Received: November 10, 2017 Revision received: March 12, 2018 Accepted: March 15, 2018

Copyright © 2018 EDAM www.estp.com.tr DOI 10.12738/estp.2018.5.127 • October 2018 • 18(5) • 2283-2294

**Research Article** 

# A Study on the Influence of Organizational Justice on College Teachers' Sense of Professional Achievement \*

Huizhen Zheng<sup>1</sup>

Hefei University of Technology; North Minzu University Ming Chen<sup>2</sup>

North Minzu University

# Abstract

Based on the social cognitive theory, through statistical analysis of 377 data from ccollege tteachers, this paper examines the influences of organizational justice on college tteachers' professional achievement and its iinfluence mechanism, and innovatively discusses the two-stage conduction mechanism between employee satisfaction and loyalty. The main research results are as follows: (1) the 3 dimensions of organizational justice are significantly correlated with teachers' professional achievement; (2) employee satisfaction and loyalty play full mediating roles in the relationship between organizational justice - employee satisfaction - employee loyalty - professional achievement, this path holds. Finally, this paper discusses the related significance of the research.

## Keywords

Organizational Justice • Professional Achievement • Employee Satisfaction • Employee Loyalty

\*Humanities & Social Science Project of Ministry of Education "Study of the Cross-level Contingency Effect of the Authoritarian Leadership Influence Mechanism on Compulsory Citizenship Behaviours"; North Minzu University Project "Empirical Research on the Influence Mechanism of Organizational Justice on Employees' Deviant Behaviours".

Citation: Zheng H. Z., & Chen, M. (2018). A Study on the Influence of Organizational Justice on College Teachers' Sense of Professional Achievement. *Educational Sciences: Theory & Practice, 18(5), 2283-2294.* http://dx.doi.org/10.12738/estp.2018.5.127



<sup>&</sup>lt;sup>1</sup>Hefei University of Technology, Hefei 230009, China; North Minzu University, Yinchuan 750021, China. Email: zhuizh@163.com

<sup>&</sup>lt;sup>2</sup>Correspondence to: Ming Chen (PhD), North Minzu University, Yinchuan, 750021, China. Email: chenming2012@qq.com

In the 21<sup>st</sup> century when talent competition is extremely fierce, more and more organizations have become aware of the need to manage their employees in a humanized manner, but at the same time, academics are beginning to focus more on professional achievement (Heller, Daehler, & Wong, 2012) than on career success.

Among the many influence factors to professional achievement, organizational justice is one of the factors that cannot be ignored. The social exchange theory believes that the relationship between employees and the organization is essentially an exchange relationship. Employees' perception of the organization will strongly influence their sense of achievement at work. If employees feel unfair, they may show a series of deviances, such as dissatisfaction, slackness in work, spreading of falsehoods and rumours, low loyalty and low productivity, etc. (Colquitt, 2001).

Organization is the most important basic unit in today's society, in which organizational justice is of particular concern to employees. Recent studies have found that employees are having increasingly higher sense of injustice. Organizational managers are very concerned about employees' feelings about the fairness of the organizational distribution results, namely, perception of distributive justice, as a lot of research shows that once employees feel the distribution is unfair, they will have negative psychological and behavioural responses, including low achievement (Wang Yan, Long Li Rong and Zhou Hao, 2007).

However, the current research on organizational justice and professional achievement is still not thorough enough. Few involves the relationship between the two, including whether the relationship is stable under different organizational situations and whether it will be affected by other specific factors. Discussing these issues helps understand the relationship between organizational justice and professional achievement from both internal mechanisms and external conditions.

This research attempts to explore the internal mechanism and boundary conditions of the relationship between the two on the basis of relevant theories. In the following sections, this paper first reviews related theories and puts forward hypotheses, then expounds the research methods used and the research results, discusses the theoretical contribution and practical value of this research, and finally points out the limitations of this research and the direction for future studies. The theoretical model in this study is shown in Fig.1.

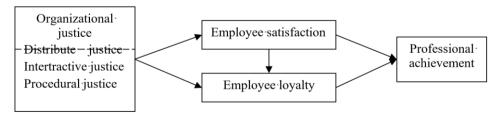


Figure 1. Research framework

# Theories and hypotheses

#### Teachers' professional accomplishment

The sense of professional accomplishment mainly refers to the internal satisfaction that the employees experience from the success and achievement of the enterprise, and they regard it as their own success and achievement. Teachers' professional (Hodges, 2003) sense of accomplishment means that teachers give full play to their own educational ability in the course of fulfilling their educational and teaching tasks, fully display their potential in educational and teaching work, realize their educational and teaching purposes, reach the standards they set in advance, feel and experience in realizing their own self-value and social value, as well as obtain a kind of intrinsic satisfaction from it. This satisfaction is fully aware of the teachers in the unit's status and role, as well as the value of doing.Therefore, the factors that affect teachers' professional achievement can be divided into tinternal and external actors.

Internal factors affecting teachers' professional achievement chiefly means personal professional values of teachers. For teachers, their personal professional values directly affect their work attitude and behavior, for example occupational cognition, occupational emotion, occupational belief and behavioral intention.

#### Organizational justice and professional accomplishment

According to management psychology, members of an organization show good feelings about their work and are influenced by their surroundings.

In School, the school organizational climate (school culture) has a significant impact on teachers' behavior and feelings. Harmonious and progressive school organizational climate can easily arouse teachers' enthusiasm and motivation to work actively, and thus improve their work performance. On the contrary, in the bad and abnormal atmosphere of school organization, teachers will feel more psychological pressure, lose the initiative of active work, frustration and sense of accomplishment. Of course, the school administrators' management behavior and management style can also affect the teachers' professional achievement.

Researchers have basically reached a consensus on the relationship between organizational justice and professional accomplishment. Long Lirong and Liu Ya (2004) believe that organizational injustice can lead to low accomplishment. Storms & Spector (1987) found that if employees believe that there is injustice in the organization, they will reduce their contribution and expectations to the organization, and even make a series of deviant workplace behaviours.

Organizational justice is an important stressor for teachers' professional accomplishment. The situational model of the social cognition theory believes that a series of information processing in the social situation finally leads to the cognitive generalization of people in that situation and further results in corresponding behavioural response, which is called the "situation-cognition-behaviour" reaction chain. According to the social cognition theory, when employees perceive unfair treatment from the organization, he/she first puts himself/herself in an unfair situation, and then generalizes this unfair perception to his workplace, and thus he or she may take corresponding actions to balance this injustice. (Hollinger & Clark, 1982; Giacalone & Greenberg, 1997). When

employees perceive obvious organizational injustice, they may take a series of negative behaviours, such as being slack in work and damaging the company's interests.

Therefore, the following research hypothesis is proposed:

H1: organizational justice is correlated with professional accomplishment.

#### Mediating role of employee loyalty between organizational justice and professional accomplishment

Loyalty behaviour is a constructive response strategy for organizational development. (Garet, Cronen, & Eaton, 2008) It is a state in which employees try to continue their employment relationship with the organization. Existing papers have verified that after employees are unfairly treated by the organization, they will reduce their trust in the organization. The organizational injustice often infringes on the actual interests or psychological feelings of teachers. At this time, teachers will no longer have illusions about the organization and will show lower professional accomplishment and reducing their organizational commitments (Bunderson, 2001). Loyalty behaviour is a state in which an employee attempts to maintain the employment relationship with the organization. Distributive or procedural injustice will directly reduce the employee's loyalty to the organization. In fact, there are quite a few situations in the organization that may cause employees to feel unfair. Teachers will have a sense of injustice longitudinally when comparing their present state with the past and horizontally when comparing themselves with others. When employees have felt the injustice for a long time, they will reduce their loyalty to the organization.

From this, it can be seen that, when teachers feel that they are being treated very unfairly by the organization, they will reduce their loyalty to the organization, which will further reduce professional accomplishment.

Therefore, the following research hypotheses are proposed:

H2: Employee loyalty is correlated with professional accomplishment.

H3: Employee loyalty plays a mediating role between organizational justice and professional accomplishment.

#### Mediating role of employee satisfaction

Many scholars at home and abroad have conducted extensive empirical research on the relationship between organizational justice and employee satisfaction, and have obtained relatively consistent conclusions. Dyer & Theriault (1976) pointed out that employees' satisfaction is affected by the level of remuneration received by others. When an employee perceives that his/her remuneration is higher than others, he/she will have higher satisfaction and lead to lower accomplishment. Capelli & Sherer (1988) confirmed this conclusion in their study and pointed out that internal comparisons are more likely to affect employee satisfaction than external comparisons. Sweeney (1990) did an empirical study on the relationship between distributive justice and employees' satisfaction with remuneration. He took random samples from several companies in the United States, and the results showed that employees' perception of distributive justice could make them more satisfied than the actual just remuneration.

The EVLN model developed by Hirschman (1970) and Farrel (1983) clearly expresses the behavioural patterns triggered by employee dissatisfaction. This model points out that employees may, depending on their dissatisfaction degree, take four actions – exit, voice, loyalty and neglect.

The Chinese have a deeply rooted concept that "inequality rather than want is the cause of trouble". Therefore, the injustice of an organization will significantly affect the employees' satisfaction, which will in turn lead to low accomplishment.

Therefore, the following research hypothesis is proposed:

H4: Employee satisfaction plays a mediating role between organizational justice and professional accomplishment.

In addition, from the foregoing analysis, it can be seen that there may be two conduction paths for organizational justice to professional accomplishment. One is based on the logical sequence of "organizational justice - employee satisfaction – professional accomplishment" and the other is based on "organizational justice - employee loyalty - professional accomplishment". However, existing researches show that employee satisfaction and employee loyalty are not two separate variables. At present, the academic circles at home and abroad generally agree that there is a positive correlation between employee satisfaction and employee loyalty. Employees who are satisfied with the company generally have higher loyalty, which means the relation chain is "employee satisfaction - employee loyalty – professional accomplishment", so it can be preliminarily concluded that their logic relation is a two-stage conduction mechanism - "organizational justice - employee satisfaction - employee loyalty – professional accomplishment".

Therefore, the following research hypotheses are proposed:

H5: Employee satisfaction is positively correlated with employee loyalty.

H6: Employee loyalty plays a mediating role between employee satisfaction and professional accomplishment.

## **Research method and design**

#### Sampling

In order to ensure the reliability and validity of the questionnaire during the formal survey, the researchers conducted a pre-survey on a large local chain supermarket group (not included in the final samples) with self-administered questionnaires distributed and collected on site. A total of 58 questionnaire forms were distributed and 55 were collected, of which 50 were valid, constituting an effective recovery rate of 86.2%. Subsequently, reliability test and factor analysis were carried out on the samples. The results showed that the reliability of each measured variable was above 0.7, and the factor structure was also ideal, indicating the questionnaire can be used for formal survey.

During the formal survey, in order to avoid distortion of various data, this study made some changes in the questionnaire compilation and imposed statistical control throughout the research process. On the one hand, the

researchers designed the questionnaire with a rigorous compilation method: first, some items were changed into reverse coded items without changing the sentence meaning for those variables lacking the reverse coded item; second, all the measuring items (except for demographic variables) are re-arranged after being disordered to reduce the randomness of the responses given by respondents; third, the research intention is concealed in the questionnaire to reduce guesswork by the respondents. On the other hand, the researchers performed a rigorous statistical test on the collected data to determine the degree of common method variance of the data as a whole.

In order to improve the coverage of the sample, the electronic questionnaires were distributed via the "Questionnaire Star" platform. The researchers sent a questionnaire link to the friends who worked in college, and asked them to also send the link to others meeting the same above conditions. A total of 411 e-questionnaires were collected. After the invalid samples were eliminated, 377 valid ones were finally obtained, with an effective rate of 91.7%.

## Selection of scales

In the scale selection and design process, the authors referred to the mature scales widely used by researchers at home and abroad. Due to the differences in cultural background and language habits, the English language may reduce the applicability of the original scales in the Chinese context. To overcome this problem, the authors followed the translation-back-translation procedure and made further modifications and improvements to the scales, not only to ensure the measurement validity of the items, but also to make it easy to understand and not to arouse disgust or concern among the respondents. This was all for the purpose of improving the quality of the survey.

(1) Professional accomplishment. The questionnaire is based on the scale developed by David Sirota (2007), which consists of 6 questions. This scale has been most widely used in related research and is supported by Chinese sample data, and thus it has good reliability and validity.

(2) Organizational justice. The "organizational justice scale" developed by Niehoff and Moorman (1993) is adopted. The original scale has 20 items, involving three dimensions – distributive justice, procedural justice and interactive justice. The questionnaire has been widely used in relevant research and has good reliability and validity. In this study, after analyzing the original questionnaire and conducting a small sample test, the authors deleted items with low factor loads.

(3) Employee loyalty. The scale developed by Allen and Meyer (1990, 1991) is adopted. This scale has been widely recognized by researchers at home and abroad as having good reliability and validity. After analyzing the original questionnaire and conducting a small sample test, the authors finally used 10 items to measure employee loyalty.

(4) Employee satisfaction. The JDI scale is selected. This scale, consisting of 6 items, measures employee satisfaction from the holistic perspective of the organization in five aspects, namely the work itself, salary, promotion, management and colleagues. It has high reliability and validity.

(5) Control variables. The common demographic variables are selected as the control variables, including gender, age, years or service and education.

## Hypotheses testing and results

#### Descriptive statistics of the samples

The demographic characteristics of this questionnaire survey are shown in Table 1. In terms of gender, male accounted for 50.7%, female 49.3%, which were quite balanced; in terms of age, 12.4% of the respondents were under the age of 25, 31.1% at the age of 25-35, 31.3% at the age of 36-45, 24.1% at the age of 46-55 and 1% above the age of 55, showing that the respondents were mostly young and middle-aged employees under the age of 45; in terms of education, those with undergraduate education 20.8% and those with Master degree 19.2%, and those with doctor degree 60%, showing that the respondents were mainly employees with doctor degree; regarding years of service in the company, 26.9% had worked for less than 2 years, 9.7% for 2-4 years, 13.9% for 4-7 years, 7.7% for 7-10 years and 41.8% more than 10 years, showing that the respondents were mainly those who had worked for less than 2 years and those for more than 10 years.

Demographic variables	Sample characteristics	Frequency (persons)	Percentage	Cumulative percentage (%)	
Gender	Female	186	49.3	49.3	
Gender	Male	191	50.7	50.7	
	Under 25	47	12.4	12.4	
	25-35	117	31.1	43.5	
Age	36-45	118	31.3	74.9	
-	46-55	91	24.1	99.0	
	Above 55	4	1.0	100.0	
	2 years or less	101	26.9	26.9	
	2-4 years	37	9.7	36.6	
Years of service in the organization	4-7 years	52	13.9	50.5	
-	7-10 years	29	7.7	58.2	
	10 years or more	158	41.8	100.0	
	Undergraduate	79	20.8	20.8	
Education	Master	72	19.2	40.0	
	Doctor	226	60.0	100.0	

*Descriptive Statistics of Formal Samples (N=377)* 

Table 1

## Reliability and validity analysis

The internal consistency coefficient (Cronbach's  $\alpha$  value) is used to determine the reliability level of the variables. In this study, the internal consistency coefficients of all variables are greater than 0.7 and most of them are above 0.9 (the lowest is that of distributive justice - 0.860), indicating the reliability of these variables are high, which is in line with the measurement requirements of the scale (see Table 2).

The study also examines the validity of each variable by conducting exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) on the samples respectively. According to the parity of the data number, the samples are divided into two parts, one used for the exploratory factor analysis to determine the degree of consistency between the actual data and the theoretical dimensions, and the other for the confirmatory factor analysis to determine the convergent validity and discriminant validity. All 377 samples were used for hypotheses testing.

According to Table 2, the KMO value of each variable is much higher than 0.7 (the lowest is that of

Zheng, Chen / A Study on the Influence of Organizational Justice on College Teachers' Sense of Professional Achievement.

distributive justice - 0.839), and the factor load of each item in the corresponding variable is much greater than 0.5 (the lowest is that of question 10, which is 0.653 in employee loyalty) and most of them are greater than 0.7. In addition, the cumulative variance explained of each variable is higher than 50% (the lowest is that of employee loyalty - 52.672%). This indicates that the factor structure of each variable is clear and that the factor components are ideal.

Variable		Item	Factor load	КМО	Bartlett's Test of Sphericity $(\chi^2/df)$	Cumulative variance explained	Cronbach's α
	Distributive justice	FP1	.754			64.189%	0.860
		FP2	.788	_	863.69/10		
		FP3	.798	0.839			
		FP4	.839	_			
		FP5	.824				
		GC1	.786	0.899	1459.19/15		0.903
		GC2	.882				
Organizational	Procedural	GC3	.884			67.673%	
justice	justice	GC4	.861	0.899		07.07370	
		GC5	.763	_			
		GC6	.748				
		HD1	.860	_	1337.14/10	74.927%	0.916
	Interactive	HD2	.859	_			
	justice	HD3	.882	0.897			
	Justice	HD4	.874	_			
		HD5	.852				
		ZC1	.729	_	1888.42/45	52.676%	0.899
		ZC2	.760	.914			
		ZC3	.745				
		ZC4	.727				
Employee		ZC5	.712				
loyalty		ZC6	.761				
		ZC7	.760				
		ZC8	.722	_			
		ZC9	.680	-			
		ZC10	.653				
		MY1	.754	0.889	1101.64/15	62.43%	0.873
		MY2	.792				
Employee		MY3	.664				
satisfaction		MY4	.817	0.007			
		MY5	.791	_			
		MY6	.870				
		CJ1	.808				
		CJ2	.703	-			
Professional accomplishment		CJ3	.800	0.950	3004.91/66	58.771%	0.934
		CJ4	.634	0.950			
		CJ5	.748				
		CJ6	.774				

### Table 2 Exploratory Factor Analysis (EFA) Results (N=183)

In addition, the authors conduct CFA to test the variable validity and the seven-factor model with mutually independent variables as the benchmark model, whose fitting indices are as follows:  $\chi^2$ =3127.89, df=1154, CMIN/DF=2.71, IFI=0.901, NNFI=0.905, CFI=0.898 and RMSEA =0.065. According to Wu Minglong (2010), 2<CMIN/DF<5 is good, RMSEA<0.1, and it would be the best if RMSEA<0.08, and IFI, NNFI, CFI, etc. are

preferably >0.9. In this study, except that CFI is 0.898, which is slightly lower than 0.9, IFI and NNFI are both greater than 0.9. Therefore, the authors believe that the fitting indices basically meet the recommended level and that the model fitting is good.

At the same time, the authors also use AMOS16.0 to test the discriminant validity (AVE value) and convergent validity of each measured variable. According to Bagozzi & Yi's suggestion, it is considered good if the composite reliability (CR) is higher than 0.60, and AVE higher than 0.50. As shown in Table 3, the composite reliability of each variable is greater than 0.8, far greater than 0.60, and the AVE value is all greater than 0.50 and most of them are greater than 0.6. Obviously, all these variables have high convergent validity. The discriminant validity is measured by comparing AVE and the matrix of correlation coefficients of latent variables. From Table 3, it can be seen that the arithmetic square root of the AVE values of each variable is significantly larger than the correlation coefficient of other factors (except for employee loyalty), indicating the variables have good discriminant validity.

#### Hypotheses testing

Table 3 lists the correlations between the variables. Obviously, the three dimensions of organizational justice are significantly positively correlated with each other (p<0.01), and they are also significantly positively correlated with employee loyalty and job embeddedness (p<0.01) and significantly negatively correlated with organizational deviance and interpersonal deviance was (p<0.01); employee loyalty is significantly positively correlated with job embeddedness (p<0.01) and significantly negatively correlated with both organizational deviance (p<0.01); job embeddedness is significantly negatively correlated with both organizational deviance and interpersonal deviance (p<0.01); job embeddedness is significantly negatively correlated with both organizational deviance and interpersonal deviance (p<0.01); and organizational deviance and interpersonal deviance (p<0.01). Therefore, the hypotheses 1a, 1b and 5 are verified.

Table 3

Correlation Coefficients and AVE and CR Values of Measuring Variables (N=377)

contenan	1011 000	jietenno anta II i B anta	011 1 44	mes of n	1000000000	8 , 61, 161	0100 (11	011)			
Variable	Mean	Standard deviation	1	2	3	4	5	6	7	AVE	CR
1.FP	3.26	0.945	(.801)	.711**	.678**	.752**	.744**	175**	201**	0.642	0.899
2.GC	3.06	1.008		(.823)	.819**	.735**	.666**	148**	191**	0.677	0.926
3.HD	3.04	1.015			(.865)	.744**	.715**	16**	19**	0.749	0.937
4.ZC	3.47	0.861				(.725)	.722**	202**	244**	0.527	0.917
5.MY	3.23	0.856					(.784)	261**	274**	0.615	0.905
6.CJ	2.05	0.883						(.767)	.899**	0.67	0.934

*Note.* FP stands for distributive justice; GC procedural justice; HD interactive justice; ZC employee loyalty; QR job embeddedness; CJ professional achievement. \*\*\* means p<0.001; \*\* p<0.01; and \* p<0.05. The square root of AVE is in the parentheses at the diagonal, the same below.

There are multiple independent variables interacting in the model, with moderate correlations between them. In order to test the collinearity of the independent variables, it is necessary to perform collinearity diagnostics on the independent variables of each model. This study selects variance inflation factor (VIF) and conditional index (CI) for joint evaluation. Generally, the critical value of VIF is 10, and that of CI is 30. When the two both exceed their respective critical values, there is a certain degree of collinearity between the variables in the model. The multicollinearity diagnosis results show that the CI values of all independent variables in Model 1-3 are lower than 30 (up to 24.187) and the VIF values are also well below 10 (up to 3.192), indicating that none

of these models (Hamilton, 1980) have multicollinearity, so the original model can be used for regression analysis.

In order to further test the mediating roles of employee satisfaction and employee loyalty, this paper uses the three-step method in hierarchical regression for testing as recommended by Baron & Kenny (1986) and Wen Zhonglin et al. (2005). The first step is to test the relationship between the independent variable and the dependent variable; the second is to test the relationship between the independent variable and the mediating variable; and the third is to test the regression equation of the independent variable, the mediating variable and the dependent variable to see if the coefficients are significant. The results are shown in Table 4.

According to the stepwise regression results in Table 4, Model 1 has examined the effects of control variables; Model 2 has examined the effects of the independent variable - organizational justice. The results show that organizational justice has a significant negative effect on organizational deviance (regression coefficient  $\beta$ =-0.19 and p<0.001). Model 3 includes employee satisfaction as a mediating variable on the basis of Model 2, and as a result, the effect of organizational justice on organizational deviance becomes insignificant ( $\beta$ =0.01 and p>0.05), but the regression coefficient of employee satisfaction is significant ( $\beta$ =-0.271 and p < 0.001), which indicates that employee satisfaction plays a full mediating role. Therefore, the hypothesis 4 holds. Model 4 includes employee loyalty as a mediating variable based on Model 2. As a result, the effect of organizational justice on organizational deviance becomes insignificant ( $\beta$ =0.01 and p>0.05), but the regression coefficient of employee loyalty is significant ( $\beta$ =-0.179 and p<0.05), which indicates that employee loyalty also plays a full mediating role. Therefore, the hypotheses 2, 3, 4 and 6 hold. Model 5 include both employee satisfaction and employee loyalty as mediating variables on the basis of Model 2. As a result, the effect of organizational justice on organizational deviance becomes insignificant. The regression coefficients of both are still significant, but smaller than those when either of them plays the sole mediating role. The total effect, on the other hand, has increased compared to that when there is only one mediating variable. This indicates that the combined mediators can explain more variance variation than a single one.

Table 4

Variable	Dependent variable: Professional achievement							
variable	Model 1	Model 2	Model 3	Model 4	Model 5			
Control variables			N/A					
Independent variable GP		-0.19***	0.01	0.001	0.124			
Mediating variable MY			-0.271***		-0.232**			
Mediating variable ZC				-0.241**	-0.179*			
F value	2.297*	5.909***	6.607***	5.501***	6.663***			
$\mathbb{R}^2$	0.027	0.069	0.096	0.085	0.106			
$\Delta R^2$		0.042	0.022	0.014				

Stepwise Regression Results of the Model (N=377)

# **Conclusions and discussion**

## Discussion

This paper mainly examines the influences of organizational justice on two types of professional achievement and its mechanism of action, and innovatively places it under the dual mediation effects to discuss the two-stage conduction mechanism between them. The main research results are as follows: (1) the 3

dimensions of organizational justice are significantly correlated with professional achievement; (2) employee satisfaction plays a full mediating role in the relationship between professional achievement; (3) employee loyalty also plays a full mediating role; (4) regarding the two-stage conduction mechanism, "organizational justice - employee satisfaction - employee loyalty - professional achievement" holds.

This research has the following theoretical significances:

First, the main effect of organizational justice on teachers' professional achievement is significantly, which is consistent with previous research conclusions. It may indicate that, in the context of both Eastern and Western cultures, organizational justice is conducive to improve teachers' professional achievement. This adds empirical evidence of Chinese company samples to the theory.

Second, this study confirms the correlations of employee satisfaction and employee loyalty with teachers' professional achievement, establishes a direct relationship between them, and provides direct empirical evidence of this relationship.

Third, this study also innovatively tests the two-stage conduction mechanism of organizational justice on teachers' professional achievement. The two-stage conduction mechanism "organizational justice - employee satisfaction - employee loyalty - teachers' professional achievement" holds.

The conclusions of this study provide a useful reference for corporate management practices:

(1) Managers not only have to improve teachers' professional achievements and the adverse effects thereof, but also need to deeply understand the sense of professional achievement promotes the quality of teaching and the professional development of teachers.

(2) The full mediating roles of employee satisfaction and employee loyalty suggest that there are at least two paths to reduce teachers' professional achievement: on the one hand, managers can take other appropriate measures to improve the employees' loyalty to the organization, such as communicating more with employees to promote good understanding and support between managers and employees; on the other hand, they can increase employees' perceptions about organizational justice to directly improve teachers' professional achievement.

(3) The two-stage conduction mechanism reveals that employees' perceptions of and attitudes toward an organization are particularly important. Their attitudes in the workplace are mostly affected by the organization itself. Therefore, the organization needs to take necessary measures to formulate more fair and reasonable systems and measures to strengthen employees' perception of justice, thereby improve teachers' professional achievement.

## **Research limitations and prospects**

There are still some limitations in this study: (1) In terms of the sample sources, although the target companies are from different industries, regions and categories, etc., they are mainly selected according to the principle of convenience and relationship, so the representativeness of these samples is limited. The general applicability of the research conclusions still needs to be verified through further research. (2) This study mainly discusses the adjusting role of job embeddedness, but in theory, there may be other paths for the effect of

organizational justice on improve teachers' professional achievement., such as employees' individual factors, other organizational factors and social factors, which are not taken into account in this study. In addition, there is no discussion on other influence factors (such as leadership behaviour) and the action mechanism of influence path (such as psychological security). Future research can work on the above aspects.

# References

- Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. *Journal of Applied Psychology*, 86(3), 386-400. http://dx.doi.org/10.1037//0021-9010.86.3.386
- Garet, M. S., Cronen, S., & Eaton, M. (2008). The impact of two professional development interventions on early reading instruction and achievement. NCEE 2008-4030. *National Center for Education Evaluation & Regional Assistance*, 39(10), 243. http://dx.doi.org/10.1111/j.1746-1561.1969.tb05085.x
- Giacalone, R. A., & Greenberg J. (1997). Antisocial Behavior in Organizations. CA: Sage.
- Hamilton, V. L. (1980). Intuitive psychologist or intuitive lawyer? Alternative models of the attribution process. *Journal of Personality and Social Psychology*, 39(5), 767-772. http://dx.doi.org/10.1037/0022-3514.39.5.767
- Heller, J. I., Daehler, K. R., & Wong N. (2012). Differential effects of three professional development models on teacher knowledge and student achievement in elementary science. *Journal of Research in Science Teaching*, 49(3), 333-362. http://dx.doi.org/10.1002/tea.21004
- Hodges, C. (2003). PROFESSIONAL LEARNING COMMUNITIES AT WORK: Practices for Enhancing Student Achievement. *Professional Learning & Leadership*, 16(5), 862-864. http://dx.doi.org/10.1080/19415257.2012.753932
- Hollinger, R. C., & Clark, J. P. (1983). Deterrence in the workplace: Perceived certainty, perceived severity, and employee theft. *Social Forces*, 62(2), 398-418. http://dx.doi.org/10.2307/2578314
- Spector, P. E., Bauer, J. A., & Fox, S. (2010). Measurement artifacts in the assessment of counterproductive work behavior and organizational citizenship behavior: Do we know what we think we know?. *Journal of Applied Psychology*, 95(4), 781-790. http://dx.doi.org/10.1037/a0019477