

A Study on the Impact of External Performance Incentives on Chinese Teachers' Work Behaviour

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Abstract. Over the recent decades, performance-based incentive systems have emerged as a significant policy tool in global education reform to enhance teacher motivation as well as educational achievement. However, performance-based pay became established in primary and secondary schools in China in a nationwide reform introduced in 2009, entailing performance evaluation as a part of teachers' pay, making external incentives such as performance pay and excellence awards central to the operation of schools. This research is a synthesis of literature (domestic and international) on teacher performance incentives and work behaviors, aiming to address the issue of the correlation between them based on the literature review and synthesis method. Findings indicate that external incentives positively affect teachers, although in a non-linear way: rational designs increase professional commitment, whereas the excessive emphasis on outcomes and rankings among teachers results in the need to comply with the evaluation system instead of improving their teaching. The subjective factor that matters in the effectiveness of incentives is that of teachers. Therefore, the design of the incentive systems needs to balance the efficiency of management with the psychological perception for teachers and their needs of the professional development, which can offer valuable ideas on how to optimise the basic education teacher incentive mechanisms in China.

Keywords: External Performance Incentives, Chinese Teachers, Work Behaviour, Primary and Secondary Education

1. Introduction

However, after the institution of performance-based pay had taken place nationwide, the teacher incentive system in primary and secondary Chinese schools has been going through a paradigm shift since 2009 [1]. The income, performance evaluation, and promotion of teachers are becoming more and more dependent on measurable performance with the policy goal of enabling the increase of professional motivation and increased quality of teaching [2]. However, teaching is a very professional activity, which cannot be effectively measured in terms of quantitative indicators, as it is also subject to professional judgment, experience, and active devotion [3]. The practice of the external incentive mechanisms has, in effect, produced heterogeneous results. While some teachers have demonstrated greater initiative in improving their teaching, others have become overly oriented

toward assessment procedures and performance indicators, thereby risking a deviation from the fundamental aims of education [4].

Although existing scholarship has addressed the educational effects of performance-based incentives, insufficient attention has been paid to the mechanisms through which such incentives influence teachers' everyday work behaviour. Previous studies have shown divergent conclusions, suggesting both the motivating effects and the potential constraining consequences of external rewards [5]. Within the Chinese context, related research has primarily focused on the policy outcomes and implementation problems of performance-based reform, including excessive quantification in evaluation and inequities in distribution.

Against this background, the present study examines how major forms of external incentives, including performance pay, appraisal and promotion, affect teachers' professional commitment, instructional improvement and responses to school evaluation systems. By adopting a literature review method and synthesizing relevant domestic and international studies in light of the realities of Chinese schools, this study seeks to clarify the relationship between external incentives and teachers' work behaviour and to provide a basis for the further optimization of school incentive systems.

2. Literature review

2.1. Theoretical foundations

The studies of external performance incentives are based on traditional motivational theories. The theory of reinforcers discussed by Skinner in the book *Reinforcement Theory* is that using positive rewards can reinforce desirable work behaviour, and this forms the basis of incentive design used in schools [6]. According to Vroom's Expectancy Theory, the important element of work motivation is based on the expectation that performance and rewards are dependent on effort expected, that is, teacher motivation only works when the teachers believe that their efforts will be properly judged [7].

Herzberg's Two-Factor Theory also differentiates between hygiene and motivator factors (salary, working conditions, recognition, and professional development), stating that only motivator factors can induce intrinsic motivation and discourage excessive use of material incentives [8]. The most powerful one is the Self-Determination Theory suggested by Deci and Ryan, which postulates three fundamental psychological needs, namely, autonomy, competence and relatedness. External rewards have a beneficial impact but only to the extent that such needs are fulfilled [9]; they are perceived as controlling and hence they drain intrinsic motivation and lower the quality of the work. The theories are the foundation of the theoretical basis of the study.

2.2. International research

Global studies verify that the contingent effect is a result of the external incentives whose effectiveness rests on the design, characteristics of the industries and individual perception [10]. In education, Lavy found performance pay significantly improved students' scores and teachers' effort in Israel, especially in quantifiable subjects [11]. Deci et al. argued in a meta-analysis that such incentives reduce teachers' intrinsic motivation, leading them to neglect students' holistic development [12]. Whiteside et al. added that excessive external incentives may cause [3] stress and affect cognitive performance. Jia & Guang [1] and Malek et al. [13] found in corporate research that external incentives work best with internal ones [14], and short-term extrinsic rewards need to be

integrated with long-term intrinsic motivation. A key international finding [15] is that comprehensive evaluation criteria are critical for incentive effectiveness [16].

2.3. Domestic research

Domestic research on Chinese teachers' performance incentives has developed rapidly since 2009, with most studies based on practical school investigations [17]. These studies affirm that performance pay has changed the "doing more or less the same" phenomenon and improved teachers' work attention. However, prominent implementation problems are identified: over-quantitative evaluation with overemphasis on test scores [18-20], ignoring intangible work like student counselling; unfair pay distribution with "average distribution" weakening incentive effects; and neglect of teachers' psychological perceptions [21]. Most domestic studies are descriptive, lacking in-depth analysis of psychological mechanisms and integration of international theories with Chinese educational realities.

3. Case analysis

Combined with the practical realities of Chinese primary and secondary education, three typical schools in eastern coastal, central inland and western rural regions are selected for case analysis [22]. All implement the national performance-based pay system but with different incentive designs, leading to distinct teacher behaviors, which verifies the non-linear impact of external incentives and the core role of teachers' subjective perception.

A key primary school on the eastern coast has a scientific incentive system with diversified evaluation indicators (teaching workload, quality, and professional development) and a focus on comprehensive teaching quality. The system is perceived to be supportive, with high professional commitment, engagement in teaching research, and a focus on the entire development of students are also evident among teachers.

One central inland high school in a junior high has strong competition in the examinations, and the incentive system gives too much emphasis to the rankings and test scores (70% of the performance pay depends on the scores). Teachers feel controlled, focusing solely on exam-oriented teaching, neglecting student counselling, and even abandoning underachievers; teacher cooperation is also poor.

A rural primary school in the west has insufficient funding and a simplistic incentive system with equal performance pay distribution and no clear reward rules. Teachers have no clear perception of the system, showing passive work behaviour with a "do enough to get by" mentality; brain drain is serious as young teachers intend to transfer to cities.

Cross-case comparison shows that incentive design directly shapes teacher behaviour, and subjective perception is the core intermediary variable. Regional economic differences also lead to uneven incentive implementation, which must be considered in system optimisation.

4. Discussion

4.1. The unstraightforward impact of external incentives

This study confirms that external performance incentives exert an indirect impact on Chinese teachers' work behaviour, consistent with international motivational theory conclusions. As public service professionals, teachers have strong intrinsic motivation, such as professional ethics and the

desire to educate, and their work outcomes are largely intangible. This determines that external incentives do not have a simple positive or negative correlation with their behaviour, but are affected by incentive design, evaluation indicators, and distribution methods. Well-designed incentives materialize teachers' work contributions, eliminate "averageism" and clarify school expectations, activating work enthusiasm and guiding positive teaching behaviour. In contrast, unreasonable incentives, such as overemphasis on quantitative outcomes, make teachers focus only on evaluation compliance, neglecting the intrinsic value of teaching and students' holistic development; unfair distribution damages teachers' morale and leads to passive work behaviour. The three case studies fully verify this indirect impact, proving that incentive effectiveness depends on the scientificity and humanisation of system design.

4.2. Teachers' subjective perception: the core intermediary variable

The study finds that teachers' subjective perception of external incentives is the core determinant of incentive effectiveness, the key to understanding incentive impacts on Chinese teachers. From the perspective of Self-Determination Theory whether teachers perceive incentives as supportive or controlling directly affects the satisfaction of their basic psychological needs (autonomy, competence, and relatedness) [9]. When incentives are perceived as supportive, with diversified evaluation, fair distribution, and professional development opportunities, teachers' psychological needs are satisfied, and external incentives integrate with intrinsic motivation, leading to high professional commitment and active teaching innovation. Psychological needs are not fulfilled when they are felt as controlling, as achieving completed classification vows in an over-quantity style, hard-and-swing too narrow outcome-based emphasis, inducing the perversities of behaviour that include exam-driving instruction and burnout at work. This result contradicts the classic management notion that incentives work solely when they are introduced. One should put more emphasis on the subjective perception of teachers in designing and executing the system.

4.3. Balancing management efficiency and professional development

The essence of designing a scientific system of teacher incentives is to create a balance between management efficiency and professional growth needs among teachers. The proposed performance pay reform of 2009 will enhance management efficiency in schools and the quality of education, which is an essential condition of educational management. Nevertheless, teaching is a professional occupation that enjoys high levels of autonomy and value generation in the long run, and the professional growth of teachers is the inherent assurance of the stability of quality increments in teaching. Overemphasis on management efficiency and quantitative outcomes damages teachers' professional development and the long-term value of education, while overemphasis on professional development and neglect of management efficiency leads to loose management and lost incentive effects. Thus, a scientific incentive system must achieve dynamic balance: it needs clear evaluation indicators and reward mechanisms to ensure management efficiency and distinguish work performance, while also adopting diversified developmental evaluation indicators, linking incentives with professional training and promotion opportunities to promote teachers' continuous professional growth. In addition, the system should have flexibility to adapt to China's educational regional differences, designing targeted mechanisms for eastern, central, and western regions.

5. Conclusion

This study aimed to investigate the impact of external performance incentives on the work behaviour of teachers in China's primary and secondary schools in the background of the 2009 performance-based pay reform. Based on the literature review and case analysis, the findings indicate that the effects of external incentives are not uniform. The discussion has shown that the subjective views of teachers on incentives are very important in defining their reaction. In case the incentive system is just, favorable and well-organized, it is more likely to foster the commitment to work professionally, enhance the teaching and focus on the overall development of students. Conversely, incentives that are too quantitative, cold or unjust have the tendency to cause passive compliance and distortion of work behaviour.

The study helps to fill the current body of knowledge by explaining the correlation between the external stimulus and the work behaviour of teachers regarding the Chinese basic education setting. The results build on the existing debates by revealing that the performance of incentive systems does not just rely on institutional design factors, but also concerns the perception of teachers in action. The practical relevance of this research to the sphere of educational management is also significant since it justifies the positive change in the teacher evaluation and the policies on incentives.

The limitation of this study is that it is based only on the literature review and analysis of cases, which can impact the generalization of the findings. Besides that, the case count is limited, and the study is not exhaustive to understand the interplay between other external incentives and other factors, including school culture and leadership of principals. The research in the future can be both inclusive in the larger sample and mixed methods because of the higher empirical background of this topic and due to the research of the mutual influence of institutional and contextual factors. Overall, this study offers a new understanding of the teacher incentive systems and stresses the necessity in the development of a fair, balanced, and helpful systems in elementary school.

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