Conditional indirect effects of POF on TI	Low-level PGF	−0.0579	0.0242	−0.1047	−0.0094
	Middle-level PGF	−0.0388	0.0169	−0.0729	−0.0061
	High-level PGF	−0.0198	0.0122	−0.0477	−0.0015
		Index	BootSE	BootLLCI	BootULCI
Index of moderated mediation	PGF	0.0305	0.0144	0.0020	0.0582

POF: Person–organization fit, PGF: Person–group fit; TI: Turnover intention; Bootstrap sample size = 5000

## Discussion

### General discussion

In summary, considering the important impact of TI in stabilizing the pediatric healthcare workforce and ensuring sufficient pediatric healthcare human resources, a moderated mediation model was utilized in this study to explore the influencing factors of TI among pediatric healthcare staff.

Both Model 4 and Model 14 confirm a direct negative correlation between POF and TI of pediatric healthcare workers. This result supports Hypothesis 1 and is consistent with previous research results [25–27]. Although studies have confirmed that POF can negatively forecast TI, this study focuses on the special group of pediatric healthcare workers in the Chinese context, providing important literature references for research in this field.

Corresponding to hypothesis 2 of this study, we confirm that HP can play a mediating role between POF and TI. Interactive psychology believes that the specific behavior or performance of employees in an organization stems from the interaction between the employees and

the organization [23]. Many subsequent researchers have also explored the association between POF and TI and proposed that factors such as career satisfaction, self-efficacy, resilience, work engagement, and burnout can mediate the association between POF and TI [60–62]. This study confirms that HP can play a mediating factor between POF and TI, providing another specific path for studying the association between person–environment fit and TI.

In addition, hypothesis 3 based on the Conservation of Resources theory and substitution hypothesis has been validated, providing further literature for the Conservation of Resources theory and substitution hypothesis, and providing a new perspective for exploring the comprehensive impact of the interaction between PGF and POF on specific behaviors or performance. Previously, Vogel and Feldman proposed that PGF is an accelerator for POF, but the results did not confirm that PGF can moderate the relationship between POF and TI. They attributed this result to perceived fit as only one of the ways to conceptualize fit, and the lack of “objective” fitting

measurements can cause significant measurement confusion [19]. We suggest that the consistency between the values and culture advocated by a group and the content advocated by an organization may affect the moderating role of PGF on the association between POF and related work outcomes, as subcultures within an organization may not necessarily be completely consistent with the main culture and may even be opposite [63–65]. Future researchers can design further studies to validate.

### Practical implications

This study explores the influencing mechanism of POE, HP, and PGF on the TI of pediatric medical workers. This has significant practical significance for pediatric medical workers and pediatric human resource management departments.

For pediatric healthcare workers, we provide the following specific recommendations: first, when seeking a job, it is important to carefully weigh the consistency between the values and culture advocated by the organization and one's own beliefs, as better alignment with organizational values means less uncertainty and more opportunities to meet one's own needs [66]. Second, we suggest that pediatric healthcare workers actively integrate into their group and leverage the potential power of the group to enhance their resources to deal with the adverse impact of work. When an individual actively integrates into their group, they can better receive social support from the group [42]. This social support from colleagues is an important resource that can help employees enrich their resource pool, thereby placing themselves in a position to minimize risk and maximize resources [36].

For the pediatric human resource management department, we provide the following specific suggestions: first, in the process of recruiting employees, attention should be paid to identifying and absorbing employees who are consistent with the organizational values, and accurately selecting employees who can contribute to the development of the organization. Studies have shown that employee behavior within an organization is influenced by the degree of consistency with organizational values [24]. Organizations that attract employees who are more in line with themselves can benefit from more positive work behaviors and attitudes [67], because when individuals coexist harmoniously with organizational values, employees experience belonging and identification with the organization, thereby promoting positive attitudes and behaviors towards the organization [68]. Second, pay attention to the potential hazards of HP, facilitate the development channels of employees within the organization, and take measures from multiple perspectives to decrease the occurrence and harm of HP. Career plateau

can be alleviated by appropriately optimizing positions, and providing employees with more promotion and learning opportunities. For example, training nurses to become specialized nurses can help reduce employees' perception of career stagnation [69]. On the other hand, the alternative rewards provided by organizations are also quite important. Providing employees with work challenges, coaching, and social support can buffer the adverse impact of HP and prevent employees from feeling less support when their self-perception is stagnant [28]. In addition, providing development opportunities for employees through special project work, additional training, and educational assistance can help offset the potential adverse consequences of stagnation. Employees can also cope with stagnation from a psychological perspective through stress management training and employee assistance programs [70]. Third, it is important to emphasize the guiding role of organizational values, identify and guide the consistency between the culture and values advocated by the group and the organization, and improve the cohesion of the organization. Previous studies have pointed out that the values pursued by different groups within an organization may not necessarily be completely consistent with organizational culture [64]. Therefore, a better fit between employees and the group may not necessarily help improve their alignment with the organization to achieve organizational goals and values, and may even have the opposite effect, as organizational goals may be abandoned due to group goals [71]. Managers should promote a consistent organizational culture and values by emphasizing organizational goals and values, thereby reducing differences between subunits within the organization, enhancing connections among organizational members, and improving task execution efficiency [71, 72].

### Limitations

Some limitations have to be emphasized to remind future researchers of this study. We conducted a questionnaire survey in a single medical institution to collect the data required for this study using a convenience sampling method. We remind future researchers to pay attention to the representativeness of single-center samples and the potential limitations of cross-sectional data in causal inference. In addition, using convenience sampling methods cannot clearly determine how many people were actually covered in the study, so it is also impossible to calculate the response rate of the questionnaire. Finally, due to the use of questionnaire surveys, which collect data through self-reporting by respondents, possible common method bias also needs to be noted.

## Research prospects

We suggest that future researchers in the field of person–environment fit should not only focus on the impact of a certain dimension on specific work outcomes but also consider the comprehensive impact of interactions between different dimensions. In addition, attention should also be paid to exploring the potential role of defining and measuring multiple ways of fit. Another concern is that we suggest future researchers when exploring the interaction between PGF and POE, can further evaluate the consistency between the values and culture advocated by the group and the mainstream of the organization, and explore the important role of this degree of consistency in specific work outcomes and performance.

## Conclusion

In summary, this study comprehensively explores the impact of POE, HP, and PGF on the TI of pediatric medical workers by constructing a moderated mediation model. The research results found a direct negative association between POE and TI, and HP can play the mediating factor in the association between POE and TI, while PGF can regulate the second part of this mediating process. According to the research findings, we emphasize the important role of employee fit with the organization and group, as well as the significant impact on employee career development.

## Abbreviations

POE	Person–organization fit
HP	Hierarchical plateau
PGF	Person–group fit
TI	Turnover intention

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## Author contributions

Q.J. drafted the manuscript, conducted statistical analysis, and made revisions to the manuscript. W.S. participated in the drafting and statistical analysis of the manuscript. H.Y. participated in the manuscript revision and conducted a critical review of the knowledge content.

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## Availability of data and materials

Further data can be requested from the corresponding author through reasonable requests.

## Declarations

### Ethics approval and consent to participate

The Medical Ethics Committee of Hebei Children's Hospital approved the project, and the respondents expressed informed consent when participating in this survey.

## Consent for publication

Not applicable.

## Competing interests

The authors declare no competing interests.

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