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Party membership and self-assessed health: Evidence from the Communist Party of China

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ABSTRACT

Background: In some countries, party membership is often associated with returns. We studied the relationship between party membership and self-assessed health.

 $\it Methods:$ Data were obtained from the 2017 Chinese General Social Survey (N = 11,641). Self-assessed health was defined as the personal evaluation of physical and psychological well-being. Logistic regression was used to explore relevant associations.

Results: Members of the Communist Party of China (CPC) were more likely than non-CPC respondents to register self-assessments of relatively healthy physical (beta = 0.319, SE = 0.098, P < 0.01, CI: 0.127–0.512) and psychological (beta = 0.257, SE = 0.072, P < 0.01, CI: 0.115–0.399) conditions.

Conclusions: Previous studies have overlooked the health-related rewards of CPC membership. Reforms to China's public health system can be smoothly implemented probably because of the health benefits accrued to party members.

1. Introduction

Political status is crucial in some countries, especially in nations governed by one-party dictatorships. Such nations often mandate party membership for promotions or positions of authority because their governments generally seek to ensure the sustainability of the one-party dictatorship. Thus, they promise preferential treatment to party members to attract citizens to join the party (Han & Li, 2021; Ji & Jiang, 2019). One-party dictatorships stipulate strict requirements for political status. Thus, those who intend to work in public sectors such as the government could also be asked to acquire party membership. Hence, the party membership would become a scarce resource (Fjelde, 2020). Therefore, party membership can enable people to satisfy certain special requirements: for instance, party members could access certain domain-specific advantages over nonmembers in countries governed by a one-party dictatorship. The extant literature includes numerous studies focusing on the effects of party membership in countries with one-party dictatorships. Many studies have found that party membership can assure higher incomes, superior well-being (Lu et al., 2022; Zhang et al., 2020), and other potential benefits (Yan, 2019; Yang & Pamala, 2021). Such advantages are collectively labeled "party membership premiums." Most existing studies have found that party membership premiums could accrue from special positions (Barbosa & Ferreira, 2023), strong working abilities (Guo & Sun, 2019; Li et al., 2007), high educational levels (Ma & Iwasaki, 2021; Markussen & Ngo, 2019), extensive social networks (Ivlevs & Hinks, 2018; Westfall et al., 2017), and rent-seeking (Chen, 2008). Party members can transform their political positions into real returns through such means.

China exemplifies a one-party dictatorship. The Communist Party of China (CPC) wields absolute political power. The CPC firmly controls the appointments of government officials. Therefore, people attempting to attain government positions are usually required to become members of the party. In other words, party membership is often closely associated with political power in China. Therefore, most Chinese citizens are eager to join the CPC (Brødsgaard, 2018; Ivlevs & Hinks, 2018). The process of applying to join the CPC is complicated. Applicants must participate actively in varied political activities organized by the CPC after submitting their request for party membership. Applicants must also pass an essential examination, undergo political censorship (contents included family background and loyalty to the Communist Party of China), and experience a one-year probationary period before being considered for full party membership. The CPC must constantly assess

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the loyalty of full party members to the party to ensure that China's one-party dictatorship is sustained. Thus, the CPC regularly conducts training and ideological programs for party members and appraises the performance of its members to ensure their loyalty to the party. Regular political activities forge intimate bonds between party members, and most CPC members have wider social networks than nonmembers (Bian & DiTomaso, 2018; Xue & Cheng, 2017).

Numerous studies have found that a party membership premium is received by party members in one-party dictatorships, particularly apropos their incomes and subjective well-being. This phenomenon is not unique to China: for example, it has been evidenced that Communist Party members of the former Soviet Union enjoyed privileges such as better housing, telephones, company resorts, and kindergartens, besides owning company cars for their private use (Geishecker & Haisken-DeNew, 2004). Moreover, members of the Communist Party in post-Soviet Russia earned 11.1% more than nonmembers (Geishecker & Haisken-DeNew, 2004). In Cuba, party membership enables faster class mobility, and this advantageous phenomenon is intricately connected to the social ties forged between party members (Romanò, 2016). Party membership also accords people new income opportunities and bestows superior options for the selection of occupations (Romano, 2018). A study in Vietnam found that party membership exerted a modest positive effect on income of around 7% and applied a substantial positive effect on subjective well-being even after controlling for income (Markussen & Ngo, 2019). Even in countries that are not subject one-party dictatorships, some researchers have found similar phenomena. For example, the political environment of some Latin American nations that do not have a one-party dictatorship causes citizens to opt willingly to obtain a political party membership to receive certain special benefits associated with such an affiliation (Gonzalez, Ezequiel & Nickerson, 2014). Members of certain political parties may also enjoy higher levels of trust (Rosas, 2010).

The significant health-related functions of party membership are overlooked in China. Specifically, party members could receive a partybased premium on health. In other words, party members could enjoy better health than nonmembers. The Chinese healthcare security system and medicine have developed rapidly over the last two decades (Jakovljevic et al., 2023; Jakovljevic et al., 2021), healthcare-related sectors have been subjected to several reforms (Micah et al., 2021). Moreover, China ranks first among the BRICS countries in growth rate (Jakovljevic, 2014; Timofeyev et al., 2023), and China's healthcare expenditure has increased at a faster pace in tandem with the nation's economic development (Jakovljevic, Wang, & Adhikari, 2023; Sahoo et al., 2023). The continuous improvement of the healthcare system has reduced the health-related disparities in China's population (Jakovljevic et al., 2016, Jakovljevic et al., 2022). Unlike the Latin American and BRICS countries, China's healthcare system encompasses a public healthcare program that is linked to the political identity of its citizens (Jakovljevic et al., 2020; Jakovljevic et al., 2019; Local Burden of Disease H. I. V. Collaborators, 2021). Party members can avail of a special healthcare package that is significantly better than the Basic Health Insurance (BHI) offered to citizens without a CPC membership. Therefore, we studied the associations between the CPC party membership and individual health status.

2. Methods

2.1. Data source

Data were obtained from the 2017 Chinese General Social Survey (CGSS) (http://cgss.ruc.edu.cn/English/Home.htm). This national survey covered adults aged 18 and above residing in 128 counties of 28 provinces in China. The 2017 CGSS was conducted using a multi-stage stratified design. Four towns/city sub-districts were selected in each of the 128 counties in 28 provinces; two or three villages/neighborhood committees were selected in each town/sub-district; and 10 households

were selected in each village/neighborhood committee. Altogether, 12,582 valid questionnaires were examined for the 2017 CGSS, and a sample size of 11,641 was obtained for this study after removing random missing data.

2.2. Variables

Self-assessed health was set as the dependent variable. Existing studies have revealed that self-assessed health can more effectively reflect the levels of health enjoyed by respondents than other indicators (Doiron et al., 2015; Simon et al., 2005; Wu et al., 2013). The 2017 CGSS surveyed the self-assessed health of respondents from two aspects: physical (1 = relatively good, 0 = relatively bad) and psychological (1 = relatively good, 0 = relatively bad).

Party membership of the CPC was established as the independent variable and was defined in terms of whether or not the respondents were party members of the CPC (1 = party members, 0 = non-CPC respondents).

Like previous studies, we controlled other variables that could affect self-assessed health, including gender (1=male, 0=female), age, education status (below elementary school, elementary school, middle school, high school, college, university and above), annual income (in US dollars), marital status (1=married, 0=unmarried), body mass index, public health insurance (1=covered) by the public health insurance, 0=not covered), and residential area (1=urban, 0=rural).

2.3. Analytic strategy

We used the logistic model to study the relationships between party membership of the CPC and self-assessed health. We proposed the following logistic model:

$$Logit(P(Y_i = 1)) = \alpha + \beta \times X_i + \sum_{k=1}^{k} \gamma_k \times controls_{ki} + \mu_i$$

where Y_i denotes self-assessed health, X_i indicates whether the individual is a member of the CPC, controls $_{ki}$ signifies the k_{th} control variable of the i_{th} individual, α denotes intercept term, β symbolizes the regression coefficient between X_i and Y_i , γ_k expresses the regression coefficient of the k_{th} control variable, and μ_i designates the random disturbance term.

We used Stata 15.0 for the data analysis. A P-value less than 0.05 (P < 0.05) was considered statistically significant.

3. Results

3.1. Descriptive analysis

Table 1 displays the descriptive statistics of the total sample including party members and nonmembers. The total sample comprised 1319 (11.33%) CPC members. Of the total sample (N = 11,641), 79.46% reported a relatively good self-assessed state of physical health vis-à-vis 20.54%, who registered the self-assessment of comparatively poor physical health. Similarly, 63.49% of the respondents assessed their psychological health as relatively good, while 36.51% reported a relatively poor self-assessed psychological state.

Considering the sample of party members (N = 1319), 87.87% of the respondents evaluated their state of physical health as relatively good and 74.91% assessed their psychological condition as relatively good. In comparison, 78.39% of the sample of non-CPC respondents (N = 10,322) reported a relatively good self-assessed physical health, and 62.03% evaluated their psychological health as relatively good.

The descriptive analysis indicated differences between the two samples of party members and nonmembers in their self-assessed physical and psychological health conditions. The proportion of party members asserting relatively good self-assessed physical health

Table 1Description of variables.

Variables	Total Sample (N = 11,641)	Party members $(N = 1319)$	Non-party members (N = 10,322) n (%)	
	n (%) ^A	n (%)		
Self-assessed physic	cal health			
Relatively good	9250 (79.46%)	1159 (87.87%)	8091 (78.39%)	
Relatively bad	2391 (20.54%)	160 (12.13%)	2231 (21.61%)	
Self-assessed psychological	ological health			
Relatively good	7391 (63.49%)	988 (74.91%)	6403 (62.03%)	
Relatively bad	4250 (36.51%)	331 (25.09%)	3919 (37.97%)	
Party membership				
Party members	1319 (11.33%)	_	_	
Non-party	10,322	_	_	
members	(88.67%)			
Gender				
Male	5547 (47.65%)	864 (65.50%)	4683 (45.63%)	
Female	6094 (52.35%)	455 (34.50%)	5639 (54.63%)	
Age				
[18, 30]	1654 (14.21%)	116 (8.79%)	1538 (14.90%)	
[31, 59]	5934 (50.98%)	562 (42.61%)	5372 (52.04%)	
[60, +∞)	4053 (34.82%)	641 (48.60%)	3412 (33.06%)	
Education status				
Below elementary	1371 (11.78%)	22 (1.67%)	1349 (13.07%)	
school	, ,	, ,	, ,	
Elementary school	2621 (22.52%)	118 (8.95%)	2503 (24.25%)	
Middle school	3323 (28.55%)	268 (20.32%)	3055 (29.60%)	
High school	2068 (17.76%)	277 (21.00%)	1791 (17.35%)	
College, university and above	2258 (19.40%)	634 (48.07%)	1624 (15.73%)	
Marital status				
Married	10,273 (88.25%)	1222 (92.65%)	9051 (87.69%)	
Unmarried	1368 (11.75%)	97 (7.35%)	1271 (12.31%)	
Public health insura		(,,,,,,,,		
Covered	10,755	1274 (96.59%)	9481 (91.85%)	
	(92.39%)	, (50.0570)	2 .01 (31.0070)	
Not covered	886 (92.39%)	45 (3.41%)	841 (8.15%)	
Residential area	000 (22.0570)	(0.1170)	0.1 (0.1070)	
Urban	7426 (63.79%)	1085 (82.26%)	6341 (61.43%)	
Rural	4215 (36.21%)	234 (17.74%)	3981 (38.57%)	
Annual income B	5197.034	9578.381	4637.163	
Body mass index B	22.779	23.250	22.719	

Note. ^A "n" denoted the number of individuals in each category and "%" denotes the percent of individuals in each category. ^B For continuous variables, the mean was reported.

conditions was 9.48% higher than non-CPC respondents. Correspondingly, the proportion of party members reporting a relatively good state of psychological health was 12.88% higher than non-CPC respondents.

In addition, the samples of party members and non-CPC respondents also differed notably apropos basic demographic characteristics such as their gender ratios, education qualifications, and annual incomes. These indicators revealed that the party members earned higher incomes and were more educationally qualified than the non-CPC respondents.

3.2. Relationship between CPC membership and self-assessed health

Table 2 reports the results of the logistic regression performed to ascertain the relationship between CPC membership and self-assessed health. Specifically, CPC members were more likely to report a relatively good state of self-assessed physical health (beta = 0.319, SE = 0.098, P < 0.01, CI: 0.127–0.512). Thus, the probability that party members of the CPC would register a relatively good state of self-assessed physical health was 57.91% ($e^{0.319}/(1+e^{0.319})$) higher than the cohort of non-CPC respondents. Moreover, CPC members were more likely to assert a relatively good state of self-assessed psychological health (beta = 0.257, SE = 0.072, P < 0.01, CI: 0.115–0.399), and this probability was 56.39% ($e^{0.257}/(1+e^{0.257})$) higher than such reports by non-CPC respondents. The parameters of educational qualifications, annual incomes, and weight also displayed statistically significant

Table 2 Logistic regression results of the relationship between party membership of the CPC and individual health (N=11,641).

Variable	Coefficient	Standard Error	P	95% Confidence Interval	
				Low	High
Dependent Variable: S	elf-assessed pl	nysical healtl	h		
Party membership	0.319	0.098	0.001	0.127	0.512
Gender (Reference	-0.125	0.066	0.059	-0.254	0.004
Group: Female)					
Age (Reference Group:	[18, 30])				
[31, 59]	-1.696	0.172	0.000	-2.033	-1.358
$[60, +\infty)$	-2.532	0.175	0.000	-2.876	-2.189
Education status (Refere	-				
Elementary school	0.181	0.073	0.013	0.038	0.324
Middle school	0.662	0.079	0.000	0.506	0.817
High school	0.738	0.098	0.000	0.546	0.930
College, university and above	1.208	0.129	0.000	0.956	1.460
Marital status	0.095	0.121	0.431	-0.142	0.332
(Reference Group:					
Unmarried)					
Public health	0.016	0.094	0.866	-0.168	0.200
insurance					
(Reference Group:					
Not covered)					
Residential area	0.478	0.055	0.000	0.370	0.585
(Reference Group:					
Rural)					
Logarithm of Annual	0.090	0.008	0.000	0.074	0.106
income					
Body mass index	-0.022	0.007	0.002	-0.036	-0.008
Constant	2.306	0.242	0.000	1.831	2.780
Dependent Variable: S	Self-assessed ps	sychological	health		
Party membership	0.257	0.072	0.000	0.115	0.399
Gender (Reference	-0.124	0.041	0.003	-0.204	-0.044
Group: Female)					
Age (Reference Group:	[18, 30])				
[31, 59]	-0.166	0.076	0.029	-0.315	-0.017
$[60, +\infty)$	-0.075	0.083	0.369	-0.237	0.088
Education status (Refere	ence Group: Bel		y school)		
Elementary school	0.199	0.069	0.004	0.065	0.334
Middle school	0.591	0.071	0.000	0.452	0.730
High school	0.659	0.081	0.000	0.500	0.818
College, university	0.714	0.089	0.000	0.539	0.889
and above					
Marital status	0.130	0.078	0.096	-0.023	0.283
(Reference Group:					
Unmarried)					
Public health	0.029	0.074	0.698	-0.116	0.173
insurance					
(Reference Group:					
Not covered)					
Residential area	0.222	0.045	0.000	0.133	0.311
(Reference Group:					
Rural)					
Logarithm of Annual income	0.047	0.007	0.000	0.034	0.061
Body mass index	-0.008	0.004	0.046	-0.016	-0.000
Dody mass muck					

correlations with self-assessed physical and psychological health conditions. Individuals with higher educational qualifications or annual incomes were more likely to report relatively good states of self-assessed physical and psychological health. The variable of weight evinced an inverted U-shaped relationship with self-assessed physical and psychological health conditions.

4. Discussion

The results revealed that CPC members were more likely than non-CPC respondents to claim a relatively good state of self-assessed physical and psychological health. Specifically, the probability that CPC members would report a relatively good physical health status was

57.91% higher vis-à-vis non-CPC respondents, and this probability was 56.39% higher apropos self-assessed psychological health. This finding indicates that CPC membership is statistically significantly correlated with self-assessed health and that CPC membership can improve the self-assessment of health to some extent.

Existing studies have evidenced that party membership can improve individual incomes and subjective well-being (Doiron et al., 2015; Simon et al., 2005; Wu et al., 2013). However, only a few studies have addressed the relationships between party membership and self-assessed health conditions. The present study found a significant statistical relationship between CPC membership and self-assessed health, which had been overlooked by previous studies. This finding is crucial to comprehensively apprehend the health-status-based distribution of the Chinese population and to grasp the premium effects of the CPC membership. In addition, basic demographic characteristics and healthy distributions have been previously associated by studies that have indicated significant associations between the distribution of healthy individuals and individual incomes, educational levels, and residential areas (Adjaye-Gbewonyo et al., 2019; Alidu & Grunfeld, 2018; Bor et al., 2017; ChokshiDave, 2018; Dursun et al., 2018). The present investigation confirmed such correlations. This study also expanded previous findings about the factors influencing the distribution of healthy individuals and indicated that political status exerted a significant statistical impact on self-assessed health in China. Moreover, this study extended previous reports of the premium effects of party membership, evidencing that party membership offered health-related rewards to CPC members and indicating that political status offered economic benefits and considerably improved self-assessed health in China.

Several studies have deduced a strong link between income and health, and some have demonstrated that individuals who are party members earn significantly higher incomes than citizens who are not party members (Knight & Yueh, 2008; McLaughlin, 2017). However, the regression results of the present study are not congruent with such previous reports: the income coefficient revealed a weaker relationship with self-assessed health in the present study than with party membership. Moreover, the regression coefficient for party membership was obtained through a model identical to the one displayed in Table 2, which was already controlling for income. Thus, it may be contended that income does not drive self-assessed health disparities based on party membership. Differences in types of public health insurance could represent an important reason. China's public health insurance is classified into different categories according to population groups. Public officers in China are covered by a special public health insurance type labeled Socialized Medicine (SM), while other citizens are covered by the BHI (Liu et al., 2016; Zhao, 2019). These two types of public health insurance differ substantively. SM contributions are drawn from finance rather than the insured persons, while BHI contributions are primarily made by the insured individuals (Wu et al., 2022). More importantly, the insurance benefits of SM are much higher than those offered by BHI. Therefore, public officers covered by SM can enjoy superior healthcare services. The one-party dictatorship mandates that all public positions in China require CPC membership. In other words, CPC members can access SM by obtaining public positions in China and consequently enjoy higher insurance benefits than non-CPC citizens, who generally cannot obtain public positions and thus cannot attain higher insurance benefits. In addition, party members command superior social networks, which can help them access healthcare services more easily than non-CPC citizens. The relationships between social networks and access to healthcare services are relatively vague. However, wider social networks generally translate to superior social support (Xiao et al., 2019), which could encompass access to healthcare workers.

Notably, the strongest associations were observed in numerous strata of educational achievements. The relationship between educational qualifications and the self-assessment of health also became stronger with the increase in the level of education, validating existing findings (Groot & Maassen van den Brink, 2007; Raghupathi & Raghupathi,

2020). Individuals with higher levels of education can better access and understand health-related information and tend to be more aware of aspects such as healthy lifestyles and disease prevention, which facilitates their taking positive action to improve their health status. Some studies have shown that higher levels of education also exert a positive impact on the mental health of individuals (Baker et al., 2011; Ross & Wu, 1995). For example, educated individuals may have higher self-esteem and self-confidence. Such traits are conducive to improving the ability of individuals to combat stress and adversity as well as fostering an optimistic attitude, which allows people to better maintain their mental health (Halpern-Manners et al., 2016). In addition, some studies have found that people with higher levels of education can more clearly understand medical information, are more able to seek medical help, and are more inclined to demand high-quality healthcare services (Van Der Heide et al., 2013).

As with most scholarly investigations, this study must also admit to certain limitations. Data-related deficiencies did not allow us to directly measure the causal relationships between party membership and selfassessed health. The study would be considerably improved if we could include a survey item that could measure the differences in fundamental demographic characteristics. The explanations for the health premium offered by the CPC membership also require further verification. Numerous studies can be cited to endorse the clarification that party members can obtain higher incomes and health insurance benefits than nonmembers. However, whether this income-related difference affects their self-ratings of their health conditions remains uncertain. The elucidation that the wider social networks of party members can help them more easily access healthcare services than nonmembers has not been proved. Therefore, future research initiatives are recommended on the health premiums accruing to party members. Third, the present study posited the type of public health insurance as an important reason for the association between party membership and self-assessed health. However, the regression model displayed in Table 2 evidenced no significant relationship between public health insurance and selfassessed health because as Table 1 illuminates, more than 90% of both groups, party members and nonmembers, were enrolled in public health insurance. Further classifying the type of public health insurance as SM, BHI, and uninsured would present one way to validate that the type of public health insurance denotes a central explanatory pathway. However, data restrictions prevented us from obtaining such distinct categories. Therefore, prospective research projects could validate this pathway by incorporating more detailed data compilations.

5. Conclusions

This study employed the 2017 CGSS and a logistic model and discovered a significant positive relationship between party membership and self-assessed health in China. Our findings indicated that party membership offered a health premium that was ignored by previous studies China has implemented major public health system reforms in the last 20 years, but the country's political system has not changed. An important question is thus raised. Are China's public health system reforms compatible with its political system? The results of this study allow the speculation that the health premium offered by the party membership has hindered or, at the very least, reduced the effects of China's reconfiguration of its public health system. China's public health system reforms purpose to promote the equitable distribution of health resources. The Chinese government has proposed a project titled Healthy China to improve the health of the entire population. However, the health premium offered by the party membership indicates a clear answer to questions about who benefits more from China's public health system reforms or the Healthy China project. In addition, most of the resistance to China's reforming its political system appears to emanate from the premiums offered by party membership, both in terms of income and health. The stronger the premium effects of party membership are, the greater the resistance to reforms in China's political system is.

Conversely, China's public health system reforms can be smoothly implemented probably because of the health premium that accrues from party membership: party members benefit more from such reforms.

Ethics approval and consent to participate

Not applicable.

Consent for publication

All authors agreed with the content and that all gave explicit consent to submit and publish.

Availability of data and materials

The data that support the findings of this study are available from the corresponding author, upon reasonable request.

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Ethical statement

Ethics approval was not required as the paper did not involve any data collected from human subjects.

CRediT authorship contribution statement

Pengfei Zhang: Conceptualization, Data curation, Methodology, Software, Writing – original draft, Writing – review & editing. **Jinghua Gao:** Validation, Visualization, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known conflicts of interest to disclose.

Data availability

Data will be made available on request.

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References

- Adjaye-Gbewonyo, D., Rebok, G. W., Gallo, J. J., Gross, A. L., & Underwood, C. R. (2019). Urbanicity of residence and depression among adults 50 years and older in Ghana and South Africa: An analysis of the who study on global ageing and adult health (sage). Aging & Mental Health, 23, 660–669.
- Alidu, L., & Grunfeld, E. A. (2018). A systematic review of acculturation, obesity and health behaviours among migrants to high-income countries. *Psychology and Health*, 33, 724–745.
- Baker, D. P., Leon, J., Smith Greenaway, Collins, J., & Movit, M. (2011). The education effect on population health: A reassessment. *Population and Development Review*, 37, 307–332.
- Barbosa, K., & Ferreira, F. (2023). Occupy government: Democracy and the dynamics of personnel decisions and public finances. *Journal of Public Economics*, 221, Article 104856.
- Bian, Y., & DiTomaso, N. (2018). The structure of labor markets in the us and China: Social capital and Guanxi. *Management and Organization Review, 14*, 5–36.
- Bor, J., Cohen, G. H., & Galea, S. (2017). Population health in an era of rising income inequality: USA, 1980-2013;2015. The Lancet, 389, 1475–1490.
- Brødsgaard, K. E. (2018). China's communist party: From mass to elite party. China Report, 54, 385–402.
- Chen, Q. (2008). Rent seeking and economic liberalization: Why are China and Vietnam different from eastern Europe? *Journal of the Asia Pacific Economy*, 13, 168–179.

- Chokshi, & Dave, A. (2018). Income, poverty, and health inequality. JAMA, 319, 1312–1313.
- Doiron, D., Fiebig, D. G., Johar, M., & Suziedelyte, A. J. A. E. (2015). Does self-assessed health measure health? Applied Economics, 47, 180–194.
- Dursun, B., Cesur, R., & Mocan, N. (2018). The impact of education on health outcomes and behaviors in a middle-income, low-education country. *Economics and Human Biology*, 31, 94–114.
- Fjelde, H. (2020). Political party strength and electoral violence. *Journal of Peace Research*, 57, 140–155.
- Geishecker, I., & Haisken-DeNew, J. P. (2004). Landing on all fours? Communist elites in post-soviet Russia. *Journal of Comparative Economics*, 32, 700–719.
- Gonzalez, O., Ezequiel, C. K.de J., & Nickerson, D. W. (2014). The conditionality of votebuying norms: Experimental evidence from Latin America. *American Journal of Political Science*, 58, 197–211.
- Groot, W., & Maassen van den Brink, H. (2007). The health effects of education. Economics of Education Review, 26, 186–200.
- Guo, Q., & Sun, W. (2019). Re-examining economic returns to communist party membership in Mainland China. *Journal of the Asia Pacific Economy*, 24, 24–41.
- Halpern-Manners, A., Schnabel, L., Hernandez, E. M., Silberg, J. L., & Eaves, L. (2016). The relationship between education and mental health: New evidence from a discordant twin study. Social Forces, 95, 107–131.
- Han, L., & Li, T. (2021). Marketing communist party membership in China. Public Choice, 188, 241–268.
- Ivlevs, A., & Hinks, T. (2018). Former communist party membership and bribery in the post-socialist countries. *Journal of Comparative Economics*, 46, 1411–1424.
- Jakovljevic, M, Wu, W., Merrick, J., Cerda, A., Varjacic, M., & Sugahara, T. (2021). Asian innovation in pharmaceutical and medical device industry – beyond tomorrow. *Journal of Medical Economics*, 24, 42–50.
- Jakovljevic, M. B. (2014). The key role of the leading emerging bric markets in the future of global health care. Experimental and Applied Biomedical Research (EABR), 15, 139–143.
- Jakovljevic, M., Chang, H., Pan, J., Guo, C., Hui, J., Hu, H., ... Shi, L. (2023). Successes and challenges of China's health care reform: A four-decade perspective spanning 1985—2023. Cost Effectiveness and Resource Allocation, 21, 59.
- Jakovljevic, M., Groot, W., & Souliotis, K. (2016). Editorial: Health care financing and affordability in the emerging global markets. Frontiers in Public Health, 4.
- Jakovljevic, M., Pallegedara, A., Vinayagathasan, T., & Kumara, A. S. (2022). Editorial: Inequality in healthcare utilization and household spending in developing countries. Frontiers in Public Health, 10.
- Jakovljevic, M., Sugahara, T., Timofeyev, Y., & Rancic, N. (2020). Predictors of (in) Efficiencies of healthcare expenditure among the leading Asian economies – comparison of oecd and non-oecd nations. Risk Management and Healthcare Policy, 13, 2261–2280.
- Jakovljevic, M., Timofeyev, Y., Ekkert, N. V., Fedorova, J. V., Skvirskaya, G., Bolevich, S., & Reshetnikov, V. A. (2019). The impact of health expenditures on public health in brics nations. *Journal of Sport and Health Science*, 8, 516–519.
- Jakovljevic, M., Wang, L., & Adhikari, C. (2023). Editorial: Asian health sector growth in the next decade—optimism despite challenges ahead. Frontiers in Public Health, 11.
- Ji, C., & Jiang, J. (2019). Enlightened one-party rule? Ideological differences between Chinese communist party members and the mass public. *Political Research Quarterly*, 73, 651–666.
- Knight, J., & Yueh, L. (2008). The role of social capital in the labour market in China. The Economics of Transition, 16, 389–414.
- Li, H., Liu, P. W., Zhang, J., & Ma, N. (2007). Economic returns to communist party membership: Evidence from urban Chinese twins. *The Economic Journal*, 117, 1504–1520.
- Liu, X., Hung, W., & Liu, K. (2016). Outcome-based health equity across different social health insurance schemes for the elderly in China. BMC Health Services Research, 16, 9.
- Local Burden of Disease, H. I. V. Collaborators. (2021). Mapping subnational hiv mortality in six Latin American countries with incomplete vital registration systems. BMC Medicine, 19, 4.
- Lu, Y., Bao, K., & Zhuang, M. (2022). Identity premium on subjective well-being: Evidence from the communist party membership in China. *The Social Science Journal*, 59, 616–629.
- Ma, X., & Iwasaki, I. (2021). Does communist party membership bring a wage premium in China? A meta-analysis. *Journal of Chinese Economics and Business Studies*, 19, 55–94.
- Markussen, T., & Ngo, Q.-T. (2019). Economic and non-economic returns to communist party membership in Vietnam. World Development, 122, 370–384.
- McLaughlin, J. S. (2017). Does communist party membership pay? Estimating the economic returns to party membership in the labor market in China. *Journal of Comparative Economics*, 45, 963–983.
- Micah, A. E., Cogswell, I. E., Meretoja, A., & Meretoja, T. J. (2021). Tracking development assistance for health and for covid-19: A review of development assistance, government, out-of-Pocket, and other private spending on health for 204 countries and territories, 1990&2013-2050. The Lancet, 398, 1317–1343.
- Raghupathi, V., & Raghupathi, W. (2020). The influence of education on health: An empirical assessment of oecd countries for the period 1995–2015. Archives of Public Health, 78, 20.
- Romanò, S. (2018). Entrepreneurship in Cuba: Returns of party affiliation and mobilization of personal contacts in Cuba. *Sociologica*, 12, 75–91.
- Rosas, G. (2010). Trust in elections and the institutional design of electoral authorities: Evidence from Latin America. *Electoral Studies*, 29, 74–90.
- Ross, C. E., & Wu, C.-ling (1995). The links between education and health. *American Sociological Review*, 60, 719–745.

- Sahoo, P. M., Sekhar Rout, H., & Jakovljevic, M. (2023). Future health expenditure in the brics countries: A forecasting analysis for 2035. Globalization and Health, 19, 49.
- Simon, J. G., De Boer, Joung, I. M., Bosma, H., & Mackenbach, J. P. (2005). How is your health in general? A qualitative study on self-assessed health. *The European Journal of Public Health*, 15, 200–208.
- Timofeyev, Y., Kaneva, M., & Jakovljevic, M. (2023). Editorial: Current questions and challenges in healthcare of the post-socialist countries. *Frontiers in Public Health*, 11.
- Van Der Heide, I., Wang, J., Droomers, M., Spreeuwenberg, P., Rademakers, J., & Uiters, E. (2013). The relationship between health, education, and health literacy: Results from the Dutch adult literacy and life skills survey. *Journal of Health Communication*, 18, 172–184.
- Westfall, A., Çelik Russell, Ö., Welborne, B., & Tobin, S. (2017). Islamic headcovering and political engagement: The power of social networks. *Politics and Religion, 10,* 3–30.
- Wu, S., Wang, R., Zhao, Y., Ma, X., Wu, M., Yan, X., & He, J. (2013). The relationship between self-rated health and objective health status: A population-based study. BMC Public Health, 13, 320.

- Wu, W., Zhang, P., Zhu, D., Jiang, X., & Jakovljevic, M. (2022). Environmental pollution liability insurance of health risk and corporate environmental performance: Evidence from China. Frontiers in Public Health, 10.
- Xiao, Q., Wu, M., & Zeng, T. (2019). Social support networks in Chinese older adults: Health outcomes and health related behaviors: A path analysis. Aging & Mental Health, 23, 1382–1390.
- Xue, X., & Cheng, M. (2017). Social capital and health in China: Exploring the mediating role of lifestyle. BMC Public Health, 17, 863.
- Yan, S. (2019). The changing faces and roles of communist party membership in China: An empirical analysis based on chips 1988, 1995 and 2002. *Journal of Contemporary East Asia Studies*, 8, 99–120.
- Yang, Y., & Pamala, W. (2021). Party membership and charitable giving in China: The mediating role of resources, networks, prosocial values and making compulsory donations. *Voluntary Sector Review*, 12, 167–187.
- Zhang, T. H., Hu, J., & Zhang, X. (2020). Disparities in subjective wellbeing: Political status, urban-rural divide, and cohort dynamics in China. Chinese Sociological Review, 52, 56–83.
- Zhao. (2019). Weimin. Does health insurance promote people's consumption? New evidence from China. *China Economic Review*, 53, 65–86.