

Leadership Member Exchange Relationships on the Work Engagement of Physical Education Teachers

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ABSTRACT

This study tries to take the group of physical education teachers in Zhaoqing City as the research object, focuses on the two variables of physical education teachers' leadership member exchange and work input, and researches the current situation of their variables, to find the correlation between the leadership member exchange of physical education teachers in Zhaoqing City and physical education teachers' work input with the help of the theory of leadership exchange and explores the optimization countermeasures of the leadership member exchange on the work input of physical education teachers as a guide to enhance the motivation of physical education teachers to work, provides a price basis for the promotion of the relationship between physical education teachers and leaders.

KEYWORDS

Member Exchange; Teacher Burnout; Work Engagement.

1. INTRODUCTION

Teachers are the foundation of education and the source of education. No matter it is building "double first-class", implementing the fundamental task of promoting morality and cultivating people, or improving the voice of education in China and building a powerful country in higher education, the realization of any goal cannot be separated from the work input of teachers^[1]. From the government to the school administrators, they are constantly exploring and improving effective systems and methods for teacher motivation, with the aim of stimulating and maintaining teachers' work enthusiasm, initiative and creativity as much as possible, and promoting teachers' work input. However, the practice process of school governance is a process with high organizational differences, role differences and individual differences. Governance practices may not be fully implemented in accordance with the provisions of the formal system^[2], which will lead to different levels of work status for teachers.

Scholars have pointed out that teachers are under a lot of stress in their careers and suffer higher levels of occupational stress than workers in many other industries^[3]. Occupational stress will lead to a series of negative consequences for teachers, such as low work efficiency and low satisfaction with work results^[4]. These behaviors are not only detrimental to teachers' own development, but also bring adverse effects on students, schools, and even society^[3], resulting in job burnout over time. Research shows that the phenomenon of teacher burnout has become a global problem, and this widespread burnout has brought serious impact on the life and work of teachers, especially among physical education teachers^[5]. Because of the "special situation" of physical education, the cause of burnout of physical education teachers is quite different from that of teachers of other disciplines, especially in China's exam-oriented education system (focusing on test scores), physical education is considered

as a sub-subject (occupying a small weight in the total score of the exam), and is not valued by administrators, students and parents. In addition, with the continuous development of national education and the deepening of PE teaching reform, people's demands on PE teachers are getting higher and higher, PE teachers have to face new challenges, and in the long run, PE teachers are prone to job burnout. Other scholars pointed out that there is a significant negative correlation between physical education teacher burnout and job involvement^[6]. To some extent, physical education teacher's involvement in teaching work affects students' mastery of physical education professional skills and physical education health knowledge, and is more related to the completion of school physical education work goals and whether the goal of sports power can be realized in the end. The research also pointed out that with the increasing work pressure, negative emotions such as impetuous and bored of employees (teachers) gradually increased, which challenged the sustainable development of the organization^[7]. To this end, more enterprises (schools) are committed to exploring the mechanism that enables employees (teachers) to maintain a high level of work involvement, which helps employees (schools) to devote themselves to work, give full play to their personal potential and thus improve work efficiency and promote the overall effectiveness of the organization. Therefore, how to improve PE teachers' work input is an important problem that needs to be solved urgently.

Pygmalion effect points out that superiors' cognition of subordinates will affect superiors' attitude toward subordinates, and thus influence subordinates' behavior^[8]. In the highly competitive economic environment, an important issue for the managers of enterprises (schools) to think about is: how to improve the work engagement of enterprise employees (teachers), so that enterprises (schools) have more core values. Maintaining a good relationship between enterprise (school) leaders and employees can not only improve the work efficiency of employees (teachers), but also prevent employees (school teachers) from easily leaving the company, thereby increasing the internal stability of the enterprise (school) and making the entire enterprise (school) constantly improve and grow. Some scholars have found that the essence of the leadership process involves not only the exchange of material social interests but also a dynamic exchange process of psychological exchange^[9]. In the field of teachers, who often face a rapidly changing educational environment, it is difficult for schools to rely on leaders' individual decisions to gain a sustained competitive advantage. As an important leader in the organizational environment of employees (teachers), leaders' value preferences, emotions and internal cognition will affect their attitudes and behaviors toward followers (employees)^[10]. The significance of management lies in how to maximize the advantages of human, material and financial resources so as to successfully achieve organizational goals. How to improve the work attitude and work engagement of employees (teachers) and give full play to their work enthusiasm has always been the core issue of organizational management^[11]. Therefore, it is urgent to study the influence of leader-member exchange relationship on improving PE teachers' job involvement. Therefore, from the perspective of leader-member exchange relationship, this paper explores the influence of leader-member exchange relationship on the work involvement of physical education teachers in Zhaoqing City. In order to improve the work efficiency of physical education teachers in Zhaoqing City, increase the internal stability of schools, and help physical education teachers maintain high enthusiasm in teaching work, so as to better complete school physical education work. To provide reference for improving the exchange relationship between school leaders and physical education teachers in Zhaoqing City, and enrich the research field on the relationship between leadership member exchange and work involvement.

2. METHODOLOGY

2.1. Research Design

A quantitative descriptive-comparative-correlation design was used in this study. This study referred to the studies of Wang Hui and Niu Xiongying (2004) and Luo Ling (2019), and will select the

measurement dimension of the exchange relationship among the leading members of physical education teachers in Zhaoqing City, Guangdong Province, China. On this basis, this study also compared the differences in the evaluation of leadership member exchange relationship between PE teachers of different groups. This research will refer to the UWES (the Utrecht Work Engagement Scale) developed by Schaufeli, select the measurement dimensions of physical education teachers' work involvement in Zhaoqing City, Guangdong Province, China, and on this basis, to compare the differences in job involvement evaluation of PE teachers in different groups. In addition, this study was also focus on the correlation between the leadership member exchange relationship and the work involvement of physical education teachers in Zhaoqing City, China.

2.2. Research Instrument

The main research tool of this study was a questionnaire survey, which consists of two parts: the first part is to consult the basic information of physical education teachers in Zhaoqing City, China; the second part is to investigate the evaluation of physical education teachers in Zhaoqing City, China on the exchange relationship and work involvement of leaders. The questionnaires were used in this study are all from previous studies. The two studies are introduced as follows:

2.2.1. Leader Member Exchange Relationship Scale

In this study, the LMX-MDM scale developed by Wang Hui and Niu Xiongying (2004) was used to measure leader member exchange. Empirical studies have proved that this scale has good reliability and validity. The scale is divided into four dimensions, such as emotion, loyalty, contribution and professional respect, with 4 items in each dimension and a total of 16 items. Likert 4-point scoring method is adopted.

2.2.2. Work Engagement Scale

The UWES (the Utrecht Work Engagement Scale) developed by Schaufeli is adopted, which contains three subscales, namely vitality (5 items), dedication (6 items) and concentration (5 items). This scale has been confirmed by Chinese scholar Xu Baihua in the relevant empirical research, and concluded that the scale has good reliability and validity.

2.3. Data Gathering Procedure

First, the researchers seek the consent of each school principal via email or telephone to allow the research survey to be conducted. Second, after obtaining permission, the researchers sent questionnaires to the PE teachers, and promptly collected the questionnaires after the PE teachers completed the answers. Thirdly, the collected questionnaire data were sorted out and analyzed using SPSS software. The study was conducted in the second half of 2023.

3. RESULTS

3.1. Profile of the Teacher Respondents in Terms of Sex, Civil Status Age, Educational Background, Length of Teaching Experience, Professional Title, School Affiliation, Department Affiliation.

Table 1 shows the profile of the teacher respondents. According to the respondent profiles shown in the above table, most of them were men. On the respondents' civil status, single people clearly had the highest frequency. Furthermore, the vast majority of them were older than 36. However, the respondents' educational background showed that the group with the greatest frequency was clearly those with a bachelor's degree. In a similar vein, the intermediate showed the highest frequency with regard to the professional title. Last but not least, a large percentage of the responders were connected to secondary schools.

Table 1. Profiles of Teachers

Variable	Indicators	Frequency	Percentage
Sex	Male	112	79.0
	Female	29	21.0
Civil Status	Single	118	84.0
	Married	23	16.0
Age	21-25 years old	10	7.0
	26-30 years old	18	13.0
	31-35 years old	32	23.0
	36 years old and above	81	57.0
Educational Background	Junior College	9	6.0
	Bachelor's Degree	100	71.0
	Master's Degree or above	32	23.0
Length of Teaching Experience	Below 1 year	3	2.0
	1-5 years	9	6.0
	6-10 years	15	11.0
	11-15 years	27	19.0
	16-20 years	87	62.0
Professional Title	Primary and Lower	38	27.0
	Intermediate	88	62.0
	Minor Advanced	14	10.0
	Advanced and Higher	1	1.0
School Affiliation	Primary School	35	25.0
	Secondary School	66	47.0
	University	34	24.0
	Others	6	4.0
	Total	141	100.0

Table 2. Overall Assessments of Teachers on the Member Leadership Exchange of Leaders

Variables	Composites				Rank
	Mean	SD	Verbal Description	Interpretation	
Emotion	3.07	0.89	Agree	Satisfied	2
Loyalty	2.99	0.90	Agree	Satisfied	3
Contribution	2.95	0.88	Agree	Satisfied	4
Professional Respect	3.10	0.84	Agree	Satisfied	1
Overall	3.03	0.88	Agree		--

Scale: 4.00-3.51=Strongly Agree; 3.50-2.51=Agree; 2.50-1.51=Disagree; 1.50-1.00=Strongly Disagree.

Table 2 shows the overall assessments of teachers on the member leadership exchange of leaders: the teachers agreed with their assessment on the member leadership exchange of leaders with a grand mean score of 3.03 and 0.88 corresponding standard deviation across all its variables in terms of emotion, loyalty, contribution and professional respect (The highest mean 3.10 which is Professional Respect). Of all variables, the one on top was apparent by the professional respect followed by the emotion, loyalty and contribution. According to the research, the ranking of variables based on mean scores revealed interesting insights. Emotion, loyalty, and contribution, while all rated positively, were prioritized over professional respect. Thus, emotional connection, loyalty, and contribution between leaders and teachers are likely to be influenced by a strong foundation of professional respect. These findings contribute to a broader discussion of effective leadership in educational settings by emphasizing the importance of leaders fostering an atmosphere of professional respect, as this sets the tone for positive teacher experiences and perceptions.

In addition, the leader-member exchange relationship is actually a process in which each understands his or her role and pays for action, and the influences on this process are multidimensional; therefore, this relationship is not only found in organizational work^[7]. High-quality leader-member exchange enhances employees' sense of responsibility and professional mission. Employees' strong sense of responsibility and professional mission is a reward for leaders' humane management. Real talents not only expect high salary, but also care about future career development and self-worth realization. Leaders adhering to the people-oriented principle, respecting and trusting employees, providing training and promotion opportunities, and providing work autonomy can promote employees to maximize their potential and develop innovation^[12]. This is consistent with the results of this study.

Table 3. Overall Assessments of Teachers on the Work Engagement of Leaders

Variables	Composites				Rank
	Mean	SD	Verbal Description	Interpretation	
Vitality	3.19	0.73	Agree	Satisfied	3
Dedication	3.21	0.71	Agree	Satisfied	1
Focus	3.20	0.68	Agree	Satisfied	2
Overall	3.20	0.71	Agree		--

Scale: 4.00-3.51=Strongly Agree; 3.50-2.51=Agree; 2.50-1.51=Disagree; 1.50-1.00=Strongly Disagree.

Table 3 shows the overall assessments of teachers on the work engagement of leaders: the above table disclosed a grand mean score of 3.20 with a 0.71 corresponding standard deviation. This implied that the respondents agreed with their assessments on the work engagement of leaders. Of all variables, the one on top was dedication followed by focus and vitality. According to the research, the emphasis on dedication aligns with existing literature on leadership and work engagement. Scholars such as Kuntsi (2014) and Jabeen et al (2020) highlight the critical role of dedication in fostering a positive and engaged work environment. Leaders who are dedicated are often seen as committed, enthusiastic, and passionate, contributing to increased motivation and job satisfaction among their team members^[14]. The second-highest mean score associated with focus indicates that teachers perceive leaders as attentive and absorbed in their work. This aligns with research on flow theory, which suggests that individuals experience optimal engagement and satisfaction when fully immersed in their tasks^[14]. Leaders who facilitate a focused and absorbing work environment contribute to higher levels of engagement and productivity.

3.2. Relationship between Teacher Respondents' Evaluation of Leadership Member Exchange and their Work Engagement

Table 4. Relationship between Leadership Member Exchange and Work Engagement

Leadership Member Exchange	Statistical Treatment	Work Engagement			Overall
		Vitality	Dedication	Focus	
Emotion	Pearson r	.593**	.539**	.414**	.515
	sig	.000	.000	.000	.000
	Decision Ho	Reject	Reject	Reject	Reject
	Interpretation	Significant	Significant	Significant	Significant
Loyalty	Pearson r	.571**	.490**	.442**	.501
	sig	.000	.000	.000	.000
	Decision Ho	Reject	Reject	Reject	Reject
	Interpretation	Significant	Significant	Significant	Significant
Contribution	Pearson r	.624**	.544**	.433**	.534
	sig	.000	.000	.000	.000
	Decision Ho	Reject	Reject	Reject	Reject
	Interpretation	Significant	Significant	Significant	Significant
Professional Respect	Pearson r	.608**	.532**	.464**	.535
	sig	.000	.000	.000	.000
	Decision Ho	Reject	Reject	Reject	Reject
	Interpretation	Significant	Significant	Significant	Significant

** . Correlation is significant at the 0.01 level (2-tailed).

Table 4 shows the relationship between leadership member exchange and work engagement: using a product moment correlation coefficient (Pearson r), the relationship between leadership member exchange and work engagement yielded significant correlations in all pairs of their respective variables. The null hypothesis was rejected at a 1% level of significance. Overall, the leadership member exchange of leaders greatly influenced their work engagement. The degree of correlations seemed to be moderate to high as shown in specific pair of variables.

According to the research, the moderate to high degree of correlations observed in specific pairs of variables implies that certain dimensions of leadership member exchange are particularly influential in shaping the work engagement of employees. This aligns with existing literature on leadership and work engagement.

Research by Radstaak et al (2017) and Mumtaz et al (2020) supports the notion that the quality of leader-member relationships is a crucial factor in influencing various aspects of employee outcomes, including work engagement. The Leader-Member Exchange (LMX) theory, in particular, emphasizes the importance of personalized and high-quality relationships between leaders and followers. Leaders who invest time and effort in building positive exchanges with their team members are likely to foster greater engagement and commitment^[15].

The specific pairings of variables within leadership member exchange (e.g., professional respect, emotion, loyalty, contribution) and work engagement (e.g., dedication, focus, vitality) may provide further insights into the dimensions that play a more prominent role in influencing engagement. For instance, if professional respect within the leadership member exchange has a particularly strong correlation with dedication in work engagement, it suggests that fostering respect in leader-follower relationships is crucial for enhancing dedication among employees^[16].

In conclusion, the significant correlations between leadership member exchange and work engagement, along with the rejection of the null hypothesis, underscore the importance of the quality of leader-follower relationships in influencing employee engagement. These findings contribute to the broader understanding of the factors that contribute to positive work engagement in organizational settings. Future research could explore specific mechanisms and leadership behaviors that enhance the quality of leader-member exchanges and, subsequently, foster greater work engagement among employees.

4. SUMMARY

- 1) The surveyed PE teachers were mostly male, predominantly single with a majority aged above 36. The highest educational attainment was a Bachelor's Degree, and most held intermediate job title.
- 2) Teachers generally had positive assessments of member leadership exchange, indicating agreement across various dimensions. Despite nuances, the overall positive trend signifies a favorable perception of leadership dynamics in education.
- 3) Teachers agreed on leaders' positive work engagement, emphasizing a focused and meaningful environment. Lower morning happiness scores suggest areas for improvement, highlights potential for better work-life balance.
- 4) Correlating leadership exchange and work engagement revealed significant connections, this underscores leaders' impactful role in fostering positive employee engagement.

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