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Militarization and Perceptions of Law Enforcement in the Developing World: Evidence from a Conjoint Experiment in Mexico

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Abstract

Although a growing body of research suggests that the constabularization of the military for domestic policing is counterproductive, this increasingly prevalent policy has nonetheless enjoyed widespread support in the developing world. This study advances our understanding of the consequences of militarization for perceptions of law enforcement: whether visual features shape perceptions of effectiveness, respect for civil liberties, proclivity for corruption and acceptance of militarization in one's own neighborhood. Based on a nationally representative, image-based, conjoint experiment conducted in Mexico, the authors find that military weapons and uniforms enhance perceptions of effectiveness and respect for civil liberties, and that the effect of military uniform becomes greater with increased military presence. The study also finds that gender shapes perceptions of civil liberties and corruption, but detects no effect for skin color. The findings suggest that a central feature of militarization linked to greater violence – military weapons – is paradoxically a key factor explaining favorable attitudes, and that women can play a crucial role in improving perceptions of law enforcement.

Keywords: policing; Latin America; militarization of law enforcement; conjoint; Mexico; public opinion

Governments around the world have increasingly militarized law enforcement. Although in the developed world militarization has taken place in the form of police adopting characteristics of the armed forces – as with the proliferation of SWAT teams and the use of military gear in local police departments – in broad parts of the developing world it has also taken the form of constabularized militaries taking on domestic law enforcement roles. The constabularization of the armed forces has become prevalent in many Latin American countries, such as Bolivia, Brazil, Colombia, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Peru and Venezuela. In all of these examples, the armed forces conduct domestic law enforcement tasks traditionally reserved for civilian police in democratic contexts, including patrolling neighborhoods, staffing checkpoints and conducting arrests.

Although a growing body of research suggests that the constabularization of the armed forces for domestic policing in the developing world is ineffective at best and counterproductive at worst (Flores-Macías and Zarkin 2021a; Lessing 2017; Osorio 2015),¹ the policy has enjoyed widespread public support in Latin America (Bailey, Parás and Vargas 2013). For example, Flores-Macías (2018) finds that constabularization is responsible for a 17 per cent increase in Mexico's homicide rate; Pérez-Correa, Silva and Gutiérrez (2015) point to a lethality rate – civilians killed per soldier

¹For comparable findings on the militarization of police in the United States, see Delehanty et al. 2017; Lawson 2019; Mummolo 2018.

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or federal police – at least three times higher for the military; and Magaloni and Rodríguez (2020) find that militarization increases torture by almost 10 percentage points. Yet over 60 per cent of Latin Americans approved of the military participating in law enforcement in 2014 (Americas Barometer 2019).

However, the relationship between constabularization and public opinion remains poorly understood. While some research has begun to explore public attitudes towards the militarization of law enforcement, it has dealt exclusively with the United States and has therefore focused on attitudes towards police becoming more like militaries (for example, Moule, Fox and Parry 2019). Further, this research has been mostly correlation based or qualitative in nature (for example, Lockwood, Doyle and Comiskey 2018). In contrast to the growing interest in the trend towards 'tough-on-crime' policies in American politics and other industrialized democracies (Jennings et al. 2017; Roberts et al. 2003; Wenzelburger 2016), the study of punitive populism – the promise of easy solutions to address complex crime and law enforcement problems (Pratt 2007) - in the developing world has lagged considerably. Scholars have yet to understand the consequences of constabularization in general, and its impact on public opinion in particular. Understanding attitudes towards militarization is important because even if militarization does not contribute to desirable outcomes – and might in fact make things worse – politicians can seize the opportunity to deploy the armed forces, often with disastrous human rights consequences. Further, as Blair and Weintraub (2020) suggest, the deployment of the military itself can contribute to an increased demand for aggressive military policing.

To advance our understanding of constabularization in the developing world, we preregistered and embedded an image-based conjoint experiment in a nationally representative survey in Mexico in August 2018.² Respondents were presented with two similar images of security personnel. Controlling for relevant factors, including pose, size, facial expression, body and background, these images randomly varied in four attributes: uniform, weapon, gender and skin color. Respondents were then asked to rate each image in terms of perceived effectiveness, respect for civil liberties, proclivity for corruption, and support for that person conducting law enforcement in the respondent's neighborhood.

This study advances the existing literature by (1) evaluating attitudes towards tough-on-crime policies beyond the US context, (2) testing whether visual features of constabularization affect perceptions of law enforcement regarding effectiveness, respect for civil liberties, corruption and support for presence in one's own neighborhood, (3) studying constabularization in combination with other physical attributes that might also shape citizens' perceptions and (4) employing images rather than text to more closely approximate reality.

We find that both military uniforms and military weapons increased perceptions of effectiveness and respect for civil liberties, and that the effect of military uniform is larger in municipalities with a greater military presence. We also find that gender had no effect on perceptions of effectiveness, but females increased perceptions of respect for civil liberties and reduced perceptions of corruption. We did not find an effect for skin color. Further, we find that military weapons increased support for constabularization in the respondent's neighborhood, while male images decreased support. These findings suggest that female security personnel can enhance perceptions of respect for civil liberties and integrity, but also that a key feature of militarization that is associated with higher levels of violence – the use of military weapons – is a central factor contributing to favorable attitudes among the public.

By providing a first step towards understanding the relationship between constabularization and attitudes towards law enforcement, these findings contribute to the literatures on punitive populism, police-society relations and civil-military relations in the developing world. In particular, they shed light on specific attributes that make punitive policies, such as militarization,

²The hypotheses, procedures and models presented here were conducted as pre-registered.

appealing to civilians regardless of the results, as well as how society perceives and relates to the armed forces and police in the developing world.

This article is organized as follows. The next section presents an overview of the literature that can inform hypotheses about public perceptions regarding the four features investigated in this article (uniform, weapons, gender and skin color). The second section discusses the case selection and research design. The third section presents the results of the image-based conjoint experiment conducted in Mexico. The final section concludes by reviewing the policy implications of the findings.

Punitive Populism and the Popularity of Militarization

A primary form of punitive populism is politicians' favoring tough-on-crime approaches to gain political favor, even when the effectiveness of such policies is in doubt (Flom and Post 2016). Punitive populism tends to be politically expedient because punitive approaches resonate among publics in need of solutions to pressing problems. Examples of policies meant to deter crime because of their severity include so-called three-strike laws, mandatory sentences and the militarization of law enforcement.

Most of the literature on punitive populism and public attitudes has focused on incarceration policies in industrialized countries (for example, Jennings et al. 2017; Lerman and Weaver 2014), but our understanding of the militarization of law enforcement remains limited even for that part of the world. Research on its prevalence, causes and consequences remains underdeveloped, with a few scholarly studies on attitudes towards militarization focusing on individual-level correlates of support – including respondents' party ID and education – for militarized policing in the developed world (Fox, Moule and Parry 2018). Further, findings have often been based on convenience samples, such as research by Wyrick (2013), who found that the militarization of police is associated with decreased trust in the police among college students. An exception is Mummolo's survey experiment (2018), which found that militarized police can inflate perceptions of crime and depress support for police.

Although these US-centered studies have begun to scratch the surface to understand how citizens view the militarization of police, we know even less about attitudes towards the constabularization of the armed forces for domestic policing, especially in the developing world. We still need to understand whether constabularization affects attitudes towards law enforcement, and which factors might shape perceptions favorably. Although the political science literature has made advances regarding democratic policing (Bailey and Dammert 2006; González 2020; Moncada 2009), criminal violence (Cruz and Durán-Martínez 2016; Osorio 2015; Rosen and Kassab 2020; Snyder and Durán-Martínez 2009; Yashar 2018) and victimization (Bateson 2012; Berens and Dallendörfer 2019; Zechmeister and Zizumbo-Colunga 2013) in Latin America, remarkably little research has been conducted in the developing world on punitive populism in general and public attitudes towards constabularization in particular (Brown and Benedict 2002).³ This is a major oversight, especially given the growing trend towards constabularization of the armed forces in the Global South (Flores-Macías and Zarkin 2021a).

Latin America's Constabularized Militaries

The constabularization of the armed forces for domestic policing has become widespread in Latin America. Not only has the region experienced the generalized trend of police adopting military weapons and tactics, but in several countries soldiers have become permanent fixtures in the daily

³Although not about public attitudes, Chevigny's overview (1995) of fear-of-crime politics in Latin America, Flom and Post's (2016) study on political incentives for punitive populism in Buenos Aires, and Holland's (2013) discussion of tough-on-crime policies to boost electoral support in El Salvador are exceptions.

law enforcement landscape. In Mexico, for example, more than 67,000 troops have participated in widespread policing since 2006 (Ordorica 2011). In Brazil, the armed forces have increasingly helped state governments regain control of urban areas (*The Economist* 2017). In Honduras, the government created the Military Police for Public Order in 2013 to combat drug trafficking (Secretaría de Defensa Nacional de Honduras 2013). Even countries that have historically lacked a military, like Costa Rica and Panama, are considering proposals to militarize law enforcement.

Governments have justified the constabularization of the armed forces by pointing to several shortcomings of police, including their ineffectiveness, disregard for civil liberties and corruption, and the popularity of the policy has facilitated its adoption. As Figure 1 shows, a majority of respondents in every Latin American country supports the armed forces becoming involved in law enforcement. This is the case even in countries with historically low levels of crime, such as Chile and Uruguay. The more we understand the logic behind public support for constabularization, the better we can inform the public about the policy's virtues and flaws.

Appearance as Heuristic for Perceptions

Appearance serves as a low-information heuristic that people rely on to form opinions about others' competence, honesty or trustworthiness (Benjamin and Shapiro 2009; Zebrowitz et al. 2002). The political science literature has found that an individual's appearance affects others' attitudes and behavior (for example, Lawson et al. 2010; Weaver 2012) even after brief exposure to a visual stimulus, such as a still image. For example, Lawson et al. (2010, 561) found that even snap judgments – 'perceptions formed by looking briefly at images of candidates' faces' – can affect people's support for a particular candidate, and that these perceptions are highly predictive of electoral results.

The criminology literature on public attitudes towards law enforcement similarly documents the role of brief visual stimuli as low-information heuristics. As Zhao and Ren (2015) have shown, attitudes towards police are generated from impressions rather than factual knowledge. Criminology research also suggests that citizens' evaluations are anchored in perceived attributes gathered from either personal interactions or while viewing an officer (for example, Frank, Smith and Novak 2005, 217). Further, as Simpson (2017) notes, most people's perceptions of law enforcement take shape not as a result of formal interaction or engagement, but rather from passive visualization.

Building on this theoretical framework on how individuals' appearance affects perceptions of law enforcement, we formulate hypotheses as to whether the type of uniform, weapon, gender and skin color influence perceptions regarding effectiveness, respect for civil liberties and proclivity for corruption. From Portland, Oregon to Latin America, debates about the merits of involving the police versus the military have focused on differences in capabilities and professional conduct, emphasizing effectiveness, civil liberties and corruption (for example, Bailey, Parás and Vargas 2013; Hertling 2020). As Sabet (2010, 247) highlights in the Mexican case, 'A brief review of the daily newspapers reveals problems such as (1) corruption and collusion with organized crime, (2) abuses [...] in the form of torture, unwarranted search and seizure, violations to due process, and inversion of the presumption of innocence, and (3) ineffectiveness exemplified by the inability to stem the violence.'

Indeed, these police shortcomings are reasons that governments often offer to justify the militarization of law enforcement. As a commissioner of a Mexican state agency (2018) characterized the appointment of a retired general to lead a local police department: '[The general's appointment] was based on the assumption that because he was ex-military, he was less corruptible and more effective'.

Beyond effectiveness, civil liberties and corruption, we also evaluate the effect of uniform, weapon, skin color and gender on the degree to which respondents support the individuals in the images conducting law enforcement in their own neighborhood. We consider this a 'hard

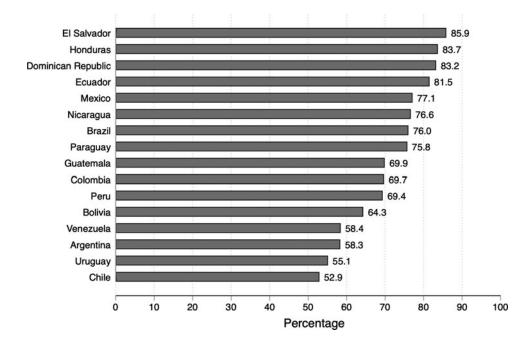


Figure 1. Support for militarization in Latin America

Note: bars indicate support for whether 'the armed forces should combat crime and violence,' based on LAPOP's Americas Barometer 2014 wave. The 2012 wave shows similar levels of support.

test' of support for militarization, since otherwise respondents may express views of the military in the abstract, rather than in their own communities. Since the literature on these issues in the developing world is even more scarce than research focused on industrialized democracies, we extend the expectations from the literature to these previously unexplored dimensions in the Latin American context with an emphasis on Mexico.

Military Uniform

Clothing communicates different things about the wearer (Harris et al. 1983), and uniforms are no exception. Bickman (1974), for example, finds that people wearing private guard uniforms obtained more compliance with their requests than those who dressed as civilians, in part because the uniform can be a symbol of legitimate authority. Since we are not aware of any studies comparing military uniforms with those of police, we turn to the few studies that compare police with civilian attire. For example, scholars have found differences in public perceptions of police wearing traditional (that is, non-paramilitary) uniforms compared to those in civilian attire. Traditional police uniforms increase perceptions of professionalization and reduce aggression towards officers (Gundersen 1987; Tenzel, Storms and Sweetwood 1976), inspire trust and induce subordination (Balkin and Houlden 1983; Singer and Singer 1985), and increase perceptions of competence (Mauro 1984).

While these studies provide important initial evidence to support the claim that people's perceptions can vary based on differences between police and civilian uniforms, they are less informative for understanding the Latin American context, where soldiers coexist with civilian police in law enforcement and the armed forces are typically better regarded than police (Bailey, Parás and Vargas 2013). According to Americas Barometer (2019), for example, in 2018 trust in the armed forces was greater than that for police in every Latin American country. Mexico is no exception: its armed forces remain one of the country's most trusted institutions. We therefore expect the military uniform to elicit favorable perceptions across several dimensions: greater effectiveness, less corruption and more support for conducting law enforcement in one's neighborhood. Further, given the tradeoffs between effectiveness in law enforcement and respect for civil liberties (Comey 2005), and because of the military's involvement in widespread human rights violations,⁴ we expect the military uniform to increase perceptions of abuse.

Military Weapon

As with the uniform, a 'weapons effect' has been documented in the psychology literature, in which the presence of weapons can shape behavior – whether increasing aggression or eliciting obedience (Berkowitz and Lepage 1967; Boyanowsky and Griffiths 1982). For example, based on a field experiment to study extortion along truck routes in Indonesia, Olken and Barron (2009) show that truckers offered larger bribes to officers whose weapons were visible, compared to those whose weapons were concealed.

However, the literature on how weapons affect perceptions of law enforcement is scarce and unable to distinguish between the effects of uniform and weapon. In particular, Mauro (1984) found that police officers with a traditional – that is, non-militarized – uniform and a visible weapon were perceived as more competent and honest than those wearing a civilian-style uniform (blazer) and no visible weapon. However, no attempt was made to distinguish between the effects of the uniform and weapon, which were conflated in the study.

In countries with significant drug-related violence, as in Colombia, El Salvador, Honduras or Mexico, military-grade weapons have become common among law enforcement personnel to counter the weapons employed by organized crime. Since weapons are a symbol of authority (Olken and Barron 2009), we expect a visible military-grade weapon to elicit favorable perceptions regarding several dimensions: greater effectiveness, less corruption and more support for patrolling one's neighborhood. Given the tradeoffs between effectiveness and respect for civil liberties, we expect the assault rifle to increase perceptions of abuse.

Gender

It has been long established that men and women are perceived differently while performing the same job (McKee and Sherriffs 1957). While research on gender-based perceptions has focused on attitudes towards candidates running for office (for example, Huddy and Terkildsen 1993; Kahn 1992) or in office (Schwindt-Bayer and Reyes-Householder 2017), surprisingly little has been written about state bureaucracies, such as the police or the military. Although prior studies have examined gender and policing, they have emphasized the structural barriers facing policewomen (Brown 1998), their attitudes towards gender issues (Page 2008), and their own views about police duties (Burke and Mikkelsen 2005).

Research on perceptions of women in the police and military has been sparse and has generated mixed findings. Leger (1997) found in a US study that the majority of respondents do not penalize female officers for their perceived physical ability and competence in policing. However, other US studies have found that women are perceived as less effective than their male counterparts (Breci 1997), but also less corrupt (Barnes, Beaulieu and Saxton 2018), less aggressive and friendlier (Simpson 2017). In developing contexts outside the United States, Karim (2019) found that increases in the ratio of women to men in police forces improve trust in Liberia, and Córdova and Kras (2019) found that women's police stations in Brazil result in higher levels of perceived legitimacy among women. A similar disparity in perceptions has been found among the armed

⁴Military rule in Argentina, Brazil, Chile, Peru and Uruguay was characterized by widespread human rights abuses. More recently, the armed forces have also been involved in grave human rights abuses as in Colombia's false positives scandal and Mexico's Ayotzinapa massacre.

forces, with women viewed as less suitable for combat roles in the US military (Drake 2006). In the developing world, Calderón (2010) found through an ethnographic study that women are perceived as fragile and less effective in Ecuador's military. In Mexico, women face comparable stereotypes: Barnes, Beaulieu and Saxton (2018) documented perceptions that female law enforcement personnel are more trustworthy.

As these studies suggest, stereotypes characterize women as weaker or less authoritative than men (McKee and Sherriffs 1957), which leads us to expect lower perceptions of effectiveness. However, women are also perceived as more caring, honest and less threatening (Barnes, Beaulieu and Saxton 2018), which leads us to expect greater perceptions of respect for civil liberties, less corruption and greater support for their presence in one's neighborhood.

Skin Color

A broad literature has documented how skin color affects perceptions of competence, leading to double standards placed on disadvantaged groups (Foschi 2000). In the context of policing, research has uncovered bias in police behavior towards different ethnic groups (White 2015), but the literature has remained surprisingly silent regarding how law enforcement personnel's own skin color might affect perceptions about them (Nanes 2018).

The few existing studies point to mixed findings. A study of three communities in Washington, DC suggests police were perceived as 'blue' rather than through a racial lens (Weitzer 2000). Yet a study by Cochran and Warren (2012) in the United States suggests that an officer's race is an important factor in shaping citizen perceptions of the legitimacy of encounters during traffic stops, particularly for minority citizens; encounters with non-white officers were seen as less legitimate on average. The literature is even more limited outside the United States, where insights about skin color in law enforcement are virtually non-existent. Notable exceptions are Weitzer and Hasisi's (2008) study of perceptions of ethno-religious differences among police in one police district in Israel and Nanes' (2018) research on demographic inclusion in Israel and Iraq. Their results provide some evidence that people prefer officers from their own ethno-religious groups, and that perceptions of police inclusion affect how citizens relate to the state.

Skin color correlates with social hierarchy in Latin America; countries in the region have been referred to as pigmentocracies (Telles 2014). Across the region, there is a positive bias associated with whiteness, and discrimination associated with darker skin tones (Aguilar Pariente et al. 2015). Not surprisingly, white European-looking soldiers have historically occupied the highest leadership positions in the military, whereas the bulk of the armed forces are darker – mestizo and/or indigenous, depending on the country (Rouquié 1987, 64).⁵ Even in countries where becoming a military officer has lost appeal for elites, leadership positions tend to be held by lighter-skinned, middle-class individuals (Norden 2016, 250).

In Mexico, for example, although a large majority of individuals are non-European looking – including those serving in the police and armed forces – the aspirational skin tone is white (Aguilar Pariente 2011; Trejo and Altamirano 2016). Therefore, we expect lighter skin to elicit favorable perceptions across dimensions: greater effectiveness, respect for civil liberties, less corruption and more support for patrolling one's neighborhood.

Case Selection and Research Design

We used an image-based conjoint design to simultaneously test the effect of military uniform, military weapon, gender and skin color on attitudes towards law enforcement personnel.

⁵Although the officer core has historically been more European looking everywhere in Latin America, Peru's military dictatorship (1969–1975) made some progress incorporating darker-skinned individuals into the army's leadership. However, other branches of Peru's military continued to lag (Hurtado 2006).

Conjoint analysis is an excellent tool to understand which combination of attributes is favored over others, since it enables researchers to estimate component-specific treatment effects simultaneously (Hainmueller, Hopkins and Yamamoto 2014). Rather than presenting respondents with a text-based list of attributes for each individual, as is commonly found in the political science literature (for example, Carnes and Lupu 2016; Hainmueller and Hopkins 2015), we conducted an image-based experiment.

We consider this an improvement over text-based experiments because images more closely approximate real-world situations in which respondents encounter security personnel. Although images might remain unable to elicit the same reaction as a real-world encounter would, the image-based approach enhances ecological validity compared to text since most people's encounters with law enforcement are visual, passive, and without any formal interaction or engagement (Simpson 2017).

The image-based conjoint experiment was embedded in a nationally representative omnibus survey in Mexico between August and October 2018. The survey was funded through an open call for proposals by a university's social science experimentation lab and fielded by a Mexican polling firm. Respondents (n = 1,206) were selected based on a nationally representative, probability-based sample. The face-to-face surveys were conducted at the respondents' homes.

Like many Latin American countries, Mexico has experienced rampant violent crime related to drug-trafficking organizations. The United States' demand for illegal drugs, crackdowns in Colombia and the dramatic influx of high-caliber weapons from the United States intensified drug-related violence in Mexico (Dube, Dube and García-Ponce 2013). Further, political alternation at the local and federal levels undermined informal networks of cartel protection (Snyder and Durán-Martínez 2009; Trejo and Ley 2018). Facing increasingly powerful and violent drug trade organizations, in 2006 President Felipe Calderón (2006-2012) declared an all-out war against organized crime (Romero, Magaloni and Díaz-Cayeros 2016; Shirk 2011). He first sent troops to Michoacán state and eventually launched police-military operations in nearly two-thirds of the Mexican states. The disruptive effect of law enforcement magnified the competition for illicit markets and resulted in an escalation of inter-cartel violence (Osorio 2015), often driven by the government's policy of decapitating drug trafficking organizations (Phillips 2015). Homicides tripled between 2006 and 2011, and more than 100,000 people were killed in Mexico during this period. The militarized approach against drug trafficking continued under Calderon's successors, Enrique Peña Nieto (2012-2018) and Andrés Manuel López Obrador (2018 to present).

We conducted the experiment in Mexico for three main reasons. First, the police and armed forces both regularly perform law enforcement tasks, which is important for the ecological validity of the experiment. More than 60,000 troops have been constabularized across the national territory for this purpose, staffing checkpoints, patrolling urban and rural areas, conducting arrests, and in some municipalities replacing local police departments altogether. Secondly, Mexico is not atypical in this regard. It is one of several Latin American countries in which the armed forces regularly participate in law enforcement, including Colombia, El Salvador, Guatemala and Honduras. Further, like the vast majority of Latin American countries, Mexico's armed forces enjoy greater trust among the population than the police.⁶ Thus Mexico presents a context in which the survey questions are meaningful and where the findings are likely to apply to other countries. Thirdly, perceptions of law enforcement in Mexico have not yet been investigated; therefore this study's findings can shed significant light on uncharted territory.⁷

⁶The exceptions are Uruguay and Chile, where trust in the police and armed forces is about the same (Latinobarometer 2018).

⁷To our knowledge, the only such study that has been conducted (Brown et al. 2006) relied on a convenience sample of law school students in Tamaulipas state and asked about attitudes towards police.

The first part of the questionnaire included a series of pre-treatment questions on baseline measures of interest, including gender, age, income, education, victimization, ideology, party ID and trust in the military. After answering the socioeconomic and demographic questions, respondents were asked to read a short sentence with instructions explaining that they would look at images and then answer some questions about them. Following the statement, respondents were presented with two similar images side by side. The images randomly varied in the four attributes of interest (uniform, weapon, gender, skin color) for a total of sixteen different profiles; other relevant factors remained constant, such as body, pose, size, height, complexion, facial expression and background (see Figure 2). These images were created using Photoshop to ensure that they were identical in every respect except the four attributes of interest.

As shown in Figure 2, the four features varied in subtle but important ways. The police version of the uniform included features typically associated with police, such as being all blue in color, showing a police badge on the chest and carrying a police baton on the belt. The military uniform replicates the police uniform in all respects, but is olive green with camouflage, has no badge and carries no baton. Both police and military uniforms include a helmet, but the police uniform has a face shield lifted over the head, whereas the military uniform does not.

A range of images could be chosen from the law enforcement continuum found in Latin America to evaluate whether constabularization shapes perceptions. We selected these particular images to generate a difficult test to evaluate whether very subtle changes influence perceptions. Whereas there is a broad spectrum of law enforcement personnel in the developing world, from non-militarized police to constabularized armed forces, we focus on images representing the threshold at which law enforcement switches from civilian police to the armed forces. The distance between (c) and (d) in Figure 3 is where law enforcement moves from militarized police – those with many visual attributes of militarization (for example, tactical uniform for combat readiness) but preserving features that typically distinguish them from the armed forces, such as the color blue and a badge – to constabularized armed forces. Crucially, not only does this choice constitute the hardest test for the uniform hypothesis – compared to the much sharper but less interesting contrast between (a) and (d) in Figure 3, for example – but it also allows us to hold most other visual features constant, since the uniforms of militarized police and constabularized military are visually closest.⁸

Further, as shown in Figure 4, the images of militarized police and constabularized military shown in the experiment are fairly typical in many Latin American countries. In Mexico, although the exact features of police uniforms vary slightly across levels of government (municipal, state, federal) and function (ministerial, anti-riot, etc.), militarized police typically wear blue uniforms and dark bulletproof vests. Mexico's armed forces also wear slightly different uniforms depending on the mission and military branch, but soldiers involved in domestic operations typically wear the olive green camouflaged uniform. It is also not unusual to find both police and soldiers with long weapons in Mexico (as shown in Figure 4 and in the Appendix). The pictures shown for the experiment reflect these features, which is important to enhance ecological validity. Whereas exploring the use of images in traditional, non-militarized police uniform would also be interesting, given limited resources,⁹ attention to ecological validity, and that this might not generate a conservative effect, we opted for images that would help evaluate whether a subtle change from a militarized police baseline to constabularized armed forces would have a noticeable effect on perceptions.

As with the uniform, the weapon varied in a subtle way as well. Whereas the baseline version shows no rifle, the other version showed parts of a military-grade assault rifle behind the person – the stock is visible over the shoulder and the barrel next to the opposite thigh, but the middle part

⁸For example, both often include bulletproof vests, combat boots and helmets.

⁹To the best of our knowledge, our study is the first to conduct a nationally representative, image-based survey experiment on attitudes towards law enforcement in a developing country.

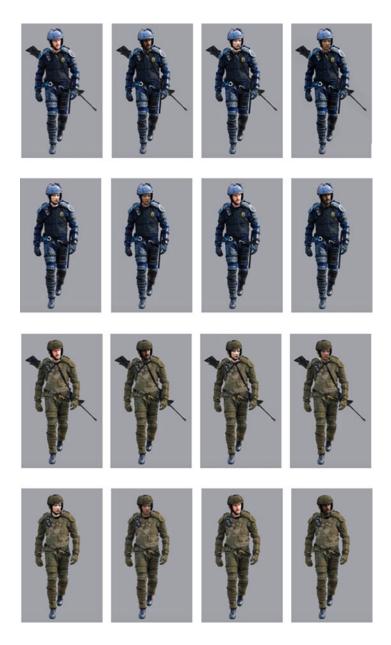


Figure 2. Images of the 16 profiles

is hidden behind the person. The partial concealment of the assault rifle would also likely yield a more conservative effect than a prominently displayed weapon.

Variation in skin color is also relatively subtle, since only the face and part of the neck are exposed in the images. One version presents light skin and the other darker skin. The face is the same, but the difference in skin color was generated by modifying the contrast in Photoshop.

For gender, we varied the face but maintained the rest of the image constant, including the body, height and complexion. A woman's face was included in one version, and man's face was included in the other. Both faces have a similar, relatively stern expression. All sixteen images have a plain gray background.

Below each pair of images, respondents were asked about their perceptions of the effectiveness, respect for civil liberties and propensity for corruption of the individuals in the images. They were



Figure 3. Visual distance between different types of law enforcement

also asked whether they would support the personnel in the images conducting law enforcement tasks in their own neighborhood. For example, respondents first read: 'The following are images of two people that work in law enforcement. Please observe both images carefully and answer the following questions.' This statement was followed by 'How would you rate their effectiveness?',¹⁰ 'To what extent do you think they respect civil liberties?'; 'How prone to engaging in corruption do you think they are?'; 'To what extent would you support or oppose them in your neighborhood?' The images appeared at the beginning of every question to ease the cognitive burden, rather than having to memorize the profiles.

To identify which components of the images were influential, we followed Hainmueller, Hopkins and Yamamoto's (2014) non-parametric approach to component-specific treatment effects. Our causal quantity of interest is the average marginal component effect (AMCE). We measured the AMCE with completely independent randomization (that is, no restrictions on the possible attribute combinations) because we are interested in how different values of the l^{th} attribute of the j^{th} profile influence an image's rating. The AMCE represents the marginal effect of attribute l over the joint distribution of the remaining attributes and can be interpreted as the average change in an image's rating when we include certain attribute values instead of the baseline attribute value.

Results

Figure 5 summarizes the effects of weapon, uniform, gender and skin color on the four outcomes of interest. Military weapon and military uniform had a significant effect when respondents were shown a pair of images and asked to rate the effectiveness of each on a 10-point scale (rescaled from 0 to 1), from not at all effective to very effective. On the 0 to 1 scale, individuals with a military weapon receive ratings 0.13 standard deviations higher than those without one, and the effect of wearing a military uniform was about half of that for the military weapon. Additionally, we do not find a significant effect for gender or skin color on perceptions of effectiveness.

Regarding civil liberties, both weapon and uniform had a significant effect on respondents' views. The assault rifle increased the perception of respect for civil liberties by 0.13 standard

¹⁰While effectiveness might have different connotations, this question was asked immediately after the statement about the two images working in law enforcement. Our interpretation is therefore one about effectiveness in law enforcement.

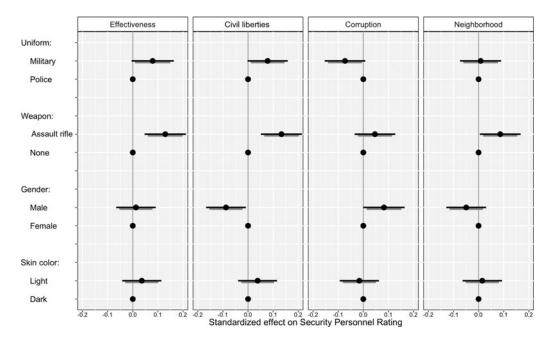


Figure 4. Militarized law enforcement (police and soldiers) in Latin America Sources: Agencia Anadolu (2019), CuartoPoder (2018), El Colombiano (2019), El Confidencial (2016), El Heraldo (2014), Prensa Libre (2014), Sputnik (2019), and Wall Street Journal (2010).

deviations. The military uniform increased perceptions of respect for civil liberties by about half the magnitude of the effect of the weapon. Male personnel decreased perceptions of respect for civil liberties by one-tenth of a standard deviation compared to female images. We do not find an effect for lighter skin on perceptions of respect for civil liberties.

Regarding corruption, military uniform decreased perceptions by 0.07 standard deviations. Military weapon increased perceptions of corruption but did not reach statistical significance. Male images increased perceptions of corruption by about a tenth of a standard deviation. Skin color did not shift perceptions of corruption.

For the question of whether respondents would support or oppose the personnel in the images conducting law enforcement in their own neighborhood, military weapon increased support by about a tenth of a standard deviation, but military uniform showed no effect. Male images





Note: this plot shows estimates of the effect of randomly assigned attributes (uniform, weapon, gender and skin color) on the rating of a security personnel image, measured in standard deviations. Estimates are based on the benchmark OLS model with robust standard errors clustered by respondent. Black bars represent 95 per cent confidence intervals and gray bars 90 per cent confidence intervals. The points without bars represent the reference category for each attribute. Effectiveness is measured from not at all to very effective; civil liberties is measured from never respects to always respects; corruption is measured from not at all prone to very prone to commit acts of corruption; and neighborhood is measured from strongly oppose to strongly support.

reduced support, but the estimate falls short of significance at conventional levels. There was no effect for differences in skin color.

Interactions with Contextual and Respondent Characteristics

The baseline results enable us to assess the overall importance of different visual aspects of constabularization on public perceptions of law enforcement. Yet our empirical design and research setting also allow us to test for potential moderators of the component effects described above. One such test is whether the military's past participation in public safety affects perceptions of its involvement in domestic policing. Mexico is an ideal setting in which to explore this question because we can leverage the sub-national variation in military operations to compare respondents' views across constabularized and non-constabularized municipalities.

Given that most information on the Mexican military is not public, we submitted a right-to-information request to obtain municipal-level data on the military's participation in domestic policing. In response, the Defense Ministry (SEDENA) provided information on the military's confrontations with criminal organizations between January 2007 and February 2018.¹¹ Though confrontations are an imperfect measurement of military presence, it serves as a reasonable proxy for constabularization because it provides information on the location and intensity of the military's operations. Further, SEDENA rejects most right-to-information requests related to the military's domestic missions on national security grounds (Storr and López Portillo Vargas 2019), making confrontations data all the more valuable for our purposes.

¹¹Request 000070003118.

We aggregated the number of confrontations from January 2007 to February 2018 for each municipality and use this measurement to proxy for the degree of military presence in a respondent's municipality. Specific to the municipalities in our survey sample, accumulated confrontations between the military and criminal organizations range between 0 and 101, and close to 50 per cent of the surveyed individuals resided in municipalities with no military confrontations.

As shown in the top row of Figure 6, compared to the police baseline, we find an increase in the effect of military uniform on people's perceptions as the military presence intensifies. The effect of military uniform on perceptions of effectiveness, respect for civil liberties, corruption and support for conducting law enforcement in one's neighborhood increases with a greater military presence. We did not find differential effects for weapon, gender or skin color. The results are available in the Appendix.

Since the armed forces are often assigned to the most dangerous areas, we also evaluate whether violent crime, rather than military presence, could be responsible for the observed differences in effects. However, as the bottom row in Figure 6 shows, the conditional effect of military uniform on perceptions of law enforcement personnel is indistinguishable from zero at all values of 5-year average homicide rates. Levels of violence do not appear to shape the effect of military uniform on respondents' views.

Taken together, these results suggest that the military's law enforcement operations further enhance their effect on perceptions. Individuals living in areas where the military conducted public safety operations not only express more favorable views of effectiveness and respect for civil liberties, but are also more supportive of the military policing in their own neighborhoods.

Beyond military presence and levels of violent crime, we also estimated whether causal effects differed by respondent sub-group.¹² As shown in the Appendix, there are interesting results pertaining to gender, trust in the military and ideology. For example, respondents who report greater trust in the military tend to express more favorable views of law enforcement personnel. A similar pattern holds for more conservative respondents. Also, the results suggest that women tend to have more favorable views of personnel carrying a military-style weapon.

Discussion

The findings suggest that two visual aspects of constabularization, the weapon and uniform, consistently affect public perceptions of law enforcement. Although for both attributes we expected a tradeoff between perceptions of effectiveness and respect for civil liberties, we found no evidence of such tradeoff. Instead, there was an effect in the opposite direction: military uniform and military weapon increased perceptions of respect for civil liberties. This suggests that the perception of authority conveyed by the military uniform and weapon prevails over the human rights scandals the Mexican armed forces have been involved in over the last several years, including accusations of extra-judicial killings, enforced disappearances and torture, including the 2014 disappearance of forty-three students in Ayotzinapa (Human Rights Watch 2019). This might be explained by both a halo effect generated by the more authoritative-looking weapon and the Mexican police's reputation of routinely engaging in human rights violations. However, the term 'civil liberties' can be interpreted in different ways by different people – for example, freedom of opinion and protest vs. the right not to be victimized by state forces. Further research should explore whether the effect found for civil liberties is in line with a particular type of understanding.

Although military weapon and military uniform share favorable effects on effectiveness and respect for civil liberties, important differences are worth highlighting. The first is the differentiated effect on perceptions of corruption. Whereas we expected a decline in perceptions of

¹²The Appendix also shows estimates of absolute levels of favorability towards profiles by attribute for each sub-group using marginal means (Leeper et al. 2020).

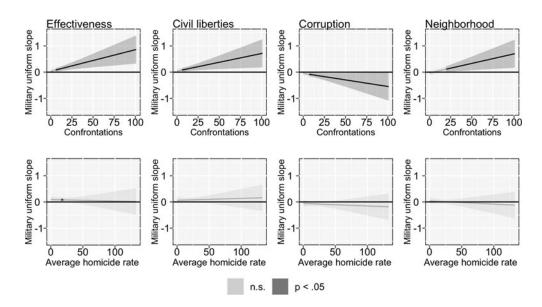


Figure 6. Interaction between military uniform and military presence/violence levels *Note*: this figure plots the interaction between confrontations occurring between January 2007 and February 2018 and military uniform in the first row and the interaction between the 5-year average homicide rate and military uniform in the second row. The horizontal axis represents the values of the moderator. On the vertical axis are the values of the slope relating the military uniform attribute to the effectiveness, civil liberties, corruption and neighborhood ratings measured in standard deviations. The gray areas represent 95 per cent confidence intervals, with regions of significance in dark gray.

corruption for both military weapon and military uniform because of the armed forces' greater reputation of discipline and integrity, only the uniform generated an effect in line with expectations. This result reflects the prevailing belief in Mexico that police are synonymous with corruption.

The other differentiated effect relates to support for patrolling the respondent's neighborhood. Military uniform fell short of expectations in that it did not shift public attitudes, but the military weapon did. This is ultimately a hard test of support because, rather than asking in the abstract, it brings the prospect of militarization close to home.

Gender also played a role in some cases. Although it did not affect perceptions of effectiveness, male images reduced perceptions of respect for civil liberties, increased perceptions of corruption and reduced support for patrolling the respondent's neighborhood. Whereas the literature on gender and security sector has offered mixed results (for example, Breci 1997; Calderón 2010; Karim 2019), we find that women are associated with desirable features – such as being less corrupt and more respectful of civil liberties – and are not perceived as being less effective. This finding suggests that policies to recruit more female officers and increase the sex ratio in security forces might have positive effects on the prevailing sentiment towards security institutions.

The inability to find an effect for skin color was surprising, because Mexico is a fairly hierarchical society along ethnic lines. As Aguilar Pariente (2011) and Trejo and Altamirano (2016) have pointed out, greater discrimination occurs with darker skin color. Although there is a slight change in perceptions of images with lighter skin color as more effective, more respectful of human rights, less corrupt and enjoying greater support for patrolling the respondent's neighborhood, this change is very small and not significant. One reason could be that in the context of Mexico's public safety landscape, skin color becomes overshadowed by other attributes of law enforcement personnel, which is consistent with Weitzer's (2000) findings in the United States.

The interactions with military presence and levels of crime suggest that the effect of the uniform is exacerbated by a greater military presence in a municipality. Our finding that the effect is not affected by levels of crime suggests that respondents' perceptions might be driven not by frustration with levels of insecurity, but by the sustained presence of the armed forces themselves, regardless of effectiveness.

The effects discussed above would likely be larger if the treatments were less subtle. For example, a more prominently displayed assault rifle could generate larger effects. The same can be said for the difference between military uniform and traditional police uniform, instead of the militarized tactical police uniform shown in the images as the reference category.

Finally, a common challenge for experimental work is ecological validity, or the extent to which it can approximate real-world conditions. Although images are not quite as realistic as videos or actual interactions, they improve on the text-based or vignette-style experiments that have dominated the conjoint experiment literature in political science to date. Since most people's interactions with law enforcement personnel are visual, passive, and without any formal dialogue or engagement, the visualization of images is not far removed from the type of distant visualization that takes place for the vast majority of the population (Simpson 2017).

Conclusion

This study's findings make several important contributions to theory and policy. While public opinion surveys have pointed to the broad popularity of militarization, our results are the first to shed light on how the armed forces' constabularization affects perceptions of law enforcement in the developing world.

In particular, we show that both military weapons and uniforms elicit perceptions of greater effectiveness and respect for civil liberties among the public, and that weapons have a greater effect than uniforms. However, whereas a military weapon led to greater support for operating in one's neighborhood, a military uniform reduced perceptions of a propensity for corruption. The effects found for military uniform were exacerbated in municipalities with a greater armed forces presence, regardless of the policy's effectiveness in reducing levels of crime. As for the other visual features, although we did not find an effect for skin color, female personnel can generate greater support for patrolling the respondent's neighborhood, as well as higher perceptions of respect for civil liberties and integrity.

The results suggest a conundrum: the feature that elicits the most favorable attitudes towards law enforcement – the use of military-grade weapons – is also the very aspect that has been most associated with greater levels of violence resulting from militarization more broadly. A number of studies have found that the use of military weapons for policing purposes results in more suspects wounded or killed by police (for example, Lawson 2019; Pérez-Correa, Silva and Gutiérrez 2015).¹³ Employing military weapons can make law enforcement personnel feel like they are in a conflict scenario where greater violence should be used (Doherty 2016, 446).

Further, because of the considerable leeway involved in policing (Mastrofski 2004), the more potentially damaging the weapon at hand, the more severe the violence that will result from encounters with suspects. While there are protocols guiding police action, decisions on the ground must often be made in split-second calculations, without continuous supervision, following ambiguous regulations or laws and under considerable stress. Operational discretion is even greater in the developing world, where standard operating procedures are less developed and legal uncertainty is prevalent (Sabet 2010). In short, one of the aspects identified as contributing to greater violence from constabularization in the number of people wounded or killed is also a key main driver of favorable attitudes.

In addition to advancing the scholarship on attitudes towards punitive populism in Mexico, this study's findings contribute to the literature on why citizens support ineffective policies or those that run counter to their own interests (Caplan 2007). This article begins to make sense

¹³Bove and Gavrilova (2015) is an exception.

of the reasons behind this disconnect using evidence from Mexico. Although Mexico shares relevant factors with other Latin American countries – such as the armed forces conducting domestic policing, higher trust in the military than police, white skin as the aspirational skin tone and stereotypes about women as less effective but more caring – further research should evaluate whether the findings travel to other developing countries.

The findings also have important implications for policy makers and international organizations concerned with good governance reforms in the security sector, as well as strategies to improve people's opinions of security forces worldwide. The findings suggest that, in line with the literature on women in policing and peacekeeping (Barnes, Beaulieu, and Saxton 2018; Karim 2019), relying on women for law enforcement can elicit desirable perceptions – including greater integrity and respect for civil liberties. These favorable perceptions lend support to some police departments' efforts to design ambitious strategies to recruit female personnel, such as in Morelia, Mexico. Doing so is bound to not only improve perceptions, but also bring positive institutional change from within.

Supplementary material. Online appendices are available at https://doi.org/10.1017/S0007123421000259.

Data availability statement. Replication data for this paper can be found in Harvard Dataverse at: https://doi.org/10.7910/ DVN/UMUEOK.

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References

- Agencia Anadolu (2019) México: Nueve personas murieron en enfrentamiento en Guerrero [Mexico: nine people died in a confrontation in Guerrero]. 24 October. Available from https://www.aa.com.tr/es/mundo/m%5C%C3%5C%A9xico-nueve-personas-murieron-en-enfrentamiento-entrebandas-criminales-en-guerrero/1625188.
- Aguilar Pariente R (2011) Social and political consequences of stereotypes related to racial phenotypes in Mexico, Documento de Trabajo CIDE 230, August.
- Aguilar Pariente R et al. (2015) Ballot structure, candidate race, and vote choice in Brazil. *Latin American Research Review* **50**(3), 175–202.
- Americas Barometer (2019) Vanderbilt University's Latin America Public Opinion Project. Available from www. LapopSurveys.org.

Bailey J and Dammert L (2006) Public Security and Police Reform in the Americas. Pittsburgh, PA: University of Pittsburgh Press.

- Bailey J, Parás P and Vargas D (2013) ¿El ejército como policía? Correlación de la confianza pública en la policía, el sistema judicial, y los militares. [The military as police? The correlation between trust in the police, the judicial system, and the military]. Política y Gobierno, 161–185.
- Balkin S and Houlden P (1983) Reducing fear of crime through occupational presence. *Criminal Justice and Behavior* 10(1), 13–33.
- Barnes T, Beaulieu E and Saxton G (2018) Restoring trust in the police: why female officers reduce suspicions of corruption. *Governance* 31, 143–161.
- Bateson R (2012) Crime victimization and political participation. American Political Science Review 106(3), 570-587.

Benjamin D and Shapiro J (2009) Thin-slice forecasts of gubernatorial elections. *Review of Economics and Statistics* **91**(3), 523–536.

- Berens S and Dallendörfer M (2019) Apathy or anger? How crime experience affects individual vote intention in Latin America and the Caribbean. *Political Studies* 67(4), 1010–1033.
- Berkowitz L and Lepage A (1967) Weapons as aggression-eliciting stimuli. *Journal of Personality and Social Psychology* 7(2), 202–207.
- Bickman L (1974) The social power of a uniform. Journal of Applied Social Psychology 4(1), 47-61.
- Blair RA and Weintraub M (2020) Mano Dura: An Experimental Evaluation of Military Policing in Cali, Colombia. Working Paper.
- Bove V and Gavrilova E (2015) Policeman on the frontline or a soldier? The effect of police militarization on crime. American Economic Journal: Economic Policy 9(3), 1–18.
- Boyanowsky E and Griffiths C (1982) Weapons and eye contact as instigators or inhibitors of aggressive arousal in policecitizen interaction. Journal of Applied Social Psychology 12(4), 398–407.
- Breci M (1997) Female officers on patrol: public perceptions in the 1990s. Journal of Crime and Justice 20(2), 153-155.
- Brown B and Benedict WR (2002) Perceptions of the police: past findings, methodological issues, conceptual issues, and policy implications. *Policing* 25(3), 543–580.
- Brown B, Benedict WR and Wilkinson W (2006) Public perceptions of the police in Mexico: a case study. *Policing* 29(1), 158–175.
- Brown J (1998) Aspects of discriminatory treatment of women police officers serving in forces in England and Wales. *British Journal of Criminology* 38(2), 265–282.
- Burke R and Mikkelsen A (2005) Gender issues in policing: do they matter? Women in Management Review 20(2), 133-143.
- Calderón Garrido L (2010) Discriminación de género y percepciones de la sexualidad entre los aspirantes, cadetes, instructores y autoridades en la Escuela Superior Militar Eloy Alfaro y la Escuela de Policía General Enríquez Gallo. [Gender discrimination and perceptions on sexuality among prospective cadets, cadets, instructors, and high-ranking officers in the Eloy Alfaro Advanced Military School and the General Enríquez Gallo Police School]. Master's thesis. Universidad Andina Simón Bolivar. Available from http://repositorionew.uasb.edu.ec/handle/10644/2238.
- Caplan B (2007) The Myth of the Rational Voter: Why Democracies Choose Bad Policies. Princeton, NJ: Princeton University Press.
- Carnes N and Lupu N (2016) Do voters dislike working-class candidates? Voter biases and the descriptive underrepresentation of the working class. American Political Science Review 110(4), 832–844.
- Chevigny P (1995) The populism of fear. Punishment and Society 5(1), 77-96.
- Cochran J and Warren P (2012) Racial, ethnic, and gender differences in perceptions of the police: the salience of officer race within the context of racial profiling. *Journal of Contemporary Criminal Justice* **28**(2), 206–227.
- Comey J (2005) Fighting terrorism and preserving civil liberties. University of Richmond Law Review 43, 403–418.
- Commissioner of a Mexican State Agency (2018) Personal interview. Mexico. March.
- Córdova A and Kras H (2019) Addressing violence against women: the effect of women's police stations on police legitimacy. Comparative Political Studies 53(5), 775–808.
- Cruz JM and Durán-Martínez A (2016) Hiding violence to deal with the state: criminal pacts in El Salvador and Medellin. Journal of Peace Research 53(2), 197–210.
- *CuartoPoder* (2018) Ejercito y Policia ya cubren vacio de Gendarmeria en Morelia [In the absence of the Gendarmerie, the military and police take over in Morelia], 7 March. Available at https://cuartopodermichoacan.com/ejercito-y-policia-ya-cubren-vacio-de-gendarmeria-en-morelia/.
- Delehanty C et al. (2017) Militarization and police violence: the case of the 1033 program. Research and Politics 4(2), 1-7.
- Doherty J (2016) US vs them: the militarization of American law enforcement and the psychological effect of police officers and civilians. *Southern California Interdisciplinary Law Journal* 25, 415–450.
- Drake M (2006) Ambivalence at the academies: attitudes toward women in the military at the federal service academies. Social Thought and Research 27, 43–68.
- Dube A, Dube O and García-Ponce O (2013) Cross-border spillover: US gun laws and violence in Mexico. American Political Science Review 107(3), 397–417.
- *El Colombiano* (2019) Grupo especial del ejército para dar captura a criminales de Bello [Special military group is created to capture criminals in Bello], 14 March. Available from https://www.elcolombiano.com/antioquia/seguridad/violencia-enbello-grupo-elite-del-ejercito-reforzara-seguridad-HF10378348.
- *El Confidencial* (2016) El hijo del 'Chapo' Guzmán ha sido liberado, según un familiar de otro secuestrado [According to a family member of one of the kidnapped, the son of "El Chapo" Guzman is free], 21 August. Available from https://www.elconfidencial.com/mundo/2016-08-21/mexico-narcotrafico-secuestro-hijo-chapo-guzman-liberado_1249355/.
- *El Heraldo* (2014) Acusan a Policía de Honduras de operar escuadrones de la muerte [The Honduran police is accused of having death squads], 7 April. Available from https://www.elheraldo.hn/sucesos/621908-219/acusan-a-policia-dehonduras-de-operar-escuadrones-de-la-muerte.
- Flom H and Post A (2016) Blame avoidance and policy instability in developing countries: the politics of public security in Buenos Aires. *Comparative Politics* **49**(1), 23–42.
- Flores-Macías G (2018) The consequences of militarizing anti-drug efforts for state capacity in Latin America: evidence from Mexico. Comparative Politics 51(1), 1–20.

- Flores-Macías G and Zarkin J (2021a) The militarization of law enforcement: evidence from Latin America. *Perspectives on Politics* 19(2), 519–538.
- Flores-Macías G and Zarkin J (2021b) Replication data for: Militarization and perceptions of law enforcement in the developing world: evidence from a conjoint experiment in Mexico. Available from https://doi.org/10.7910/DVN/UMUEOK, Harvard Dataverse, V1, UNF:6:w0UEw2pMrkzirVtT17llAQ==

Foschi M (2000) Double standards for competence: theory and research. Annual Review of Sociology 26(1), 21-42.

- Fox B, Moule Jr R and Parry M (2018) Categorically complex: a latent analysis of public perceptions of police militarization. Journal of Criminal Justice 58, 33–46.
- Frank J, Smith B and Novak K (2005) Exploring the basis of citizens' attitudes toward the police. *Police Quarterly* 8(2), 206–228.
- González Y (2020) Authoritarian Police in Democracy: Contested Security in Latin America. New York: Cambridge University Press.
- Gundersen DF (1987) Credibility and the police uniform. Journal of Police Science and Administration 15(3), 192-195.
- Hainmueller J and Hopkins D (2015) The hidden American immigration consensus: a conjoint analysis of attitudes toward immigrants. American Journal of Political Science 59(3), 529–548.
- Hainmueller J, Hopkins D and Yamamoto T (2014) Causal inference in conjoint analysis: understanding multidimensional choices via stated preference experiments. *Political Analysis* 22(1), 1–30.
- Harris MB et al. (1983) Clothing: communication, compliance, and choice. *Journal of Applied Social Psychology* 13(1), 88–97.
- Hertling M (2020) 'I helped build a police force in Iraq. We refused to dress them in camo', *The Washington Post*, 20 July. Available from https://www.washingtonpost.com/outlook/2020/07/20/mark-hertlingpolice-portland/.
- Holland A (2013) Right on crime? Conservative party politics and Mano Dura policies in El Salvador. Latin American Research Review 48(1), 44–67.
- Huddy L and Terkildsen N (1993) The consequences of gender stereotypes for women candidates at different levels and types of office. *Political Research Quarterly* **46**(3), 503–525.
- Human Rights Watch (2019) Mexico: Events of 2018. New York: Human Rights Watch.
- Hurtado L (2006) Ejército cholificado: reflexiones sobre la apertura del ejército peruano hacia los sectores populares [The 'cholificacion' of the military: reflections on the Peruvian military's opening to the popular sector]. *İconos: Revista de Ciencias Sociales* 26, 1390–1249.
- Jennings W et al. (2017) Penal populism and the public thermostat: crime, public punitiveness, and public policy. *Governance* 30(3), 463–481.
- Kahn K (1992) Does being male help? An investigation of the effects of candidate gender and campaign coverage on evaluations of US Senate candidates. *Journal of Politics* 54(2), 497–517.
- Karim S (2019) Restoring confidence in post-conflict security sectors: survey evidence from Liberia on female ratio balancing reforms. British Journal of Political Science 49(3), 799–821.
- Latinobarometer (2018) Latinobarometer data 2018.
- Lawson C et al. (2010) Looking like a winner: candidate appearance and electoral success in new democracies. *World Politics* **62**(4), 561–593.
- Lawson Jr E (2019) Police militarization and the use of lethal force. Political Research Quarterly 72(1), 177-189.
- Leeper T, Hobolt S and Tilley J (2020) Measuring subgroup preferences in conjoint experiments. *Political Analysis* 28(2), 207–221.
- Leger K (1997) Public perceptions of female police officers on patrol. American Journal of Criminal Justice 21(2), 231-249.
- Lerman A and Weaver V (2014) Arresting Citizenship: The Democratic Consequences of American Crime Control. Chicago, IL: University of Chicago Press.
- Lessing B (2017) Making Peace in Drug Wars: Crackdowns and Cartels in Latin America. New York: Cambridge University Press.
- Lockwood B, Doyle M and Comiskey J (2018) Armed, but too dangerous? Factors associated with citizen support for the militarization of the police. *Criminal Justice Studies* **31**(2), 113–127.
- Magaloni B and Rodríguez L (2020) Institutionalized police brutality: torture, the militarization of security, and the reform of inquisitorial criminal justice in Mexico. *American Political Science Review* **114**(4), 1013–1034.
- Mastrofski S (2004) Controlling street-level police discretion. ANNALS of the American Academy of Political and Social Science 593(1), 100–118.
- Mauro R (1984) The constable's new clothes: effects of uniforms on perceptions and problems of police officers. *Journal of Applied Social Psychology* 14(1), 42–56.
- McKee J and Sherriffs A (1957) The differential evaluation of males and females. Journal of Personality 25(3), 356–371.
- Moncada E (2009) Toward democratic policing in Colombia? Institutional accountability through lateral reform. *Comparative Politics* **41**(4), 431–449.
- Moule Jr R, Fox B and Parry M (2019) The long shadow of Ferguson: legitimacy, legal cynicism, and public perceptions of police militarization. *Crime and Delinquency* **65**(2), 151–182.

Mummolo J (2018) Militarization fails to enhance police safety or reduce crime but may harm police reputation. Proceedings of the National Academy of Sciences of the United States of America 115(37), 1–6.

Nanes M (2018) Policing in divided societies: the importance of perceptions. *Comparative Politics Newsletter* 28(1), 51–58. Norden D (2016) Latin American militaries in the 21st century: civil-military relations in the era of disappearing boundaries.

In Mares D and Kacowicz A (eds), Routledge Handbook of Latin American Security. London: Routledge, pp. 242-253.

- Olken B and Barron P (2009) The simple economics of extortion: evidence from trucking in Aceh. Journal of Political Economy 117(3), 417-452.
- Ordorica AP (2011) El Ejército y la ley. Nexos, 1 December. Available from https://www.nexos.com.mx/?p=14585.
- **Osorio J** (2015) Contagion of drug violence: spatio-temporal dynamics of the Mexican war on drugs. *Journal of Conflict Resolution* **59**(8), 1403–1432.
- Page A (2008) Judging women and defining crime: police officers' attitudes toward women and rape. *Sociological Spectrum* **28**(4), 389–411.
- Pérez-Correa C, Silva C and Gutiérrez R (2015) Índice de letalidad: menos enfrentamientos más opacidad [Lethality index: fewer confrontations and more opacity]. *Nexos*, 1 July. Available from https://www.nexos.com.mx/?p=25468
- Phillips B (2015) How does leadership decapitation affect violence? The case of drug trafficking organizations in Mexico. *Journal of Politics* 77(2), 324–336.

Pratt J (2007) Penal Populism. London: Routledge.

Prensa Libre (2014) Honduras arranca operativos para combatir la violencia, 28 January. Available from https://www.prensalibre.com/internacional/honduras-arranca-operativos-para-combatir-violencia-0-1074492745/.

- Roberts J et al. (2003) Penal Populism and Public Opinion: Lessons from Five Countries. New York: Oxford University Press.
 Romero V, Magaloni B and Díaz-Cayeros A (2016) Presidential approval and public security in Mexico's war on crime. Latin American Politics and Society 58(2), 100–123.
- Rosen J and Kassab HS (2020) Crime, Violence, and the State in Latin America. New York: Routledge.

Rouquié A (1987) The Military and the State in Latin America. Berkeley: University of California Press.

- Sabet D (2010) Police reform in Mexico: advances and shared obstacles. In Olson E, Shrik D and Selee A et al. (eds), Shared Responsibility: US-Mexico Policy Options for Confronting Organized Crime. Washington, DC: Wilson Center, p. 247.
- Schwindt-Bayer L and Reyes-Householder C (2017) Citizen responses to female executives: is it sex, novelty or both? *Politics, Groups, and Identities* 5(3), 373–398.
- Secretaría de Defensa Nacional de Honduras (2013) Memoria 2013 Secretaría de Defensa Nacional [2013 Annual Report of the Secretariat of National Defense]. Available from http://www.dip.mindef.mil.gt/memoria_labores_2012-2013.pdf.
- Shirk D (2011) The Drug War in Mexico. Washington, DC: Council on Foreign Relations.
- Simpson R (2017) The police officer perception project: an experimental evaluation of factors that impact perceptions of the police. *Journal of Experimental Criminology* 13(3), 393–415.
- Singer M and Singer AE (1985) The effect of police uniform on interpersonal perception. *The Journal of Psychology* **119**(2), 157–161.
- Snyder R and Durán-Martínez A (2009) Does illegality breed violence? Drug violence and state-sponsored protection rackets. Crime, Law, and Social Change 52(3), 253–273.
- Sputnik News (2019) Policía colombiana despeja disturbios en puente fronterizo con Venezuela [Colombian police handle disturbances on a border bridge with Venezuela], 26 February. Available from https://mundo.sputniknews.com/americalatina/201902261085722317-choques-opositores-venezolanos-tachira/.
- Storr S and López Portillo Vargas E (2019) Seguridad Pública Enfocada en el Uso de la Fuerza e Intervención Militar: La Evidencia en México 2006–2018 [Public security focused on the use of force and military intervention: evidence from Mexico 2006–2018]. Ciudad de México: Universidad Iberoamericana. Available from https://seguridadviacivil.ibero.mx/pdf/informe.pdf?_ga=2.88145947.182919811.1605128811-1697792030.1605128811.

Telles E (2014) Pigmentocracies: Ethnicity, Race, and Color in Latin America. Chapel Hill: University of North Carolina Press.

- Tenzel J, Storms L and Sweetwood H (1976) Symbols and behavior-experiment in altering police role. *Journal of Police Science and Administration* **4**(1), 21-27.
- The Economist (2017) The Brazilian army is turning into a de facto police force, 6 July.
- **Trejo G and Altamirano M** (2016) The Mexican color hierarchy: how race and skin tone still define life chances 200 years after independence. In Hooker J and Tillery A (eds), *The Double Bind: The Politics of Racial Class in the Americas*. Washington, DC: APSA, pp. 1–14.
- Trejo G and Ley S (2018) Why did drug cartels go to war in Mexico? Subnational party alternation, the breakdown of criminal protection, and the onset of large-scale violence. *Comparative Political Studies* 51(7), 900–937.
- Wall Street Journal (2010) 12 Mexican police killed in ambush, 15 June. Available from https://www.wsj.com/articles/ SB10001424052748704324304575306862673082500.
- Weaver V (2012) The electoral consequences of skin color: the 'hidden' side of race in politics. *Political Behavior* **34**(1), 159–192.
- Weitzer R (2000) White, black or blue cops? Race and citizen assessments of police officers. *Journal of Criminal Justice* 28(4), 313–324.

Weitzer R and Hasisi B (2008) Does ethnic composition make a difference? Citizens' assessments of Arab police officers in Israel. *Policing & Society* 18(4), 362–376.

Wenzelburger G (2016) A global trend toward law and order harshness? European Political Science Review 8(4), 589-613.

- White K (2015) The salience of skin tone: effects on the salience of police enforcement authority. *Ethnic and Racial Studies* **38**(6), 993–1010.
- Wyrick P (2013) Police Militarization: Attitudes Towards the Militarization of the American Police (Master's thesis). East Tennessee State University. Available from https://dc.etsu.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com.mx/ &httpsredir=1&article=2329&context=etd.
- Yashar D (2018) Homicidal Ecologies: Illicit Economies and Complicit States in Latin America. New York: Cambridge University Press.
- Zebrowitz L et al. (2002) Looking smart and looking good: facial cues to intelligence and their origins. *Personality and Social Psychology Bulletin* 28(2), 238–249.
- Zechmeister E and Zizumbo-Colunga D (2013) The varying political toll of concerns about corruption in good versus bad economic times. *Comparative Political Studies* **46**(10), 1190–1218.

Zhao J and Ren L (2015) Exploring the dimensions of public attitudes toward the police. Police Quarterly 18(1), 3-26.

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