

Article

Exploring the Mutual Nexus of Social Capital, Social Innovations and Organizational Performance

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Abstract: The ability of self-reconstruction is essential to the survival of social organizations. To meet the social challenges, these organizations must enhance their creative and innovative processes. Although an extensive literature describes the impact of social capital on innovations, research on how social and organizational innovations affect organizational performance and social capital is very slim. This paper makes an addition to the literature by investigating the impact of organizational and social innovations in explaining the relationship of social capital and organizational performance. Confirmatory factor analysis, exploratory factor analysis, and structural equation modelling are used on the data gained from social organizations in China. It is found that social and organizational innovations affect the organizational performance in positive way while social capital has a vital role in this relationship by improving mutual cooperation, interaction and trust. The mediating role of social and organizational innovations in the relationship of social capital and organizational performance is formalized through structural equation modeling. The empirical findings reveal that organizational and social innovations have mediating role in relationship of organizational performance and social capital. The empirical results do not support the direct relationship between organizational performance and social capital or between innovations and organizational performance. It is also found that social and organizational innovations are necessary to improve the relationship of organizational performance and social capital.

Keywords: social capital; social innovations; organizational performance



Citation: Shuwang, Z.; Madni, G.R.; Yasin, I. Exploring the Mutual Nexus of Social Capital, Social Innovations and Organizational Performance.

Sustainability **2022**, *14*, 11858.

<https://doi.org/10.3390/su141911858>

su141911858

Academic Editor: Wen-Long Zhuang

Received: 17 August 2022

Accepted: 7 September 2022

Published: 21 September 2022

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1. Introduction

National and local governments face a number of socioeconomic and environmental issues during this decade, necessitating the creation of new public policies [1,2]. To improve the delivery of government services, these policies need the creation of new inter-organizational relationships as well as multi-actor execution procedures that must involve several private and public organizations [3–7]. Since the start of the new century, researchers and policy makers have employed a growing number of “magic concepts” to define and promote solutions to cope with new societal issues and difficulties [8,9]. One such concept is the role of social organizations for social and organizational innovations. The importance of social organizations in developing countries is growing, owing to the need for innovative methods in a variety of uncertain, diverse, and complicated social environments [10]. To develop, execute, and offer excellent services to their consumers, social organizations require innovative strategies to meet the societal problems resulting from evolving issues [11,12]. These organizations also contribute to creating a large number of jobs and volunteers in developing countries. Social organizations improve their efficacy and efficiency, as well as their overall competitiveness, through innovations and better performance [13–17]. Every organization has the goal to attain and sustain its superior

performance. There are number of views, theories and recommendations to improve the performance of organizations. The effect of the social dimensions of organizations on performance of organizations is not new but it is generally unrecognized. This is true in case of social organizations in China, which have got much importance after special attention given by Chinese government. It is dire need to investigate the factors affecting the performance of social organizations. The inadequate attention towards the social aspects of the organization is the motivation for this study. This study investigates the impact of social aspect (social capital) on performance of organizations and via and how which mechanism this impact is realized, in other words, the mediating role of social and organizational innovations. As these are significant drivers of organizational performance and relevant to social dimensions of organizations. This study is an extension of Nahapiet and Ghoshal's [17] research about organizational performance and social capital.

A significant predictor of organizational performance is social capital, which is commonly understood as the real and prospective resource for interactions among individuals [15–18]. Social capital is defined as the social interaction, mutual trust, norms and vision shared by the members of organization to achieve the goals of the organization. Social capital is the overall shape and type of interactions among organizational members [16], along with the connections between the organizations and their rivals, stakeholders, and associates [19–21]. While discussing social capital, the kind and quality of the connections and communication channels that hold together people and organizations are our focus. Better group communication, more effective teamwork, increased intellectual capital stocks and their usage, and improved resources are all benefits of social capital [15–17,22]. Social capital describes the overall accessibility and relationship among members of a network. It also discusses the quality of relationship among members of network like mutual trust and respect, norms and common values.

The use of social innovation in understanding and resolving social issues has been praised extensively. The common themes in social innovations are a more effective solution of social issues than what already exists, new social interactions or partnerships that assist approaches to social challenges [23], and solutions that improve our ability to act against societal issues. Social and organizational innovations are much important for the success of any organization. The techniques, practices, and methods prevailing in other organizations or networks may be borrowed for further innovations in adopting organization. It is suggested that social innovations influence technology advancements, foster digital connectedness, and/or help communities' development [24]. A few frontrunners from the profession of social work have made substantial contributions to this conversation, despite the fact that the paradigm of social innovations offers a fresh framework for addressing social issues [25,26]. Social innovation is an emerging topic that has become the most prominent school of management and leadership, producing momentous work regarding engineering, design, and public policy. The findings of the studies highlight the positive relations between social capital and innovations [27,28]. It is argued that presence of trust, respect, and cooperation facilitates the resources exchange which affect the innovations positively. In the field of social organizations, it is dire need to acknowledge the efforts and appreciate these innovations which will further enhance the innovations in the future. When the efforts of individuals for organizations are identified then they share a common faith and pressurize the other colleagues for cooperation and implementation of innovations. We are not limited to consider only large scale innovations but considering incremental and small scale innovations as well.

Organizational innovations are defined as advances in inside interactions in an organization, like collaborations among different units, as well as affiliation and engagement among various interest groups and their networks (other research laboratories, assistance services, companies, etc.). This study sees this as a fundamental shift in organizational management, procedures, routines, strategic orientation, and structure. Innovation entails learning procedures in organizations that foster abilities, teamwork knowledge, and adaptation to the environment, as well as facilitating competitiveness. Organizational

innovations actually demonstrate the extent to which a company is offering novel services, spending money for research and development, and more [29]. Furthermore, these advances also offer a tool for maintaining and enhancing quality and cost savings [30,31]. This entails implementing new or better modes of production, distribution, and service delivery. Therefore, it refers to how often an organization experiments with new technologies, new methods of doing things, new organizational forms, new policies [30,32], and other changes that have an impact on resource allocation, policies, and other aspects of the social structure of the organization.

The social capital theory implies that social capital is a relationship which is embedded among the members of an organization. The relationship among members of an organization based on effective communication, coordination, respect, trust, and reciprocity is a source for the creation of organizational advantage. These organizational advantages facilitate knowledge sharing, teamwork, and the creation of new knowledge, leading to organizational and social innovations. The innovation activities in organizations are deeply socially constructed. The innovations are considered as a process of social learning that is embedded with the mutual participation and cooperation of organizational members. These innovations are necessary for the survival and success of organizations. Usually, small innovations are not recognized and underestimated in organizations which discourage future innovations. Social and organizational innovations are due to the convergence of knowledge from different actors in the organizations and social capital is a source of this convergence.

Since the year 2000, social innovations have been a widespread concept in China. “Social Innovation Management” is a significant driver of innovations in the public sector, while activities related to social entrepreneurship continue to inspire numerous innovative projects in the private sector. The Chinese government began taking steps in 2010 to encourage SOs to start providing social services because the relationship between the Chinese government and SOs had previously been marked by political conflict. This move drew considerable attention from both domestic and foreign observers. In contrast, it appeared that the government was not only willing to pay SOs, but was also willing to provide assistance to help SOs to expand their capacity and provide additional social services. SOs expanded in number tremendously as a result of this governmental incentives. By the end of 2015, China had over 600,000 SOs in function, employing 7.35 million people and 4696 charity foundations. This shift in the interaction between the state and the private sector has had a major effect on the development of China’s social policy. It has affected not only the bodies that offer social services, but also the content of those services and the decision-making procedures that go along with them. SOs have now become an important aspect of Chinese social life. China altered its industrialization policy from investment-based production and labor-intensive industry to innovation-oriented growth in the early days of economic reform in the late 1990s, following high growth that heralded new sorts of development. The government document “Decision on Accelerating the Progress of Science and Technology,” published in 1995, is an example of state’s regulations towards technological innovations, strongly stressed on technological and managerial innovations. In addition, this policy emphasized the importance of social innovations in social and commercial sectors. After the mid-2000s, innovative initiatives in the social sector were primarily focused on two policy areas: social management at the community and local levels, and the service area. The government promoted a business-sector policy of mass entrepreneurship and innovation, advocating for the adoption of development through innovations as a national strategy. The importance of social innovations as a national development guide is also highlighted.

This research is conducted for social organizations in China and investigates the effects of social capital on organizational performance with the mediating role of social and organizational innovations in this relationship. It is hypothesized that social capital affects organizational performance in a positive way through the serial multiple mediation of social and organizational innovations. In Chinese social organizations, employees are encouraged

to innovate. The innovation implementation process is considered a learning opportunity through training, user assistance, collaboration, cooperation among people, and exchange of information [33]. It is thought that the innovation implementation process encourages learning and helps to produce new knowledge [34–36]. Therefore, the actions and efforts made during the implementation process may be a means to improve organizational performance by affecting social innovations in a positive way.

Every organization has the goal of attaining and sustaining extraordinary performance, including social organizations with objectives other than financial gain. Studies showing the effects of the social dimensions of organizations on organizational performances are not new, but they are not typically recognized. There are numerous guidelines, opinions, and theories to optimize the organizational performance in the field of strategic management [31,32]. Our research examines the effects of the social dimensions of the organizations, or the impact of social capital on organizational performance, with the mediating role of social and organizational innovations in the context of Chinese social organizations. This topic is inspired by the paucity of attention given to the social factors of organizational performances by managers, organizational leaders, and policymakers. To that aim, we also incorporate social and organizational innovations into our model, since they are significant factors in determining how well an organization performs, because they are connected to its social side. The research of Nahapiet and Ghoshal [17] on the linkage between organizational performance, intellectual capital, and social capital serve as the foundation and extension of our study.

Although there is extensive literature on the impacts of social capital on organizational performance, there are few studies examining this impact in a model of intricately entangled social and organizational innovations. To the best of our knowledge, there are none in the context of social organizations in China. This is the first attempt in the literature to offer a conceptual framework for exploring the connections between these characteristics using structural equation modelling. Empirical studies on the impacts of organizational and social innovations on social capital are limited, although the impact of social capital on innovations is widely documented. By addressing this gap, our research hopes to advance the body of knowledge. Because our research was done in social organizations, we think that the relationships between these notions may be different from those in more traditional organizations due to their unique rules, practices, and dynamics. Finally, the developed world has been the main focus of the research on these characteristics. This study could offer insightful information on how the same process functions in a developing nation.

2. Methodology

This research is conducted for social organizations working in China. The social organizations in three provinces of China (Jiangsu, Guangdong, and Zhejiang) are the source of information for this study. The aims and methods of the study were explained in invitation letters sent to 480 organizations. Consent was given by 192 organizations to participate in the survey, while 163 organizations accomplished the survey. The sample of social organizations is diversified by including charitable social organizations (provision of housing, clothing or medicine; distribution of food, etc.), business foundations (provision of schools, shelters, housing etc.), social associations (for the marginalized groups, pensioners, disabled, etc.), community social organizations (gender, educational, religious, etc.), defense or protection (of immigrants, women, children, human rights, animals, the environment, etc.). Organizations were included in the sample that have at least 5 years of operations at the time of survey (surveyed organizations have 10 years of operation on average) and have a payroll of 12 full-time workers (the average number of workers in the sample organizations was 35). Among the sample organizations, 18% are international while 82% are national social organizations.

Variables and Measures

The survey questionnaire is designed to examine how social capital impacts organizational performance, and how social innovations and organizational innovations affect this relationship in the social organizations of China. Social innovations, organizational innovations, social capital, and organizational performance were measured through designed survey questionnaire. The questionnaire had 50 questions relevant to social innovations, organizational innovations, and social capital. Each section has variety of questions depicting the characteristics of each head. The survey tool was created using the standards discussed in earlier research works [37,38]. The available theoretical and quantitative literature was explored while the survey instrument was being developed. The theory's compatibility with a variety of survey tools was investigated. Following this, components from multiple studies were integrated to build the survey instrument's early draft. Academics and subject-matter experts assessed the instrument's content validity, phrasing, structure, order, and relevancy. They provided feedback that led to the deletion and modification of several questions until it was deemed sufficient. The survey items were originally written in English. The poll was performed in a context where the majority of the population spoke Chinese; thus, two specialists who were proficient in both languages translated the questionnaire into Chinese. The English translation was then done from the Chinese by two more professionals who were strong in both languages. This was undertaken to make sure the translated form of the questionnaire was compatible with the original survey form. A five-point Likert scale was used, ranging from 1 = Strongly Disagree, 2 = Disagree, 3 = Somewhat Disagree, 4 = Agree, and 5 = Strongly Agree, to assess the relationship among organizational performance, social capital, social innovations, and organizational innovations.

Social capital is measured through a multi-dimensional construct following the theoretical framework of Nahapiet and Ghoshal [17]. There are 15 questions to measure social capital drawn from [17,39,40]. These questions concentrate on the importance of employees for an organization, the competencies of employees, their mutual working relationships, and common efforts to meet the goals of the organization. In the same way, social innovations are measured through 15 main questions determined through [31,41–45]. The social innovations are measured through the ability of the organization to recognize, integrate, transform, and use external information in order to solve societal issues related with goal of social organization. Moreover, questions about working in conjunction with external actors to exchange knowledge and information are also included. Organizational innovations based on 20 items determined through [46–50] include the questions about adaptability to changes in the environment, the implementation of improvements that enable employees to be more productive, the encouragement of workers to change their attitudes, the adoption of new technology, the creation of one's own methods of working, and personal initiatives encouraged by management to find new modes of working. Organizational performance is measured through a weighted combination of perceptual and objective data on organizational performance. The annual performance reports of social organizations are used to obtain data on objective performance and this is measured through a multi-dimensional performance measurement tool, developed by insights drawn from Kaplan and Norton's [51] 'Balanced Score Card' approach. Organizational performance is measured against four dimensions and a wide range of indicators are used to measure each dimension described in the earlier literature: (1) financial service performance (2) service performance (3) on-site performance assessment (4) administrative service performance.

3. Results

The data were analyzed using three steps: (1) Confirmatory factor analysis (CFA), (2) Exploratory factor analysis (EFA), (3) Structural equation modeling (SEM).

Confirmatory factor analysis is a procedure used to test how well the variables represent the number of constructs. It shows whether sub-constructs are consistent with the understanding of the researcher regarding the nature of that factor. To determine the significance of the measurement model, CFA was performed and the results are reported in

Table 1. In the beginning, first-order CFA is applied and the social capital (SOK), structural social capital (SSC), relational social capital (RSC), cognitive social capital (CSC), organizational performance (ORP), social innovations (SOI), and organizational innovations (ORI) were analyzed. The empirical findings of the analyzed CFA highlight the good fitness of the data. The results of the CFA were: $\chi^2/\text{df} = 1.836$, comparative fit index (CFI) = 0.820, goodness of fit index (GFI) = 0.691, adjusted goodness of fit index (AGFI) = 0.793, Tucker Lewis index (TLI) = 0.934, incremental fit index (IFI) = 0.879, root mean square error of approximation (RMSEA) = 0.037, and standardized root mean square residual (SRMR) = 0.046. The findings of the first-order CFA confirm the presence of sub-dimensions of social capital. Second-order CFA is needed to apply to confirm the linkages of sub constructs to underlying constructs. The findings of the second-order CFA are also similar to the findings of the first-order CFA, showing a good fitness. The $\chi^2/\text{df} = 2.022$ lies between 1 and 3 while the value of RMSEA is 0.038 (RMSEA < 0.06), implying a good fitness [52]. All other indices are also within satisfactory limits.

Table 1. Confirmatory Factor Analysis (CFA).

	χ^2	χ^2/df	CFI	GFI	AGFI	TLI	IFI	RMSEA	SRMR
First Degree CFA	2081.759	1.836	0.820	0.691	0.793	0.934	0.879	0.037	0.046
Second Degree CFA	2183.425	2.022	0.845	0.891	0.799	0.966	0.937	0.038	0.041

Table 2 shows the findings on the validation of measurement model, highlighting that regression weights of all sub constructs of social capital are greater than 0.6 ($p < 0.01$) and have significant relationships with their parent construct (social capital). Therefore, both models indicate a good fitness of the data. A higher-order model was then chosen to for two reasons. For similar cases in the literature, the values of the “Conditional Akaike Information Criterion” (CAIC) of two similar models with different levels of complexity are compared, then the model having lower values of CAIC is supposed to have a better fit [53]. While comparing the values of CAIC for first- and second-order models, the value of CAIC for second order is slight lower (3155.923 and 3140.674 are the values of CAIC for the first and second order, respectively). Thus, the second-order model was selected due to its lower value of CAIC, and the literature also supports the higher-order model and it is more related to the purpose of this research.

Table 2. Confirmatory Factor Analysis. Note. All the regression weights are statistically significant at $p < 0.01$.

	Items	Regression Weights	Average Variance Extracted	Cronbach’s Alpha	Composite Reliability
Social Capital	SOK		0.851	0.943	0.898
Structural Social Capital	SSC	0.863	0.762	0.884	0.923
Relational Social Capital	RSC	0.835	0.642	0.894	0.874
Cognitive Social Capital	CSC	0.891	0.628	0.863	0.964
Organizational Innovations	ORI		0.817	0.973	0.898
Social Innovations	SOI		0.725	0.946	0.943
Organizational Performance	ORP		0.528	0.913	0.941

3.1. Exploratory Factor Analysis

Exploratory factor analysis is also a multivariate method that identifies the smallest number of constructs known as factors. It is also used to determine the structure of a large set of variables. This method assumes that any variable may be associated with any factor. Exploratory factor analysis (EFA) is applied in association with varimax rotation to find the factors’ structure and extracts the dimension of SOK, ORI, SOI, and ORP. Exploratory factor analysis yields three factors for SOK (CSC, RSC, and SSC), one factor for ORI, one for

SOI, and one factor for ORP. The variance extracted for SOK, ORI, SOI, and ORP in total is 68.41%, 63.66%, 63.31%, and 60.72%, respectively. The factor loadings of all dimensions of SSC, RSC, CSC, ORI, SOI, and ORP are greater than 0.5 ($p < 0.01$). The internal consistency of the scales is determined through reliability analysis. The reliability is measured by Cronbach's alpha. The values of Cronbach's alpha for SOK, SOI, ORI, and ORP were found to be equal or greater than 0.90.

3.2. Validity and Reliability Analyses

The values of composite reliability gained to determine the internal consistency (reliability) as values are reported in Table 2. The value of composite reliability for constructs is more than 0.80, while the threshold level for construct reliability is 0.7 [54] so all constructs are reliable. Convergent validity may also be determined through composite reliability [55]. Moreover, the values of regression weights higher than 0.5 ($p < 0.01$) confirm the convergence of factors at a common point, along with an indication of convergent validity [55]. The values of estimated regression weights are higher than 0.5 ($p < 0.01$). The convergent validity is also represented through average variance extracted (AVE). The estimated values of average variance extracted are higher than 0.5, which satisfies the condition of high convergent validity [54]. The construct validity is also ensured by the satisfaction of the condition of discriminant validity. The discriminant validity is measured by performing twenty-one pairwise tests among the constructs. The constrained and unconstrained models are tested through chi-square difference tests. The significance of the chi-square difference test verifies the discriminant validity of the constructs [56]. The chi-square test was applied to first- and second-order models and the values of the test are reported in Table 3. The empirical findings reveal the significant distinction of constructs from each other, proving the strong presence of discriminant validity.

Table 3. Discriminant Validity. All values are statistically significant at $p < 0.01$.

Test	Description	Constrained χ^2 Model	Constrained df	Unconstrained χ^2 Model	Unconstrained df	χ^2 Difference
First Order						
1	SOK $\leftrightarrow$ SOI	1103.38	552	1286.30	553	182.92
2	SOK $\leftrightarrow$ ORI	498.49	248	573.19	249	74.7
3	SOK $\leftrightarrow$ ORP	437.90	192	531.23	193	93.33
4	SOI $\leftrightarrow$ ORI	828.53	369	894.59	370	66.06
5	SOI $\leftrightarrow$ ORP	619.82	298	723.69	299	103.87
6	ORI $\leftrightarrow$ ORP	237.32	83	328.63	84	91.31
Second Order						
7	ORI $\leftrightarrow$ SOI	251.28	94	324.21	95	72.93
8	SOI $\leftrightarrow$ ORI	256.32	70	289.34	71	33.02
9	SOI $\leftrightarrow$ ORP	319.31	96	395.62	97	76.31
10	CSC $\leftrightarrow$ SOI	216.25	42	315.37	43	99.12
11	CSC $\leftrightarrow$ ORI	253.23	71	316.82	72	63.59
12	RSC $\leftrightarrow$ SOI	199.53	52	327.43	53	181.43
13	RSC $\leftrightarrow$ ORI	196.89	77	283.47	78	86.58
14	ORI $\leftrightarrow$ CSC	201.35	43	321.37	44	120.02
15	SSC $\leftrightarrow$ SOI	101.15	56	188.82	57	87.67
16	SSC $\leftrightarrow$ ORI	168.48	75	237.43	76	68.95
17	SSC $\leftrightarrow$ CSC	100.29	44	188.53	45	88.24
18	SSC $\leftrightarrow$ RSC	112.48	38	203.49	39	91.01
19	SSC $\leftrightarrow$ ORP	114.83	50	200.17	51	85.34
20	RSC $\leftrightarrow$ ORP	210.39	51	339.72	52	170.67
21	CSC $\leftrightarrow$ ORP	201.37	52	340.22	53	138.85

When independent and dependent variables of the research are gained through the same sources, systematical variations in responses are observed, so there is common method variance [57]. Common method variance (CMV) may deflate or inflate the correlations among the regressors, so researchers may make misguided conclusions [57]. The extant literature highlights that for common method variance to result in common method bias, "it has to be large enough and most common method variance is too small to cause common method bias" [57].

The data of organizational performance (ORP) were collected through survey questionnaires, while the data of objective performance were collected via the annual performance reports of the social organizations. As the data of organizational performance were collected through two different sources, there is no chance of common method variance (CMV) being problematic in this study. However, statistical analyses were performed to ensure the absence of common method biasedness (CMB). Harman's single factor test is applied on models of CFA and EFA to test the presence of CMB. "Harman's single factor test is used to check if a single factor explained the majority of the variance" [58]. All factors are constrained to a single factor in both models of CFA and EFA. The variance in the EFA model was found to be 39.22% and 21.09% in the CFA model. Common method bias exists if variance has a value greater than 50% [58]. Thus, it can be found that the empirical findings of this study are not affected by common method variance and there is an absence of common method biasedness.

The correlations among variables and descriptive statistics are reported in Table 4. It was found that correlation among factors at common points was significant, strong, and positive.

Table 4. Descriptive Statistics and Correlations.

Variables	Descriptions	$\bar{x}$	σ	SOK	SOI	ORP	ORI
SOK	Social Capital	3.596	0.648	1			
SOI	Social Innovations	3.599	0.624	0.849 **	1		
ORP	Organizational Performance	3.241	0.662	0.614 **	0.686 **	1	
ORI	Organizational Innovations	5.614	0.724	0.687 **	0.825 **	0.613 **	1

Note. Significance level (**): $p < 0.01$.

The relationship among the constructs and their impact on each other is determined through structural equation modeling. The dependent variable in the structural model is social capital (SOK) while organizational innovations (ORI), social innovations (SOI), intellectual capital (IC), and organizational performance (ORP) are the independent variables. The goodness of fitness of structural model was measured. After this, the relationship between SOK and ORI, SOK and SOI, the mediation of ORI in SC-IC, the mediation of SOI in SC-ORP and ORI-ORP relationships, and the serial mediation of ORI and SOI in the SOK-ORP relationship, were investigated. Table 5 shows the fit statistics of the structural model and highlights the values of the model in acceptable limits ($\chi^2 = 2163.612$, $\chi^2/df = 2.007$, CFI = 0.919, TLI = 0.934, IFI = 0.914, AGFI = 0.811, GFI = 0.841, RMSEA = 0.046, SRMR = 0.053). All these values imply the goodness of fitness of the data. The values of regression weights express a significant and positive relationship between SOK and ORI ($\beta = 0.751$, $p < 0.01$).

Table 5. Results of Structural Model.

First Degree CFA								
χ^2	χ^2/df	CFI	GFI	AGFI	TLI	IFI	RMSEA	SRMR
2163.612	2.007	0.919	0.841	0.811	0.934	0.914	0.046	0.053

The structural model identifies the mechanism used to find the outcomes, analyzes the counterfactual policies, and quantifies the effects on specific outcomes. It also determines the degree of correlation among latent variables or factors. The findings of the study suggest that SOK positively affects ORI. The results ($\beta = 0.741$, $p < 0.01$) also confirm the positive relation between SOK and SOI. Baron and Kenny's approach (1986) [59] is followed to determine the mediation of ORI. Initially, SOK and SOI are isolated and then the impact of SOK on SOI is investigated. A significant and positive relationship ($\beta = 1.032$, $p < 0.01$) was found between social capital and social innovations. After this, a similar method is

applied to determine the relation between SOK and ORI, and a significant and positive relationship ($\beta = 0.937$, $p < 0.01$) was found. Subsequently, the impact of ORI on SOI was explored for the complete model, and a significant and positive relationship ($\beta = 0.243$, $p < 0.01$) was found. The full model was investigated to determine the relation between SOK and SOI, and a significant and positive relation between SOK and SOI ($\beta = 0.812$, $p < 0.01$) was found. An additional observation is that the impact of SOK on SOI declined in the presence of ORI when the full model was used. It can be highlighted that ORI mediates the SOK–SOI relationship partially. To determine the significance of mediation, Sobel’s test was applied. The bias-corrected boot strap confidence interval (CI) method was also used. The findings of the Sobel test assure us of the presence of significant mediation (Sobel test statistic = 5.435, $p < 0.01$) (See Table 6).

Table 6. Mediation Analysis.

Paths	Path Coefficient (β)	Sobel Test Statistics (z-Value)	Lower CI	Upper CI
SC → ORI → SOI	0.244 ** ($\beta_1 \cdot \beta_3$)	5.435	0.139	0.359
SC → SOI → PERF	0.649 ** ($\beta_2 \cdot \beta_4$)	3.225	0.193	1.484
ORI → SOI → PERF	0.213 ** ($\beta_3 \cdot \beta_4$)	5.478	0.054	0.493
SC → ORI → SOI → PERF	0.210 ** ($\beta_1 \cdot \beta_3 \cdot \beta_4$)	2.755	0.057	0.416

Note. Significance level (**): $p < 0.01$.

The bias-corrected boot-strap confidence interval approach, a re-sampling technique, was selected over other techniques to check the mediating role of proposed factors because it is considered a more distinct method to test indirect effect [60]. We produced 2000 re-samples and assessed if indirect impact substantially deviated from 0 before conducting bias-corrected bootstrapping. The empirical findings of the method highlighted that the mediation of organizational innovations in the relations of social capital and social innovations is significant (bias-corrected boot strapping estimates = 0.244, $p < 0.01$; 95% CI (0.139–0.359)). It is evident that social innovations are mediators in the relationship of SOK and ORP. The same procedure is applied to determine the indirect effect. Organizational innovations are found to fully mediate the relation of SOK and ORP. The Sobel test is applied to find the statistical significance of the mediating role of organizational innovations and a significant role (Sobel test statistic = 3.225, $p = 0.003$) was found for it. We applied the bias-corrected bootstrapping technique to further support these findings. A total of 2000 resamples were generated and the bias-corrected confidence interval was derived, showing that the mediating impact is substantially different from 0, supporting the mediation of social innovations for the relationship of SOK and ORP (bias-corrected boot strapping estimate = 0.649, $p < 0.02$; 95% CI (0.193–1.584)). It is postulated that SOI have mediating role in the relation between organizational innovations and organizational performance. Baron and Kenny’s approach [59] is followed and a significant relationship ($\beta = 0.615$, $p < 0.03$) was found for organizational innovations; organizational performance becomes insignificant ($\beta = -0.053$, $p = 0.547$). The Sobel test and bias-corrected boot strapping were applied to determine the significant mediation of SOI (Sobel test statistics = 5.478, $p < 0.03$ and bias-corrected boot strapping estimates = 0.194, $p < 0.01$; 95% CI (0.054–0.493)). The empirical findings of the test confirmed the significant role of the mediation of social innovation. To explore the serial mediation of organizational innovations and social innovations in the SOK–ORP relation, we first investigated the total impact of SOK on ORP without the presence of the mediators, organizational innovations, or social innovations. The impact of SOK on ORP was observed to be significant and positive ($\beta = 0.745$, $p < 0.01$). After this, the mediators (organizational innovations and social innovations) were included in the model, and the direct impact of SOK on ORP was determined in the model. The direct impact of social capital on organizational performance was found to be insignificant when mediators were present ($\beta = -0.084$, $p = 0.238$), supporting the serial mediation of organizational innovations and social innovations between SOK and ORP. The serial me-

diating impact of ORI and SOI was computed by using the formula proposed by Taylor et al. [61]:

$$z - value = \frac{\mu\theta\lambda}{\sqrt{\mu^2 \cdot \theta^2 \cdot SE\lambda^2 + \mu^2 \cdot \lambda^2 \cdot SE\theta^2 + \lambda^2 \cdot \theta^2 \cdot SE\mu^2}} \quad (1)$$

The serial mediation of organizational innovations and social innovations was found to be significant (serial mediation estimates = 0.198, $p < 0.01$). The bias-corrected boot strapping procedure was also used to check the serial mediation. The bias-corrected confidence interval confirmed the significant serial mediation of organizational innovations and social innovations on the social capital–organizational performance relationship (boot strapping estimates = 0.198, $p = 0.004$; 95% CI (0.057–0.416)). Hence, organizational innovations and social innovations have a serial mediator impact in the relation between organizational performance and social capital.

All the above reveals that sub constructs of social capital are appropriate as found by confirmatory factor analysis and have a profound impact on organizational performance. The exploratory factor analysis depicts that sub constructs are associated with organizational performance. Further analysis verifies the convergent validity and discriminant validity of the variables and their sub constructs. The correlation among variables is highlighted in descriptive analysis, while the structural equation model conveys that social and organizational innovations are affected by social capital in the social organizations of China and these innovations may have an impact on organizational performance. The bias-corrected boot-strap method highlights the mediating role of organizational and social innovations in the relationship of social capital and organizational performance.

4. Discussion

Social capital continues to play a crucial role in determining organizational performance but this topic is still in its infancy. People make organizations, which are similar to social communities [62]. An organization's social capital is ingrained in members and seen as a significant asset, particularly when it is integrated into organizational operations [63]. We want to highlight the critical role social capital plays in the effectiveness of social organizations in our study. We demonstrate that social capital affects organizational and social innovations favorably in the context of social organizations in China and indirectly enhances organizational performance through the serial multiple mediation of organizational and social innovations.

The procedure by which these closely entangled models of social innovations and social capital and organizational innovations affect organizational performance may be dissimilar in social organizations. Innovations in social organizations are commonly due to employees' performance, their satisfaction with the organization's environment, and their motivations. It is debated whether the implementation of these innovations is more challenging [64]. It is argued that social capital helps to implement social and organizational innovations. In addition, since social and organizational innovation occurs as a consequence of organizational performance and available social capital, we intend to examine the impacts of innovations on ORP and SOK.

Our results support the literature's assertion that social capital and organizational innovations are positively correlated. Our findings demonstrate that positive interpersonal relationships, mutual respect and understanding, strong working relationships, the capacity for teamwork, and effective communication all contribute to organizational innovations. Based on information from earlier studies, we may conclude that it is common to see resistance by employees regarding change and new procedures, and it is noted that resistance may be much more pronounced when the innovations do not stem from internal motivations. Although we have not looked at the existence or consequences of resistance to innovations in our research, it seems very true in earlier research [64]. It may be more difficult for organization members to accept innovation when decision making and idea generations take place with an external authority or outside the organization [48]. This can

also result in disconnectedness. We may therefore conclude that social capital may be even more important in the procedure of implementing innovation by improving coordination by easing access, through greater employee trust, and by encouraging social contact [17,48].

Our research also reveals a favorable relationship between social capital and social innovations, both directly and through the partial mediation of organizational innovations. Social capital, or the competence for employees to interact with one another and work together to solve issues, relationships built on mutual respect and trust, shared values, and a common goal, encourages the free exchange of ideas and discussion, and makes it easier to integrate and coordinate the efforts of various departments. The actions and efforts engaged in the implementation of an innovation process also serve as a mediator in interactions between social capital and social innovations, in addition to their direct association. This, in our opinion, may be the outcome of the potential learning brought on by organizational innovations. However, we did not discover a direct relationship between innovations and organizational performance. This is not a surprising outcome because it is frequently thought that examining the direct influence of innovations on organizational performances is too simple. It is often believed that innovation indirectly influences organizational performances through other characteristics of organizations since the implementation of innovations is a difficult and drawn-out process [65]. Implementing innovation is regarded as a process of knowledge creation and learning in and of itself, generating fresh waves of information [53]. Therefore, actions associated with innovation implementation may benefit social innovations, hence indirectly enhancing organizational performance. We contend that this holds true even for innovation initiatives that are abandoned after a specific amount of time spent implementing them [65]. It is believed that the initiatives and activities performed in the implementation of an innovation process may affect the organizational performance positively until the project termination, even though the intended outcomes of innovations on organizational performance are lost when innovative projects are terminated early without completion. Alternatively, our findings highlight that even if some innovative tasks are not finished and are aborted before full completion, this does not inevitably result in a total loss, since innovative actions up to that point can play a role towards organizational performance by enhancing social innovations. This is due to the fact that the process of implementing innovation requires training, knowledge exchange, employee cooperation, and active employee engagement in order to achieve a common objective. This is a crucial finding from our study because organizational innovations have no impact on organizational performance without the mediation of social innovations. Social innovations help to realize the beneficial effects of organizational innovations on organizational performance.

In a similar line, we did not find any proof that social capital directly affects how well an organization performs. The bulk of theoretical and empirical research support the inverse link between organizational performance and social capital, the literature's conflicting findings in this area notwithstanding. Although a direct relation between SOK and ORP could not be found, our results reveal that SOK affects organizational performance both through the partial and serial mediation of social and organizational innovations. These findings convey that there is no direct relation between ORI and ORP or between SOK and ORP. Social innovations are the sole link between the dependent and independent factors. Social innovation is the major factor in our research, which has a positive impact on SOK and organizational innovations on ORP.

The results of our study are built on the theoretical framework of Nahapiet and Ghoshal [17], which contends that SOK is crucial in determining how well companies operate via the development of social innovations, and offer various management and policy implications. Our study's findings demonstrate that ORP is positively impacted by social capital, organizational innovations, and social innovations. ORP is very little affected by social capital and organizational innovations. Social capital has an influence on organizational performance through the complete mediation of social innovations as well as the serial multiple mediation of organizational and social innovations. Similarly,

social innovations influence organizational innovation through the mediation of social innovations. The findings of the study highlight that organizational innovations impact organizational performance, though not directly. Thus, even if the organizational innovations do not have a direct effect on organizational performance, they may have an effect through some other organizational factors, like social innovations [53]. Therefore, for social capital and organizational innovations to transform into better organizational performance, social innovations are indispensable. Without social innovations, neither social capital nor organizational innovations will improve organizational performance. However, social organizations measure their social innovations systematically and incorporate them into their strategic plans. Thus, monitoring and measuring social innovations should be the top priority of policy makers and managers who intend to improve organizational performance [44].

5. Summary and Conclusions

This study validates a theoretically constructed model and explores the mechanisms through which SOK, ORI, and SOI in social organizations impact ORP. This study makes a number of contributions. First, despite the tight connections between SOK, social and organizational innovations, and organizational performance, empirical study on these topics has been scarce. To the best of our knowledge, social organizations have not been the subject of such research. To understand their interconnections and how they influence one another, it is critical to integrate these variables in a model. Our study approach, which emphasizes the value of social connections in organizational and social innovations, is based on Nahapiet and Ghoshal's theoretical framework. Our findings support earlier studies and demonstrate that performance is, in fact, indirectly influenced by social capital.

Second, and this has never been done before, we look at the serial multiple mediation of organizational and social innovations on the link between SOK and ORP. Our results highlight the idea that social capital has a good effect on innovative activities, which in turn have a favorable impact on ORP. We expand earlier research that examines how SOK impacts ORP and adds to the body of knowledge by looking more closely at “how” SOK influences ORP through the mediation of organizational and social innovations. The findings support the serial multiple mediation of organizational and social innovations in the link between SOK and organizational performance. Our research demonstrates that SOK is crucial for innovation activities because it helps to innovate, which in turn enhances organizational performance. The major mediator between social capital and organizational success, according to our findings, is social and organizational innovation. Through the mediation of social and organizational innovations, social capital and organizational performance are impacted.

Thirdly, instead of following the conventional method of examining the effects of social and organizational changes, we look at how they affect the social capital of social organizations. Although this theory supports the potential contribution of innovative activities to the creation of new knowledge and learning, or new social capital, actual research into this link is still relatively new [66–68] and empirically investigating this relationship is novel.

Author Contributions: Conceptualization, G.R.M.; methodology, Z.S.; software, I.Y.; formal analysis, G.R.M.; resources, Z.S.; data curation, Z.S.; writing—original draft preparation, G.R.M.; writing—review and editing, I.Y.; funding acquisition, Z.S. All authors have read and agreed to the published version of the manuscript.

Funding: National Social Science Planning Project “Research on Procedural Guarantee Mechanism of Co-construction, Co-governance and Shared Social Governance Legalization” (Project No.: 20AFX003).

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data is available on request.

Conflicts of Interest: The authors declare no conflict of interest.

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