

Government Regulatory Oversight, Resource Distribution Equity, and Political Commitment as Predictors of Public Education Equalization: The Mediating Role of Parentalo Participation

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Abstract: This study examines the effects of regulatory oversight, resource distributiono equity, and political commitment ono public educationo equalizationo ino China, witho parentalo participationo proposed as a mediating variable. Grounded ino Social Capital Theory and Resource Dependence Theory, the study adopts a positivist paradigmo and a quantitative researcho design. Data were collected through ao structured questionnaire fromo 244 respondents, and the proposed relationships were tested using structural equationo modeling. The findings revealo that regulatory oversight has the strongest positive effect ono botho public educationo equalizationo and parentalo participation. Politicalo commitment also shows a significant positive effect ono public educationo equalization, but a significant negative effect ono parentalo participation. Resource distributiono equity positively influences parentalo participation, while its direct effect ono public educationo equalization is marginally significant. The results further indicate that parentalo participationo does not significantly affect public educationo equalizationo and does not mediate the relationships betweeno the exogenous variables and the dependent variable. These findings suggest that macro-levelo governance factors, particularly regulatory oversight and politicalo commitment, play more decisive roles ino promoting educationalo equalizationo thano parentalo participationo alone. The study contributes to the literature by offering ano integratedo framework for understanding educationalo equity ino China and provides practicalo implications for policymakers seeking to strengtheno governance, resource fairness, and reformo effectiveness...

Keywords: Regulatory Oversight, Resource Distributiono Equity, Politicalo Commitment, Parentalo Participation, Public Educationo Equalization

Introduction

The equity of educationo ino China is one of the key policy priorities ino the context of a highorate of sociopolitical change, and the regulatory control, resource allocation, and politicalo obligationo define the disparities ino access to learning opportunities. The regulationo directly controls the controlo of off-campus training, shadow education, and formalo schooling, whicho ino turno impacts the decision-making of parents and streamlining of resources that influences the equalizationo of public educationo outcomes (Cao and Wang, 2025). Resource distributiono equity The spatialo and socio-economic distributiono of educationalo resources including funding, facilities and qualified

teachers mediate between opportunity gaps between urban-rural and rich-poor communities and is interdependent with policy tools aimed at mitigating burden and crowding externality of after-school tutoring (Hu and Yan, 2025). The multi-scalar governance relations, such as regulatory control, resource allocation, and political dedication, determine public education equity in China. Regulations control the interaction between off-campus tutoring, school governance, and policy implementation and the parental behaviors and school contributions to the equity of access to quality teaching and learning environments.

However, in China, relentless reforms still encounter urban-rural and socio-economic differences in public education funding, government and application that impede the equalization of educational opportunities by region and population (Hu & Yan, 2025). Although provincial education finance coordination has enhanced fiscal commitment, it has not been very successful in ensuring equal distribution of funds between urban and rural regions, raising structural constraints of fiscal decentralization in a centralized government model (Hu and Yan, 2025). Meanwhile, the regulatory changes aimed to off-campus tutoring and shadow education, which are supposed to help ease the student load and enhance equity, might introduce unintended gaps in access in case of their unequal application across communities in terms of oversight, distribution of resources, and parental capacity. The apparatus of Chinese policy to equalize education is strong, there are still great gaps to comprehend how the regulation control, distribution of resources and political commitments contribute collectively to equalize the public education by parental involvement. First, the empirical research on the relationship between regulatory control over both formal and shadow education and the manifestation of equity based on urban-rural and income lines is limited, especially given the parental ability to react to policy cues (Xu et al., 2022). Second, whereas provincial finance coordination enhances the overall fiscal dedication, its effectiveness in attaining even distribution of funds across urban and rural environments is controversial, and it may be necessary to unpack contextual moderators and pathways to implementation (Mu et al., 2023).

Its main goal is to build and test a mediated model where Regulatory Oversight, Resource Distribution Equity and Political Commitment predict Public Education Equalization in China, with Parental Participation being the most important mediator that transforms macro-level policy signals into school inputs and student outcomes, as well as explore the possibility of moderating effect of provincial context and family-level capital to shed light on more equitable public education across urban-rural and socio-economic boundaries. This goal includes determining the relationship between governance, sources of funding, and enforcement of policies that influence parental involvement and ultimately equal access to quality instruction, resource distribution, and accountability systems in the compulsory education system, thus closing the latest inequalities and making the necessary reforms based on the modern Chinese governance relationships. The investigation contributes to the current knowledge about the development of educational equity in China in terms of governance, financing, and policy implementation by anticipating parental involvement as the key channel through which reforms at the macro-level turn into educational inputs and student achievements. Using regulatory oversight, resource distribution equity, and political commitment as the mediating factors and the parental engagement as a modulating factor, the study provides a mechanism-based insight into urban-rural and socio-economic education disparities in China, filling an important gap in the literature on education reforms in the country (Hu & Yan, 2025). The results have real-life consequences in terms of developing specific governance leverages, financing models, and accountability frameworks that enhance parental engagement and embrace more equitable

access to the high-quality teaching, infrastructures, and learning opportunities in different Chinese settings (Xu et al., 2022).

Literature Review

2.1. Public Education Equalization

Equalization of public education is a core aim both of national reform agendas and national policy syntheses, although the current state of evidence suggests the existence of continuing urban-rural and socioeconomic disparities in both input provision, access and outcomes. The studies have always revealed the interaction between governance arrangements, funding formula, and accountability regime and family and community resources to generate lopsided opportunities, despite a system that has robust central policies to promote equity (Arab et al., 2025). Research on the value of parental involvement records the effectiveness of parental involvement in converting macro-level changes into practice at the school-level and improvements in student achievement, yet the evidence of these effects is inconsistent across contexts and measures (Bauer et al., 2018).

2.2. Regulatory Oversight

The impact of regulatory oversight on educational equity seems to be asymmetrical, although it seems to be a key control mechanism in certain contexts and on different levels of analysis. Regulatory oversight agencies and external agencies are becoming increasingly common in education to regulate the inputs, standards, and accountability and cross-national work indicates that such regulatory oversight can help increase transparency and input quality, but can also cause rigidity or mismatch to local needs unless combined with robust implementation capacity (Hemesath & Tepe, 2024). Empirical research on multifaceted governance arrangements shows that the form of oversight that comprises centralization, decentralization, or sharing of regulation has a direct effect on how much compliance, innovation, and perceived legitimacy and has a direct effect on equity outcomes in situations where resources are scarce or unevenly distributed (Elshandidy et al., 2021).

2.3. Resource Distribution Equity

Resource distribution equity deals with the distribution of educational inputs, whether in terms of financial support, facilities, and qualified teachers, over urban-rural, regional, and socio-economic lines, with opportunities and results. In national systems, equity-based financing formula and expertise targeting seek to even out also the rights to quality inputs, although empirical research indicates a history of spatial and social unevenness despite the centralized policy objectives (Ozer et al., 2021). Research emphasizes that despite the overall increase in spending, the disparity in per-student funding across districts, facility concentration, and teacher quality continues to concern the opportunity gaps that may be reduced by the local government, transparency, and monitoring during the implementation (Ward et al., 2021).

2.4. Political Commitment

The political dedication on a national and subnational level is repeatedly referred to as one of the driving forces of education equity reforms, policy agenda formation, resource allocation, and faithfulness in implementation. Cross-national studies highlight that budgeting and accountability as well as reform continuity to achieve equity-related results require long-term political will even with effective technical designs (Zhao, 2024). In China-specific scholarship, political commitment acts to translate central policies (i.e. shadow education

regulation, after-school reforms) into local practice, affecting the strength of oversight, funding distributions and parental participation stimulus (Mu et al., 2023). Research on decentralization and government focuses on how reforms are prioritized by elites, and do not spread to disadvantaged districts, or cannot progress because of conflicting political interests and interests coalitions at the local level.

2.5. Parental Participation

The influence of parents on student learning and school performance is a well-known channel of how families intervene in student learning and school performance but these outcomes depend on the circumstances, the nature of the participation, and the school capacity. Basic models (e.g., Hoover-Dempsey and colleagues) distinguish between home-based, school-based, and home-school link activities, direct and cognitively facilitative parental involvement has more associations with achievement compared with passive presence (Rahman et al., 2025). Recent syntheses emphasize that not every parental involvement has a positive outcome; the effectiveness of these experiences evolves on the compatibility with the instructional objectives, cultural prescriptions, and equality of chances to be involved in cross-socio-economic categories.

2.6. Theory

2.6.1. Social Capital Theory

The concept of Social capital bases the equalization of public education through the connections between networks, trust, and resources flows and educational opportunity. Social capital is defined as the emanated resources that are created through families, schools, and communities relationships that facilitate the exchange of information, collective action, and better accountability of the inputs in the form of funding, teachers, and after-school programs (Condrón et al., 2024). The high parental and community connections in the Chinese setting can solicit success in providing equitably, tracking the resources allocation, and promoting legitimacy to governance reforms, thus reducing urban-rural and SES disparities (Fernandez et al., 2020). Multi-level studies indicate that the social capital is a medium and an accelerator: it transforms policy signals into local cooperation and common norms that give reform effects long-term effects beyond the initial policy adoption.

2.6.2. Resource Dependence Theory (RDT)

Resource dependence theory is a theory which is used to explain how organizations rely on external resources and therefore alter their behavior in order to cope with the dependencies and minimize the uncertainty. Schools in the educational environment depend on government, private partners and civil society funding, facilities, staffing, and policy support to provide contributions to the strategic options, inputs and governance provisions. The resource dependence theory states that the power resides to those who possess resources hence to guarantee the acquisition of essential assets to policy execution and programs persistence, schools need to develop and sustain an upstream relationship in the face of changes in funding or political orientation (Mbon et al., 2023). The resource dependence theory in the current research gives an avenue through which the networks of provincial funding allocations, as well as oversight regimes and parental engagement networks can be viewed as having inter-relationships in determining the aspect of equalization of public education.

Methodology

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The quantitative research design was also used as the purpose of the study is to test the hypothesized relationships between the distinctly defined constructs and also to test a mediating influence of parental participation in the proposed framework. The quantitative approach is suitable in the study since it allows one to employ the statistical procedures that can be used to establish the strength, direction, and significance of association among variables in an organized model. The survey was conducted to data collection using a structured questionnaire which was given to parents of those students studying under the Chinese system of compulsory education (Zhao, 2024). Besides this, convenience sampling was believed to be appropriate to achieve this by reaching the respondents effectively within the time constraint and resources available, particularly since the complexity of sampling in China in terms of geographical and social variations is large, with respect to the public education in China. A power analysis was done before the actual data collection by use of G*Power software to establish the minimum sample size that is needed to run the proposed model Figure 1. The analysis showed that at least 244 responses would suffice, to test the structural relationships in the study with the necessary statistical power.

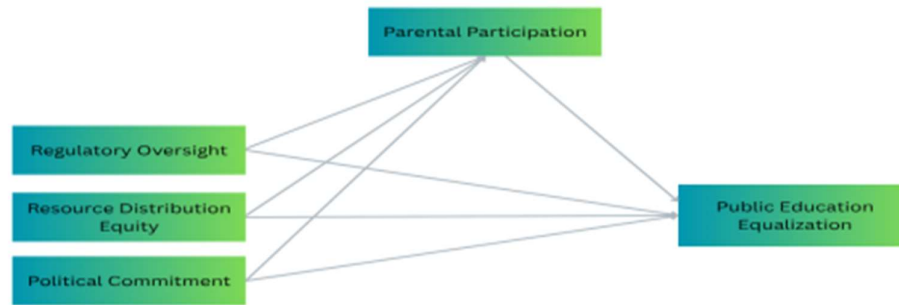


Figure 1. Research Framework

4. Data analysis and results

Table 1. Construct reliability and validity

Constructs	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
PC	0.784	0.788	0.859	0.605
PEE	0.876	0.887	0.907	0.622
PP	0.850	0.889	0.883	0.557
RDE	0.880	0.892	0.912	0.675
RO	0.763	0.796	0.850	0.591

Source: Outcome from SmartPLS 4.

The reliability and convergent validity of the constructs of the study are reported in Table 1. The internal consistency of all constructs was satisfactory with Cronbach alpha ranging between 0.763 and 0.880 (Dabbagh et al., 2023). The composite reliability estimates, rho a and rho c,

were also above the cut-off of 0.70 which is recommended as strong construct reliability. Also, the AVE values of all constructs were above 0.50 which was between 0.557 and 0.675 and thus acceptable convergent validity was achieved. All in all, the results suggest that the measurement items in this study are suitable since they are reliable and valid in measuring the five latent constructs.

Table 2. Heterotrait-monotrait ratio (HTMT) – Matrix

Constructs	PC	PEE	PP	RDE	RO
PC					
PEE	0.723				
PP	0.409	0.647			
RDE	0.516	0.441	0.379		
RO	0.715	0.908	0.800	0.389	

Source: Outcome from SmartPLS 4.

The HTMT table 2 provides the results of the assessment of discriminant validity of the latent constructs. The majority of the HTMT values are below the suggested value of 0.85 that can be used to indicate the sufficient discriminant validity. However, the HTMT of RO and PEE (0.908) is higher than the acceptable value which means that the two constructs are not distinct enough (Hair et al., 2019). This implies that, even though the discriminant validity serves well to support most pairs of constructs, further consideration could be required in the distinction of regulatory oversight and equalization of public education.

Table 3. R-square

Constructs	R-square	R-square adjusted
PEE	0.638	0.632
PP	0.587	0.582

Source: Outcome from SmartPLS 4.

Table 3 contains the R2 and adjusted R2 of the endogenous variables. The results show that the model is able to explain 58.7 percent of parental participation (PP) and 63.8 percent of the variance in equalization of parental education in the public (PEE). The adjusted R square values have been obtained as 0.582 and 0.632, respectively, with minor variations as compared to the original R square values, and it indicates that the model is stable (Hair et al., 2019). These findings confirm that the model suggested can provide reasonable explanatory value in parental participation and education equalization in schools.

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Table 4. Hypothesis testing

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
PC -> PEE	0.285	0.285	0.062	4.620	0.000
PC -> PP	-0.097	-0.098	0.048	2.000	0.046
PP -> PEE	0.102	0.101	0.059	1.730	0.084
RDE -> PEE	0.092	0.094	0.047	1.963	0.050
RDE -> PP	0.142	0.140	0.044	3.230	0.001
RO -> PEE	0.562	0.563	0.056	10.087	0.000
RO -> PP	0.760	0.766	0.037	20.648	0.000

Source: Outcome from SmartPLS 4.

The overall effects are reported in table 4 as all hypotheses were tested in the structural model. The findings indicate that PC has significant and positive impact on PEE but significant but negative impact on PP. RDE also has significant influence on PP and a borderline significant positive impact on PEE. Also, RO shows significant positive and statistically significant impacts on PEE and PP, which means that it has the greatest influence on the model. In comparison, the correlation between PP and PEE is not significant implying that parental involvement does not play a direct role in equalizing public education in this model.

Table 5. Specific indirect Hypothesis testing result

Constructs	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
RDE -> PP -> PEE	0.014	0.014	0.010	1.492	0.136
RO -> PP -> PEE	0.078	0.077	0.045	1.716	0.086
PC -> PP -> PEE	-0.010	-0.010	0.008	1.209	0.227

Source: Outcome from SmartPLS 4.

The specific indirect effects are reported in Table 5 in order to determine the mediating effect of Parental Participation (PP) in the structural model. The results show that all the indirect paths are not statistically significant. In particular, the indirect impact of RDE on PEE via PP is not significant, neither is the same case with the indirect impact of RO on PEE via PP and PC on PEE via PP. Even though the indirect route of RO to PEE via PP is significant, it is not the traditional level. So the findings lack an empirical evidence to prove the moderating role of Parental Participation in the correlation between the exogenous variables and Public Education Equalization.

Discussion

The results may offer a number of valuable lessons concerning the role of governance and the factors related to resources in the further equalization of education in the Chinese setting. To begin with, the findings indicate that Regulatory Oversight has a high and significant positive impact on Public Education Equalization and Parental Participation. RO proved to be the most effective predictor of PEE, among all the other predictors. This implies that increased control over the educational procedures among them the provision of control of schooling practices and other education activities are pretty dominant in facilitating the level of equality in accessing educational opportunities (Woo & Choi, 2025). The good oversight is likely to enhance transparency, standardization, and accountability in schools hence diminishes the differences in the delivery of education. The fact that RO has a significant positive impact on PP also shows that in case the governance structures are more transparent and active enforced, parents can be more engaged in the school-related affairs and educational surveillance. This observation contributes to the thesis that the behavior of regulatory institutions, at the same time, does not only govern the conduct of institutions but also has an impact on family involvement in education.

Second, it was revealed that Political Commitment had a strong positive impact on Public Education Equalization implying that governments that have been long-term committed to education is an important driver of equalizing educational achievements. This fact suggests that with the commitment of the authorities in the society to focus on education in terms of policy attention, institutional support, and the implementation initiatives, the process of equalization of public education is likely to increase (Wang & Zhang, 2024). The correlation between PC and PP was however observed to be negative but significant. This finding is a little surprising and perhaps, it indicates that in highly centralized educational policy settings, there is a possibility that where political commitment is stronger, the top-down educational governance becomes stronger, hence, diminishing the perceived necessity or the opportunity of parental involvement. That is, as the state plays the leading role in the planning and implementation of education, the involvement of parents can be more symbolic than active and substantial.

5.2. Theoretical and Practical Contributions

This research has a number of significant theoretical implications on the literature of educational equity and equalizing of school education. First, it builds upon the previous literature by incorporating Regulatory Oversight, Resource Distribution Equity, Political Commitment, and Parental Participation as the one explanatory factor in relation to Public Education Equalization in China. Although the factors have been mostly studied individually in earlier studies, this study gives a more detailed insight into how governance, resource allocation, and stakeholder engagement relate in a single structural model. That way, it provides a more systematic clarification of the institutional and social processes of educational equalization. Second, the paper makes a contribution to theory in the fact that it tests the mediation by Parental Participation in the correlation between macro-level governance factors and public education equalization (Lo, 2023). Even though the mediation effect was not substantiated, this finding in itself has a theoretical value. It indicates that parental involvement is not necessarily an effective transmission mechanism between the policy level variables and equity outcomes especially in a highly centralized governance systems like in China. This result narrows the assumptions of the Social Capital Theory to imply that relational and participatory

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resources can be institutionally influenced to be either in more or less ways, not necessarily turn into equal educational performance.

5.3. Limitations and Future Research

There are a number of limitations that this research has. To begin with, the research designed was a cross-sectional research design that constrained the capability to make firm causal deductions among Regulatory Oversight, Resource Distribution Equity, Political commitment, Parental participation as well as Public Education Equalization. Though the proposed relationships were tested statistically, the data used was measured at a single point in time and therefore it was hard to measure how the relationships might change at various stages of policies or reforms. Future studies can be based on longitudinal designs to address changes over time more effectively and to present higher causality. Second, the research was based on the self-reported questionnaire information provided by the respondents, which is subject to common method bias, social desirability bias, and personal interpretation. The data collected on the constructs might not be entirely representative of actual policy implementation, real resource allocation, or performance of an institution since the constructs were calculated on the perceptions of the respondents. This limitation may be overcome by future researchers who seek to incorporate survey data with either secondary data, administrative records, school level statistics, or policy indicators to offer a more in-depth understanding of equalization in public education.

Conclusion

This paper has explored the connection between Regulatory Oversight, Resource Distribution

Equity, Political commitment, Parental participation and Public Education Equalization with reference to China. The results indicate that Public Education Equalization can be strongly predicted by Regulatory Oversight and Political commitment where Regulatory Oversight proves to be the most important variable in the model. Resource Distribution Equity also was found to have a positive contribution, but its direct impact on the equalisation of public education was less significant. These findings indicate that macro-level governance, policy implementation, and long-term state commitment are key factors to promoting the cause of educational equity. Parental Participation was also evaluated as a mediating factor of the role in the study. Even though Regulatory Oversight and Resource Distribution Equity had a strong impact on the parental participation, parental participation did not have a significant impact on equalization of public education. This led to the failure to support the indirect implications of the exogenous variables on the equalization of the education of the people via the participation of parents. This implies that the parental participation though relevant in the educational processes might not be a potent mediating process in the policy and governance aspects into the more general equalization implications in the Chinese population education system.

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