Modern Dictators: Olympic Sports and Regime Stability

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Abstract

Authoritarian states are commonly believed to go to much greater lengths than their democratic counterparts to excel in international sporting events, like the Olympics, and to have had remarkable success as a result. However, all authoritarian regimes are not equally likely to pursue this goal. Personalistic regimes, I argue, are more likely than other regimes to seek and achieve athletic success because personalist leaders not only derive their legitimacy from their own personal attributes, which makes them more likely to pursue prestige-enhancing activities abroad, but they also have more discretionary power than other leaders to pursue their goals. Athletic achievement, though, is unlikely to strengthen these leaders' positions in power as it is a weak form of building political support on its own. Consistent with this argument, the statistical analysis in this paper indicates that, in general, authoritarian states are not more successful than democracies at the Olympics, but that personalistic regimes are more successful than democracies as well as other autocratic regimes, and that greater success at the Olympic Games does not make personalist leaders less likely to be forcibly expelled from power within one year of the Games. Word Count: 9,898

In the twenty-first century, authoritarian states are employing a much wider range of tactics in order to remain in power (Dobson 2012). Rather than compelling actors through mass arrests, torture and repression, dictators are using these new tactics to cajole, persuade, and even charm people into supporting their regimes. Not only do authoritarian regimes hold nominally democratic elections for this purpose (Blaydes 2010; Magaloni 2008; Malesky and Schuler 2010; Malesky, Schuler and Tran 2012), but they also deploy trolls to plant positive information about their regimes on the internet; construct grandiose buildings by world renown architects with the hopes of winning the title of the only, tallest, or most expensive of its kind in the world; and even aspire to make a name for themselves in international sports by hosting and excelling in major sporting events, like the Olympics and World Cup (Bairner and Molnar 2010; Grix 2015; Grix and Brannagan 2016).

In order to excel at these events, authoritarian states have reportedly gone to much greater lengths than their democratic counterparts. Not only are these states known to have imposed intense pressure on their athletes to win and to have forced athletes to endure extreme training at young ages, but they have also been found to cheat in order to gain a competitive edge by giving athletes performance-enhancing drugs, buying off judges, manipulating equipment, and lying about their athletes' ages.³ In the most pervasive and well-known case of state-sponsored doping, East Germany drugged as many as ten thousand athletes for decades without the athletes knowledge, causing serious health problems for these athletes later in life. At the same time, authoritarian states have rewarded successful athletes with incredible riches often involving large cash bonuses, jobs, apartments and luxury cars.

¹Tom Parfitt, "My Life as a Pro-Putin Propagandist in Russia's Secret 'Troll Factory'," *The Telegraph*, 24 June 2015.

²Hiufu Wong, "World's Next Tallest Tower: Super Green, Very Pink," CNN, 26 June 2014

³Adam Taylor, "The Incredible Pressure China Puts on Its Olympic Athletes," Business Insider, 30 July 2012.

While athletes who bring home medals in authoritarian states are richly rewarded and lauded as national heroes, those who do not are condemned, publicly humiliated, and punished with financial ruin, imprisonment, and torture. Uday Hussein, as head of the Iraqi National Olympic Committee, physically abused and threatened athletes for losing matches, and even kept a torture scorecard tracking how many times individual players had been beaten.⁴ In North Korea, unsuccessful athletes have been forced into labor camps, and publicly excoriated for betraying the communist nation's ideological struggle and its supreme leader.⁵ Belarus' president, Alexander Lukashenko, is also known to have verbally abused his country's unsuccessful athletes. When Belarus' national soccer team did not score against Spain in a 2012 World Cup qualifier, he derided the team as a "disgrace" and as having "shit themselves".⁶

But, not all authoritarian governments do this. Some dictators do not even know the name of their countries' national soccer teams.⁷ Leaders in personalist regimes, in which one individual dominates the government apparatus and its instruments (Colgan and Weeks 2015), have more incentives than leaders in other authoritarian regimes to use international sports to bolster their power, and are more likely to be successful in this regard, I argue, because personalist leaders not only derive their legitimacy from their own personal attributes, which makes them more likely to pursue prestige-enhancing activities abroad, but they also have more discretionary power than other autocrats to pursue their goals. Success in international sports, I further argue, is a weak form of building domestic support on its own, though, and is unlikely to strengthen personalist leaders.

To shed light on this issue, I unpack the reasons why personalist leaders are likely to

⁴ "Which Teams Have Been Punished for Defeats?" The Guardian, 29 September 2009.

⁵Ericka Andersen, "North Korea to Olympians: No Medals Means Labor Camp," *The Daily Signal*, 8 August 2012; "North Korea's Failed World Cup Footballers Undergo Public Mauling," *The Guardian* 30 July 2010.

⁶ "Olympics-Uncompromising Lukashenko Blasts Belarus Games Failure", Reuters, 26 October 2012.

⁷ "I Didn't Know Cranes Was National Team - Museveni," National 7 April 2006.

pursue success in international sports, and test systematically whether personalist regimes are more likely to be successful at the Olympics than other regimes through a statistical analysis of the forty-six Olympic Games that occurred between 1908 and 2014. Why the Olympics? Historically, the Olympics are the most well-known and widely watched international sporting competition, offering states as such the best opportunity to use sports for political purposes. It is also the most inclusive. While only 32 countries participated in the 2014 World Cup, 89 countries and 205 countries participated in the 2014 Winter Olympics and the 2012 Summer Olympics respectively. Also, unlike the World Cup, the Olympic Games include many different sporting events, so that no country has an advantage over another based on the popularity of a particular sport in their country.

While there is a rich historical literature on the relationship between sports and politics (Guttmann 1992; Hill 1996; Bairner and Molnar 2010), and much anecdotal evidence about the athletic success of authoritarian regimes, the relationship between authoritarianism and athletic achievement has never been tested empirically. By not only testing this relationship, but also by differentiating among authoritarian regimes, this analysis adds to an important and growing literature, which examines how distinctions among authoritarian regimes affect the foreign policy behavior of states, including their likelihood of reneging on threats (Weeks 2008), acquiring nuclear weapons (Way and Weeks 2013), folding in response to international sanctions (Wright and Escribà-Folch 2010), engaging in military conflicts (Reiter and Stam 2003; Lai and Slater 2006; Peceny, Beer and Sanchez-Terry 2002), and complying with international treaties (Chyzh 2014). It also furthers our understanding of personalist regimes while offering an alternative explanation for some of these outcomes, by demonstrating how the nature of personalistic regimes encourages prestige-enhancing policies abroad and how these policies influence leadership stability.

Politics at the Olympics

The Olympics are reputed to be an apolitical event about excellence in sport. "We are not a political body, we are a sports organisation," Jacques Rogge, the long-time president of the International Olympic Committee (IOC), stressed when he retired in 2013 ahead of mounting pressure to relocate the Sochi Games due to Russia's poor human rights record.⁸ Despite such pronouncements, the Olympics and politics are deeply intertwined.

How International Politics Affects the Olympic Games

Geopolitical events have resulted in the Olympics being cancelled, as was the case in World Wars I and II, countries, such as South Africa under the apartheid and Afghanistan under the Taliban, being banned from the Games, and in other countries refusing to participate in the Games. The United States led the largest boycott in Olympic history against the 1980 Moscow Games to protest the Soviet invasion of Afghanistan, while China led the longest, boycotting the Games for more than 20 years because Taiwan, whose independence it disputed, was allowed to participate in the Games. For years, Taiwan also refused to participate in the Games because it was not allowed to compete under the name of the Republic of China. When forced to march under the name of Formosa at the opening ceremonies of the 1960 Rome Games, Taiwan's placard-bearer carried a sign "under protest".

International political events have also influenced the way in which the Games have been conducted. The Olympic Village was created during the Great Depression to reduce athletes' housing costs at the 1932 Los Angeles Games, while four years later, Nazi Germany invented the torch relay to call attention to the greatness of the German Reich at the 1936 Berlin Games (Mandell 1971). At the 2008 Beijing Games, China, also driven by nationalist intent, had countries march in the Parade of Nations according to the number of strokes in the first David Bond, "Jacques Rogge: Departing IOC Chief Transformed Olympic Body," BBC, 9 September 2013.

character of their name written in simplified Chinese so that Taiwan was forced to march under the letter "C" rather than "T" (Lee, Bairner and Tan 2010).

Political rivalries have also disrupted the competition. Iranian athletes have feigned injuries and illnesses to avoid bouts against Israeli athletes, while Lebanese athletes have refused to train alongside Israelis.⁹ At the London Games, North Korea's women's football team refused to play its match against Colombia when the South Korean flag was mistakenly displayed alongside the names of the North Korean lineup. The most well-known example of political rivalries affecting the conduct of the Games, though, is the 1956 semifinal water polo match between Hungary and the Soviet Union, which came on the heals of the Soviet invasion of Hungary and resulted in both countries' teams physically assaulting each other during the competition (Gray and Raney 2006; Hadás 2010).

How the Games Affect Domestic Politics

The Olympics Games have also been source of domestic upheaval. Non-state actors opposed to the Games have organized against them, including anti-poverty groups opposed to the high costs and uncertain economic benefits of the Olympics (Baade and Matheson 2002; Kasimati 2003; Preuss 2004), civil rights groups outraged by people's evictions from their homes to construct event sites, and environmental groups eager to avoid the Games' negative impact on air quality and water, among other things (Hayes and Karamichas 2011).

Non-state actors have also mobilized around the Olympics to increase attention for goals unrelated to the Games (Brownell 2012; Harvey et al. 2015). Eric Robert Rudolph, for example, bombed the 1996 Atlanta Games to shame the United States for its legalization of abortion, while pro-Tibet activists organized largely peaceful rallies around the Beijing Olympic torch relay to demand independence for Tibet and protest against human rights

⁹ "Iranian and Israeli Athletes Not Expected to Face Off in London Olympics," The Washington Post, 24 July 2012.

violations in China. More recently, gay-rights advocates mobilized around the 2014 Sochi Olympics to advocate for gay rights and to challenge a Russian law prohibiting the distribution of propaganda on non-traditional relationships to minors.

How the Games Have been Used to Further International Politics

The Olympics have also been used to further various international goals, the least effective of which has been international peace. Although the Olympic Charter identifies international peace as a goal of the Games, the Olympics have not ended violence between states (Hoberman 2011). States have made overtures toward peace to host the Games, but these overtures have only been superficial and temporary. Prior to the 1936 Olympics, for example, Nazi Germany removed anti-Semitic signs from public areas and expunged anti-Semitic discourse from its newspapers, but still did not allow Jews to compete in the Games, continued to operate concentration camps during them, and only three years later invaded Poland and started WWII (Young 2010). The Games have even resulted in violence, as in the 1972 Munich Games, where the terrorist group, Black September, demanding the release of over two hundred Palestinians imprisoned in Israel, murdered eleven Israeli athletes and coaches (Andrews, Schultz and Silk 2010).

States, however, have successfully used the Olympics for international gain in other ways. Developing countries, like South Korea, and China, have used the Games to position themselves among the ranks of developed countries (Allison and Monnington 2002; Guoqi 2008; Grix 2012). To make this point, South Korea hung huge banners to obscure poor and ramshackle neighborhoods along the marathon route of the 1988 Seoul Games (Vitiello 2006), while China forced so-called undesirables (e.g., street children, homeless, and prostitutes) into camps at the 2008 Beijing Games. South Korea also tried to use the Seoul Games to declare itself as the sole legitimate regime on the Korean peninsula (Lee 2010). To prevent

this, North Korea claimed that the South was too unstable to host the Games and even planted a bomb in an airport near Seoul to make this point (Lee 2010, 119).

Finally, during the Cold War, both the United States and the Soviet Union used the Olympics to assert their soft power (Nye Jr. 1991), claiming that their Olympic success demonstrated the superiority of democracy and capitalism in the case of the former, and communism in the case of the latter, over other political systems (Riordan 1999; Howell 1975; Lee and Bairner 2009; Bloyce and Smith 2010, 57). Even after the end of the Cold War, the United States has continued to use the Olympics for these ends. The US used the fact that Afghanistan and Iraq participated in the 2004 Athens Olympics to justify its invasion of these countries, claiming that were it not for the US' actions neither country would have competed in these Games (Butterworth 2007, 2016). While both authoritarian states and democracies have an incentive to use the Olympics to pursue their international goals (Nye Jr. 1991; Reiche 2015; Grix and Brannagan 2016), personalist regimes have a greater incentive than democracies and other authoritarian regimes to use the Games to achieve their domestic political objectives.

A Personalist Edge?

Personalistic regimes are non-democratic regimes in which the national leader has wide discretionary power over policy decisions and the selection of regime personnel because political, bureaucratic, and security institutions are weak and lack autonomous bases of support (Geddes 2003). Personalistic leaders do not claim the right to rule through electoral institutions as in democracies; nor do they seek legitimacy through the promulgation of a particular ideology as in party-based regimes, or through either familial ties, tradition, or divine right as in monarchies and theocracies. Instead, personalist leaders generally seek legitimacy through their own personal attributes – their intelligence, charisma, skills, and so

forth (Linz 2000; Ezrow and Frantz 2011; Frantz and Stein 2012).

As a result, personalistic leaders commonly try to aggrandize themselves, that is, to accentuate, expand, and exaggerate how great they are in order to legitimate their rule. Personalist leaders have sought to demonstrate their greatness not only domestically by building monuments and holding parades in their own honor, but also internationally by trying to enhance their countries' prestige abroad. Since the state and the premier are fused in personalist regimes, raising the prestige of the state invariably raises that of its national leader (Ezrow and Frantz 2011). Personalist leaders may try to enhance their countries' international prestige in many different ways, including joining international organizations, acquiring nuclear weapons, engaging in militarized disputes, and just as importantly arguably, through success in international sports.

Athletic success can enhance the international prestige of countries by signaling to other states that these countries are successful, talented, rich, healthy and so forth. And, unlike some other ways in which states can increase their prestige abroad, athletic success does not have significant reputational and material costs for countries. Seeking to acquire nuclear weapons, for example, can result in some states shunning, isolating, and even sanctioning other states; joining international organizations can entail major financial and security responsibilities, while engaging in militarized disputes can result in significant economic and human costs. Success in international sports is also different from many of these policies because it is something states can achieve without the support or acceptance of other countries. However, if personalist regimes are not successful in winning sports internationally, personalist leaders risk undermining their legitimacy as they do if they are unsuccessful in any of these policies.

How is a personalist regime's success in international sports a reflection of its national leader? Personalist leaders commonly claim that the success of their countries' athletes

in international competitions is due to the welfare that their states provide citizens under their rule (Lee and Bairner 2009). Economic prosperity is essential for winning medals (Grimes, Kelly and Rubin 1974; Levine 1974; Ball 1972; Bernard and Busse 2004; Johnson and Ali 2004). More prosperous countries are able to invest more in winning medals than less wealthy countries, and a higher investment in sport, which results in better training, equipment, and coaches, is likely to yield a bigger medal haul. In general, nutrition is also higher in wealthier countries so that children with the potential to become world-class athletes are able to develop properly in order to realize their potential.

Personalist leaders also often claim that their athletes' success is due to their being imbued with the values they and their regimes represent, such as hard work, courage, independence, and so forth. Athletes in personalist regimes, in turn, often publicly attribute their success to their national leaders (either out of genuine appreciation or duty), commonly thanking these leaders for giving them the strength, courage and inspiration to win and even dedicating their medals to them. In Kazakhstan, for example, two-time Olympic gold-medal winner Ilya Ilyin said of Kazakhstan's president after the London Games, "I am thankful for having such a person as you, Nursultan Abishevich, in my life. You are a hero, a champion and a man who always supports when you need it." In contrast, when athletes in personalist regimes have failed to win medals, they have apologized to their leaders for betraying their countries.

Not only do personalist leaders have more incentives than other leaders to pursue success in international sports, but they also have more discretion than them to direct government spending towards elite sports and to cheat in order to gain a competitive edge. Both pursuits can help countries earn more medals. Along with better facilities and better training,

¹⁰ "Today President Nursultan Nazarbayev Takes Part in the Solemn Ceremony of Honoring of Winners and Medallists of the XXX Summer Olympic Games," Official Site of the President of the Republic of Kazakhstan, 17 August 2012. Accessed: 31 March 2016.

increased spending can allow countries to dole out performance bonuses to athletes. Personalistic regimes offer athletes some of the highest bonuses in the world for winning Olympic medals. Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Russia and Uzbekistan reportedly award gold-medal-winning athletes more than one hundred thousand US dollars, with Azerbaijan topping the list at more than half a million US dollars. Only Singapore is reputed to pay higher. The US, by contrast, awards gold-medal-winning athletes twenty-five thousand dollars.

Personalistic leaders are able to direct more spending towards international sports than democratic leaders because, like other autocrats, they do not depend on the public-at-large to remain in power. The public-at-large is not likely to tolerate a significant investment in elite sports because the benefit of it accrues to a narrow group of individuals, namely athletes and coaches with the potential to compete at this level. The military, political and business elites, which personalist leaders instead depend on for power, are more likely to support investment in elite sports, even though they do not directly benefit from it either, because the benefits that these elites accrue under the regime depend on the personalist leaders' survival in power.¹² These elites are weaker than in other autocrats regimes (Geddes, Wright and Frantz 2014; Ezrow and Frantz 2011). Personalist leaders buy these elites' support with particularistic favors and commonly rotate regime personnel in and out of office to prevent them from developing autonomous bases of support.

Cheating can also give countries an edge over their competitors. Performance-enhancing drugs, including steroids and human growth hormone (HGH), build muscle mass and enhance recovery so that endurance athletes can train harder with less rest. Other forms of

¹¹Feruza Rakhmonova, "The Financial Incentives for Central Asian Olympians," BBC Uzbek, 1 August 2012; Antoine Blua, "Money For Medals: How Sochi Athletes Stand To Cash In," Radio Free Europe/Radio Liberty, 04 February 2014.

¹²It is debatable whether this constituency is smaller or larger than in other regimes (Bueno de Mesquita et al. 2003; Wright 2009; Chang and Golden 2010; Pickering and Kisangani 2010).

doping, such as blood transfusions, improve performance by increasing the aerobic capacity of athletes. Although drug testing has improved over the decades, with the invention of long-term metabolite and out-of-competition testing, doping is still possible today. Reliable methods to detect some forms of doping, such as blood transfusions, are not yet available, while masking agents can hide the presence of certain drugs. Cheating is not limited to performance-enhancing drugs. It extends to lying about athletes' ages so that younger, lighter and more flexible athletes can compete in events where this is an advantage, manipulating equipment, buying off judges, and so forth.

Personalistic leaders also have more discretion to cheat in sports than democrats or other autocratic leaders due to their monopoly over state institutions. Their control over these institutions allows personalistic leaders to utilize the skills, talents and resources of multiple branches of government towards this end. It also reduces the number of independent checks on leaders' actions in order to reduce the likelihood of their being caught. Vladimir Putin's tight grip over Russia's political, bureaucratic, and security institutions allowed Russia to conduct a systematic state-sponsored doping program in the last decade. The doping program involved Russia's Ministry of Sport, which ordered the director of the country's anti-doping laboratory to replace certain athletes tainted samples with clean samples, as well as Russia's intelligence service. The Federal Security Service (FSB), according to the lab's director, intimidated staff, helped switch samples, and worked as doping control officers. Putin's tight control over the media also helped avoid detection.

However, success in international sports independent of other prestige-enhancing activities is unlikely to help personalist leaders remain in power. Legitimacy is essential to the ability of leaders to remain in power, as psychological studies have shown (Tajfel 1978; Jost and Major 2001). According to these studies, people are willing to accept the status quo (i.e., social hierarchies and suboptimal policies) if they consider the status quo legitimate.

Lacking legitimacy, leaders are compelled to resort to force in order to remain in power (Gurr 1971). Finally, success in international sports can enhance countries' international prestige and people's pride in their nation, especially if countries win many medals (Allison and Monnington 2002; Evans and Kelley 2002; van Hilvoorde, Elling and Stokvis 2010; Naylor et al. 2012).

However, the effects of international sports on these outcomes are generally small and short-term (van Hilvoorde, Elling and Stokvis 2010). In general, countries experience only a modest boost in international prestige and national pride around the sporting events themselves. Such modest gains are unlikely to help personalist leaders deter major threats to their power. Juan Perón, was a serious proponent of international sports, investing heavily in sports, naming himself the head of the national sports administration and helping to launch the Pan-American Games. Although sport helped burnish Perón's image, this was not enough to overcome the protracted rift between Perón and the Catholic Church, which resulted in the 1955 military coup d'etat against Perón after he officially declared church and state to be separate.

Coups d'etat, like that which deposed Perón, are motivated by a number of factors including power struggles, as in Argentina, personality or ideological conflicts, and economic crises (Londregan and Poole 1990; O'Kane 1993; Powell 2012; Kim 2016). They are the most common way in which personalist leaders are removed from power. Between 1946-2008, 47% of personalist leaders who left office were removed from power by coups d'etat. Popular protests are the second most common way in which personalist leaders were removed from power in this period. They are also often precipitated by economic crises, which success is international sporting events is unlikely to mitigate (Brancati 2014, 2016).

Even though success in international sports in unlikely to help personalist leaders deflect

¹³Calculation by author using the following datasets: Marshall and Marshall (2013); Geddes, Wright and Frantz (2014); Mattes, Leeds and Matsumura (nd).

major threats to their power, personalist leaders are likely to pursue success in this arena anyway. Leaders, across regime types, pursue foreign policies that are unsuccessful because they lack accurate information about their likely success (Fearon 1995). Personalist leaders, though, are more likely than leaders of other regimes to pursue foreign policy goals that do not help them achieve their desired goals, as in the case of international sports, because personalistic leaders tend to surround themselves with cronies and sycophants, who lack the skills and experience to competently execute their jobs. In order to maintain tight control over the government, personalist leaders also tend to limit their bureaucrats independence and their ability to raise critical assessments of their leaders foreign policies plans. As a result, personalist leaders tend to lack accurate information and reliable intelligence about their foreign policy decisions, tend to be overconfident in their actions, and tend to make more mistakes than other leaders in their foreign policy decisions (Ezrow and Frantz 2011, 157-162).

Analysis

The analysis involves three separate sets of models. The first predicts participation in the Olympics; the second predicts Olympic success, and the third analyzes the relationship between Olympic success and leadership stability. The analyses traverse the 46 summer and winter Olympic Games that occurred between the 1908 London Games and the 2014 Sochi Games. The analysis does not include the first modern Olympics in Athens in 1896 or the two subsequent Games because athletics competed in these Games on an individual rather than state basis. Only independent states are included in the analysis.

¹⁴States can grant citizenship to athletes from other countries to win more medals, but this state-switching strategy has little impact on medal counts. Only a small percentage of athletes do not compete for the state in which they were born, not all of which have switched for strategic purposes, and only a small percentage of foreign-born athletes win medals. See: Walker Connor, "How Many Sochi Athletes are Competing for a Country that is Not Their Birth Nation?" Pew Research Center, 19 February 2014.

¹⁵These states, including microstates, are identified based on Gleditsch and Ward (1999) for the 1816-2012 period and my own extension of these data for 2014.

Data and Measures

The data and measures used in each of these analyses are as follows.

Democracy

Democracy is measured in terms of the polity index (one year lag) because the primary mechanism through which democracy is likely to affect Olympic success is through open and competitive elections. The polity index measures democracy based on the openness and competitiveness of executive recruitment, the independence of executive authority, and the regulation and competitiveness of participation. On this 21-point index, democracies range between +5 and +10, and non-democracies/authoritarian states range between -10 and 4. If authoritarian states perform better at the Olympics than democracies, then states with lower values on the polity index should be significantly associated with winning a higher percentage of Olympic medals. As a robustness test, I also utilize a more stringent categorization of democracies (+7 and above), the effects of which are the same.

Regimes are disaggregated into types according to the *Global Political Regimes* (GPR) dataset (Geddes, Wright and Frantz 2014). Personalistic regimes, which should be associated with greater Olympic success than democracies and other regimes, are defined in the GPR dataset as regimes in which access to and the benefits from political office depend on the discretion of an individual leader (Geddes 2003, 51). The coding criterion for personalist regimes matches my argument well (Geddes 2003, Appendix A).¹⁶ It codes regimes as per-

¹⁶Regimes are classified as personalist if they receive a higher proportion of 'yes' responses to the following 13 questions than the proportion of 'yes' responses that they receive for questions associated with party-based or military regimes. They are: (1) Does the leader lack the support of a party; (2) If there is a support party, was it created after the accession to power?; (3) If there is a support party, does the leader choose most of the members of the politburo-equivalent?; (4) Does the country specialist literature describe the politburo-equivalent as the rubber stamp for the leader; (5) If there is a support party, is it limited to a few urban areas?; (6) Was the successor to the first leader, or its heir apparent, a member of the same family, clan, tribe, or minority ethnic group as the first leader?; (7) Does the leader govern without routine elections?; (8) If there are elections, are they essentially plebiscites, that is without either internal or external competition?; (9) Does access to high office depend on the personal favor of the leader?; (10) Has the normal military hierarchy been seriously disorganized or overturned?; (11) Have dissenting officers or officers from

sonalist if there is a single leader who does not derive his/her authority from either a party or the military, and if s/he has wide discretionary power over the country's legislative and security bodies. Alternative measures of personalist regimes, such as Hadenius and Teorell (2007) and Lai and Slater (2006), are not as closely aligned with my theoretical argument. The following are examples of personalistic regimes: Belarus (1992-2010), Azerbaijan (1992-2010), Kazakhstan (1992-2010), Iraq (1960-1968;1980-2002), Ivory Coast (2002-2010), and Russia (1994-2010). These are also all states anecdotally associated with going to great lengths to win Olympic medals.

The GPR dataset identifies three other major types of authoritarian regimes – party regimes, military regimes, and monarchies – in addition to democracies (the omitted category in the models). Party regimes are regimes in which the party dominates access to political office and control over policy; military regimes are regimes in which a group of officers decides who rules and exercises some influence on policy; and monarchies are regimes in which the national leader inherits his/her authority. They are also coded based on a number of different criteria (Geddes 2003, Appendix A).

different regions, tribes, religions, or ethnic groups been murdered, imprisoned, or forced into exile?; (12) Has the officer corps been marginalized from most decision-making; and (13) Does the leader personally control the security apparatus?

¹⁷Hadenius and Teorell (2007) offer an alternative measure of personalism based on executive turnover, which I do not use because it is based on a potential outcome rather than a defining characteristic of personalistic regimes. I do not use Lai and Slater (2006) for a number of reasons. First, their coding of personalist regimes utilizes a liberal criteria of institutional constraints – coding as personalist, regimes in which the executive has "unlimited authority" and an undefined "intermediate category" vis-à-vis only legislative bodies (not the military) and is based on constitutional rules, not necessarily what is the case in practice as in the GPR dataset; second, they classify as personalist, military and party-based regimes, which, as theorized in the previous section, have alternative basis of legitimacy and less incentives than personalist regimes to try to enhance their country's international prestige through international sports. Third, it is not theoretically important, as it was for the theory that these data were developed, whether a personalist leader is backed by either the military or a political party.

¹⁸Democracies are non-authoritarian regimes. Authoritarian regimes are regimes in which opposition parties have been banned or subjected to serious harassment or institutional disadvantage, or where the ruling party has never lost control of the executive and has controlled at least two-thirds of all legislative seats since 1985 (Geddes 2003, 71). The GPR dataset also identifies four other types of regimes: foreign-occupied, independent, provisional, and warlord, which are not very common in the analysis period and, therefore, are coded as missing.

Hybrid regimes, exhibiting elements of more than one regime type, are coded according to the regime for which they exhibit the greatest number of features following Geddes, Wright and Frantz (2014).¹⁹ As a robustness test, I recode hybrid regimes as personalist according to whether or not they exhibit the three most important features of personalism in terms of my theory – namely legislatures that are rubbers stamps of autocrats, security apparatuses personally controlled by autocrats, and high offices dependent on the autocrats' personal favor for access.²⁰ All regime types are measured with separate indicator variables, coded 1 if a regime was of a given type the year prior to the Olympics, and 0 otherwise.

I measure whether a state is communist or not based on the party affiliation of the national leader. Although previous studies have found a strong relationship between communism, an ideology of one-party states, and Olympic success (Ball 1972; Bernard and Busse 2004; Johnson and Ali 2004), the success of communist regimes in the Cold War era is not likely due to the communist ideology per se. While communism emphasized mass physical culture, until the late 1920s, sport was only valued for military training and health (Bairner, Kelly and Lee 2016). For many years communist countries, like Russia, explicitly opposed Western sports competitions, considering them "tools of bourgeois militarism and fascism" and a means to repress the proletariat class (Edelman, Hilbrenner and Brownell 2014). Moreover, not all communist states prioritized athletic success, as did the Soviet bloc countries, particularly the less economically advanced communist states, like Vietnam and Cambodia (Riordan 1999).

¹⁹As such, party-military, party-personalistic, party-personalistic-military, and oligarchic regimes as coded as party regimes, while indirect military and military-personalistic regimes are coded as military regimes.

²⁰Regimes are coded as hybrid when they have the same proportion of 'yes' responses to the 13-question criteria for personalist regimes as for the party and military regime criteria. My recode of these data is based on the raw Geddes (2003) data available from (Weeks 2014). This practice results in the following hybrid regimes being categorized as personalist regimes for the periods indicated: Afghanistan (1980-92); Cuba (1964-96); Gabon (1964-76); Ghana (1964); Indonesia (1976-96); Myanmar (1969-88); Paraguay (1959-62); Romania (1951-88).

²¹ "Manifesto of the Red Sport International," Young Worker, 9 May 1925.

The national leaders for each state are based on Archigos 4.0 (1875-2014) (Goemans, Gleditsch and Chiozza 2009) and the party affiliation for these leaders is based on the CHISOLS dataset (Mattes, Leeds and Matsumura nd). A communist party is defined as a party that espouses the complete public ownership of land and the means of production and a society without class divisions or government.²² I identified the political ideology of each leader's party based on a range of sources including, the *Comparative Manifesto Project* and the *World Encyclopedia of Political Systems and Parties*, as well as country-specific resources.

Olympic Success

Olympic success is measured in terms of the percentage of medals states win at each Olympic Game.²³ I do not use the total number of medals that states win to measure Olympic success because the number of events at each Game and, thus, the potential medals that states can win, has varied significantly over time and across the summer and winter games. The 1908 London Summer Games, for example, had 110 events, which included tug-of-war and lawn bowling, while the 2012 London Summer Games, which included neither of these sports, had 302 events. Thee winter Olympics two years later included only 98 events.

Table 1 presents the mean percentage of medals won by democratic and authoritarian states at the Olympic Games between 1908 and 2014. They are calculated by determining the percentage of total medals (by color) that countries won at a given Olympic Game and taking the average of these percentages across regimes. In contrast to arguments claiming that

²²Terrance Ball, "Communism," *Encyclopædia Britannica*, Chicago: Encyclopædia Britannica, Inc.

²³Occasionally, independent states have competed jointly as "unified teams". Two of these unified teams, representing West and East Germany (1956, 1960, and 1964) and the former Soviet Union states (1992), won medals. For the German unified team, I identified the individual affiliation of each athlete and calculated the Olympic success figures for the West and East German teams separately. Although they competed jointly, West and East German athletes trained separately and were funded by their respective countries. I did not separate out the medal totals for the Soviet unified team because in this team, athletes from the former Soviet republics were trained and funded under the Soviet system with the USSR having only dissolved at the end of 1991.

authoritarian states have an edge over democracies at the Olympics, on average democracies win a higher percentage of Olympic medals, regardless of color, than autocracies.²⁴

Table 1: Olympic Success Across Regimes (% of all medals)

	gold	silver	bronze	total
autocracies	0.43	0.41	0.42	0.43
democracies	1.47	1.50	1.49	1.51

These figures are based on the official outcome of the athletic competitions.²⁵ Between 1968 – the year in which mandatory drug tests were first implemented – and 2014, only 63 athletes from 28 countries have been stripped of their medals. See Table 2. More than a third of the athletes stripped of their medals represented democratic states. Democracies were also stripped of a higher percentage of the medals that they won (1.45%) than autocracies (0.90%).

Forced Expulsions

Leadership stability is measured in terms of forced expulsions. Forced expulsion includes all cases in which the national leader is removed from power by internal opposition in the form of either a coup d'etat, armed rebellion, popular protest, or assassination. These four means by which leaders may be removed from power include threats to leaders that emanate from

²⁴These figures are based on all independent states regardless of whether they participated in the Games, but the same trends emerge if the figures are re-calculated based on only participants. If democracy is defined as 7 or greater, democracies still outwin non-democracies, but the difference between the two is smaller.

²⁵The Olympic success figures are calculated based on data from the official results published on *Olympic.org* on the current medal standings and data on drug disqualifications from the *International Society of Olympic Historians* (ISOH). I obtained the data on current medal standings by scraping the Olympic.org website using R. The Olympic success figures figures do not reflect changes in the medal standings as a result of the IOC stripping athletes of medals due to drug violations for two reasons. First, not all athletes known to have cheated have been stripped of their medals. No East German athlete has been stripped of his or her medals despite known, systemic state-sponsored doping in East Germany. Second, the post-drug disqualification tally, were it complete, would not reflect any advantage authoritarian states have over democracies in cheating. So few athletes have been stripped of their medals that excluding them does not change the results anyway.

Table 2: Olympic Medals Stripped Due to Drug Violations, 1968-2014

regime	percentage of stripped medals	percentage of regimes	country
autocracies	33.90	0.90	Bulgaria (1976; 1988), Bahrain (2008), Belarus (2004; 2008; 2012), Czechoslovakia (1976), Cuba (1996), Hungary (1988), Mongolia (1972) Spain (1972), Poland (1976), Russia (1996), Soviet Union (1976), and Uzbekistan (2012)
democracies	66.67	1.45	Bulgaria (2000), Canada (1988), Colombia (2004), Germany (2000; 2004), Spain (2002), Finland (1984), Great Britain (1988; 2002), Greece (2004), Hungary (2004), Ireland (2004), Italy (2008), Netherlands (1972), Romania (2000), Russia (2002; 2004; 2006), Sweden (1968; 1984; 2014), Turkey (2012), Ukraine (2004; 2008), United States (1972; 2000; 2004; 2012)

Note: Four athletes were stripped of multiple medals: Olga Danilova (Russia); Marion Jones (United States); Jong-Su Kim (North Korea); and Ivan Tikhon (Belarus). These athletes are not double counted in the figures.

the political elite, the military, and/or the public. If Olympic success strengthens personalists leaders, it should minimize threats from each of these groups, and forced expulsions should be negatively associated with winning a higher percentage of medals. Forced expulsions is coded 1 if a leader is removed from power one year after the Olympics by either a coup d'etat, armed rebellion, popular protest, or assassination, and 0 otherwise. The purported effects of success in international sports is generally short-term, thus, would not likely extend beyond a year. Forced expulsions is derived from data provided in *Coup d'état Events*, 1946-2012 (Marshall and Marshall 2013). I examine leadership stability, rather than regime stability, because my argument about why regimes pursue success in international sports is about individual leaders seeking to legitimize their rule, and because when leaders fall, regimes do not necessarily change as one type of a leader may be replaced by another leader of the same type.

Economic Development

Public and private investment in sports is likely to be higher in states with advanced economies, making these states more likely not only to participate in the Olympics, but also

to win medals than other states (Grimes, Kelly and Rubin 1974; Levine 1974; Ball 1972; Bernard and Busse 2004; Johnson and Ali 2004). Economic development is measured in terms of gross domestic product (GDP) per capita (lag) using the *Maddison Project* (1-2010) (units=ln, 1990 International Geary-Khamis dollars) (Bolt and van Zanden 2014) and the *World Development Indicators* (units=ln, constant 2000 US dollars) (1960 onwards) (World Bank 2014). The Maddison Project data are the main source of data used in the analysis because it spans all modern Olympic Games. Earlier figures on GDP per capita are less likely to be accurate than more recent data.

Population

States with larger populations are more likely to participate in the Olympics and to win medals than states with smaller populations because they have a deeper pool of potential Olympic-caliber athletes (Grimes, Kelly and Rubin 1974; Levine 1974; Ball 1972; Bernard and Busse 2004; Johnson and Ali 2004). There are limits, though, in the extent to which population is likely to be associated with Olympic success because team events restrict countries to one entry and count as only one medal, and because the IOC limits the number of athletes from each country and allows every state to enter one athlete per sport regardless of quality. Population is measured in terms of the year prior to the Olympics using the Maddison Project (1-2010) (ln, unit=millions), which is very highly correlated with data from the World Development Indicators.

Climate

Whether or not countries participate in the winter Olympics and the percentage of medals that they win likely depends on the climate, with cold-weather countries more likely to participate in the winter Games than warm-weather countries due to the popularity of and training conditions for cold-weather sports in these countries. Climate is measured in the

analysis in terms of the average annual temperature (celsius) the year prior to the Olympics using data scraped from the World Bank's *Climate Data API*. I denote the season of the Games with an indicator variable coded 1 for the winter Games and 0 for the summer Games.

Host Country

Host countries are likely to win a higher percentage of Olympic medals than other countries because they have the home field advantage (Baumeister 1984; Schlenker et al. 1995; Beilock 2011). Athletes from host countries may be more familiar with the facilities than foreign athletes and may also benefit from the support of an enthusiastic crowd. Host cities are also able to influence to some extent which new sports are included in the Games and are likely to lobby for sports in which they have a competitive advantage. Finally, host countries are subject to less strict qualification rules, which may increase the number of athletes they have at the Games although they may not be medal-caliber (Pettigrew and Reiche 2016).

Whether or not states participate in the Olympic Games is also likely to depend on the host country, with states more aligned politically with the host country being more likely to participate in the Games than other states. The host country represents the values of the Olympic Movement more broadly. Political affinity is represented by three measures evaluating states' trade ties, military disputes, and geographic proximity with the host state. I use trade interdependence to measure political affinity because states with strong trade ties tend to share similar foreign policy preferences (Rogowski 1987; Peterson and Theis 2012). Data on trade ties is based on the *Trade Data Set* (V3.0) from the Correlates of War (COW) project. Trade is measured in terms of the total amount of trade flows between a state and the Olympic host state (current US millions of dollars, lag).

I measure military conflict directly using the COW's *Militarized Interstate Dispute Data* (V4.0). Militarized interstate disputes are conflicts in which one or more states threaten,

display, or use force against one or more states. MIDs are measured in terms of whether or not there was a MID (of any level of hostility) in the year prior to the Olympics between a state and the Olympic host state, coded 1 if there was a MID and 0 otherwise. States involved in a MID with any state the year prior to the Olympics may also be less likely to win medals at the Games due to diminished economic resources. Therefore, I also measure whether or not a country was involved in a MID the year prior to the Olympics with any state, coded 1 if they were and 0 otherwise.

Geographic proximity serves as another affinity measure because states in the same geographic region often share similar political characteristics and interests (Gleditsch and Ward 2006; Cox, Low and Robinson 2008). Before the introduction of jet passenger planes at the end of World War II, athletes from states closer to the host state were also more likely to have participated in the Olympics due to the high costs and difficulty of international travel. Geographic proximity is measured in terms of regional commonality. If states are situated in the same geographical region, as defined by the UN Standard Area Codes, geographic proximity is coded 1 and 0 otherwise.

Results

In this first set of analysis, I evaluate the likelihood of states participating in the Olympic Games. The statistical models in this analysis are estimated using multilevel mixed effects logistic regression since countries are nested within Olympic Games and participation is measured dichotomously.²⁶ Olympic participation rates have varied significantly throughout history. See Figure 1. Participation rates for the winter Games are consistently lower than those for the summer games, most likely due to the popularity and costs of winter sports.

²⁶The models do not include a lag of the dependent variable because including a lagged dependent variable on the right-hand side of the equation, can violate strict exogeneity assumptions and can result in an upward bias of the lagged dependent variable and a downward bias of the other predictors (Griliches 1967; Achen 2000; Keele and Kelly 2006).

While the Games were much more exclusive at the beginning of the twentieth century, since the end of the Cold War, 90-98% of all independent states have participated in the summer Olympics. Olympic participation rates have varied much less over time. Overall, only about one-third of all independent states participated in the winter Games between 1924 and 2014.

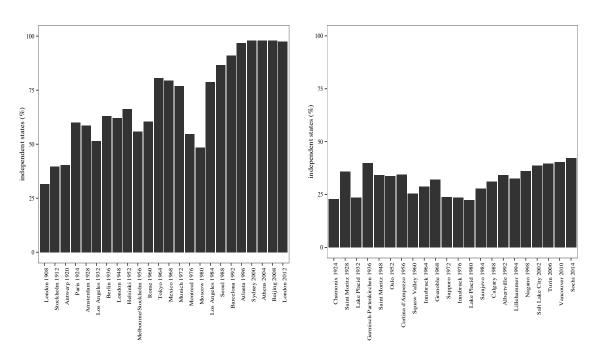


Figure 1: Independent States Participation Rate, 1908-2014

In general, democracies have a stronger presence at the Olympic Games than authoritarian states. See Figure 2. From 1908 to 2014, at least a majority of all countries participating in the Games were democracies. Since the end of the Cold War, the presence of democracies has grown. Since this time, more than three-quarters of independent states competing in the Olympics were democracies. This trend reflects the growth in the number of democracies in the world and not a decline in the percentage of authoritarian states competing in the Olympics. In fact, since the end of the Cold War, roughly the same percentage of

authoritarian states as democracies (98% or more) have competed in the summer Games.²⁷

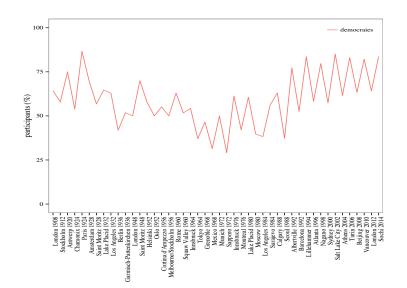


Figure 2: Democratic Participants in the Olympics, 1908-2014

In the statistical analysis, democracy is also a significant predictor of participation in the Olympics. Model 1 analyzes the relationship between democracy, measured in terms of the polity index, and participation in the Games, controlling for various socio-demographic factors, including GDP per capita, climate, season, and population.²⁸ According to Model 1, states with higher polity scores are more likely to participate in the Olympics than states with lower polity scores.²⁹

Also, according to Model 1, as expected, richer and more populated states are significantly more likely to participate in the Olympic Games than other states. These results are robust.

²⁷The percentages are calculated as the number of either autocracies or democracies that participated in each Olympic Game divided by the total number of either autocracies or democracies in the year prior to each Olympic Game, multiplied by 100.

²⁸The Vancouver 2010, London 2012, and Sochi 2014 Olympics are not included due to the lack of climate, GDP per capita and/or population data for these Games.

²⁹In a separate model, I drop GDP per capita because the GDP per capita data is not available for the German Democratic Republic, which is known to have emphasized sporting success. In this model, the polity index remains a positive and significant predictor of participation in the Olympics.

If I substitute the World Bank data on GDP per capita and population for the Maddison data used in this model, both GDP per capita and population remain significant predictors of participation. Warmer countries are significantly less likely to participate in the Olympic Games, especially the winter Games, according to a separate model in which I interact climate with the indicator for season. If I subset the data by season, warmer countries are only significantly less likely to participate in the winter Olympics. If I interact GDP per capita and season, richer countries are also more likely to participate in the winter Games than poor countries, which is not surprising given the cost of equipment of many winter sports.

In Model 2, I substitute the indicators for democracies and authoritarian states (omitted category) for the polity index. As is evident from this model, democracies are more likely to participate in the Olympics than authoritarian states. According to the model, the predicted probability that a democracy will participate in the Olympics is 108% higher than it is for an autocracy, holding all other variables constant at their means. If I substitute the regime type indicator variables into the model in place of the polity index, as in Model 3, the relationship between Olympic participation and personalistic regimes is not significant, indicating that personalistic regimes are not more or less likely to participate in the Olympics than democracies. These results hold if I repeat the analysis using the recoded hybrid cases of personalist regimes. Personalist regimes may outperform democracies at the Games, as shown in the next set of models, even though they are not more likely to participate in them, because personalist regime selectively invest in sports that they are more likely to win.

In Model 4, I restrict the analysis to the post-Cold War period since the Olympics have become much more inclusive over time, and because the model might therefore not predict participation in the more recent Olympic Games as well as it predicts earlier periods. Despite the greater inclusiveness of the Games, the polity index remains a positive and significant

Table 3: Olympic Participation, 1908-2010

	Model 1	Model 2	Model 3	Model 4	Model 5
Polity Index	0.05** (0.01)			0.10** (0.02)	0.05** (0.01)
Democracy		0.68** (0.12)			
Personalistic			-0.25 (0.18)		
Party			-0.79** (0.16)		
Military			-0.54** (0.21)		
Monarchy			-1.15* (0.22)		
Communism			-0.15 (0.22)		
GDP per capita	0.91** (0.07)	0.94** (0.07)	0.94** (0.07)	1.06** (0.16)	0.87** (0.07)
Population	0.47** (0.04)	0.48** (0.04)	0.41** (0.04)	0.54** (0.09)	0.45** (0.04)
Climate	-0.14** (0.01)	-0.14** (0.01)	-0.14** (0.01)	-0.22** (0.02)	-0.14** (0.01)
Season	-3.68** (0.47)	-3.70** (0.47)	-4.26** (0.51)	-8.20** (0.60)	-3.94** (0.52)
Geographic Proximity					0.82** (0.18)
MID					-2.57** (0.46)
Trade Flows					7.98e-06 $(1.02e-05)$
Constant	-6.27** (0.78)	-6.79** (0.76)	-5.05** (0.86)	-2.37 (1.51)	-5.79** (0.86)
$\hat{\sigma}_{game}$	1.46	1.45	1.34	0.28	1.54
$\hat{\sigma}_{season}$	2.30e-09	6.51 e-09	6.18e-07	9.32e-10	1.36e-08
N_{game}	43	43	43	10	40
N	4087	4087	3641	1440	3731

Note: significant at the *p \leq 0.05, **p \leq 0.01 level.

predictor of participation in the Olympics in the post-Cold War period. It even remains significant if I restrict the analysis to the current millennium.

In Model 5, I add three measures of political affinity with the host nation – geographic proximity, MID host nation, and trade flows. The polity index remains significant in this model. Countries that are located in the same region as the host state and that trade more extensively with the host state are more likely to attend the Olympics, according to Model 5, but only the effect of geographic proximity is significant. Trade flows remain insignificant even if geographic proximity is dropped from the model. In contrast, countries that were involved in a militarized dispute with the host country in the previous year are significantly less likely to participate in the Olympic Games. Neither geographic proximity nor MID host nation remains a significant predictor of Olympic participation if I restrict the analysis to the post-Cold War period.

In the second set of models, I analyze the relationship between democracy and Olympic success. For this analysis, I use propensity score matching to pre-process the data to adjust for any biases in a country's likelihood of participating in the Olympics based on the predictors from the previous analysis (Rubin 1974, 2006).³⁰ These predictors are: the polity index, GDP per capita, population, climate, season, geographic proximity, trade affinity, and MID host nation. To match the data, I use genetic matching, which uses an evolutionary search algorithm to find a set of weights for each covariate that achieves an optimal balance (Sekhon and Diamond 2008).³¹ The balance in these covariates across participants and

³⁰Alternative methods of causal inference, such as Heckman selection models, are not applicable here because they require at least one variable from the selection model to be different from the outcome model.

³¹For robustness sake, I also use full matching, which minimizes a weighted average of the estimated distance measure between treated and control subjects within subclasses, the results of which are reported in the supplementary appendix. I present the results of the genetic matching in the article since the improvement in the balance is better than for the full matching, especially for the main predictor, the polity index. In the statistical analysis using the full matching, personalistic regimes are a positive and significant predictor of Olympic success and overall there is not a statistically significant difference between between democratic and authoritarian regimes. If I restrict the analysis to only those states that participated in the Games, rather

non-participants is significantly improved as a result of the matching. These results of the balance tests are available in a supplementary appendix.³² After pre-processing the data, I analyze the relationship between democracy and Olympic success, weighing the data according to the propensity scores generated through the matching process so that the analysis is doubly robust.³³ The models are estimated with multilevel mixed effects generalized linear models using a Gaussian distribution and an identity link function since Olympic success is continuous and countries are nested within Olympic Games.³⁴

Model 6 analyzes the relationship between democracy and Olympic success between 1908 and 2010, controlling for GDP per capita, population, host country, climate, season, and whether or not a country was involved in a militarized interstate dispute with any state the year prior to the Olympics.³⁵ In this model, the coefficient for the polity index is not significant, indicating that, in general, authoritarian regimes are not significantly associated with a higher percentage of Olympic medals than democracies. Also, according to this model, host nations, more populous countries, and countries with higher GDPs are associated with a higher percentage of Olympic medals than other countries.³⁶ Overall, warmer countries win significantly fewer medals. This is true for both the winter and summer Olympics although

than weight the data using either of these methods, the statistical analysis similarly indicates that among Olympic participants, personalist regimes outperform democracies at the Olympics although the effects are not significant.

³²For 5 of the 8 covariates, including the polity index, the reduction in the differences in the means between participants and non-participants is 94% or above.

³³This means that if the matching is not perfect but the regression model is properly specified or, alternatively, if the regression model is not properly specified but the matching is adequate, the causal estimates will be consistent.

³⁴The results are substantively and significantly the same if I use multilevel mixed effects linear regression models instead.

³⁵The 1908 London Games are dropped due to the lack of MID data. The 2010 Vancouver, 2012 London and 2014 Sochi Games are dropped due to the lack of population, climate, GDP per capita, and/or MID data. The Antwerp 1920, Saint Moritz 1948, and London 1948 Games are dropped due to lack of matches arising from the genetic matching process.

³⁶East Germany, which was highly successful at the Olympics during its existence, is dropped from the model due to the lack of GDP per capita data for it. If GDP per capita is dropped from the model, less democratic countries still do not win significantly more medals than more democratic regimes.

the differences are more substantial for the winter Olympics according to a separate model in which I interact season and climate.

Table 4: Olympic Success, 1912-2010

	Model 6	Model 7	Model 8	Model 9	Model 10
Polity Index	0.01 (0.01)				
Democracy		0.03 (0.12)			
Personalistic			0.29* (0.13)	0.25* (0.12)	0.31* (0.14)
Party			0.38** (0.13)	0.14 (0.10)	$0.20 \\ (0.12)$
Military			-0.31* (0.15)	-0.34** (0.14)	-0.32* (0.16)
Monarchy			$0.08 \\ (0.08)$	$0.03 \\ (0.07)$	0.04 (0.09)
Communism				0.59* (0.24)	$0.46 \\ (0.27)$
GDP per capita	0.28** (0.08)	0.30** (0.08)	0.40** (0.07)	0.41** (0.07)	0.40** (0.09)
Population	0.43**	0.43**	0.51** (0.07)	0.51**	0.50**
Host Country	1.01**	1.04**	(0.01)	(0.01)	(0.00)
Season	-0.07 (0.31)	-0.06 (0.31)	-0.30 (0.22)	-0.31 (0.22)	-0.31 (0.25)
Climate	-0.13** (0.02)	-0.13 (0.02)	-0.11** (0.02)	-0.11** (0.02)	-0.12** (0.02)
MID	0.14 (0.11)	0.13 (0.11)	0.18 (0.10)	0.19 (0.10)	0.19 (0.12)
constant	-3.07** (0.97)	-3.25 (0.96)	-5.37** (0.75)	-5.44** (0.75)	-5.13** (0.96)
$\hat{\sigma}_{game}$	0.38	0.39	0.03	0.03	0.03
$\hat{\sigma}_{season}$	0.03	0.03	2.57e-35	1.51e-32	7.89e-36
N_{game}	39	39	30	30	26
N	2599	2599	2286	2286	1870

Note: significant at the * $p \le 0.05$, ** $p \le 0.01$ level.

In Model 7, the polity index is disaggregated into two indicators representing democracies and autocracies (omitted category). The coefficients for democracies is not significant in this model, indicating that neither democracies nor autocracies significantly outperform each other at the Olympics. However, certain types of authoritarian states, as expected,

outperform democracies, as Model 8 indicates.³⁷

According to Model 8, both personalistic and party regimes win a significantly higher percentage of Olympic medals than democracies, while military regimes win a significantly lower percentage of Olympic medals than democracies. The predicted probabilities are 28% higher for personalist regimes and 37% higher for party regimes than for democracies, according to this model, holding all other variable constant at their mean. Wald tests indicate that the difference between personalist and party regimes is not statistically significant, but the difference between personalist and military regimes is significant.

In Model 9, I include an indicator variable for communism. In this model, party-based regimes are no longer significant, but the coefficient for personalistic regimes remains significant. Communist regimes are also significantly associated with winning a higher percentage of Olympic medals. These results are due primarily to the Soviet Bloc countries in the Cold War period. Outside Europe, only four communist countries – China, Cuba, Mongolia, and North Korea – have ever won any Olympic medals. None of the six communist countries that existed in Africa during the Cold War period won any medals. These results hold if I repeat the analysis using the recoded hybrid cases of personalist regimes.

In Model 10, I restrict this model to the period in which performance-enhancing drugs were potentially at their height (1948-2000). Steroids were invented in the 1930s and introduced into sports in the late 1940s and 1950s. In 1999, the World Anti-doping Agency (WADA) was established, marking a major step forward in international efforts to combat doping in sports. In this model, personalist regimes are significant and positively associated with Olympic success. Military regimes also significant but negatively associated with Olympic success. Meanwhile, neither party regimes nor monarchies are significantly associated

³⁷The analysis period is restricted to 1946-2010 because of the GPR dataset's coverage period. The indicator for host nations is dropped from this, and all subsequent models, because only four authoritarian regimes (i.e., China, Mexico, Soviet Union, and Yugoslavia) hosted the Olympics in this period, and all were party-based regimes.

ated with Olympic success in this model.

In the third set of models, I explore whether or not winning a greater percentage of Olympic medals affects the likelihood of leaders being forcibly removed from power within one year of the Games. The analysis includes the 40 summer and winter Olympic Games that occurred between 1920 and 2006. The analysis is based on multilevel mixed effects logistic regression models because forced expulsions is measured dichotomously and because countries are nested within Olympic Games. Prior to analyzing the data, I pre-process the data using generalized propensity score (GPS) matching since Olympic success is a continuous variable (Hirano and Imbens 2004). The GPS is calculated based on covariates evaluated in the previous analysis to predict Olympic success.³⁸ These predictors are: the polity index, GDP per capita, population, climate, season, host country, and MID. The results based on the GPS matching and those without yield the same substantive conclusions.

In Model 11, I examine the relationship between Olympic success and forced expulsions controlling for the polity index, GDP per capita, and MID. According to it, winning a higher percentage of Olympic medals is not significantly associated with forced expulsions. GDP per capita is significant in this model but militarized interstate disputes are not. The result for GDP is not robust across specifications. If I examine coups d'etat and popular protests individually with separate indicators for each, Olympic success is not significantly related to either of them. There are too few cases of assassinations or rebellions to analyze them separately. In an additional model, I analyze whether Olympic success is significantly related to all coups d'etat, including both successful and attempted coups d'etat. They are not.

In Model 12, I substitute the dichotomous measure of democracies for the polity index while in Model 13, I interact Olympic success with the polity index to determine if Olympic

³⁸To check for balance across these covariates, I divide the treatment variable into 4 equally-sized groups and then test if the GPS-weighted means for each interval are the same using t-tests. According to these tests, the data are balanced for the polity index, the primary quantity of interest, GDP per capita and MID.

Table 5: Olympic Success, 1920-2006

	Model 11	Model 12	Model 13	Model 14
Olympic Medal Success (OMS)	-0.05 (0.09)	-0.05 (0.09)	-0.69 (0.45)	$0.03 \\ (0.05)$
Polity Index	-0.03 (0.07)		$0.03 \\ (0.07)$	
Democracy		-1.07 (1.39)		
Polity-OMS Interaction			-0.10 (0.06)	
Party				$0.25 \\ (1.75)$
Military				2.69 (1.84)
Monarchy				1.11 (2.22)
GDP per capita	-1.04* (0.49)	-0.91 (0.54)	-0.90 (0.46)	-0.95 (0.70)
MID	$0.02 \\ (0.60)$	$0.01 \\ (0.62)$	$0.04 \\ (0.63)$	-0.60 (0.80)
Constant	3.97 (3.83)	3.33 (3.91)	3.26 (3.55)	2.61 (6.58)
$\hat{\sigma}_{game}$ N $_{game}$ N	8.36e-33 32 1023	4.11e-33 32 1023	5.38e-33 32 1023	2.06e-33 32 952

Note: significant at the * $p \le 0.05$, ** $p \le 0.01$ level.

success is more or less strongly associated with forced expulsions depending on the extent of democracy in countries. The main effects and interaction terms in this model are not jointly significant according to a Wald Test, indicating that it is not.

In Model 14, I substitute regime type for the polity index. According to this model, Olympic success is still not associated with forced expulsions, and neither is any of the regime type variables. Personalistic regimes are omitted from the model due to collinearity. These results hold if I repeat the analysis using the recoded hybrid cases of personalist regimes. Unfortunately, there are too few cases of each regime type in order to interact them with Olympic success.

Conclusion

Despite all the anecdotal evidence suggesting otherwise, authoritarian states do not, in general, outperform democracies at the the Olympics. The failure of these regimes to outperform democracies is not likely a result of the pressure that authoritarian regimes exert on athletes backfiring. Intense pressure to win, financial or otherwise, can backfire by distracting athletes and making them tense and self-conscious so that they lose the instinctive, smooth, and fluid motion needed for complex motor behaviors (Wine 1971; Martens and Landers 1972; Baumeister 1984; Chib et al. 2002; Beilock 2011). However, were pressure to explain this phenomena, the effect should be uniform across authoritarian regimes, and it is not.

Personalist regimes significantly outperform democracies at the Olympic Games. Communist party regimes also outperform democracies but this result is not necessarily a function of communism per se, but the success of the Soviet Bloc countries and the unique circumstances of the Cold War rivalry between the US and the Soviet Union. In earlier periods, and outside this bloc, communist countries have not emphasized or excelled in international

sports nearly as much. The US also performed better in the Cold War period than in the subsequent period. At the same time, according to the analysis, military regimes perform significantly worse than democracies and personalist regimes.

These findings further enrich our understanding of personalist regimes by identifying an important dimension of personalist regimes that is likely to influence their foreign policy behavior, namely a greater propensity to pursue prestige-enhancing policies abroad. Personalist leaders pursue these policies, including, but not limited to, international sports, because their right to rule is built, not around elections, ideology or familial ties as in other regimes, but their own personal characteristics, skills, and attributes. The institutional weakness of these regimes also allows personalist leaders to pursue their foreign policy goals more easily than leaders in other types of regimes, even when these goals have little immediate military or economic consequences for regimes.

Personalist regimes have been associated with many different foreign policy behaviors, including states' acquisition of nuclear weapons (Way and Weeks 2013), responsiveness to sanctions (Wright and Escribà-Folch 2010), signing of international treaties (Chyzh 2014), and initiation of wars (Peceny, Beer and Sanchez-Terry 2002; Reiter and Stam 2003). Most explanations of these foreign policy behaviors focus on how the institutional weakness of personalist regimes serves as a permissive condition allowing leaders to pursue their goals. A few explanations also look to the characteristics of personalist leaders to explain their preferences for these goals. Weeks (2012), for example, argues that personalist leaders are more inclined to initiate conflicts because they tend to have "grand international ambitions" and "view force as an effective longer-term strategy" (335), while Reiter and Stam (2003) argue that personalist leaders are more risk-accepting because they are less likely to be deposed if they initiate unsuccessful wars.

The greater propensity of personalist leaders to pursue prestige-enhancing policies abroad

provides an alternative explanation for some of these outcomes. Personalist leaders, for example, may pursue nuclear weapons, not (only) to improve their national security given their greater vulnerability to foreign intervention, but also to enhance their international prestige by joining the nuclear club. Similarly, personalist leaders may sign onto international agreements in order to enhance their international prestige, and back out of them when they no longer serve this purpose. The fact, moreover, that personalist leaders tend to surround themselves with uncritical and incompetent elites, who do not provide personalist leaders with accurate information about the utility of their foreign policy pursuits, also offers an alternative reason for why personalist leaders pursue certain strategies abroad besides the fact that personalist leaders are less likely to lose power if their foreign policy goals do not succeed.

References

- Achen, Christopher H. 2000. "Why Lagged Dependent Variables Can Supress the Explanatory Power of Other Independent Variables." University of Michican.
- Allison, Lincoln and Terry Monnington. 2002. "Sport, Prestige and International Relations." Government and Opposition 37(1):106–134.
- Andrews, David L., Jaime Schultz and Michael L. Silk. 2010. The Olympics and Terrorism. In *The Politics of the Olympics: A Survey*, ed. Alan Bairner and Gyozo Molnar. London: Routledge pp. 81–92.
- Baade, Robert A. and Victor Matheson. 2002. Bidding for the Olympics?: Fool's Gold? In *Transatlantic Sport: The Comparative Economics of North American and European Sports*, ed. Carlos Pestana Barros, Muradali Ibrahímo and Stefan Szymanski. Northampton, MA: Edward Elgar Publishing.
- Bairner, Alan and Gyozo Molnar, eds. 2010. The Politics of the Olympics: A Survey. London: Routledge.
- Bairner, Alan, John Kelly and Jung Woo Lee. 2016. Sport and Communism: the examples of North Korea and Cuba. In *Routledge Handbook of Sport and Politics*, ed. John Kelly, Jung Woo Lee and Alan Bairner. Abingdon, UK: Routledge.
- Ball, Donald W. 1972. "Olympic Games Competition: Structural Correlates of National Success." *International Journal of Comparative Sociology* 12:186–200.
- Baumeister, Roy F. 1984. "Choking under pressure: Self-consciousness and Paradoxical Effects of Incentives on Skillful Performance." *Journal of Personality and Social Psychology* 46(3):610–620.
- Beilock, Sian. 2011. Choke: What the Secrets of the Brain Reveal About Getting It Right When You Have To. New York: Atria Books.
- Bernard, Andrew B. and Meghan R. Busse. 2004. "Who Wins the Olympic Games: Economic Resources and Medal Totals." *The Review of Economics and Statistics* 86(1):413–417.
- Blaydes, Lisa. 2010. *Elections and Distributive Politics in Mubarak's Egypt*. New York City: Cambridge University Press.
- Bloyce, Daniel and Andy Smith. 2010. Sport Policy and Development: An Introduction. Abingdon, Oxon: Routledge Press.
- Bolt, Jutta and Jan Luiten van Zanden. 2014. "The Maddison Project: Collaborative Research on Historical National Accounts." *The Economic History Review* 67(3):627–651.
- Brancati, Dawn. 2014. "Democratic Authoritarianism: Origins and Effects." Annual Review of Political Science 17:313–326.

- Brancati, Dawn. 2016. Democracy Protests: Origins, Features, and Significance. New York City: Cambridge University Press.
- Brownell, Susan. 2012. "Human Rights and the Beijing Olympics: Imagined Global Community and the Transnational Public Sphere." *British Journal of Sociology* 63(2):306–27.
- Bueno de Mesquita, Bruce, Alastair Smith, Randolph M. Siverson and James D. Morrow. 2003. The Logic of Political Survival. Cambridge, MA: MIT Press.
- Butterworth, Michael. 2016. Sport and Politics in the United States. In *Routledge Handbook of Sport and Politics*, ed. John Kelly, Jung Woo Lee and Alan Bairner. Abingdon, UK: Routledge.
- Butterworth, Michael L. 2007. "The Politics of the Pitch: Claiming and Contesting Democracy Through the Iraqi National Soccer Team." Communication and Critical/Cultural Studies 4(2):184–203.
- Chang, Eric and Miriam A. Golden. 2010. "Sources of Corruption in Authoritarian Regimes." Social Science Quarterly 91(1):1–20.
- Chib, Vikram S., Benedetto De Martino, Shinsuke Shimojo and John P. O'Doherty. 2002. "Neural Mechanisms Underlying Paradoxical Performance for Monetary Incentives Are Driven by Loss Aversion." *Neuron* 74:582–594.
- Chyzh, Olga. 2014. "Can You Trust a Dictator: A Strategic Model of Authoritarian Regimes' Signing and Compliance with International Treaties." Conflict Management and Peace Science 31(1):3–27.
- Colgan, Jeff D. and Jessica L.P. Weeks. 2015. "Revolution, Personalist Dictatorships, and International Conflict." *International Organization* 69(1):163–194.
- Cox, Kevin R, Murray Low and Jennifer Robinson, eds. 2008. The SAGE Handbook of Political Geography. Thousand Oaks, CA: SAGE Publications Ltd.
- Dobson, William J. 2012. The Dictator's Learning Curve: Inside the Global Battle for Democracy. Doubleday.
- Edelman, Robert, Anke Hilbrenner and Susan Brownell. 2014. Sport Under Communism. In *The Oxford Handbook of the History of Communism*, ed. Stephen A. Smith. Oxford: Oxford University Press.
- Evans, M. D. R. and Jonathan Kelley. 2002. "National Pride in the Developed World: Survey Data from 24 Nations." *International Journal of Public Opinion Research* 14(3):303–338.
- Ezrow, Natasha M. and Erica Frantz. 2011. Dictators and Dictatorships: Understanding Authoritarian Regimes and Their Leaders. New York: Continum Book.
- Fearon, James D. 1995. "Rationalist Explanations for War." *International Organization* 49(3):379–414.

- Frantz, Erica and Elizabeth A. Stein. 2012. Comparative Leadership in Non-democracies. In *Comparative Political Leadership*. New York: Palgrave Macmillan pp. 292–313.
- Geddes, Barbara. 2003. Paradigms and Sand Castles: Theory Building and Research Design in Comparative Politics. Ann Arbor: University of Michigan Press.
- Geddes, Barbara, Joseph Wright and Erica Frantz. 2014. "Autocratic Breakdown and Regime Transitions." *Perspectives on Politics* 12(2):313–331.
- Gleditsch, Kristian S. and Michael D. Ward. 1999. "A Revised List of the Independent States since the Congress of Vienna." *International Interactions* 25(4):393–413.
- Gleditsch, Kristian Skrede and Michael D. Ward. 2006. "Diffusion and the International Context of Democratization." *International Organization* 60(4):911–933.
- Goemans, Henk E., Kristian Skrede Gleditsch and Giacomo Chiozza. 2009. "Introducing Archigos: A Dataset of Political Leaders." *Journal of Peace Research* 46(2):269–283.
- Gray, Colin Keith and Megan Raney. 2006. "Freedom's Fury." Maintain Creative CO.
- Griliches, Zvi. 1967. "Distributed Lags: A Survey." Econometrica 35(1):16-49.
- Grimes, Ray A., William J. Kelly and Paul H. Rubin. 1974. "A Socioeconomic Model of National Olympic Performance." Social Science Quarterly 55:777–782.
- Grix, Jonathan. 2012. "The Politics of Sports Mega-events." Political Insight 3(1):4-7.
- Grix, Jonathan. 2015. Sport Politics: An Introduction. Basingstoke: Palgrave.
- Grix, Jonathan and Paul Michael Brannagan. 2016. "Of Mechanisms and Myths: Conceptualizing States' 'Soft Power' Strategies through Sports Mega-Events." Diplomacy and Statecraft 27.
- Guoqi, Xu. 2008. Olympic Dreams: China and Sports, 1895-2008. Cambridge, MA: Harvard University Press.
- Gurr, Ted Robert. 1971. Why Men Rebel. Princeton: Princeton University Press.
- Guttmann, Allen. 1992. The Olympics: A History of the Modern Games. Urbana-Champaign: University of Illinois Press.
- Hadás, Miklos. 2010. The Olympics and the Cold War: an East European Perspective. In *The Politics of the Olympics: A Survey*, ed. Alan Bairner and Gyozo Molnar. London: Routledge pp. 106–116.
- Hadenius, Axel and Jan Teorell. 2007. "Pathways From Authoritarianism." *Journal of Democracy* 18(1):143–157.
- Harvey, Jean, John Horne, Parissa Safai, Simon Darnell and Sébastien Courchesne-O'Neill. 2015. Sport and Social Movements: From the Local to the Global. Globalizing Sport Studies.

- Hayes, Graeme and John Karamichas. 2011. Olympic Games, Mega-Events and Civil Societies: Globalization, Environment, Resistance. London: Palgrave Macmillan.
- Hill, Christopher R. 1996. Olympic Politics: Athens to Atlanta, 1896-1996. New York: Manchester University Press.
- Hirano, Keisuke and Guido W. Imbens. 2004. The Propensity Score with Continuous Treatments. West Sussex, England: John Wiley and Sons, Inc.
- Hoberman, John. 2011. "The Myth of Sport as a Peace Promoting Political Force." SAIS Review 31(1):17–29.
- Howell, Reet. 1975. "The USSR: Sport and Politics Intertwined." Comparative Education 11(2):137–145.
- Johnson, Daniel K. N. and Ayfer Ali. 2004. "A Tale of Two Seasons: Participation and Medal Counts at the Summer and Winter Olympic Games." Social Science Quarterly 85(4):974–993.
- Jost, John T. and Brenda Major, eds. 2001. The Psychology of Legitimacy: Emerging Perspective on Ideology, Justice and Intergroup Relations. Cambridge University Press.
- Kasimati, Evangelia. 2003. "Economic Aspects and the Summer Olympics: A Review of Related Research." International Journal of Tourism Research 5:433–444.
- Keele, Luke and Nathan J. Kelly. 2006. "Dynamic Models for Dynamic Theories: The Ins and Outs of Lagged Dependent Variables." *Political Analysis* 14(2):186–205.
- Kim, Nam Kyu. 2016. "Revisiting Economic Shocks and Coups." *Journal of Conflict Resolution* 60(1):3–31.
- Lai, Brian and Dan Slater. 2006. "Institutions of the Offensive: Domestic Sources of Dispute Initiation in Authoritarian Regimes, 1950–1992." American Journal of Political Science 50(1):113–126.
- Lee, Jung Woo. 2010. The Olympics in the Post-Soviet Era: The Case of the Two Koreas. In *The Politics of the Olympics: A Survey*, ed. Alan Bairner and Gyozo Molnar. London: Routledge Press pp. 117–129.
- Lee, Jung Woo and Alan Bairner. 2009. "The Difficult Dialogue: Communism, Nationalism, and Political Propaganda in North Korean Sport." *Hospitality, Leisure, Sport and Tourism* 33(4):390–410.
- Lee, Ping-Chao, Alan Bairner and Tien-Chin Tan. 2010. Taiwanese Identities and the 2008 Beijing Olympic Games. In *The Politics of the Olympics: A Survey*, ed. Alan Bairner and Gyozo Molnar. London: Routledge pp. 129–144.
- Levine, Ned. 1974. "Why Do Countries Win Olympic Medals? Some Structural Correlates of Olympic Games Success: 1972." Sociology and Social Research 58:353–360.

- Linz, Juan J. 2000. *Totalitarian and Authoritarian Regimes*. Boulder, CO: Lynne Rienner Publishers.
- Londregan, John B. and Keith T. Poole. 1990. "Poverty, the Coup Trap, and the Seizure of Executive Power." World Politics 42(2):151–183.
- Magaloni, Beatriz. 2008. Voting for Autocracy: Hegemonic Party Survival and its Demise in Mexico. New York City: Cambridge University Press.
- Malesky, Edmund and Paul Schuler. 2010. "Nodding or Needling: Analyzing Delegate Responsiveness in an Authoritarian Parliament." American Political Science Review 104(3):482–502.
- Malesky, Edmund, Paul Schuler and Anh Tran. 2012. "The Adverse Effects of Sunshine: A Field Experiment on Legislative Transparency in an Authoritarian Assembly." *American Political Science Review* 106(4):762786.
- Mandell, Richard D. 1971. The Olympics of 1972: A Munich Diary. Urbana-Champaign: University of Illinois Press.
- Marshall, Monty G. and Donna Ramsey Marshall. 2013. "Coup d'E tat Events, 1946-2012." http://www.systemicpeace.org/inscrdata.html.
- Martens, Rainer and Daniel M Landers. 1972. "Evaluation Potential as a Determinant of Coaction Effects." *Journal of Experimental Social Psychology* 8:347–359.
- Mattes, Michaela, Brett Ashley Leeds and Naoko Matsumura. nd. "Change in Source of Leader Support (CHISOLS)." *Journal of Peace Research*.
- Naylor, Michael E., Priscila Alfaro-Barrantes, David P. Hedlund, Sheila N. Nguyen and Joon Sung Lee. 2012. "National Pride Associated with Olympic Athletes and Teams." *Global Sport Management News* 3(8):4–5.
- Nye Jr., Joseph S. 1991. Bound To Lead: The Changing Nature Of American Power. New York: Basic Books.
- O'Kane, Rosemary H. T. 1993. "Coups d'Etat in Africa: A Political Economy Approach." *Journal of Peace Research* 30(3):251–270.
- Peceny, Mark, Caroline C. Beer and Shannon Sanchez-Terry. 2002. "Dictatorial Peace?" American Political Science Review 96(1):15–26.
- Peterson, Timothy M. and Cameron G. Theis. 2012. "Beyond Ricardo: The Link between Intra-Industry Trade and Peace." *British Journal of Political Science* 41(4):747–767.
- Pettigrew, Stephen and Danyel Reiche. 2016. "Hosting the Olympic Games: an Overstated Advantage in Sports History." The International Journal of the History of Sport 33(6-7):635–647.

- Pickering, Jeffrey and Emizet F. Kisangani. 2010. "Diversionary Despots? Comparing Autocracies' Propensities to Use and to Benefit from Military Force." *American Journal of Political Science* 54(2):477–493.
- Powell, Jonathan. 2012. "Determinants of the Attempting and Outcome of Coups d'état." *Journal of Conflict Resolution* 56(6):1017–1040.
- Preuss, Holger. 2004. The Economics of Staging the Olympics: A Comparison of the Games, 1972-2008. Northampton, MA: Edward Elgar Publishing.
- Reiche, Danyel. 2015. "Investing in Sporting Success as a Domestic and Foreign Policy Tool: the Case of Qatar." International Journal of Sport Policy and Politics 7(4):489–504.
- Reiter, Dan and Allan C. Stam. 2003. "Identifying the Culprit: Democracy, Dictatorship and Dispute Initiation." *American Political Science Review* 97(2):333–337.
- Riordan, James. 1999. The Impact of Communism on Sport. In *The International Politics of Sports in the Twentieth Century*, ed. James Riordan and Arnd Krüger. E and FN Spon.
- Rogowski, Ronald. 1987. "Trade and the Variety of Democratic Institutions." *International Organization* 41(2):203–223.
- Rubin, Donald B. 1974. "Estimating Causal Effects of Treatments in Randomized and Non-randomized Studies." *Journal of Educational Psychology* 66:688–701.
- Rubin, Donald B. 2006. *Matched Sampling for Causal Effects*. Cambridge, UK: Cambridge University Press.
- Schlenker, Barry R., Stephen T. Phillips, Kurt A. Boniecki and David R. Schlenker. 1995. "Championship Pressures: Choking or Triumphing in One's Own Territory?" *Journal of Personality and Social Psychology* 68(4):632–643.
- Sekhon, Jasjeet S. and Alexis Diamond. 2008. "Genetic Matching for Estimating Causal Effects: A General Multivariate Matching Method for Achieving Balance in Observational Studies." Unpublished Manuscript.
- Tajfel, Henri, ed. 1978. Differentiation between Social Groups: Studies in the Social psychology of Intergroup Relations. London: Academic Press.
- van Hilvoorde, Ivo, Agnes Elling and Ruud Stokvis. 2010. "How to Influence National Pride? The Olympic Medal Index as a Unifying Narrative." *International Review for the Sociology of Sport* 45(1):87–102.
- Vitiello, Greg. 2006. "How Host Nations Use the Olympics to Burnish their Country's Public Image." *Television Quarterly* pp. 45–50.
- Way, Christopher and Jessica L.P. Weeks. 2013. "Making It Personal: Regime Type and Nuclear Proliferation." American Journal of Political Sciences 58(3):705–719.

- Weeks, Jessica L. 2008. "Autocratic Audience Costs: Regime Type and Signaling Resolve." *International Organization* 62(1):35–64.
- Weeks, Jessica L. 2012. "Strongmen and Straw Men: Authoritarian Regimes and the Initiation of International Conflict." *American Political Science Review* 106(02):326–347.
- Wine, Jeri. 1971. "Test Anxiety and Direction of Attention." Psychological Bulletin 76(2):92–104.
- World Bank, The. 2014. World Development Indictors Online. Washington, D.C.: World Bank Group.
- Wright, Joseph. 2009. "How Foreign Aid Can Foster Democratization in Authoritarian Regimes." American Journal of Political Science 53(3):552–571.
- Wright, Joseph and Abel Escribà-Folch. 2010. "Dealing with Tyranny: International Sanctions and the Survival of Authoritarian Rulers." *International Studies Quarterly* 54(2):335–359.
- Young, Christopher. 2010. Berlin 1936. In *The Politics of the Olympics: A Survey*, ed. Alan Bairner and Gyozo Molnar. London: Routledge pp. 93–105.