

#### RESEARCH ARTICLE

# Bread and Circuses: Sports and Public Opinion in China

Dan Chen<sup>1,\*</sup> and Andrew W. MacDonald<sup>2,\*</sup>

#### Abstract

Sports victory constitutes an important part of propaganda in authoritarian states. The heavy state investment in sports industries and sports culture in China illustrates the political importance of sports. However, few studies have systematically examined the exact impact of sports propaganda on public opinion. Using a survey experiment conducted in two Chinese cities, this article finds that broadcast highlighting national sports achievements has significant positive effects on general satisfaction and compliance with the local governments. These results expand on the small, but growing, literature on the effects of sports on political opinions and help detail the specific ways in which sports can affect political attitudes.

Keywords: sports; propaganda; public opinion; China; survey experiment

There is a long history behind the idea that sports have an influence on politics; the Roman satirist Juvenal long ago noted the effectiveness of state-sponsored games (bread and circuses) in increasing regime support. Similarly, autocrats who spend lavishly on their Olympic programs should be keenly aware of the political value of national sports victories. The former Soviet Union competed in the Olympics primarily for political reasons – to display power and dominance, despite its initial refusal to participate in the Olympics seen as elitist and promoting capitalism (Keys 2003). In China, the government perceives sports as an important way to garner domestic support and raise its international status. Chinese president Xi Jinping

<sup>&</sup>lt;sup>1</sup>Department of Political Science, University of Richmond, Richmond, VA 23173, USA and <sup>2</sup>Department of Political Science, Duke Kunshan University, Kunshan, Jiangsu, China

<sup>\*</sup>Corresponding author. E-mails: dchen@richmond.edu; Twitter: @profdanchen; andrew.macdonald@dukekunshan.edu.cn; Twitter: @profandrewm

Support for this research was provided by the University of Louisville Center for Asian Democracy. The authors thank Le Tan and Wenbin Li for their assistance in fielding the experiment and the following people for providing helpful feedback: Jason Gainous, Rongbin Han, John James Kennedy, and the participants of the Harvard-MIT-BU Chinese Politics Research Workshop. All errors remain the responsibility of the authors. The data, code, and any additional materials required to replicate all analyses in this article are available at the Journal of Experimental Political Science Dataverse within the Harvard Dataverse Network, at: https://doi.org/10.7910/DVN/BWCX3E (Chen and MacDonald, 2019). The experiment was approved by the institutional review board at the University of Louisville. The authors have no conflicts of interest to declare.

<sup>©</sup> The Experimental Research Section of the American Political Science Association 2019

noted in August 2017 that "sports carry our dream for strength, prosperity, and national rejuvenation," and that "when our sports are strong, our nation is strong" (Zhang et al. 2017). To understand sports in authoritarian politics, this study uses a lab-in-the-field survey experiment to examine the public opinion effects of sports in China.

# Sports and Politics in China

The persistent and heavy investment in sports indicates that its political importance is perceived by the Chinese government. In 1980, the Ministry of Sports set up a new strategy to promote both mass sport and competitive sport, although the latter was the focus (Lu and Hong 2014, p. 103). In the early 1990s, China started to bid for hosting the Olympics. After failing the bid to host the 2000 Summer Olympics, China succeeded in bidding to host the 2008 Summer Olympics. This was considered a milestone in China's sports history and affirmation of its rising political and international status. The official People's Liberation Army Daily referred to the successful Olympic bid as validation for China's economic reform and its socialist policies and achievements (People's Liberation Army Daily 2001). After 2008, the Chinese government doubled down on sports investments, in areas such as training athletes, building Olympic parks, and growing the sports industry. According to the 13th five-year plan for sports development issued in 2016 by the General Administration of Sports, the Chinese national team was to consolidate its status in the 2016 Rio Olympics and to achieve even better results in the 2018 Winter Olympics and the 2020 Summer Olympics. This plan aims to develop a sports industry worth over three trillion Chinese yuan by 2020, the increase rate of which would exceed the national economic growth rate. More important, this plan prioritizes building an influential sports culture that strengthens national cohesion and cultural competitiveness (General Administration of Sports 2016).

Indeed, for the Chinese government, more important than investing in the sports is cultivating national pride through admiring accomplished athletes. For example, China Central Television (CCTV), the national-level state television, has been hosting a yearly event called CCTV Sports Personality of the Year since 2005, celebrating accomplished athletes such as Olympians. The government elevates the status of sports in its political discourse by allowing sports to foster a sense of nationalism, shown in rhetorical frames such as winning glory for the motherland and strengthening the nation (Brownell 1995; Xu 2008). For example, several sports contests were used to foster and manifest anti-Japanese sentiments, such as the 2007 FIFA (Fédération Internationale de Football Association) Women's World Cup, the 2008 East Asian Football Championship, and the 2010 Asian Games (Lu and Hong 2014, chap 7). When sports are tied to nations, they drive a powerful appetite for national pride. Research finds that, even among democratic nations, viewing the Olympic Games increases citizens' patriotism, nationalism, and smugness (Billings et al. 2013).

Given the aggressive investments in the sports industry and culture, what are the political consequences? Whereas existing studies have explored the rhetorical and emotional meanings of sports in authoritarian politics, few have examined the exact

impact of sports on public opinion. Analyzing results from a lab-in-the-field survey experiment conducted in two Chinese cities, Xi'an and Guangzhou, this study finds that sports broadcast highlighting Chinese athletes' achievements in international sports competitions has a positive impact on the general satisfaction and behavioral compliance with the local governments. We argue that this is because national sports accomplishments tend to arouse national pride and thus increase the mood of happiness; this positive change in mood then boosts the preference for the status quo, enhancing satisfaction and compliance with the local incumbents. The findings from this study apply most specifically to urban Chinese citizens, who account for over half of the population and are a hypothesized key demographic for the regime to control.<sup>1</sup>

# The Psychological Effects of Sports

Despite the contrasting political systems, this study draws on a small, but growing, literature on how, in established democracies, politically irrelevant events such as sports victory, lotteries, shark attacks, and climate fluctuations can shape one's evaluation of the political incumbent and affect electoral choices (Achen and Bartels 2016; Bassi 2019; Healy et al. 2010; Huber et al. 2012). These empirical patterns suggest that political attitudes and decisions can be "influenced by irrelevant events that have nothing to do with the competence or effectiveness of incumbent government" (Healy et al. 2010, p. 12807). Particularly, the impact of sports victories on political outcomes has been found in democracies such as the USA (Healy et al. 2010; Healy and Malhotra 2010; Miller 2013), Germany (Hagen et al. 2004), and Spain (Bagues and Esteve-Volart 2016), which was partially replicated in recent studies (Busby et al. 2017; Busby and Druckman 2018).

Ostensibly, the sports industry in China is largely supported by the state, as discussed earlier, unlike the sports industries in democracies that are typically owned and managed by private organizations. Despite the difference in state involvement, we hypothesize that the psychological mechanism of mood enhancement, through which sports outcome shifts opinions on political incumbents, is similar in China. The psychological literature finds that a positive mood can enhance the favorability of one's evaluation of other people and objects (Clore and Huntsinger 2007; Forgas 2000; Schwarz and Clore 1983) and amplify the preference for the status quo (Yen and Chuang 2008). A change in mood in a positive or negative direction can be contagious, affecting seemingly unrelated opinions (Huber et al. 2012, p. 731). It has been observed that "people often transfer emotions in one domain toward evaluation and judgment in a completely separate domain" (Healy et al. 2010, p. 12804). Applying this mechanism, we should expect that national sports victories in international competitions increase people's evaluations of the incumbent through an enhanced mood.

Because mood is often volatile, the duration of a positive mood and its effect is typically short. Busby et al. (2017) found that the boost in the evaluation of the incumbent disappeared after 1 week following the sports event, suggesting the temporary nature of this psychological effect. Despite the lack of durability, we argue

<sup>&</sup>lt;sup>1</sup>For a quantitative look at regime satisfaction across the urban-rural divide, see Han (2012).

that the positive effect of national sports victories in increasing people's evaluations of political incumbents is significant, because understanding the dynamic effect of sports complements the "static" (Michelitch and Utych 2018) individual-level determinants by introducing dynamic elements into an assumed stable process of opinion change. Furthermore, this study helps us understand why the Chinese government continually emphasizes and invests in the sports industry and culture.

Taken together, we hypothesize that national sports accomplishments generate opinion change through the psychological mechanism where mood enhancement increases general satisfaction and compliance with the political incumbent that represents the status quo. We do not, however, expect national sports accomplishments to change opinions on specific issues, as the psychological effect is limited to affective and general evaluations, inapplicable to rational analysis of concrete issues. Nor do we expect national sports accomplishments to permanently increase citizens' satisfaction and compliance with the political incumbent; the opinion change is understood to be transient.

# **Experimental Design**

#### Sample

We recruited 18 college students in Xi'an and 26 college students in Guangzhou to conduct the survey experiment in June 2015. These two major Chinese cities, located in the northern and southern regions of the country, were selected to allow geographic variation. Within each city, we mapped out grids and randomly selected student pairs to travel to locations within each grid. Student pairs were instructed to find popular public spaces, such as public squares, shopping malls, and parks, to conduct the experiment. To maximize and diversify available participants, the experiment was conducted on Fridays and Saturdays in the afternoon and early evening hours in June 2015, a time of the year when people tend to spend more time outdoors. Student pairs were instructed to approach as wide a demographic as possible. The demographics of the participants, presented in the following section, indicate that we obtained a reasonably representative sample of Chinese urban residents.

#### **Experimental Treatment**

To develop the treatment, we used a television report from the state television CCTV about a 2014 sports award ceremony featuring popular Chinese athletes, many of whom are Olympians and celebrities. Among those highlighted in the report are Ning Zetao, the swimmer who won four gold medals at the 2014 Asian Games; Li Na, the tennis player who won a second Grand Slam title at the 2014 Australian Open; Lang Ping, the volleyball coach who led Chinese women's volleyball team to win a silver medal at the 2014 Volleyball World Championship; and Zhang Hong, the skater who won a gold medal at the 2014 Sochi Winter Olympics. All of these celebrated athletes achieved successful careers through

<sup>&</sup>lt;sup>2</sup>Our goal was to recruit an equal number of student collaborators in both cities, but variation in student attendance resulted in slight oversampling in Guangzhou.

international, rather than domestic, sports competitions. The emphasis on international sports success makes this report a suitable treatment to examine the politicization of sports and its impact on public opinion. The report was approximately 2 minutes long and included snippets of athletes' acceptance speeches as they received awards. Considering the possibility of demand characteristics, or "pretest sensitization" (Aronson et al. 1989; Druckman et al. 2011), we employed a posttest-only experimental design (Campbell and Stanley 1963). Each participant was randomly shown a treatment video on a tablet before answering a survey or simply given a survey if selected to be in the control group.

We selected television broadcast as treatment, instead of reports from print or online media, for two reasons. First, television is the medium with the highest, near-universal penetration rate in China, and there was little rural-urban difference.<sup>3</sup> Moreover, a recent study finds that among both traditional and new media outlets, television is the most trustworthy in China (Zhou et al. 2014). Second, despite the importance of television in political communication, it remains understudied. A survey of recent scholarship shows that about 65 percent of the articles on media politics in China published between 1981 and 2010 focused on newspapers (Stockmann 2010). Therefore, television is crucial in helping us better understand the public opinion effect of sports as a form of political communication in China.

### Survey Instrument

In the post-treatment survey, we included four categories of questions. The first category measures compliance with the local governments. We used questions on obeying government officials during disputes and natural disasters as proxies of compliance, a strategy used by recent studies (Huang, 2015; Truex 2017). The second category measures satisfaction with the local governments.

To differentiate overall evaluations of government performance from specific issue stances, we asked the third category of questions regarding a contested, prevalent issue in local governance in China – demolition and relocation, or *chaiqian* (hereafter referred to as CQ). Issues related to eminent domain have generated widespread discontent and confrontation over land seizure and insufficient compensation (Hsing 2010). Many media reports on this issue, as a result of pro-regime spin, emphasize the greed of certain residents in asking for excessive compensation for demolition as well as their obstruction of social order and stability. Other media reports show sympathetic tones toward local residents, highlighting their loss of property and livelihood. We chose the CQ issue, rather than other contentious issues such as pollution, because this issue is clearly attributable to the government, unlike pollution for which people may blame irresponsible businesses while overlooking or downplaying the government's role. Furthermore, the CQ issue, albeit varying regionally, is a national phenomenon.

We used participants' evaluations of their local governments, rather than the central government, to measure their opinions related to this issue because government

<sup>&</sup>lt;sup>3</sup>According to the *China Statistical Yearbook*, the penetration rate of television in China in 2015 was 98.77 percent.

handling of the CQ issue varies by region and is primarily judged locally. Moreover, other research on China has shown that respondents generally answer highly positively about central government performance (Saich 2007). Given that we would likely obtain little variation in response, we did not want to bias our results by introducing a question about the central government that may prompt respondents to become fearful of imagined government surveillance.

The final category of questions measures demographics, helping us understand the participant pool. A full list of questions used in the survey experiment is included in the online appendix within the Harvard Dataverse Network; the appendix contains wording for all questions analyzed in this article.

An important note on the research design concerns the original scope of this project. Our original motive was to compare how different media treatments, including the sports report and CQ reports, affect political opinions. However, due to production errors, the CQ videos were not suitable as treatment, so we removed the CQ groups after the experiment and proceeded with simply examining whether the sports report had the hypothesized effect. Because the original research design did not require a placebo video, we were unable to include one. However, we try to mitigate potential biasing effects of this limitation by conducting the following extensive analysis.

#### Results

In total, we had an *n* of 249; 116 in Xi'an and 133 in Guangzhou. The response rate was 29.73 percent in Xi'an and 30.31 percent in Guangzhou, resulting in an overall response rate of 30 percent. Demographic characteristics are displayed in Table 1. Overall, the sample characteristics are similar with the main difference being that Guangzhou participants have a higher median income, as one might expect for residents of a tier-1 city. The Guangzhou sample is slightly younger and more likely to have an urban residency permit. Compared with the census statistics, the pooled sample is slightly younger and more educated than the national average and somewhat higher-income earners.

Table 1
Sample Demographics

	n	Age	Female (%)	Yearly household income	Education level	Urban <i>Hukou</i> (%)
Xi'an		32.4	47	30,000-40,000	University	51
Guangzhou	133	29.6	44	70,000–80,000	University	62
Pooled	249	30.9	46	50,000-60,000	University	57
2010 census (Urban)	n/a		49	28,843*	Secondary	57

Source: Authors' survey experiment.

Yearly household income and education level are median category values; the rest are sample means. Urban *Hukou* (household registration) indicates that the participant has an urban residency permit.
\*From 2015 *China Statistical Yearbook*.

	<b>6</b> - <b>-</b>	
Balance test	Control group	Sports treatment
Age	31.9	29.5
Income <sup>a</sup>	9.6	9.4
Married	39%	35%
Education <sup>b</sup>	4.5	4.5
Party member	26%	20%
Female	41%	54%*
Urban <i>Hukou</i>	55%	61%
White collar	70%	61%
In workforce	62%	60%
N	141	108

Table 2.

Demographic Balance

Source: Authors' survey experiment.

Our randomization procedure led to a relatively balanced assignment across treatment and control groups, as shown in Table 2. Gender is the only variable for which the null hypothesis of no difference between the treatment and control groups can be rejected at the 0.05 level. We utilize a regression approach later in this section to provide a further check on this imbalance. As expected, the regression results are nearly identical to those of means comparisons.

Results from means comparisons are shown in Table 3. Consistent with our hypothesis, the results show that watching a broadcast highlighting national sports victories generated significantly higher responses to the compliance and satisfaction questions. The average response of the sports treatment group was 0.52 point (on a 1–10 scale) higher on compliance questions and 0.77 point higher on satisfaction questions relative to the control group.

Furthermore, the compliance and satisfaction questions show a relatively high degree of consistency among the answers; the Cronbach's alpha is 0.78 and 0.84, respectively. A principal component analysis (PCA) of the two question categories shows that one component for both categories can explain a high degree of variance in these questions. The first component explains 71% of the variance in compliance questions and 75% of the variance in satisfaction questions. Assuming that the compliance and satisfaction questions measure the same unidimensional construct, we indexed these two categories into compliance and satisfaction variables in the following analysis. As shown in Table 4, compared with the control group, the sports treatment group is significantly more likely to be willing to comply and report satisfaction with their local governments.

The differences in means provide support for the hypothesis that national sports accomplishments increase favorable evaluations of the local governments. This finding is even more interesting considering that whereas the survey questions measure

a1-16 scale.

b1-6 scale.

<sup>\*</sup>Indicates significance at the 0.05 level.

Table 3
Question Responses by Experimental Groups

Mean comparisons	Control group	Sports treatment
Issue questions		
I1. Peasants are too greedy in seeking compensation in the CQ problem	5.34	5.17 (0.31)
12. Local government does not offer enough compensation in CQ cases	6.64	6.46 (0.27)
13. Peasants have legitimate compensation claims	6.43	6.42 (0.25)
14. Compensation issues are handled fairly by local government	5.79	5.77 (0.48)
Compliance questions		
C1. Should always obey local government	7.92	8.49* (0.02)
C2. Follow directions of local government when in a dispute	7.63	8.12* (0.03)
C3. Willing to help local government during natural disaster	8.68	9.09* (0.03)
Government satisfaction questions		
S1. Satisfaction with local government on the issue of traffic congestion	5.31	6.17* (0.00)
S2. Satisfaction with local government on the issue of demolition and relocation	5.64	6.30* (0.00)
S3. Satisfaction with local government overall	5.79	6.57* (0.00)
N	140	107

Source: Authors' survey experiment. Response scale: 1-10. Entries are group means.

Table 4.

Question Index Responses by Experimental Groups

	Control group	Sports treatment
Compliance Index	8.07	8.56* (0.01)
Satisfaction Index	5.58	6.35* (0.00)

Source: Authors' survey experiment. *p*-values are shown in parentheses. Response scale: 1–10. \*Indicates significance at the 0.05 level. The *t*-test assumes unequal variance in a one-sided test.

attitudes toward the local governments, the treatment focuses on sports achievements at the national level. This result thus suggests a spillover effect where a positive mood resulting from national sports accomplishments can increase support for the incumbents at the local level. This effect, however, is limited to general evaluations. On issue-specific questions, the treatment group was not significantly different from the control group, providing support for the hypothesized limits of the sports effects.

<sup>\*</sup>Indicates significance at the 0.05 level. The t-test assumes unequal variance comparing the sports group with the control group in a one-sided test. p-value is provided in parentheses.

The contrasting results on general evaluations (compliance and satisfaction) and issue-specific attitudes might indicate a certain degree of politicization of sports that goes beyond a mere mood effect. If sports victories enhance political opinions by boosting mood, then this effect ought to buoy a wide range of attitudes; if the mechanism is specific to the political implications of sports victories, then the treatment should result in movement on a narrower set of political attitudes. The contrast in Table 3 seems to suggest the latter. However, the limited scope of this study does not allow a definitive conclusion. At least on the CQ issue, respondents were not affected by the celebratory and nationalist mood in the treatment. In a recent study conducted in the USA that found a direct link between victories by one's favorite college sports teams and evaluations of the political incumbents, the results are similar in that only general evaluative attitudes, such as evaluations of the president and the respondents' university, were affected, not evaluations of the economy or the pope (Busby and Druckman 2018). Furthermore, this study directly measured the change in mood and found that to be significant in affecting political attitudes, lending support to the hypothesized mechanism of a mood effect. Other recent studies such as Healy et al. (2010) and Miller (2013) measured the incumbent vote share as the dependent variable, which also falls into the category of general evaluations rather than issue-specific attitudes. Compared with these recent studies, the sports effects in China appear similar to those in the USA, despite that China's sports teams are politicized with explicit and heavy government support. Further research is needed to differentiate the mechanisms of mood boost versus politicization of sports.

Whereas means comparison is often used to construe average treatment effects, it "does not fully summarize the information generated by a random assignment experiment" (Gaines and Kuklinski 2011, p. 446). Moreover, random imbalance may confound the treatment effects (Bowers 2011). In an attempt to remove some of the effects due to demographic imbalance and to capture potential variance associated with the treatment effect, we employ regression analysis to incorporate relevant covariates (Maxwell and Delaney 2004). The results are largely consistent with the means comparison results, shown in Table 5.

The estimated coefficient for the sports treatment group is significant (excepting for C1 where it verges on significant) and in the hypothesized direction in each model. The sports treatment led to a statistically significant increase in compliance and satisfaction with the local governments. Across all variables included in the regression analysis, sports treatment maintains the largest magnitude of effect, ranging from shifting the predicted response by 0.55 unit on question C1 to 0.94 unit on question S1.

Somewhat surprisingly, those indicating that they themselves or someone they knew had had CQ experience appeared to be more pro-government. We hesitate to speculate extensively as to why this might be the case, other than to offer some possibilities. One explanation is that conventional wisdom may be wrong on the CQ experience; at least in these cities individual experience may be, on average, positive with respect to compensation. Another reason may be that CQ experience is confounded with other variables we did not measure, such as the size of one's social network.

Table 5.
Regression Results

	C1	C2	C3	C Index	S1	S2	S3	S Index
Sports group <sup>a</sup>	0.55	0.64*	0.66*	0.60*	0.94**	0.76*	0.80*	0.84**
	(0.08)	(0.03)	(0.01)	(0.02)	(0.00)	(0.01)	(0.01)	(0.00)
Following TV news	0.19**	0.11	0.10	0.14*	0.07	0.09	0.12	0.09
	(0.01)	(0.09)	(0.11)	(0.02)	(0.31)	(0.21)	(0.11)	(0.16)
Female	0.79*	0.29	0.49	0.51*	0.45	0.32	0.13	0.31
	(0.01)	(0.34)	(0.07)	(0.04)	(0.14)	(0.29)	(0.68)	(0.25)
Married	0.96*	0.87	0.12	0.67	0.30	0.17	0.34	0.27
	(0.05)	(0.05)	(0.76)	(0.07)	(0.51)	(0.71)	(0.48)	(0.50)
While collar	0.23	0.22	-0.17	0.11	0.18	0.36	-0.08	0.14
	(0.59)	(0.58)	(0.64)	(0.74)	(0.66)	(0.38)	(0.86)	(0.71)
In workforce	-0.01	-0.16	-0.13	-0.10	-0.40	-0.16	-0.70	-0.43
	(0.98)	(0.70)	(0.71)	(0.76)	(0.32)	(0.70)	(0.11)	(0.24)
Party member	0.35	0.98**	0.70*	0.69*	0.36	0.23	-0.35	0.08
	(0.38)	(0.01)	(0.04)	(0.03)	(0.35)	(0.55)	(0.39)	(0.82)
Income	-0.02	-0.01	0.03	-0.00	-0.03	-0.03	-0.01	-0.03
	(0.63)	(0.70)	(0.28)	(0.94)	(0.37)	(0.29)	(0.80)	(0.38)
Education	0.26	0.12	0.21	0.20	0.04	0.05	0.25	0.11
	(0.21)	(0.52)	(0.22)	(0.20)	(0.83)	(0.77)	(0.23)	(0.53)
Age	-0.02	-0.02	0.01	-0.01	-0.01	-0.02	-0.01	-0.02
	(0.21)	(0.22)	(0.49)	(0.41)	(0.48)	(0.20)	(0.41)	(0.30)
Urban <i>hukou</i>	0.15	-0.03	0.05	0.02	-0.02	-0.11	0.29	0.04
	(0.65)	(0.93)	(0.86)	(0.95)	(0.96)	(0.71)	(0.39)	(0.88)
CQ experience	0.91**	1.04**	0.53*	0.83**	0.53	0.54	0.72*	0.59*
	(0.00)	(0.00)	(0.05)	(0.00)	(0.08)	(0.07)	(0.03)	(0.03)
Guangzhou	0.35	-0.13	0.44	0.24	0.62*	-0.05	0.09	0.21
	(0.28)	(0.67)	(0.11)	(0.35)	(0.04)	(0.86)	(0.79)	(0.44)
n	204	205	203	202	206	205	205	205
$R^2$	0.167	0.170	0.162	0.204	0.144	0.108	0.123	0.142

Source: Authors' survey experiment.

p-values in parentheses. For questions C1, C2, C3, S1, S2, and S3, please refer to Table 3.

As an additional check on our results, we conducted two supplemental investigations. The first test examined the potential biasing effects of gender imbalance on the treatment effects. If our hypothesis holds, then the estimated effects of sports

p < 0.05; p < 0.01.

<sup>&</sup>lt;sup>a</sup>Sports group is a dummy variable where 1 refers to the participants randomly assigned to the treatment group.

treatment on issue-specific attitudes should continue to be non-significant and close to zero after adding gender into the regression models. As shown in Table 6, we do not observe any significant difference in issue-specific attitudes as a result of receiving the treatment.

Table 6.
Issue Regression Results

	l1	I2	13	14
Sports group <sup>a</sup>	-0.27	-0.21	0.01	-0.04
	(0.50)	(0.54)	(0.98)	(0.90)
Following TV news	0.06	-0.03	0.20**	0.10
	(0.54)	(0.68)	(0.00)	(0.17)
Female	-0.19	0.41	0.71*	0.41
	(0.64)	(0.24)	(0.02)	(0.22)
Married	0.03	0.84	-0.23	0.85
	(0.96)	(0.11)	(0.61)	(0.09)
White collar	-0.71	0.49	0.52	-0.00
	(0.20)	(0.29)	(0.20)	(1.00)
Employed	-0.63	-0.25	0.22	-0.44
	(0.24)	(0.60)	(0.58)	(0.32)
Party member	-0.65	-0.15	-0.35	-0.26
	(0.20)	(0.73)	(0.36)	(0.53)
Income	0.07	-0.01	-0.04	-0.05
	(0.13)	(0.73)	(0.20)	(0.19)
Education	0.04	0.40	0.14	0.34
	(0.88)	(0.06)	(0.47)	(0.10)
Age	-0.02	0.04*	0.06**	-0.04*
	(0.34)	(0.02)	(0.00)	(0.03)
Urban <i>hukou</i>	0.21	0.19	0.11	-0.27
	(0.62)	(0.60)	(0.73)	(0.43)
CQ experience	0.11	-0.70*	-0.25	0.08
	(0.79)	(0.04)	(0.40)	(0.80)
Guangzhou	0.25	-0.83*	-0.71*	-0.38
	(0.54)	(0.02)	(0.02)	(0.26)
п	205	203	202	204

Source: Authors' survey experiment.

p-values in parentheses. For questions I1-I4, please refer to Table 3.

p < 0.05; p < 0.01.

<sup>&</sup>lt;sup>a</sup>Sports group is a dummy variable where 1 refers to the respondents randomly assigned to the sports video group. All other respondents are put to the category 0.

	l1	12	13	14	S2
l1	1				
12	0.14	1			
13	-0.04	0.41	1		
14	0.20	-0.01	0.21	1	
S2	0.18	0.00	0.08	0.41	1

Table 7.

Correlation Between Issue and Satisfaction Questions

The second test examined the potential correlations between issue-specific attitudes and general evaluations to justify our division of questions into the two categories. The results of the pairwise correlations are shown in Table 7.

In general, the correlations indicate that these variables are not strongly related. The two largest correlations are between S2 and I4, and between I2 and I3, though 0.41 represents a relatively weak relationship. Their positive correlations, however, indicate a consistently positive or negative attitude toward the CQ issue, suggesting response validity. Overall, we interpret these weak correlations as indications that participants were answering each issue question in its own right, rather than as part of a shared, larger construct regarding government performance that would predict both issue-specific and general evaluative answers. In particular, the issue-specific questions were phrased in a way that asked about assigning blame for a particular public policy problem, whereas the satisfaction questions asked the participants for a summative judgment regarding their local governments' performance. The weak results in the correlation matrix of issue questions, contrasting with the high internal consistency in compliance and satisfaction questions discussed earlier, provide justification for the division of the questions.

The analysis so far demonstrates that national sports achievements increase compliance and satisfaction with local governments. On issue-specific questions, however, the same effect does not appear to exist. This result lends support to our hypothesis that sports act through a psychological mechanism of mood enhancement, which increases favorability of the status quo but does not affect opinions that require rational assessment of concrete issues.

As an initial attempt at understanding the public opinion effect of national sports accomplishments, this study has several limitations. First, the change in mood was not directly measured as the mediating factor; in our study, we tested the psychological hypothesis through an indirect but extensive analysis of the data. A better approach would use a within-subject design. Second, the hypothesized transience of the sports effect was not captured. Due to practical constraints and concern for privacy, we did not track the participants to document their evaluations of the local governments after the survey experiment. Finally, as much as we tried to recruit diverse participants, the sample inevitably skewed toward the younger and more educated segments of the urban population. Future research shall address these design and measurement issues to gain a better understanding of the scope and salience of sports and mood in affecting public opinion.

### **Concluding Remarks**

This study shows that national sports achievements increase citizen compliance and satisfaction with the local governments in China. The results suggest that sports can serve as an effective type of implicit propaganda. We argue that the psychological effect of enhanced mood that favors the status quo is the likely causal mechanism.

Our results shed light on the recent developments in sports politics, such as the Chinese government's push to attract top-tier foreign talents into their domestic soccer leagues (Huang 2016). The positive causal link between sports and preference for the incumbents also explains the phenomenon of local politicians in democracies allocating lavish funds on expensive new stadiums for local sports teams, a set of decisions that have long deemed to be economically irrational (Siegfried and Zimbalist 2000).

Finally, if the psychological effect of sports victories holds true, there should be a larger set of opinions and behavior influenced by similar types of implicit propaganda. Conceptually sports fit into a larger category of feel-good events such as military parades and nationalist songs that are designed to elicit an upbeat, optimistic, and generally happy mood, rather than making an issue-specific point. Future research can further this line of inquiry by investigating other related types of indirect propaganda and comparing the effect significance and size. In addition, investigating whether poor performance in international or local sports competitions affects public opinion would also illuminate the relationship between sports and politics.

#### References

Achen, Christopher H. and Larry M. Bartels. 2016. Democracy for Realists: Why Elections Do Not Produce Responsive Government. Princeton, NJ: Princeton University Press.

Aronson, Elliot, Phoebe C. Ellsworth and J. Merrill Carlsmith. 1989. Methods of Research in Social Psychology, 2nd ed. New York, NY: McGraw-Hill.

**Bagues, Manuel and Berta Esteve-Volart.** 2016. Politicians' Luck of the Draw: Evidence from the Spanish Christmas Lottery. *Journal of Political Economy* 124(5):1269–94.

Bassi, Anna. 2019. Weather, Risk, and Voting: An Experimental Analysis of the Effect of Weather on Vote Choice. Journal of Experimental Political Science 6(1):17–32.

Billings, Andrew C., Kenon A. Brown and Natalie A. Brown. 2013. 5, 535 Hours of Impact: Effects of Olympic Media on Nationalism Attitudes. *Journal of Broadcasting and Electronic Media* 57(4):579–95.

Bowers, Jake. 2011. Making Effects Manifest in Randomized Experiments. In *Cambridge Handbook of Experimental Political Science*, eds. Druckman James N., Green Donald P., Kuklinski James H. and Lupia, Arthur. New York, NY: Cambridge University Press, 459–80.

**Brownell, Susan.** 1995. Training the Body for China: Sports in the Moral Order of the People's Republic. Chicago, IL: University of Chicago Press.

Busby, Ethan C. and James N. Druckman. 2018. Football and Public Opinion: A Partial Replication and Extension. Journal of Experimental Political Science 5(1):4–10.

Busby, Ethan C., James N. Druckman and Alexandria Fredendall. 2017. The Political Relevance of Irrelevant Events. *The Journal of Politics* 79(1):346–350.

**Campbell, Donald T. and Julian Stanley.** 1963. Experimental and Quasi-Experimental Designs for Research. Chicago, IL: Rand McNally.

Chen, Dan and Andrew W. MacDonald. 2019. Replication Data for: Bread and Circuses: Sports and Public Opinion in China. *Harvard Dataverse*, V1. doi: 10.7910/DVN/BWCX3E

Clore, Gerald L. and Jeffrey R. Huntsinger. 2007. How Emotions Inform Judgment and Regulate Thought. Trends in Cognitive Sciences 11(9):393–99.

- Druckman, James N., Donald P. Green, James H. Kuklinski and Arthur Lupia. 2011. Cambridge Handbook of Experimental Political Science. New York, NY: Cambridge University Press.
- Forgas, Joseph P. 2000. Feeling is Believing? The Role of Processing Strategies in Mediating Affective Influence on Beliefs. In *Emotions and Beliefs: How Feelings Influence Thoughts*, eds. Frijda, Nico H., Manstead, Antony S. R. and Bem, Sacha. New York, NY: Cambridge University Press, 108–44.
- Gaines, Brian J. and James H. Kuklinski. 2011. Treatment Effects. In Cambridge Handbook of Experimental Political Science, eds. Druckman, James N.,Green, Donald P., Kuklinski, James H., and Lupia, Arthur. New York, NY: Cambridge University Press, 445–58.
- General Administration of Sports. 2016. The 13<sup>th</sup> Five-Year Plan for Sports Development (Tiyu Fazhan Shisanwu Guihua). General Administration of Sports, May 5, Retrieved from http://www.sport.gov.cn/n316/n340/c723004/content.html
- Hagen, Lutz M., Reimar Zeh, Nina Reiling and Maike Müller-Klier. 2004. "Soccer in the Media, Public Mood, and How the German Ruling Coalition Won the Last National Elections." In *Paper presented at the Annual Meeting of the International Communication Association*, New Orleans, 27 May 2004.
- Han, Chunping. 2012. Satisfaction with the Standard of Living in Reform-Era China. *The China Quarterly* 212:919–40.
- Healy, Andrew J. and Neil Malhotra. 2010. Random Events, Economic Losses, and Retrospective Voting: Implications for Democratic Competence. Quarterly Journal of Political Science 5(2):193–208.
- Healy, Andrew J., Neil Malhotra and Cecilia Hyunjung Mo. 2010. Irrelevant Events Affect Voters' Evaluations of Government Performance. Proceedings of the National Academy of Sciences 107(29): 12804–809.
- **Hsing, You-Tien**. 2010. The Great Urban Transformation: Politics of Land and Property in China. New York, NY: Oxford University Press.
- Huang, Haifeng. 2015. Propaganda as Signaling. Comparative Politics 47(4):419-437.
- Huang, Zheping. 2016. China's Soccer Teams Spent \$430 Million Buying New Players to Impress President Xi Jinping. Quartz, March 1. Retrieved from http://qz.com/627311/chinas-soccer-teams-spent-430-million-buying-new-players-to-impress-president-xi-jinping/
- Huber, Gregory A., Seth J. Hill and Gabriel S. Lenz. 2012. Sources of Bias in Retrospective Decision Making. American Political Science Review 106(4):720–41.
- **Keys, Barbara.** 2003. Soviet Sport and Transnational Mass Culture in the 1930s. *Journal of Contemporary History* 38(3):413–34.
- Michelitch, Kristin and Stephen Utych. 2018. Electoral Cycle Fluctuations in Partisanship: Global Evidence from Eighty-Six Countries. *The Journal of Politics* 80(2):412–27.
- Miller, Michael K. 2013. "For the Win! The Effect of Professional Sports Records on Mayoral Elections". Social Science Quarterly 94(1):59–78.
- People's Liberation Army Daily. 2001. Long Live Motherland Congratulations to Beijing for Its Successful Bid for the Olympics (Zuguo Wansui Qingzhu Beijing Shenao chenggong). People's Liberation Army Daily, July 16, Retrieved from http://www.people.com.cn/GB/guandian/26/20010716/512342.html
- Lu, Zhouxiang and Fan Hong. 2014. Sport and Nationalism in China. Abingdon, UK: Routledge.
- Maxwell, Scott E. and Harold D. Delaney. 2004. Designing Experiments and Analyzing Data: A Model Comparison Perspective, 2nd ed. New York, NY: Routledge.
- Saich, Tony. 2007. Citizens' Perceptions of Governance in Rural and Urban China. *Journal of Chinese Political Science 12*(1):1–28.
- Schwarz, Norbert and Gerald L. Clore. 1983. Mood, Misattribution, and Judgments of Well-Being: Informative and Directive Functions of Affective States. *Journal of Personality and Social Psychology* 45(3):513–23.
- Siegfried, John and Andrew Zimbalist. 2000. The Economics of Sports Facilities and Their Communities. The Journal of Economic Perspectives 14(3):95–114.
- Stockmann, Daniela. 2010. Information Overload? Collecting, Managing, and Analyzing Chinese Media Content. In Contemporary Chinese Politics: New Sources, Methods, and Field Strategies, eds. Carlson Allen, Gallagher Mary E., Lieberthal Kenneth, and Manion Melanie. New York, NY: Cambridge University Press, 107–28.
- **Truex, Rory.** 2017. Consultative Authoritarianism and Its Limits. *Comparative Political Studies* 50(3): 329–61.

- Xu, Guoqi. 2008. Olympic Dreams: China and Sports, 1895–2008. Cambridge, MA: Harvard University Press.
- Yen, HsiuJu Rebecca and Shih-Chieh Chuang. 2008. The Effect of Incidental Affect on Preference for the Status Quo. *Journal of the Academy of Marketing Science 36*(4):522–537.
- Zhang, Xiaosong, Peng Gao and Zewei Zhang. 2017. Xi Jinping: Create New Conditions for National Sports and Accelerate Building Our Nation into a Strong Sports Nation. (Xi Jinping: Kaichuang woguo tiyu shiye fazhan xinjumian, jiakuai ba woguo jianshe chengwei tiyu qiangguo). Xinhua News Agency. August 27, Retrieved from http://www.xinhuanet.com/politics/2017-08/27/c\_1121550898.htm
- **Zhou, Shuhua, Hongzhong Zhang and Bin Shen**. 2014. Comparison and Magnitude Credibility: Whom to Trust When Reports Are Conflicting? *The Open Communication Journal* 8:1–8.

Cite this article: Chen D and MacDonald AW (2020). Bread and Circuses: Sports and Public Opinion in China. *Journal of Experimental Political Science* 7, 41–55. https://doi.org/10.1017/XPS.2019.15