Citizen Support for Government Surveillance: Evidence from a Survey Experiment in Kuwait

Pre-analysis Plan

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There have been extensive revelations about government surveillance of ordinary citizens in the name of national security, even in the democratic United States. It is generally considered that people value their privacy; according to a 2014 PEW study, 74% of Americans believe they should not "give up privacy and freedom for the sake of safety" and 54% of Americans disapprove of "government's collection of phone and internet data as part of anti-terrorism efforts."[1] According to an Axios report, IBM's survey in 2019 revealed that 81% of the respondents have became more concerned with companies' use of their data.[2] As privacy rights have become a key issue around the world, there has been a surge of studies examining the state's use of surveillance to monitor their citizens (e.g. Deibert and Rohozinski, 2010; Villeneuve and Crete-Nishihata, 2011; King, Pan, and Roberts, 2013; MacKinnon, 2013). Yet, we know little about how much security outweighs privacy to the masses: *under which conditions are citizens willing to relinquish their privacy to the government?*

In a survey experiment fielded in Kuwait, we demonstrate how exposure to different types of online threats and their targets affect public's risk perception and their support for government surveillance. Contrary to conventional wisdom, we expect citizens not to give up their privacy rights for the sake of national security. Instead, we hypothesize that individuals are more likely to accept government violation of their privacy when this is framed as necessary to protect citizens against threats to themselves (i.e. personal versus national) than when it is framed as necessary to protect the political order (national). Despite a low probability of terrorist acts, we expect citizens to be willing to sacrifice their privacy in the terrorism (versus cyber crime) condition due to devastating and physically evident consequences of these acts.

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[1] https://www.pewresearch.org/fact-tank/2015/05/29/what-americans-think-about-nsa-surveillance-national-security-and-privacy/

[2] https://www.axios.com/consumers-kinda-sorta-care-about-their-data-3292eae9-2176-4a12-b8b5-8f2de4311907.html

This project provides the first empirical analysis of conditions when citizens may give up their privacy in an authoritarian setting. Studying surveillance in this setting is difficult, but important. An increasing reliance on the Internet allows authoritarian governments to use this medium to surveil and repress their citizens. Indeed, cyber-operations have become common in Middle Eastern autocracies that have long relied on repression and surveillance using the *mukhabarat* or intelligence services (e.g. Brownlee, Masoud, and Reynolds 2015). Today, this is especially true for the oil-rich Gulf monarchies where roughly 80% of their citizens are active on social media. For instance, the United Arab Emirates (UAE) have utilized its vast wealth to fund surveillance operations of ordinary citizens — regime critics dissidents, not just foreign governments and suspected terrorists.[3] As many states have been using "national security" as a justification to monitor internet activities (Lupovici, 2018), these results apply outside of the Middle Eastern autocracies. As a result, they provide important theoretical and policy contributions.

1 What We Know about Technology & Surveillance

There exists ample academic work that examines the state's use of surveillance and its impact (e.g Foucault, 1977). Recently, scholars started examining the use of the Internet in place of traditional, physical surveillance tactics (Asal et al., 2016; Coleman, 2014; Egorov, Guriev, and Sonin, 2009; Esarey and Xiao, 2008, 2011; King, Pan, and Roberts, 2013). However, we know little about how the public views the government's use of surveillance. Rather, public-opinion scholars have largely focused on how the internet has changed political behavior — the effects of the Internet on (i) political participation (Coleman, Taylor, and van de Donk, 1999; Bimber, 2001; Weber, Loumakis, and Bergman, 2003; Kluver, 2004; Polat, 2005; Haynes and Pitts, 2009); (ii) social activity (Brants et al.,

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[3]https://af.reuters.com/article/worldNews/idAFKCN1PO1A6

1996; Franzen, 2000; Robinson et al., 2000; Howard, Rainie, and Jones, 2001); (iii) collective actions (Lupia and Sin, 2003); and (iv) the relationship between citizens and bureaucrats (Scavo and Shi, 2000; Bovens and Zouridis, 2002; Welch and Fulla, 2005; Mossberger, Tolbert, and Stansbury, 2003).

While studies have shown that risk perception is critical in understanding individual preferences and behaviors (Hafner-Burton et al., 2017; Kertzer, 2017; Kostyuk and Wayne, 2019), we know little about risk assessment in cyberspace due to the lack of theoretical and empirical evidence regarding cybersecurity in the literature. A few experimental works evaluate emotional mechanisms underlying citizens' threat perceptions surrounding cyber operations. For instance, exposure to very specific stories about acts of cyber-terrorism have been shown to increase anxiety (Jarvis, Macdonald, and Whiting, 2017). Some politically motivated cyber operations can even cause as much emotional distress as typical physical terrorist violence (Canetti, Gross, and Waismel-Manor, 2016) and can lead to a hardening of militant political attitudes in conflict contexts. Moreover, exposure to different types of cyber threats, particularly those that personally impact individuals, affects individuals' perception of cyber risk and their reported willingness to change their personal online behavior (Kostyuk and Wayne, 2019). As such, researchers have yet to explore the conditions when public is willing to give up privacy for security against cyber operations. This study fills an existing theoretical and empirical gap by bridging different but important works from political science, policy, psychology and computer science to examine citizen preference for privacy rights in autocracies.

2   Theory: Privacy in the Name of Security

This project argues that the effect of different types of threats and targets will produce divergent risk perceptions, resulting in divergent public support for surveillance.

Using a 2 x 2 design, we directly manipulate a cyber threat's two key characteristics —
its *type* (criminal versus terrorist) and *target* (personal versus national) — while keeping
other threat's characteristics constant. We expect that risk perceptions of cyber threats
that target participants directly (i.e criminal condition) will be relatively low, despite an
increasingly growing evidence that such threats may present more risk to individual than
other security threats, such as terrorism. Additionally, we hypothesize that individuals
are more likely to accept government violation of their privacy when this is framed as
necessary to protect citizens against threats to themselves (i.e. personal versus national)
than when it is framed as necessary to protect the political order (national). Individual's
cognitive biases might explain such a perception.

Slovic (2016) explains two key dimensions of risk perception — "dread" that the un-
wanted outcome triggers and the extent, to which this risk is "known." The physical con-
sequences of many terrorist attacks that citizens tend to vividly remember should create
a high perception of such dread compared to consequences of cyber-criminal operations,
many of which still remain unknown. Unlike in the cases of terrorism where many lives
were lost, no one has been killed as a direct result of online criminal activities. Since both
dimensions of risk perception are much higher for terrorism than for cyber crime, we ex-
pect citizens to be willing to sacrifice their privacy in the terrorism (versus cyber crime)
condition due to devastating and physically evident consequences of these acts.

However, exposure to a cyber threat that personally target an individual may shift
their perception of how dreadful some cyber threats can be and make them think about
real consequences of cyber operations. This may alter their overall perception of cyber
risk. As a result, we argue that individuals are more likely to accept government violation
of their privacy when this is framed as necessary to protect citizens against threats to
themselves (i.e. personal versus national) than when it is framed as necessary to protect

the political order (national).

Lastly, we also expect to observe significant heterogeneous effects, in relation to the prior perception of government and prior exposure to cyber threats, among additional variables. We explain these effects in Section 4.4.

3 *Hypotheses*

This project will test how citizens respond to different types of threats and targets of cyber operations. Specifically, our main goal is to test the following two groups of hypotheses:

1. *Personal versus National*: Individuals are more likely to accept government violation of their privacy when this is framed as necessary to protect citizens against material threats to them than when it is framed as necessary to protect the political order.

2. *Criminal versus Terrorist*: Individuals are more likely to accept violation of their privacy when this is framed as necessary to protect them from terrorism than when it is framed as necessary to protect them from crime.

All hypotheses can be summarized as the following:

- *Support for Surveillance*

  - Individuals are more likely to accept government violation of their privacy after exposure to the personal condition (versus the national condition).

  - Individuals are more likely to accept government violation of their privacy after exposure to the terrorism condition (versus the crime condition).

- *Value of Privacy*

- Individuals are more likely to value their privacy after exposure to the personal condition (versus the national condition).

- Individuals are more likely to value their privacy after exposure to the terrorism condition (versus the crime condition).

- *Support for Cybersecurity Spending*

  - Individuals are more likely to support increase in cybersecurity spending after exposure to the personal condition (versus the national condition).

  - Individuals are more likely to support increase in cybersecurity spending after exposure to the terrorism condition (versus the crime condition).

- *Online Behavior*

  - Individuals are more likely to report willingness to engage in cautious online behaviors after exposure to the personal condition (versus the national condition).

  - Individuals are more likely to report willingness to engage in cautious online behaviors after exposure to the terrorism condition (versus the crime condition).

- *Risk Perception*

  - Individuals are more likely to report heightened perception of cyber risks after exposure to the personal condition (versus the national condition).

  - Individuals are more likely to report heightened perception of cyber risks after exposure to the terrorism condition (versus the crime condition).

4 Research Design

4.1 Survey Methodology

The face-to-face survey interviews will be conducted using a nationally representative sample of 2,000 Kuwaiti nationals, 18 or older. We are working with the Kuwaiti branch of IPSOS, a global research firm. The survey is set to take place for roughly a month this summer.

To select respondents, the sampling frame is created based on the most recent Kuwaiti national census that took place in 2014, with updates incorporated from the 2017 statistical reports from the Public Authority for Civil Information (PACI). We use a random stratified quota sampling according to gender, age, and region. All governorates and neighborhoods in Kuwait are included.[4] A public intercept method is used to recruit respondents at cafes, malls, parks, diwaniyyaas, etc. Co-ops are government-operated entities and almost always consist of a grocery store, mosque, bank, pharmacy as well as various shops and restaurants. The co-ops also distribute subsidies; every citizen is entitled to subsidized goods such as rice and chickens. They exist in every neighborhood and places for everyday needs for all Kuwaitis. This method was chosen as door-to-door surveys are illegal in Kuwait.

Kuwait is an oil-rich monarchy where the emir has ruled the country since independence. Social media plays a crucial social and domestic role in the country, where almost all citizens own smartphones. Increasingly, social media has played a key role in the Middle East and North Africa region (MENA), such as during 2009 Iranian protests, 2011 Arab uprisings, and 2019 popular protests in North Africa. More importantly, social media has shaped day-to-day interactions outside of the political discourse.

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[4]Age categories are

4.2 Experimental Design

We manipulate two variables of threats: type and target. This design allows us to systematically examine how the citizen responses vary in different plausible contexts. Subjects will be randomly assigned to one of four manipulation conditions or a control. The enumerators will read a corresponding short text.

		Target	
		Personal	National
Type	Criminal	T1	T3
	Terrorist	T2	T4

Control: More than 90% of Kuwaitis today have one or more social media accounts.

Treatment 1 (criminal / personal): More than 90% of Kuwaitis today have one or more social media accounts. **Criminals** have increasingly targeted *Kuwaitis on social media* to steal their private information.

Treatment 2 (terrorist / personal): More than 90% of Kuwaitis today have one or more social media accounts. **Terrorists** have increasingly targeted *Kuwaitis on social media* to steal their private information.

Treatment 3 (criminal / national): More than 90% of Kuwaitis today have one or more social media accounts. **Criminals** have increasingly targeted *government entities in Kuwait* to steal their secret information.

Treatment 4 (terrorist / national): More than 90% of Kuwaitis today have one or more social media accounts. **Terrorists** have increasingly targeted *government entities in Kuwait* to steal their secret information.

4.3 Variables

4.3.1 Dependent Variables

We include five categories of dependent variables: support for government surveillance, value of privacy, support for government spending on cyber capabilities, personal online behavior, and risk assessment. We ask the following questions after reading to them the aforementioned texts.

1. *Support for Surveillance:*

    - How much do you oppose or support the view: the government should increase monitoring social media and internet activities in order to identify potential perpetrators and prevent wrongdoing.

      (a) Strongly oppose

      (b) Mostly oppose

      (c) Somewhat oppose

      (d) Neither oppose nor support

      (e) Somewhat support

      (f) Mostly support

      (g) Strongly support

2. *Value of Privacy:*

- How much do you oppose or support the view: the privacy of a citizens social media and internet accounts should not be violated under any circumstance

  (a) Strongly oppose

  (b) Mostly oppose

  (c) Somewhat oppose

  (d) Neither oppose nor support

  (e) Somewhat support

  (f) Mostly support

  (g) Strongly support

3. *Support for cybersecurity spending*

   - Thinking about public spending to improve governments abilities to stop online criminal activities, should it be...?

     (a) Much more than now

     (b) Somewhat more than now

     (c) Same as now

     (d) Somewhat less than now

     (e) Much less than now

4. *Personal online behavior*

   - How often do you plan to update your passwords in the future?

     (a) More than once a month

     (b) About once a month

     (c) A few times a year

(d) About once every year

    (e) Never

    (f) Only when I have to

- How often do you plan to update your anti-virus software in the future?

    (a) More than once a month

    (b) About once a month

    (c) A few times a year

    (d) About once every year

    (e) Never

    (f) Only when I have to

- How likely are you to hide your identity when you write or upload on the internet?

    (a) Extremely likely

    (b) Very likely

    (c) Moderately likely

    (d) Somewhat likely

    (e) Not at all likely

5. *Risk assessment*

- How likely do you think it is that your online personal data will be stolen by criminals or terrorists in the next year?

    (a) Extremely likely

    (b) Very likely

    (c) Moderately likely

(d) Somewhat likely

(e) Not at all likely

- How secure do you think the government websites are from external threats?

    (a) Extremely secure

    (b) Very secure

    (c) Moderately secure

    (d) Somewhat secure

    (e) Not at all secure

4.3.2 Other Variables

We begin the survey by asking respondents questions on factors that could potentially confound the relationship between exposure to treatment and the dependent variables. We also include variables that may produce heterogeneous treatment effects.

1. *Ideology:* To evaluate ideology in a country where the conventional liberal-conservative spectrum has multiple meanings, we as questions such as the following:

    - *Wealth Distribution:* Some people feel that the incomes should be made more equal through the distribution of part of the wealth of the rich to the poor. Suppose these people are at one end of a scale, at point 1. Others feel there should be larger income differences as incentives for individual effort. Suppose these people at the other end, at point 5. And of course, some other people have opinions somewhere in between. Where would you place yourself on this scale, or haven't you thought much about this?

    - *Government Involvement:* Some believe that the government should grant everyone a job and provide him with a minimum standard of living. Suppose

these people are at one end of a scale, at point 1. Others believe that individual, not the government, has to manage his own situation even if the individual has no job and no money. Suppose these people at the other end, at point 5. Of course, there are some people with intermediate views. Where would you place yourself on this scale, or haven't you thought much about this?

- *Islamist/Secular* How worried are you about the following: neglecting religious obligations?

2. *Previous exposure to online threats:*

- To your knowledge, have you, or anyone you know, ever had online accounts hacked or personal online information stolen (like bank information, photos, address, etc.)?

3. *Prior perception of national security and international relations:*

- How worried are you about the following:
  - Street crime
  - Foreign interventions in Kuwaiti affairs
  - Terrorist attack
  - Military threats
  - Online privacy
- How strong or weak do you prefer future relations to be, between Kuwait and the following countries or entities?
  - Saudi Arabia
  - Russia
  - Qatar

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- Israel

  - Iraq

  - Iran

  - China

  - USA

  - Bahrain

  - Turkey

  - Egypt

  - Oman

4. *Perceptions of Governance Quality:* It is logical to think that prior perception of government performance may influence how citizens view various government policies.Barnes and Córdova (2016) have argued that citizens with higher respect for government "citizens in countries with relatively good governance quality who express a strong preference for government involvement to improve citizens' well-being" show greater support for governmental policies. At the same time, if a government's capacity to deliver promised outcomes is limited, citizens will be skeptical of the effectiveness of the promised effects of governmental policies. Because of that, we ask participants to answer a few questions related to governance quality, their preferences for government involvement to improve citizens' well-being and their evaluation of a government's capability to deliver promised outcomes.

   - Please indicate if you have total, considerable, partial, low, or no confidence for the following:

     - Parliament and MPs

     - Cabinet and ministers

– Judiciary and judges

5. *Political Knowledge and Interest* We also measure a participant's level of political awareness because their support for regime policies depends on their level of political awareness. Studying authoritarian regimes, Geddes and Zaller (1989) demonstrate that people who are in the middle range of awareness are exposed to government-dominated media and are not able to resist it, and, as a result, are the most susceptible to government influence. Following Geddes and Zaller (1989, p. 327)'s approach, we use *political information* as the most generally reliable and valid measure of political awareness.

- *Knowledge:* How many MPs are there in the parliament?

- *Interest:* How interested would you say you are in politics – are you ...?

6. *Cyber-Security Behaviors:* We amended questions by Egelman and Peer (2015) that measures respondents' cyber-security behaviors.

- For your online and social media accounts, how careful do you use a difficult or long password that goes beyond the sites minimum requirements?

- For your online and social media accounts, how often do you use two-factor authentication?

7. *Previous perception of government surveillance & self-censorship:*

- How likely do you think somebody is accessing your private information like emails, Internet surfing history, social media accounts, etc.?

- To your knowledge, have you, or anyone you know purposefully tried to hide his online activities?

8. *Demographics:* We also collect common socio-economic and demographic features of respondents such as antecedents of political attitudes such as age, gender, region, marital status, religion, religiosity, vocation, language, income and education.

4.4   *Heterogeneous Treatment Effects*

Different subgroups of participants might respond in distinct ways to different variables. Possibilities include, but are not limited to:

- Those respondents who express less trust in government may show *lower* support for surveillance and cybersecurity spending.

- Those respondents who themselves or someone who they know were victims of cyber attacks may show *higher* support for surveillance and cybersecurity spending.

- Those respondents who express more support for bigger government role in the economy (i.e. redistribution) may show *higher* support for surveillance and cybersecurity spending

- Those respondents with a medium-level of political awareness may show *higher* support for surveillance and cybersecurity spending.

- Those respondents who already engage in some cyber-protective behaviors or self-censorship may report *higher* willingness to engage in other cyber-protective behaviors in any manipulation condition.

- Those respondents who express lower prior perception of national security may report *higher* support for surveillance and cybersecurity spending.

We use the interactions terms in the following regression model to model these heterogenous effects:

$$Y_i = \alpha + \beta_1(T_i) + \beta_2(\gamma_i) + \beta_3[(T_i) * (\gamma_i)] + \beta_4(X_i)\epsilon_i, \tag{1}$$

where a moderator γ_i and an interaction term of the moderator and treatment condition $[(T_i) * (\gamma_i)]$ are introduced. If the interaction term β_3 is significant, we will use marginal effects plots to make interpretations regarding who is driving the treatment effect most those high or low in γ_i. Because the theoretical priors on treatment effect heterogeneity are relatively weak, we will explore these effects in an exploratory fashion.

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