Does studying in Hong Kong affect the ideological preferences of Chinese mainland undergraduates?

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Does studying in Hong Kong affect the ideological preferences of Chinese mainland undergraduates?

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ABSTRACT

This paper investigates the ideological preferences of Chinese undergraduate students in relation to where they attend university. 101 survey responses are collected, and propensity score matching is used to filter the raw data. Regression results of ideological preferences on different dimensions using the ordinary least squares method reveal suggestive evidence that studying in Hong Kong will significantly liberalise the ideological preferences of Chinese mainland students in the political, economic, and cultural dimensions.

KEYWORDS

Ideological preferences; propensity score; Caliper matching; China; Hong Kong SAR

I. Introduction

According to the Oxford Dictionary, ideology is defined as a system of ideals, especially those that form the basis of economic or political theory and policy. The division of the ideological 'left' and 'right' can be traced back to the French Revolution. The left wing is characterised as preferring drastic change in political, social and economic dimensions, while the right wing does not (Tansey 2004). Bobbio (1996) states that 'left' and 'right' are not absolute concepts. Their connotations have changed across different countries and

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time periods. He believes that it is the attitude towards equality that determines the differences between right and left. The left emphasises equality of outcomes, while the right holds the belief that inequality is intrinsic between human beings.

However, these discussions of context and classification are based on western discourses (Brown 2012). Ideological preference in China does not easily conform to the 'left' and 'right' scale often used by the West. Ideology in China is located in a completely different context and has its classification standards, which have changed dramatically over the 20th century. Western political ideological trends were introduced to China in the late 19th century. Marxism was introduced to China in the 1910s. Later, the May Fourth Movement of 1919 spurred Chinese intellectuals towards embracing more western ideas (Brown 2012). After the May Fourth Movement, ideology divergences and rivalry between different ideologies have become increasingly apparent. Ideologies integrates and adapts to local systems of thought as well. During the period between 1919 and 1949, elements from traditional schools of thought like Confucianism were absorbed by different camps. With the end of the Chinese civil war and the establishment of the People's Republic of China (PRC) in 1949, Maoist ideology, or in other words, more radical streams of left wing political thinking dominated the country (Nathan and Shi, 1996). Radical ideological trends reached their peaks during the Great Leap Forward of 1958 – 1962 and the Cultural Revolution of 1966 – 1976 (Brown 2012). However, with the death of Mao Zedong, and Deng Xiaoping's move towards an economic reform and opening up, liberal economics gradually obtained legal status and further helped to resuscitate liberal ideology in China. In the post-Maoist era, liberal and market-oriented ideologies compete with conservation camp in China and significantly changed all dimensions of society (Tang 2005).

Unfortunately, relevant investigations and estimations of Chinese ideological preferences are extremely inadequate compared to efforts in the US. Scholars mainly use qualitative methods to investigate Chinese ideological preferences. In April 2015, the Chinese Political Compass published more than 170,000 responses to political orientation surveys. These questionnaire and data set provides useful tools for researchers to analyse the current state of ideological preferences in China.

Recent studies using data from the Chinese Political Compass only draws conclusions on the ideological preferences of respondents within Chinese mainland, and ignores those who are studying or working in Hong Kong and abroad. In this paper, we evaluate the influence of studying in Hong Kong on the ideological preferences of undergraduate students from Chinese mainland. According to Hail (2015), overseas Chinese students have a higher chance of becoming patriots or nationalists. However, his research relies on the interview of 18 overseas Chinese students and professors only. The small sample size affects the accuracy of his conclusions. This paper aims to provide a more reliable, quantitative measurement on the changes in ideological preferences for students born in Chinese mainland and educated in Hong Kong SAR. As the number of Chinese mainland students in Hong Kong's universities has increased steadily in recent years, their ideological preferences may significantly impact the future of the Chinese ideological spectrum. Our paper is structured as follows: the subsequent section reviews the literature, section three describes the data and methodology, section four presents the estimation results, and the final section concludes.

Literature review

Researchers in the United States (US) have made deep ideological investigations into the preferences and priorities of the American public. The American Ideology Project, a nation-wide ideological survey, estimates the political liberalism or conservatism of states down to the city level (Tausanovitch and Warshaw 2013). The project is based on the survey responses of 275,000 Americans, and yields a very rich data set (Tausanovitch and Warshaw 2014). Researchers also combine questionnaires of ideological preferences with behavioral measures like voting choice during presidential elections, in order to examine what moderate voters in the United States look like (Klar 2014).

Several researchers, such as Pan and Xu (2015), have made use of the Chinese Political Compass to probe ideological preferences in China. They analyse the results from an empirical perspective using the Principal Component Analysis (PCA) method. They also find that ideological orientations in political, economic, and social or cultural

dimensions among respondents are highly correlated. Those who are politically liberal tend to score higher in economic and social dimensions, reflecting a greater likelihood of supporting market-oriented policies and liberal social values (Pan and Xu 2015). This correlation is especially strong in China and does not present itself obviously in western countries, where different ideological dimensions may not be strongly correlated (Political Compass 2017). For example, western respondents who prefer liberal markets may not be supportive of liberal social values such as same-sex marriage and abortion; advocates for the necessity of government intervention in the market economy may similarly have reservations about liberal social values. In regional variation analysis, Pan and Xu (2015) find suggestive evidence that residents of provinces with higher per capita GDP, levels of urbanisation, and trade openness are more likely to prefer political liberalism, market-oriented policies, and western culture. However, the Chinese Political Compass data set has the problem of pre-selection. All responses are self-responded, which suggests that the respondents may have strong political preferences or possess a relatively high educational background. Those with an interest in a particular political issue will have a greater incentive to access and respond to the survey. A gender balance also manifests itself – males with bachelor degrees form a large proportion of the data set.

Wu (2013) also uses the Chinese Political Compass to explore ideological polarisation from a dynamic perspective among Chinese internet users. From 2008 to 2011, he randomly selected 1000 responses each year to analyse political beliefs. Questions in the Political Compass are divided into categories that explore nationalism, economic sovereignty, political conservatism, traditionalism, market regulation, attitudes towards economic reform[1], and attitudes towards agricultural subsidies. The author divides Chinese Internet users into two groups – ideologues and agnostics. There are two camps in ideologue group: those who score highly in nationalism indicators, and those who score highly in cultural liberalism indicators. The ideologue groups are highly stable, but the composition of those who are agnostic about these two indicators has changed significantly over time (Wu 2013). On the one hand, there is now a larger aversion to nationalism and conservatism; on the other hand, a greater degree of suspicion exists in

[1] Reform grievance indicates people's attitudes towards economic reform. Some may harbor resentment towards the reform process because of unfair income and wealth distributions that have emerged as a result.

the liberal camp towards those who are agnostic (Wu 2013). This suggests greater uncertainty in the distribution of future ideological preferences. The author also finds that significant polarisation occured within this four-year period, a trend that typically spans several decades in democratic countries (Wu 2013).

Data and methodology

The Chinese Political Compass is an online survey tailored to Chinese political and cultural contexts and is modeled after the UK's Political Compass platform. The survey is developed by scholars and graduate students of Peking University, who are interested in analysing the various dimensions of ideology in China. It comprises 50 questions – the first 20 questions focus on political issues, the next 20 focus on economic issues, and the last 10 focus on cultural or social issues. Respondents pick one of four responses to each question: 'strongly disagree', 'disagree', 'agree' and 'strongly agree'. A neutral choice is not provided to force respondents to express their opinions on sensitive questions. The standardised responses aid the estimation of a qualitative ideological dimension and the generation of quantitative results using a linear model. In this study, the ideological preferences of respondents across three dimensions will be investigated, with preference scores ranging from 0 to 3. In the political dimension, higher scores represent more liberal attitudes and lower scores represent more repressive attitudes. In the economic dimension, lower scores indicate that people prefer government intervention in economic activities, while higher scores indicate the preference for free-market approaches. In the socio-cultural dimension, lower scores indicate the preference for traditional Chinese values, while higher scores indicate a preference for western culture and progressive social values. A higher overall score represents a higher possibility of preferring a broadly liberal ideology.

Individual characteristics are first gathered, which include gender, family monthly income, year of study at university, choice of arts or science in senior high school, university major, university name, province of residence before entering university, and sexual orientation. Since the primary concern is whether studying in Hong Kong SAR

changes the ideological preferences of Chinese mainland undergraduate students, all respondents to our survey are current full-time undergraduate students at either Chinese mainland universities or Hong Kong universities, who study in Chinese mainland before entering university and sitting the national college entrance examinations.

We interviewed 101 students, 50 of whom currently study at universities in Hong Kong. In order to estimate the effect of studying in Hong Kong on their ideological preferences, propensity score matching is used to filter raw data to reduce bias caused by reverse causality (Randolph et al. 2014). First introduced by Rosenbaum and Rubin (1983), the propensity score is the conditional probability of assignment to a particular treatment given the observed covariates. Rosenbaum and Rubin (1985) demonstrate the technique in an empirical study of the effects of prenatal exposure to barbiturates on subsequent psychological development. In this study, they illustrate three different methods for multivariate matched sampling: nearest available matching, nearest available Mahalanobis metric matching, and Mahalanobis metric matching within calipers.

Since the apparent ideological differences in outcome between the two groups may depend on factors other than those considered, to ensure the accuracy of our conclusions, the effect of studying in Hong Kong is separated from factors that previously affected the development of their ideological preferences.

In our paper, a logit model was adopted to estimate the propensity score for each observation. A set of variables implemented to match data is listed in Table 1 including: gender, monthly family income, choice of arts or science in senior high school, and sexual orientation.

Table 1. Variables in the logit model.

gender	Eequals 1 if the student is male, and equals 0 otherwise.
income	Categorical variable (1, 2, 3, 4, 5) indicating monthly family income. We set ‘below 3000RMB’ as 1, ‘3000-5000 RMB’ as 2, ‘5000-10000RMB’ as 3, ‘10000-20000RMB’ as 4 and #above 20000RMB’ as 5.

arts.or.science	Equals 1 if the student chose the arts stream in senior high school, and equals 0 otherwise.
sex.orientation	Equals 1 if the respondent is non-heterosexual, and equals 0 if the respondent is heterosexual.

The logit model results are shown in Table 2 Gender, income and sexual orientation are statistically significant, but whether they chose the arts or science stream in high school is insignificant. Table 3 shows the summary of original data, the differences between control group and treated group are all significant except for variable arts.or.science.

Table 2. Estimation results of the logit model.

Independent variables	Estimate	t-statistics
(intercept)	0.1878	1.084
gender	-0.2058	-2.039
income	0.1177	2.733
arts.or.science	-0.0461	-0.460
sex.orientation	0.3182	2.072

Table 3. Summary for original data.

Independent variables	Means of treated group	Means of control group	t-value
(intercept)	0.580	0.412	-

gender	0.380	0.569	1.914
income	3.680	2.980	-3.312
arts.or.science	0.460	0.451	-0.090
sex.orientation	0.180	0.039	-2.294

The second step is to choose a matching method. Typically, the Nearest-neighbouring (NN) matching method and Caliper matching method are used. Both methods are utilised in this study; but the Caliper matching method that results in the lowest mean differences between the treated group and the control group is adopted. NN matching is a straightforward method in which the control individual is chosen as a matching partner for an individual in the treatment group that is closest in terms of propensity score (Caliendo and Kopeinig 2008). This method performs poorly with our sample, as shown in Table 4. The difference in means between the treated group and control group are slightly reduced comparing with original data. T-tests for the differences are significant for the *income* and *sex.orientation* variables, indicating that students in the treatment group and control group are still different in terms of income and sex orientation.

Table 4. Results of the nearest neighbouring matching method.

Independent variables	Means of treated group	Means of control group	t-value
(intercept)	0.580	0.417	-
gender	0.380	0.560	1.815
income	3.680	3.020	-3.146
arts.or.science	0.460	0.460	0.000
sex.orientation	0.180	0.040	-2.272

As the NN matching method creates a significant gap between closest neighbours, the caliper matching method is chosen to match data instead. A caliper refers to a tolerance standard in the maximum propensity score distance (Caliendo and Kopeinig 2008). Its use helps avoid significant difference gaps, allowing for improved data matching (Huber, Lechner, and Steinmayr 2014). The caliper is set to one quarter of a standard deviation of the propensity score, as shown below:

$$r = \frac{1}{4} . \sqrt{\frac{\sum_{i=1}^{i=n} (Y_i - \hat{Y})^2}{n}}$$

Table 5 shows that the Caliper matching method works better compared to NN matching method. Before matching, although the means for choosing arts or science in senior high school are relatively similar across groups, the gender result in the treated group is around 0.19 units lower than in the control group. Students studying in Hong Kong also have higher monthly family incomes. After matching, these differences are dramatically reduced, with the means of all items in the treated and control groups becoming identical. The matched data are used to further analyse factors that have an influence on ideological preferences.

Table 5. Results of the Caliper matching method.

Dependent variables	Mean of treated group	Mean of control group	t-value
(intercept)	0.491	0.491	-
gender	0.429	0.429	0.000
income	3.429	3.429	0.000
arts.or.science	0.571	0.571	0.000
sex.orientation	0.036	0.036	0.000

Ideological preferences

After reducing selection bias, we estimate a model incorporating variables in political, cultural, and economic dimensions. The OLS regression model is shown below.

$$
\begin{aligned}
preferencescores \\
&= \beta_0 + \beta_1 gender + \beta_2 income + \beta_3 year1 + \beta_4 year2 + \beta_5 year3 \\
&+ \beta_6 arts.or.science + \beta_7 majorbusiness + \beta_8 majoreng \\
&+ \beta_9 majorsocial + \beta_{10} majorarts + \beta_{11} majorscience + \beta_{12} HK \\
&+ \beta_{13} sex.orientation
\end{aligned}
$$

The definitions of explanatory variables are shown in Table 6.

Table 6. Variables in the regression model

gender	Equals 1 if the student is male, and equals 0 otherwise.
income	Categorical variable (1, 2, 3, 4, 5) indicating monthly family income. We set 'below 3000RMB' as 1, '3000-5000 RMB'; as 2, '5000-10000RMB' as 3, '10000-20000RMB' as 4 and 'above 20000RMB' as 5.
year1	Equals 1 if the respondent is a year one student, and equals 0 otherwise.
year2	Equals 1 if the respondent is a year two student, and equals 0 otherwise.
year3	Equals 1 if the respondent is a year three student, and equals 0 otherwise.
arts.or.science	Equals 1 if the student chose the arts stream in senior high school, and equals 0 otherwise.

majorbusiness	Equals 1 if the respondent is majoring in business, and equals 0 if otherwise.
majoreng	Equals 1 if the respondent is majoring in engineering, and equals 0 otherwise.
majorsocial	Equals 1 if the respondent is majoring in the social sciences, and equals 0 otherwise.
majorarts	Equals 1 if the respondent is majoring in the arts, and equals 0 otherwise.
majorscience	Equals 1 if the respondent is majoring in the sciences, and equals 0 otherwise.
HK	Equals 1 if the student studies at a university in Chinese Hong Kong, and equals 0 otherwise.
sex.orientation	Equals 1 if the respondent is non-heterosexual, and equals 0 if the respondent is heterosexual.

Table 7. OLS regression result of political dimension.

Dependent variables	Estimate	t-value
(intercept)	1.676	5.394
gender	0.045	0.532
income	-0.007	-0.161
year1	-0.237	-0.796
year2	0.063	0.271
year3	0.188	1.003
arts.or.science	-0.061	-0.590

majorbusiness	-0.308	-1.417
majoreng	-0.345	-1.382
majorsocial	-0.524	-2.214
majorarts	-0.376	-1.573
majorscience	-0.444	-1.590
HK	0.275	3.383
sex.orientation	0.009	0.046

Political dimension

The multi-linear regression results are shown in Table 7, and the null hypothesis H_0 is shown below.

$$H_0: \beta_{12} = 0$$

All variables except *majorsocial* and *HK* are statistically insignificant. The p-value for the *HK* variable is small enough to reject the null hypothesis. The estimated coefficient of the *HK* variable is 0.275, which indicates that studying at a university in Hong Kong will push political ideological preferences towards the liberal end of the spectrum by 0.275 points on average. This is a large jump, given that the range of the preference score is only 0 to 3.

Cultural dimension

From Table 8, only the concerned variable *HK* is statistically significant; 'majorsocial' is also statistically insignificant in this dimension. The null hypothesis (H_0: $\beta_{12} = 0$) is rejected, as the t-value of *HK* is 3.110. For the overall significance test, the F-statistic is 2.262, which is large enough to reject the null hypothesis. The estimated coefficient of *HK* is 0.246, which means that studying in Hong Kong moves the ideological preferences

of Chinese mainland students in the cultural dimension towards the liberal end of the spectrum by 0.246 points on average.

Table 8. OLS regression result of cultural dimension.

Dependent variables	Estimate	t-value
(intercept)	1.669	5.536
gender	-0.065	-0.796
income	0.033	0.804
year1	-0.145	-0.502
year2	-0.122	-0.545
year3	-0.179	-0.984
arts.or.science	-0.047	-0.462
majorbusiness	-0.131	-0.620
majoreng	-0.007	-0.031
majorsocial	-0.114	-0.497
majorarts	-0.076	-0.326
majorscience	-0.102	-0.378
HK	0.248	3.110
sex.orientation	-0.037	-0.188

Economic dimension

Table 9 shows that the *income*, *arts.or.science* and *HK* variables have statistically significant coefficients in this dimension, and their p-values are small enough to reject the null hypothesis (H_0: $\beta_{13} = 0$). With regards to monthly family income, a student's

ideological preference in the economic dimension is observed to increase by 0.126 points on average if his monthly family income increases by one category. For the *arts.or.science* variable, keeping other variables constant, the ideological preference in the economic dimension for students who chose to study arts in senior high school is 0.236 points higher in comparison to those who chose science. As for the concerned variable *HK*, the estimated coefficient is 0.261, which indicates that, holding other variables constant, studying in Hong Kong universities will on average push the ideological preferences of mainland Chinese students in the economic dimension towards a free-market orientation by 0.261 points. The overall test is also significant, as the p-value of the F-test is small, at 0.001971. This shows that there is enough evidence to reject the null hypothesis.

Table 9. OLS regression result of economic dimension.

Dependent variables	Estimate	t-value
(intercept)	0.487	1.597
gender	0.107	1.298
income	0.126	3.025
year1	0.094	0.320
year2	-0.108	-0.477
year3	0.209	1.136
arts.or.science	0.236	2.313
majorbusiness	0.147	0.689
majoreng	0.268	1.092
majorsocial	-0.126	-0.541
majorarts	0.177	0.756

majorscience	0.352	1.284
HK	0.261	3.268
sex.orientation	0.216	1.085

Potential heteroskedasticity may exist in our example. For instance, we cannot observe the ideological preferences of an interviewee's parents and friends, which would exist as a residual in the model. The ideological preferences of our interviewees may have an effect on this residual, which means that the variance of the error term is not constant. The presence of heteroskedasticity makes the t-statistic in the OLS regression deviate from the t-distribution, resulting in t-tests in OLS regression models to becom potentially unreliable. In our case, we use the Newey-West estimator as a reference for each dimension. The Newey-West estimator is a universally used method to overcome problems of serial correlation and heteroskedasticity in the error term in regression models. Table 10 lists Newey-West estimates for the political dimension, showing the t-value of *HK* to be 3.5357, which indicates that the estimator of the *HK* variable is still statistically significant in the political dimension after adjustments are made.

Table 10. Newey-West estimators for political dimension.

Dependent variables	Estimate	t-value
(intercept)	1.676	6.801
gender	0.045	0.649
income	-0.007	-0.214
year1	-0.237	-0.898
year2	0.063	0.359
year3	0.188	1.245

arts.or.science	-0.061	-0.755
majorbusiness	-0.308	-1.413
majoreng	-0.345	-1.651
majorsocial	-0.524	-2.671
majorarts	-0.376	-2.005
majorscience	-0.444	-1.677
HK	0.275	3.536
sex.orientation	0.009	0.120

Table 11. Newey-West estimation results for cultural dimension.

Dependent variables	Estimate	t-value
(intercept)	1.669	7.425
gender	-0.065	-1.269
income	0.033	1.131
year1	-0.145	-0.502
year2	-0.122	-0.667
year3	-0.179	-1.003
arts.or.science	-0.047	-0.777
majorbusiness	-0.131	-0.931
majoreng	-0.007	-0.055
majorsocial	-0.114	-0.832

majorarts	-0.076	-0.595
majorscience	-0.102	-0.543
HK	0.246	3.037
sex.orientation	-0.037	-0.475

Table 12. Newey-West estimation results for economic dimension.

Dependent variables	Estimate	t-value
(intercept)	0.487	2.110
gender	0.107	1.117
income	0.126	3.970
year1	0.094	0.526
year2	-0.108	-0.558
year3	0.209	2.051
arts.or.science	0.236	2.252
majorbusiness	0.147	2.063
majoreng	0.268	1.954
majorsocial	-0.126	-1.060
majorarts	0.177	1.209
majorscience	0.352	2.923
HK	0.261	3.451
sex.orientation	0.216	2.134

Table 11 and Table 12 reflect the statistical significance of the choice of majors. The p-values of all dummy variables pertaining to respondents' majors in university are small enough to reject the null hypothesis. Furthermore, the estimators of the *HK* variable are still statistically significant, which reinforces our previous conclusions.

The problem of potential omitted variables still exists in the model. For example, people close to respondents, such as their parents, friends, and teachers may affect their ideological preferences. However, the ideological preferences of these people and the students themselves are positively correlated. The fact that they have chosen to study at a university in Hong Kong also has positive correlations with the ideological preferences of the people close to respondents. This may result in omitted variable bias. Since we have derived the result that studying in universities in Hong Kong makes students more likely to adopt liberal ideological preferences, the conclusion is still reliable after taking omitted variable problems into considerations. In addition, our results indicate that studying in Hong Kong has effects of similar magnitude on all three ideological dimensions, verifying Pan and Xu's (2015) observation that political, economic, and socio-cultural values are highly correlated in China.

Conclusion

This paper has evaluated the effect of studying in Hong Kong on the ideological preferences of Chinese mainland undergraduates. Survey data on Chinese mainland undergraduates who study at universities in Chinese mainland and Hong Kong SAR, are collected and analyzed. Propensity score matching is used to filter the data, and the ordinary least squares method is applied to run regressions of ideological preferences on independent variables. The results show that studying in Hong Kong has clear liberalising effects on students' ideological preferences in political, cultural and economic dimensions. Keeping other variables constant, studying in Hong Kong is observed to increase ideological preference scores by, on average, 0.2 points more than studying in Chinese mainland.

However, there are many more factors that have yet to be taken into account, which may produce more nuanced analysis if investigated. For instance, factors that might prompt

Chinese mainland students in Hong Kong to prefer liberal stances have yet to be examined. Possible factors include peer pressure, the free flow of information, the ideology of their professors, and so on. Regarding the free flow of information, many researchers have evaluated the implications of the 'Great Firewall' of China. Based on analysis conducted by Taneja and Wu (2014), cultural proximity has a more significant role than access blockage in shaping online user behavior. Future studies might delve deeper into the specific explanations of whether the free flow of information or professors' ideological preference have any apparent effect on student ideological preferences.

References

Bobbio, Norberto. 1996. "Left and Right: The Significance of a Political Distinction. Chicago: University of Chicago Press.

Brown, Kerry. 2012. "The communist party of China and ideology." *China: An international journal* 10.2: 52-68..

Caliendo, Marco, and Sabine Kopeinig. 2008. "Some practical guidance for the implementation of propensity score matching." *Journal of economic surveys* 22.1: 31-72.

Hail, Henry Chiu. 2015. "Patriotism abroad: Overseas Chinese students' encounters with criticisms of China." *Journal of Studies in International Education* 19.4: 311-326.

Huber, Martin, Michael Lechner, and Andreas Steinmayr. 2015. "Radius matching on the propensity score with bias adjustment: tuning parameters and finite sample behaviour." *Empirical Economics* 49.1: 1-31.

Klar, Samara. 2014. "A multidimensional study of ideological preferences and priorities among the American public." *Public Opinion Quarterly* 78.S1: 344-359.

Nathan, Andrew J., and Tianjian Shi. 1996. "Left and right with Chinese characteristics: issues and alignments in Deng Xiaoping's China." World Politics 48.4: 522-550.

Pan, Jennifer, and Yiqing Xu. 2018. "China's ideological spectrum." *The Journal of Politics* 80.1: 254-273.

Political Compass. 2017. The UK Election and The Political Compass. Compass Counterpoint. Available from: https://www.politicalcompass.org/counterpoint-20170610

Randolph, Justus J., Kristina Falbe, Austin K. Manuel, and Joseph L. Balloun. 2014. "A step-by-step guide to propensity score matching in R." *Practical Assessment, Research & Evaluation* 19.18: 1-6.

Rosenbaum, Paul R., and Donald B. Rubin. 1983. "The central role of the propensity score in observational studies for causal effects." *Biometrika* 70.1: 41-55.

Rosenbaum, Paul R., and Donald B. Rubin. 1985. "Constructing a control group using multivariate matched sampling methods that incorporate the propensity score." *The American Statistician* 39.1: 33-38.

Taneja, Harsh, and Angela Xiao Wu. 2014. "Does the Great Firewall really isolate the Chinese? Integrating access blockage with cultural factors to explain Web user behavior." *The Information Society* 30.5: 297-309.

Tang, Wenfang. 2005. Public opinion and political change in China. Stanford University Press.-

Tansey, Stephen, and Stephen D. Tansey. 2004. Politics: the basics. New York, NY: Routledge.

Tausanovitch, Chris, and Christopher Warshaw. 2013. "Measuring constituent policy preferences in congress, state legislatures, and cities." *The Journal of Politics* 75.2: 330-342.

Tausanovitch, Chris, and Christopher Warshaw. 2014. "Representation in municipal government." *American Political Science Review* 108.3: 605-641.

Wu, Angela. 2013. "Ideological Polarization Over a China-as-Superpower Mindset: An Exploratory Charting of Belief Systems Among Chinese Internet Users, 2008-2011". *International Journal of Communication*, 8: 2243–2272.

Appendix

1. China Political Compass Survey Questions for the political dimension.

Political

No.	Survey Question
1	People should not have universal suffrage if they have not been educated about democracy. 如果人民没有受过民主教育，他们是不应该拥有普选权的。
2	Human rights take precedence over sovereignty. 人权高于主权。
3	When events that have major repercussions on public safety occur, the government should freely disseminate information even if information disclosure increases the risks of unrest. 发生重大社会安全事件时，即使认为信息公开有导致社会骚乱的风险政府仍应该放开信息传播。
4	Western multiparty systems are unsuitable for China in its current state. 西方的多党制不适合中国国情。
5	Indiscriminately imitating (systems of) western-style freedom of speech will lead to social disorder in China. 在中国照搬西方式的言论自由会导致社会失序。
6	It is preferable to let universities recruit students by themselves than to have a unified national college entrance examination system. 由高校自主招生考试比全国统一考试招生更好。
7	Religious adherents should be allowed to conduct missionary work in nonreligious spaces. 应该容许宗教人士在非宗教场所公开传教。
8	Primary school, secondary school and college students should all participate in government organsed military training. 无论中小学生或大学生，都应参加由国家统一安排的军训。
9	National unity and territorial integrity are the highest interest of society. 国家的统一和领土完整是社会的最高利益。
10	Even if procedural rules are violated in the process of investigation and evidence gathering, those who have actually committed crimes should be punished. 哪怕经历了违法程序规定的审讯和取证过程，确实有罪的罪犯也应被处刑。
11	The state has an obligation to provide foreign aid. 国家有义务进行对外援助。
12	It is acceptable to besmirch the images of national leaders and founding leaders in literary and artistic works. 国家领导人及开国领袖的形象可以作为文艺作品的丑化对象。

13	When laws fail to fully constrain criminal behaviors, people have the right to impose their own punishments for these behaviours. 当法律未能充分制止罪恶行为时，人民群众有权自发对罪恶行为进行制裁。
14	Media should be allowed to represent the voice of a particular social stratum or interest group. 应当允许媒体代表某一特定阶层或利益集团发言。
15	If it has sufficient state capabilities, China has the right to take any action to defend its national interests. 如果国家综合实力许可，那么中国有权为了维护自己的利益而采取任何行动。
16	Force should be used to reunify Taiwan if the condition allows. 条件允许的话应该武力统一台湾。
17	Lawyers should do their utmost to defend clients even if the client has committed a crime. 律师即使明知被辩护人的犯罪事实也应当尽力为其进行辩护。
18	Chinese citizens should be allowed to hold foreign citizenship. 应该允许中国公民同时拥有外国国籍。
19	It is impossible for western countries led by the United States to tolerate the rise of China as a major power. 以美国为首的西方国家不可能真正容许中国崛起成为一流强国。
20	The state should take measures to train and support athletes so they can win glory for the country in various international competitions. 国家应当采取措施培养和支持体育健儿在各种国际比赛场合为国争光。

2. China Political Compass Survey Questions for the economic dimension.

Economic	
No.	Survey Question
21	The minimum wage should be set by the state. 最低工资应由国家规定。

22	The fruits of China's economic development since reform and opening up are enjoyed by a small group of people, most people did not get much benefit. 中国改革开放以来的经济发展成果都被一小群人占有了，大多数人没得到什么好处。
23	In the decision-making of major (infrastructure) projects, individual interests should give way to social interests. 在重大工程项目的决策中，个人利益应该为社会利益让路。
24	Wasting food is also an individual freedom. 浪费粮食也是个人的自由。
25	If the price of pork is too high, the government should intervene. 如果猪肉价格过高，政府应当干预。
26	A high tariff should be imposed on imported goods that are also produced domestically to protect domestic industries. 应当对国外同类产品征收高额关税来保护国内民族工业。
27	Education should be public to the greatest extent. 教育应当尽可能公立。
28	The interests of state-owned enterprises are part of the national interest. 国有企业的利益属于国家利益。
29	Attempting to control real estate prices will undermine economic development. 试图控制房地产价格的行为会破坏经济发展。
30	The primary means to improve the lives of the low-income people is to give them fiscal subsidies and support. 改善低收入者生活的首要手段是国家给予财政补贴与扶持。
31	A rich man deserves better medical services. 有钱人理应获得更好的医疗服务。
32	High income earners should disclose the sources of their income. 高收入者应该公开自己的经济来源。
33	People who make money through capital gains contribute less to society than people make money through labour. 靠运作资金赚钱的人对社会的贡献比不上靠劳动赚钱的人。
34	It is better to sell state-owned enterprises to capitalists than to let them go bankrupt. 与其让国有企业亏损破产，不如转卖给资本家。

35	Sectors related to national security and important to national economy and people's livelihoods must be controlled by state-owned enterprises. 那些关系到国家安全，以及其他重要的国计民生的领域，必须全部由国有企业掌控。
36	The process of capital accumulation is always accompanied by harm to the working class. 资本积累的过程总是伴随着对普通劳动人民利益的伤害。
37	Individuals should be able to own, buy and sell land. 私人应当可以拥有和买卖土地。
38	The government should adopt higher grain purchasing prices to boost the income of peasants. 政府应该采用较高的粮食收购价格以增加农民收入。
39	Foreign capital in China should enjoy the same treatment as national capital. 在华外国资本应享受和民族资本同样的待遇。
40	Natural monopolies that emerge out of market competitions are harmless. 市场竞争中自然形成的垄断地位是无害的。

3.

3. China Political Compass Survey Questions for the cultural/social dimension

Cultural and social	
No.	Survey Questions
41	Two adults should be free to engage in voluntary sexual behaviour regardless of their marital status. 两个成年人之间自愿的性行为是其自由，无论其婚姻关系为何。
42	One should not openly comment on the shortcomings of their elders. 不应公开谈论自己长辈的缺点。
43	Modern Chinese society needs Confucianism. 现代中国社会需要儒家思想。
44	The fundamental standard to evaluate the value of a work of art is whether it is liked by the masses. 判断艺术作品的价值的根本标准是看是不是受到人民大众喜爱。
45	Even with population pressures, the state and the society have no right to interfere in the decision to have a child, or how many children to have. 即使有人口压力，国家和社会也无权干涉个人要不要孩子，要几个孩子。

46	The Eight Diagrams (Bagua) in The Book of Changes (Zhouyi) can explain many things well. 周易八卦能够有效地解释很多事情。
47	The perspective of traditional Chinese medicine on human health is superior to that of modern mainstream medical science. 中国传统医学对人体健康的观念比现代医学更高明。
48	It is unnecessary to push forward the simplification of Chinese characters. 汉字无需人为推行简化。
49	Traditional Chinese classics should be the basic education material for children. 应当将中国传统文化的经典作品作为儿童基础教育读物。
50	I will recognise the relationship between my child and a homosexual partner if it is a voluntary choice. 如果是出于自愿，我会认可我的孩子和同性结成伴侣关系。