Factors influencing teacher performance in Shanghai high schools in COVID-19 pandemic

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Article Info

ABSTRACT

The performance of teachers in schools has become a questionable phenomenon during COVID-19 due to changing landscape of teaching. Since the performance of teachers is linked to performance of students, it is imperative to investigate the influencing factors for teachers' performance. This study is conducted to examine the relationships between instructional leadership (IL), teaching autonomy (TA), school resources (SR), teacher self-efficacy (TSE), teacher performance (TP) and teaching workload (TW). A sample of 321 responses was collected using a Likert scale questionnaire. Partial least square–structural equation modeling (PLS-SEM) was used to analyze the data using Smart PLS 3. The findings of the study confirmed that TA, IL, and SR are significant antecedents of TSE. The study reports that TSE is a significant predictor of TP. The study reports that TSE is a significant mediator and TW is a significant moderator. The study suggests that TP can be improved with TSE which is improved by IL, TA, and SR. The school education administration in China is required to develop policies in line with this research to contribute to knowledge. The study recommends that the policymakers and practitioners should focus on school's resources, IL and TA which significantly will improve the performance of teachers in China.

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1. INTRODUCTION

The teaching and learning processes are affected with COVID-19 all over the world [1]. Similarly, the high school teacher in Shanghai also face challenges related to online learning due to sudden change in mode of education [2]. Therefore, it was a difficult task to address the diverse needs of students in continuous changing environment of education. Hence, the emerged challenges become problematic in the way of teaching leadership and supporting teachers for improving the education system [3]. Furthermore, the necessity of effective leadership emerged to improve the education system and better standards for the students. It is also useful to improve the performance of teachers in educational institutions [4].

The problem in performance of teachers is multidimensional [5]. The capability of teachers to deal with students increased their workload during COVID-19. Furthermore, there was lack of resources to deal with difficult working mechanism and challenges in teaching performance had emerged [6], [7]. Besides, opportunities for professional development, instructional leadership (IL) and teaching autonomy (TA) are important to formulate the strategies for effective teaching [8]. Therefore, this understanding is necessary for educational leaders to implement the policies and practices that improves the outcomes of students.

In theoretical standpoint, the relationships between IL and teacher performance (TP) is well documented [9]. Nevertheless, the moderating and mediating variables that could influence this relationship need further investigation in context of global pandemic. The critical factor of teacher self-efficacy (TSE) defined as belief in their abilities can play a significant mediating role [10]–[13]. Similarly, theories on self-efficacy denotes that a higher level of self-efficacy influences the teacher motivation, effectiveness, and resilience [14]. However, the relationships demonstrating self-efficacy as a mediator between IL, TA, school resources (SR), and TP need further comprehensive discussion.

Despite the existence of previous studies, there are still knowledge gaps regarding the understanding how IL, TA and SR impacts teachers' self-efficacy and TP in context of COVID-19 [15]. The existing research mainly focused on normal educational settings and gaps related to crisis context was left [16]. In addition, the understanding of mediating variable like TSE and moderating variable teaching workload (TW) remained less debated among scholars in COVID-19 context [17]. By discussion this all, the following question gained attention: what are the influencing factors to improve teachers' performance in Shanghai high schools? (Q1).

Therefore, this study was designed to achieve an objective that was to address gaps in knowledge by examining the relationships between IL, TA, SR, TSE, TP, and TW. This study was conducted in the context of post COVID-19 context considering the respondents from Shanghai high schools. The objective of this study was to provide a noticeable insight for policy makers and education leaders to better support teachers to improve their performance that will ultimately results in improving students' performance. The study is based on a motivation to urgently address the factors affecting teachers' performance in post pandemic context.

The IL in the educational institutes is reliable way to improve teachers' performance [6]. When the teachers are motivated to perform well, the support from leaders can improve their performance. A satisfactory level of motivation is achieved when organizational works are performed based on IL improvements [7]. The highly motivated instructional leaders are supportive to the teachers for their performance. The willingness and motivation to improve the performance is a significant factor which advances the teachers' support and learning [14]. A higher level of support is always required to improve the self-efficacy of teachers that translates into their strategic performance [18]. Thus, the hypothesis was formulated as: there is a relationship between IL and TSE (H1).

The autonomy to work in any educational institution has significant influence of teachers' willingness to perform [16]. When the teachers are highly motivated, their teaching style is improved which is significant to influence their performance. An advancement in educational culture is possible when the teachers are highly motivated to improve their work [19]. When the teachers are working in the supportive environment, it influences their behavior and way of performance. The logical approach to influence the performance of teachers is to help them to work with creativity [20]. This strategic support in creative working environment develops a culture of significant working that is logically supportive for higher performance [21]. Thus, the hypothesis was formulated as: there is a relationship between TA and TSE (H2).

The availability of resources is helpful for the teachers to influence their performance [22]. When schoolteachers are supported with rich resources, their performance is improved effectively. Oppositely, the limited resources of teachers also limit their performance which reduces their effectiveness in working [23]. Therefore, a higher level of involvement of teachers is improved when the have required resources which are necessary to their performance [24]. Similarly, when teachers' self-efficacy is developed to improve their performance, a significant working mechanism leading to organizational improvement is recommended where the necessary resources should be provided to teachers [25]. Therefore, the teacher's performance is always improved with the availability of effective resources for them. Thus, the hypothesis was formulated as: there is a relationship between SR and TSE (H3).

The self-motivation is a significant factor to improve the performance of teachers [26]. When they are motivated for innovative performance, the necessary support helps to improve their learning. The reliable approach is to support teachers for application of their utilization in work [27]. The significant challenges emerged when teachers are highly motivated and there is no support to them for their performance [28]. Thus, teacher's self-efficacy should be motivated and they must be supported for effective performance [29]. A higher level of support to improve the learning of teachers and influencing their self-efficacy is recommended to influence their performance. Thus, the hypothesis was formulated as: there is a relationship between TSE and TP (H4).

Self-efficacy of teachers influence their performance [5]. The psychologically strong teachers are effective in their decision making and improvement in performance. Similarly, the teachers who are less motivated, their performance is compromised [8]. The performance of teachers is also improved based on their involvement in teaching. The higher level of involvement increases the self-efficacy of teachers and support their performance [9]. While the lower level of performance is less supportive to teachers and their performance is also compromised. In developing teachers' performance, the role of their self-efficacy is

increased over time which actively support their performance [30]. Thus, the hypothesis H5 (a) proposed as: there is a relationship mediating role of TSE in the relationship between IL and TP.

The motivation of teachers is improved when they are supported with good environment to work [31]. The logical understanding to improve the performance of teachers is when the support from management is reliable. It is recommended that the management should emphasize teachers to increase their performance but their self-efficacy also should be improved [32]. The highly motivated teachers are effective in their performance which is a logical way forward to influence their performance [33]. The self-efficacy based approach of teachers is developed when they have autonomy to design their lecture and involvement students into productive work without any external influence [34]. Therefore, the performance of teachers is increased. Thus, the hypothesis H5 (b) is formulated as: there is a relationship mediating role of TSE in the relationship between TA and TP.

The resources are also necessary to influence the performance of teachers [3]. When the teachers have effective resources, their performance level is improved. It is recommended that teachers should have high level of performance that is necessary to strategically influence their performance [4]. Whereas the less availability of resources limits the performance of teachers that is a significant challenge. The improvement in teaching is based on utilization of resources and ranking of educational institutions is also developed with it [35]. However, the self-efficacy of teachers matters a lot on the way they utilize the available resources for their work to improve performance [15]. Thus, the hypothesis H5 (c) is formulated as: there is a relationship mediating role of TSE in the relationship between ST and TP.

The workload in teaching is also problematic for teachers to influence their performance [14]. When the teachers are motivated to perform well, their self-efficacy is developed. Many teachers are not satisfied to teacher when their responsibilities are high [10]. There is need to balance curricular and co-curricular activities of the teachers which have a significant influence on their performance. The reliable way of teachers' performance is to support them for effective outcome [17]. When teachers are highly motivated to improve their performance, management should not involve them in extra-curricular activities which limit their performance [36]. Therefore, workload is an influencing factor in teacher's performance. Thus, the hypothesis was formulated as: there is a relationship moderating role of TW in the relationship between self-efficacy and TP (H6). The model of this study is shown in Figure 1.
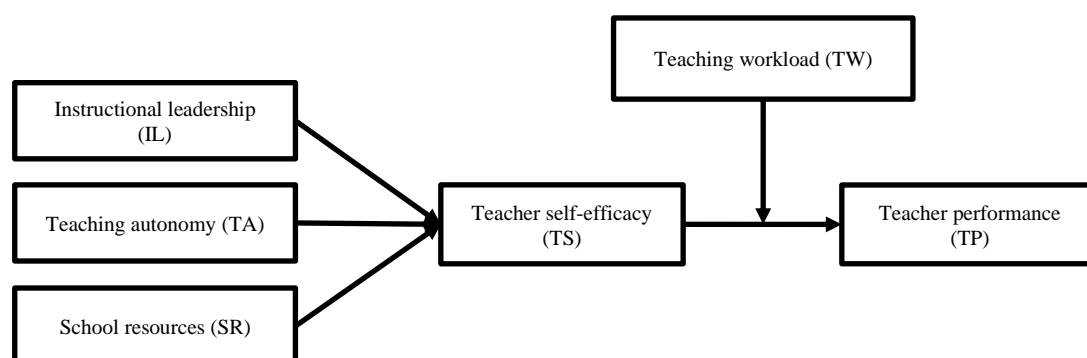

Figure 1. Research model

2.   METHOD

This research is based on quantitative design where the data collected from respondents was used to measure the relationships between variables. The research operationalized the variables and used scale developed by previous studies to measure the structural relationships between variables [37]–[42]. In the previous studies, these scale items achieved coefficient of reliability (α) significantly. Whereas, research by Mann [43] recommended to use a scale when α value is above 0.70. In the source studies, α value for all scale items were above the aforementioned threshold. Hence, the scale was considered reliable and valid to further use in future studies. The process of quantitative data based hypotheses testing is significant to scholars as it helps to determine the nature and direction of relationships. This study has tested direct, mediating and moderating relationships with quantitative data. The process of data collection was comprehensive to ensure the generalization of findings.

The research population were the teachers and students in Shanghai based high school. This population was considered for two purposes: diversity of data and generalization of findings. Principals and teachers were considered for the collection of data. In previous studies, the scholars also collected data from

teachers and students to analyze the relationship between variables. In addition, the study used a Likert scale questionnaire for collection of data. This questionnaire was self-structured and based on the items taken from previous studies. There were two sections in the questionnaire: demographics and Likert scales.

Since the population of the study was defined, a purposive sampling was used for collection of data. Teachers and principals were contacted for providing quantitative data on this research. This data was collected in cross-sectional design. It is significant to collect cross-sectional data when the reflective scale items are used to measure the relationship between variables. In accordance, the study used survey based approach for data collection. This approach is significantly considered to collect data as the previous studies also used survey based approach in data collection.

The respondents of the study were contacted before data collection. It is necessary to collect data ethically for any research. Therefore, the respondents of this study were contacted through the administration of the schools. Data collection letter were submitted to the school's administration prior to collect data. The administration of the schools were contacted using phone calls and emails to get their perception for data collection. In this study, no human subject was involved but just survey based data collection to measure the perception of respondents.

This research has collected data using printed questionnaire. According to scholars, a sample of more than 300 respondents is appropriate to analyze the data. This research distributed 400 questionnaires to collect the data. These questionnaires were distributed to collect the responses from the participants. They were informed about the purpose of research and basic instructions to respond to questions. A total of 344 responses were collected back and initial screening was performed. During initial screening, some responses were deleted and 321 responses were considered valid for the analysis of data. According to Hair *et al.* [44], a sample above 300 is significant to analyze the data with Smart PLS 3; while Hair *et al.* [45] previously discussed that Smart PLS is useful to analyze small level of data sample.

This study used two software statistical package for social sciences (SPSS) 26 and Smart PLS 3 for analysis of data. SPSS 26 was used to analyze the demographic information of the study. Furthermore, Smart PLS 3 was used for inferential tests. The measurement model assessment and structural model assessment were performed to analyze the data. Similarly, the findings of predictive relevance were also tested to analyze the nature and predictive power of the model.

3. RESULTS

The data of this research was analyzed and demographic information was tested at stage first. Out of 321 respondents, 24 were underage of 25. Furthermore, there were 152 respondents in age group of 25–34 and 81 in age group of 35–44. Meanwhile, there were 64 respondents in age group above 44 years. From the data of gender, it was found that 139 respondents were male and 182 respondents were female. In addition, the study found that 93 respondents were principals and 228 respondents were teachers. Finally, 48 respondents were performing their current role of teacher or principal from less than 1 year. Whereas 145 respondents were performing this role from 1–3 years and 128 respondents were performing this role from more than 3 years. The demographics information about the respondents is reported in Table 1.

Table 1. Demographic of respondents

Construct	Category	Counts	Total	Proportion
Age	Under 25	24	321	0.075
	25–34 years	152	321	0.474
	35–44 years	81	321	0.252
	Above 44 years	64	321	0.199
Gender	Male	139	321	0.433
	Female	182	321	0.567
Role	Principal	93	321	0.29
	Teacher	228	321	0.71
How many years you have been in current role?	Less than 1 year	48	321	0.15
	1–3 years	145	321	0.452
	More than 3 years	128	321	0.399

The descriptive statistics of the data was tested to measure its normality. For this purpose, the mean and standard deviation of the data was analyzed at first. The findings confirm that participants responded properly to the data and mean and standard deviation was significant. Furthermore, the findings of skewness and kurtosis were analyzed with threshold -2 and +2 [46]. The results report that data was significantly accepted for normality as presented in Table 2.

The findings of measurement model assessment were checked to analyze the individual items' reliability. It is a process to check if the data of the study is appropriately loaded on scale items. The factor loadings are checked in this stage and items loading below 0.60 are deleted [47]. The findings reported in Table 3 confirmed that all scale items were significant as loading on all was above 0.60. Therefore, the reliability of scale items data was achieved as shown in Figure 2 and Table 3.

Table 2. Descriptive statistics

| No.	Items	Mean	Standard deviation	Excess Kurtosis	Skewness
1	IL_1	3.293	1.12	-0.953	-0.035
2	IL_2	3.237	1.138	-0.958	-0.004
3	IL_3	3.259	1.183	-1.156	-0.014
4	TA_1	3.305	1.139	-1.094	-0.022
5	TA_2	3.271	1.135	-1.027	-0.008
6	TA_3	3.346	1.156	-1.085	-0.059
7	SR_1	3.358	1.149	-1.136	-0.064
8	SR_2	3.421	1.114	-0.989	-0.207
9	SR_3	3.439	1.177	-1.146	-0.17
10	TS_1	3.324	1.125	-1.111	-0.017
11	TS_2	3.33	1.167	-1.182	-0.052
12	TS_3	3.318	1.162	-1.158	-0.079
13	TS_4	3.386	1.176	-1.185	-0.129
14	TS_5	3.299	1.162	-1.114	-0.039
15	TW_1	3.308	1.241	-1.214	-0.101
16	TW_2	3.268	1.188	-1.112	-0.004
17	TW_3	3.336	1.204	-1.126	-0.069
18	TP_1	3.305	1.215	-1.22	-0.09
19	TP_2	3.364	1.184	-1.211	-0.07
20	TP_3	3.383	1.197	-1.271	-0.072
21	TP_4	3.262	1.2	-1.065	-0.015
22	TP_5	3.355	1.183	-1.163	-0.116
23	TP_6	3.414	1.16	-1.104	-0.146
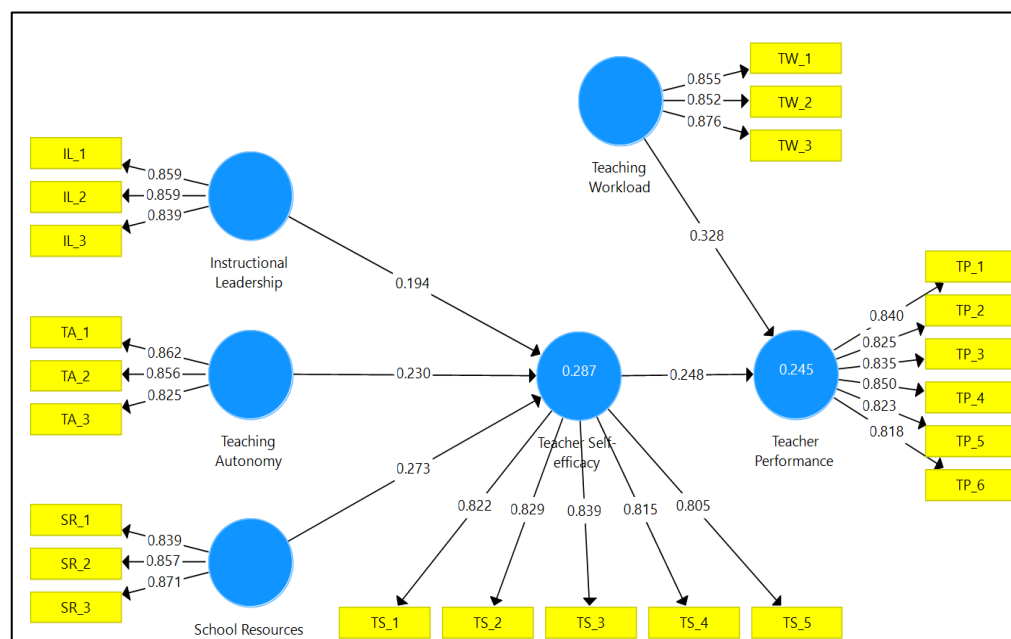
Figure 2. Measurement model

The findings of convergent validity were tested to measure the validity and reliability of data. The findings of composite reliability and average variance extracted were tested at this stage. The composite reliability value above 0.70 is accepted as significant [44]. Furthermore, the value of average variance extracted above 0.50 confirms a significant variance in the data. The results reported in Table 4 confirmed that reliability and validity of data was significantly achieved.

The findings of discriminant validity were tested to measure the discrimination in the data while analyzing multicollinearity issues. This study used well known heterotrait-monotrait (HTMT) method for discriminant validity test. The results reported in Table 5 confirmed that all values were less than recommended threshold of 0.85 [48]. Hence, the discriminant validity of the data was significantly achieved.

Table 3. Factor loadings

Construct	Items	Statements	Factor loadings
IL	IL_1	My principal provides clear guidance on teaching practices.	0.859
	IL_2	My principal supports innovative teaching methods.	0.859
	IL_3	My principal encourages collaboration among teachers	0.839
SR	SR_1	My school provides adequate teaching materials.	0.839
	SR_2	I have access to the latest technology for teaching.	0.857
	SR_3	Support staff are available to assist me with my teaching responsibilities.	0.871
TA	TA_1	I have the freedom to choose the teaching methods I use.	0.862
	TA_2	I can make decisions about the curriculum content.	0.856
	TA_3	I feel trusted by my school administration to make important decisions.	0.825
TP	TP_1	My students generally perform well academically.	0.84
	TP_2	I regularly achieve my teaching goals.	0.825
	TP_3	I receive positive feedback on my teaching from students and parents.	0.835
	TP_4	I maintain a positive and productive classroom environment conducive to learning.	0.85
	TP_5	I effectively differentiate instruction to meet the diverse needs of my students.	0.823
	TP_6	I consistently use assessment data to inform and improve my teaching practices.	0.818
TSE	TS_1	I feel confident in my ability to engage students in learning.	0.822
	TS_2	I can effectively manage my classroom.	0.829
	TS_3	I am able to implement new teaching strategies successfully.	0.839
	TS_4	I am capable of motivating students who show low interest in schoolwork.	0.815
	TS_5	I feel confident in my ability to adapt my teaching strategies to meet the needs of all learners.	0.805
TW	TW_1	I often feel overwhelmed by my workload.	0.855
	TW_2	My workload allows me to balance work and personal life effectively.	0.852
	TW_3	I have sufficient time to complete my teaching responsibilities.	0.876

Table 4. Convergent validity

Construct	Composite reliability	Average variance extracted
IL	0.888	0.727
SR	0.891	0.732
TP	0.931	0.692
TSE	0.912	0.675
TA	0.885	0.719
TW	0.896	0.741

Table 5. Discriminant validity

Construct	IL	SR	TP	TSE	TA	TW
IL						
SR	0.415					
TP	0.475	0.471				
TSE	0.448	0.505	0.447			
TA	0.497	0.487	0.53	0.493		
TW	0.535	0.524	0.509	0.547	0.473	

The study analyzed the findings of common method bias to confirm no issues in the data as it was collected from a single source. Common method bias leads to misleading results in any research. The findings of common method bias reported in Table 6 confirmed that there were no issues in the data as all values were less than 5 [49]. Hence, the data was considered without any bias to analyze the findings.

Table 6. Common method bias

Construct	Teacher performance	Teacher self-efficacy
Instructional leadership		1.248
School resources		1.242
Teacher performance		
Teacher self-efficacy	1.279	
Teaching autonomy		1.311
Teaching workload	1.279	

The findings of structural model assessment were performed to analyze the data. A threshold of t>1.96 was considered for hypotheses testing [44]. According to results of H1, there is a significant and relationship between IL and TSE. The results of H2 confirmed that there is a positive and significant relationship between TA and TSE. The findings of H3 reported that there is a positive and significant relationship between SR and TSE. Furthermore, H4 results also show that there is a positive and significant relationship between TSE and TP. The findings are shown in Figure 3 and Table 7. Similarly, the findings of H6 confirmed that there is a positive and significant relationship moderating role of TW in the relationship between self-efficacy and TP. Hence, the study confirmed that a significant presence of TW positively influence and strengthen the relationship between teaching self-efficacy and TP as shown in Figure 4.
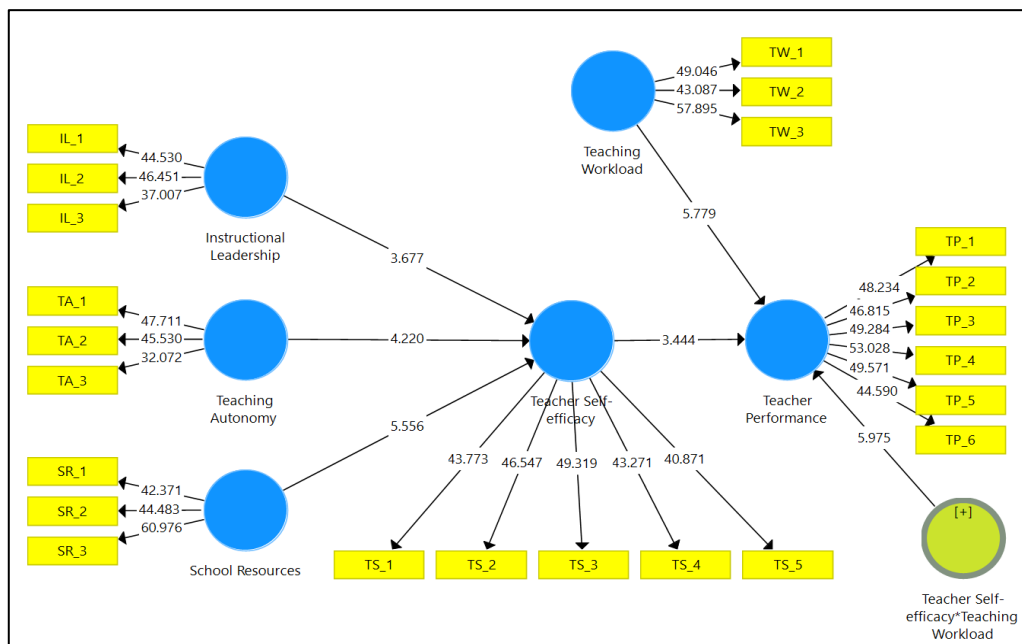
Figure 3. Structural model

Table 7. Direct and moderating paths

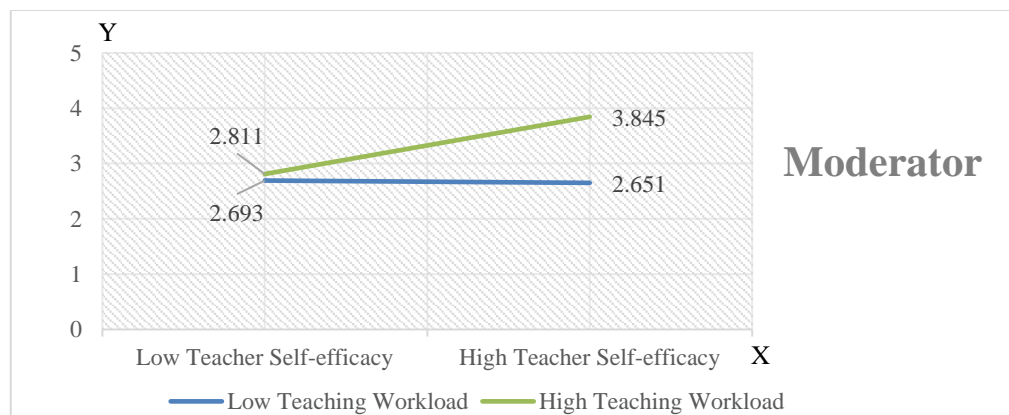| Direct and moderating paths	Original sample	Sample mean	Standard deviation	T statistics	P values
IL->TSE	0.194	0.196	0.053	3.677	0
SR->TSE	0.273	0.273	0.049	5.556	0
TSE->TP	0.184	0.183	0.053	3.444	0.001
TSE*TW->TP	0.269	0.269	0.045	5.975	0
TA->TSE	0.23	0.23	0.054	4.22	0

Figure 4. Moderating role of teaching workload

The findings of hypothesis H5 (a) confirmed that there is a significant and positive relationship mediating role of TSE in the relationship between IL and TP. Moreover, the results of H5 (b) confirmed that there is a positive and significant relationship mediating role of TSE in the relationship between TA and TP. Finally, the findings of H5 (c) confirmed that there is a positive and significant relationship mediating role of TSE in the relationship between SR and TP. The results are reported in Table 8.

The findings of predictive relevance were measured to analyze the predictive power of model from independent variables to dependent variables. The study used PLS Blindfolding test to analyze predictive relevance. The findings (Q2>0) reported in Figure 5 and Table 9 confirm that predictive relevance was significantly achieved. Therefore, the study model was significantly confirmed with reliable predictive power.

Table 8. Indirect paths

Indirect paths	Original sample	Sample mean	Standard deviation	T statistics	P values
SR->TSE->TP	0.05	0.05	0.017	2.902	0.004
IL->TSE->TP	0.036	0.036	0.015	2.316	0.021
TA->TSE->TP	0.042	0.042	0.017	2.442	0.015
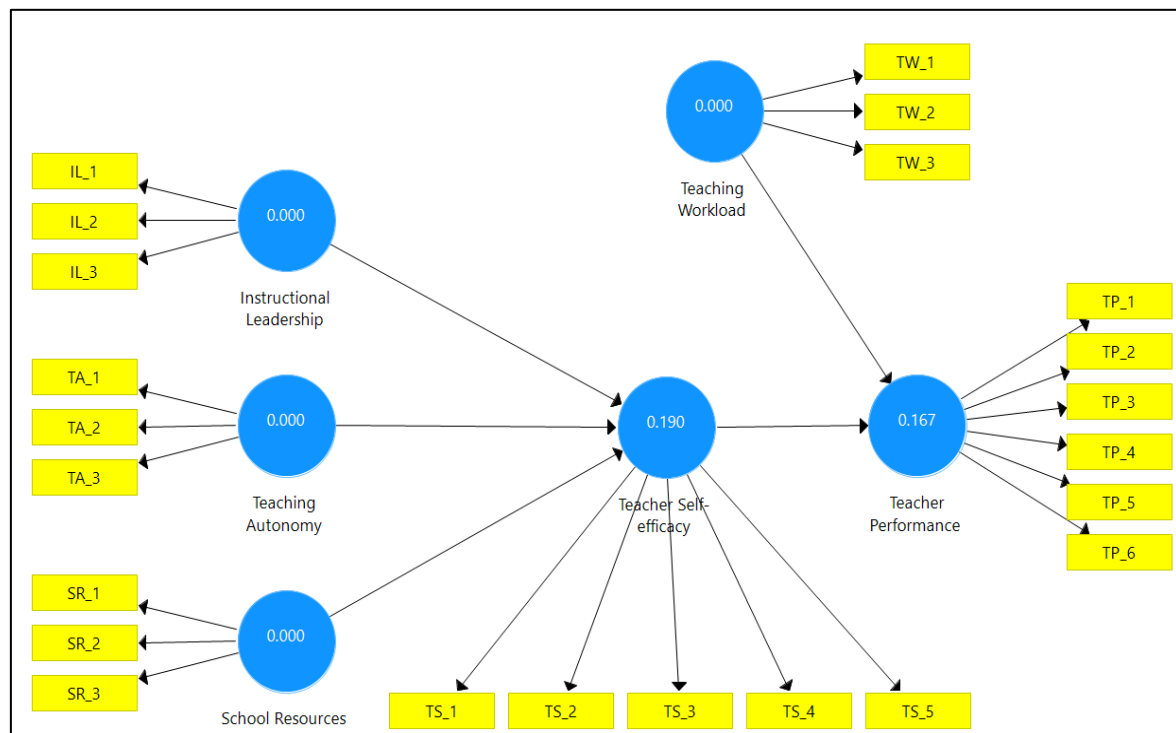
Figure 5. Predictive relevance

Table 9. Predictive relevance

Construct	SSO	SSE	Q^2 (=1-SSE/SSO)
IL	963	963	
SR	963	963	
TP	1926	1604.747	0.167
TSE	1605	1300.074	0.19
TA	963	963	
TW	963	963	

4. DISCUSSION

The empirical justification were used to achieve the objective of this research. According to results of H1, there is a significant relationship between IL and TSE. This relationship is analyzed in context of previous studies. According to Hajovsky *et al.* [30], one dependable strategy for raising teacher effectiveness in educational institutions is IL. Similarly, research by Guoyan *et al.* [36] discussed that when organizational

tasks are carried out in accordance with improvements in IL, a suitable degree of motivation is attained. The study by Utami *et al.* [22] reported that the readiness and drive to enhance performance is a crucial component that propels teachers' support and education. Whereas, Hutzler *et al.* [31] discussed increasing teachers' self-efficacy always means providing them with a higher level of support, which in turn improves their strategic performance.

The results of H2 confirmed that there is a positive and significant relationship between TA and TSE. This relationship is analyzed in context of previous studies. According to Prewett and Whitney [17], teachers' willingness to perform is significantly influenced by their autonomy at work in any educational setting. Meanwhile, Fahmi *et al.* [20] denoted that when instructors have a strong desire to do better at what they do, the culture of education can progress. According to Birjandi and Tamjid [28], assisting educators in using their creativity is a sensible way to improve their performance. While, Song *et al.* [9] discussed that higher performance is logically supported by the major working culture that is developed in a creative working environment thanks to this strategic support.

The findings of H3 reported that there is a positive and significant relationship between SR and TSE. According to Aparicio *et al.* [26], the availability of materials helps teachers improve their effectiveness. Furthermore, Liu *et al.* [16] discussed that when teachers have the resources, they need to do well, their level of commitment increases. According to Muenchhausen *et al.* [5], instructors should be given the appropriate resources. Thus, having useful tools at their disposal helps teachers perform better every time.

Furthermore, H4 results also showed that there is a positive and significant relationship between TSE and TP. This relationship is analyzed in context of previous studies. According to Havrilova *et al.* [25], one important component in raising instructors' performance is their own drive. Besides, research by Akturk and Ozturk [33] discussed that supporting educators as they apply their utilization in the workplace is a dependable strategy. The study by Lyu *et al.* [19] denoted that teachers' self-efficacy needs to be encouraged, and they need assistance in order to work well. Furthermore, Biasutti and Concina [34] highlighted that it is advised that instructors receive more help to enhance their learning and boost their self-efficacy in order to affect their performance.

The findings of hypothesis H5 (a) confirmed that there is a significant and positive relationship mediating role of TSE in the relationship between IL and TP. This relationship is analyzed in context of previous studies. According to Affuso *et al.* [14], teachers' self-efficacy affects how well they perform. Teachers that possess high psychological qualities are adept at making decisions and enhancing their students' performance [46], [47]. According to Raymond and Gabriel [1], teachers who lack motivation see a decline in their effectiveness. Meanwhile, research by Ogunode [18] discussed that a greater degree of involvement boosts teachers' self-efficacy and supports their work. The study by Bagnall *et al.* [24] discussed that when instructors' self-efficacy grows and actively supports their performance, which helps to strengthen their teaching.

Moreover, the results of H5 (b) confirmed that there is a positive and significant relationship mediating role of TSE in the relationship between TA and TP. This relationship is analyzed in context of previous studies. According to Affuso *et al.* [14], when instructors have a positive work environment, their motivation increases. The research by Affuso *et al.* [14] also discussed that it is advised that management place more emphasis on helping teachers perform better, but they should also work to boost their self-efficacy. Besides, according to Bartosiewicz *et al.* [10], teachers performance is improved when they are motivated to perform their work with significant self-efficacy.

Similarly, the findings of H5 (c) confirmed that there is a positive and significant relationship mediating role of TSE in the relationship between SR and TP. This relationship is analyzed in context of previous studies. According to Bas [15], the materials are also required to affect teachers' performance. The research by Reinholz *et al.* [6] discussed that it is advised that educator's function at a high enough level to strategically affect their students' performance. According to Osorno and Federico [4], the use of resources informs the development of educational institution rankings, which in turn informs improvements in instruction. Whereas, the study by Blevins *et al.* [50] reported that a teacher's self-efficacy has a significant impact on how well they use the resources at their disposal to enhance performance.

Finally, the findings of H6 confirmed that there is a positive and significant relationship moderating role of TW in the relationship between self-efficacy and TP. This relationship is analyzed in context of previous studies. According to Zhang *et al.* [3], another factor that negatively affects teachers' performance is their workload. Meanwhile, the study by Hasibuan [7] discussed that even with heavy obligations, many instructors are not content with their work. According to Jowett *et al.* [21], encouraging instructors to achieve successful results is a dependable method of evaluating their work. Whereas, Raymond and Gabriel [1] discussed that a teacher's workload affects their performance.

5. CONCLUSION

In a nutshell, this study was designed to achieve an objective that was to address gaps in knowledge by examining the relationships between instructional leadership, teaching autonomy, school resources, teacher self-efficacy, teacher performance, and teaching workload. The research has theoretical significance as all purposed relationships were accepted. The study confirmed that IL has a significant impact on TSE. Previously, this relationship was inconsistent in the literature. The study also confirmed that TA is a significant predictor of TSE, while this relationship was less debated previously. Similarly, the study concludes that SR have significant impact on TSE which was less reported in previous studies. Hence, this study added three new relationships into the literature of TSE.

In addition, the study concludes that TSE is a significant predictor of TP. This relationship was also inconsistent in existing literature but this study improves the discussion on it. The mediating role of TSE is also established by this research. Previously, no scholar has tested the mediating role of TSE between exogenous variables (IL, TA, and SR) and endogenous variable (TP). The scholarly discussion on the mediating role of TSE is novel contribution by this research. Whereas the study also introduces that TW is a significant moderator between TSE and TP. By addressing these theoretical implications, the study fills the gap in the body of literature.

The findings of this research recommend significant implications to improve teaching performance in China. The policies can be developed based on the findings of this research to improve the performance of teachers. The study advocated that there is need for work on TA and IL which directly influences the self-efficacy of teachers. In addition, the study recommends that there must be appropriate resources for schools that can be utilized by the teachers. In result, their self-efficacy would be developed to improve their contribution to enhance performance. The study further insists to advance teachers to have less workload as higher workload influences their performance. Furthermore, the study recommends making policies for TSE which is a significant factor to mediate the impact of TA, SR, and IL on TP. Therefore, the policies developed to increase TSE can be helpful to improve TP. The working of aforesaid implications can positively influence teaching performance in China which is significant to improve the learning of students.

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