THE STRUCTURE OF PUBLIC OPINION ON CRIME POLICY: EVIDENCE FROM SEVEN CARIBBEAN NATIONS

Edward R. Maguire* American University

Devon Johnson George Mason University

January 29, 2015

*Edward Maguire is the corresponding author. He can be contacted at maguire@american.edu.

Edward R. Maguire is Professor in the Department of Justice, Law, and Criminology at American University in Washington, DC. His professional interests focus on policing, violence, social science methodology, and comparative criminology. He is currently leading studies of gangs and violence in the Caribbean, transnational crime in Central America and the U.S., predictive policing in Uruguay, and protest policing in the U.S.

Devon Johnson is Associate Professor of Criminology, Law and Society at George Mason University in Fairfax, Virginia. Her current research focuses on punishment preferences in the United States and the Caribbean, public perceptions of the police in the United States and in Trinidad and Tobago, and views about the legitimacy of counterterrorism strategies and airport security.

THE STRUCTURE OF PUBLIC OPINION ON CRIME POLICY: EVIDENCE FROM SEVEN CARIBBEAN NATIONS

Abstract

A long tradition of research has examined public opinion on crime policy. Much of this

research focuses on identifying the determinants and correlates of public opinion; few studies

have examined the dimensional structure of public attitudes toward crime policy. This study

posits and tests a multidimensional conceptualization of attitudes toward crime policy. We

hypothesize that two general dimensions – punitiveness and progressiveness – are the minimum

necessary to account for people's opinions on crime policy. We test this multidimensional

conceptualization and examine the structure of public opinion on crime policy using exploratory

and confirmatory factor analyses and survey data from more than 11,000 residents in seven

Caribbean nations. Our findings indicate that public opinion in all seven nations is

multidimensional.

Keywords: crime policy, public opinion, punitive attitudes, progressive attitudes

2

INTRODUCTION

Social scientists from a wide range of disciplines and perspectives have examined individual and societal responses to wrongdoing, whether anthropologists studying primitive tribal societies, social psychologists trying to understand individual and interpersonal behavior, or sociologists examining trends across nation-states. In recent years, much of this research has focused on the idea of punitiveness, including punitive attitudes, behaviors, and policies. In large part, this research emphasis reflected the 'punitive turn' in many of the world's developed democracies. Theoretical explanations for this shift toward a more punitive orientation often focus on the role of public opinion, and specifically public preferences for the harsh treatment of offenders. However, the concept of punitiveness does not fully encapsulate public opinion on criminal justice policy. Indeed, much of the research evidence suggests that the public also favors preventive and rehabilitative approaches to dealing with crime and offenders.

A sizeable body of research on public opinion toward crime policy has developed, much of which treats public opinion as a dependent variable and seeks to identify its determinants. While there is now an extensive literature on the *antecedents* of public opinion on these issues, a cumulative body of research on the nature and structure of attitudes toward crime policy has not yet emerged. Thinking about antecedents (or consequences) of attitudes, without first clarifying their structure, may be putting the proverbial cart before the horse.

In an effort to help improve our understanding of the *structure* of attitudes toward crime policy, this study specifies and tests a basic multidimensional conceptualization of public

_

¹ The United States stands as a hallmark of this increasingly punitive orientation, with incarceration rates increasing five-fold since 1973 (e.g., Berman, 2008; Clear, 2007). However, there is also evidence of increasingly punitive criminal justice policies in Australia, Japan and throughout much of Western Europe (Frase, 2001; Indermaur and Roberts, 2011; Miyazawa, 2008). In contrast, it appears that some western nations have bucked this trend, including Canada (Doob and Webster, 2006) and Finland (Frase, 2001).

opinion using exploratory and confirmatory factor analytic methods to examine cross-national survey data from seven Caribbean countries. We proceed in several steps. First we summarize recent public opinion research on crime policy attitudes. Next, drawing on a wide range of literature across several disciplines, we describe our conceptualization of punitive and progressive attitudes. Finally, we propose and test two hypotheses about the structure of public attitudes toward crime policy.

BACKGROUND

Scholars have conceptualized and measured public opinion on crime policy in multiple ways. Some begin with the implicit assumption that people's attitudes can be located on a unidimensional continuum, with punitive attitudes on one end and nonpunitive or progressive attitudes on the other end (see Mascini and Houtman, 2006 for examples). Other scholars may not *conceptualize* public opinion as unidimensional, but they focus only on the punitive dimension (e.g. Johnson, 2009; King and Maruna, 2009) or rely on secondary datasets that treat punitive and progressive policy options as opposing choices (e.g. Unnever and Cullen, 2010a). Treating public opinion as unidimensional may mask the complexity in people's attitudes toward crime policy and may result in incomplete or misleading assumptions about their actual views.

Indeed, public opinion polls show that the public simultaneously supports preventive, punitive, and rehabilitative responses to crime and criminals (Doble, 2002; Peter D. Hart Research Associates, 2002). Moreover, academic studies find that most people express strong support for both punitive *and* progressive policies for adult and juvenile offenders (Applegate, 2001; Cullen et al., 2000; Cullen et al., 2002; Cullen et al., 2007; Hartney and Marchionna, 2009; Gerber and Engelhardt-Greer, 1996; Johnson, 1994; Piquero et al., 2010; Riley and Rose, 1980).

As a result, some scholars argue that public opinion on crime policy is multidimensional (Cullen, Cullen, and Wozniak, 1988; Hutton, 2005; McCorkle, 1993; Sprott, 1999; Unnever et al., 2010).²

If public opinion is multidimensional then reducing it to a single dimension can generate conceptual and inferential problems. Treating it as unidimensional may produce a distorted and incomplete measure of the way people's attitudes are actually structured. Based on a parallel literature on the structure of political ideologies, Feldman and Johnston (2013) argue that forcing respondents onto a single dimension may misrepresent their true perspectives by mapping "multidimensional preferences onto a unidimensional space." We distinguish two methods by which scholars treat punitiveness as unidimensional. Both approaches can generate inferential problems, but the first is more serious than the second.

The first approach involves the use of punitiveness scales ranging from punitive on one end to progressive on the other. This approach operates on the assumption that support for punitive solutions is the opposite of support for progressive solutions like prevention, rehabilitation, or restorative justice (e,g., Hurwitz and Peffley, 2005). If people support both punitive and progressive solutions, this type of measurement strategy would force people to falsely choose between them.

The second approach involves the use of punitiveness scales ranging from punitive on one end to non-punitive on the other. The use of such measures is appropriate for some research questions (e.g., what factors increase support for punitive policies?). However, if these studies are considered in isolation, evidence resulting from them may be misinterpreted to mean that people who endorse punitive policies like capital punishment or "three strikes" laws do not endorse progressive policies aimed at crime prevention and rehabilitation (Mascini and

² Pickett and Baker (2014) argue that a portion of the relationship between support for punitive policies and support for rehabilitative policies may be due to a methodological artifact resulting from acquiescence bias among survey respondents.

Houtman, 2006; Unnever et al., 2010).³ To the extent that public opinion influences policy, misunderstandings about the full range of public opinion may contribute to the diffusion of criminal justice policies that are inconsistent with the public's true preferences.⁴ Because public opinion polls and many recent academic studies have focused primarily on punitive attitudes, this research may have the unintended consequence of communicating to policy makers that people *prefer* punitive policies to progressive policies (Cullen et al., 2002; Hutton, 2005).⁵

The findings from research on public attitudes toward crime policy that treats these attitudes as unidimensional may be suspect. If public opinion on crime policy is in fact multidimensional, a more genuine understanding of its antecedents would require research that captures its full dimensionality. As Feldman and Johnston (2013) note about research on public opinion more generally, "allowing for structural and conceptual complexity in mass ideology has significant consequences for theoretical models of its antecedents." The same concerns are relevant for research that examines the consequences of public opinion on crime policy.

Although many scholars working in this area now consider public opinion on crime policy to be multidimensional, only a handful of studies have directly examined the dimensionality of public opinion in this domain. Duffee and Ritti (1977) were perhaps the first to examine the dimensionality of public opinion in their study of attitudes toward correctional policy. Based on data from a survey of Pennsylvania residents, they found that public attitudes

_

³ For instance, Gault and Sabini (2000) found that men were more supportive of punitive solutions than women. At the same time, they also found that women expressed equal support for punitive and progressive ("human service") solutions to crime. Had they not measured support for progressive solutions, their results would have painted a misleading picture of women's attitudes. As Cullen, Fisher and Applegate (2000: 7-8) note, "progressive opinions cannot be discovered if they are not measured."

⁴ Scholars debate the influence of public opinion on crime policy, including the extent to which public opinion and policymakers each influence the other (Beckett, 1997; Roberts et al., 2002; Ramirez, 2013).

⁵ One reason for this trend in the literature may be the widespread use of secondary and polling data such as the General Social Survey or the Gallup Poll, which contain few, if any, items measuring support for progressive policy responses. Moreover, as Hutton (2005) notes, the method of inquiry also affects assessments of public opinion, with surveys likely to overestimate levels of punitiveness.

clustered into "two conceptually distinct categories that might be termed 'retribution' and 'rehabilitation'" (Duffee and Ritti, 1977: 452). According to their argument, the former dimension focused on the idea that society was "too soft on criminals," while the latter dimension focused on the "genesis of criminal behavior, and consequently, its proper treatment" (p. 453). Mascini and Houtman (2006) examined the dimensionality of public opinion on crime policy using data from a sample of 1,892 Dutch citizens. Based on a factor analysis, they found that support for repression (typically called punitiveness) was conceptually distinct from support for rehabilitation, but that there was no significant correlation between these two factors. 6 In another study of 446 Dutch citizens, Mascini and Houtman (2002) found a significant positive correlation between measures of support for repression and rehabilitation.

More recently, Pickett, Mancini and Mears (2013) examined the dimensionality of public opinion toward sex offender policy using a web-based sample of 537 American adults. They found that support for punitive sex crime laws was distinct from support for sex offender treatment. Moreover, they found a significant negative correlation between the two factors. In another recent study, Ramirez (2014) examined the crime policy attitudes of 515 black Americans. His confirmatory factor analysis found separate dimensions for preventive and punitive policy support and a negative correlation between the two measures. Others have also found that attitudes toward punitive and progressive policies constitute distinct factors, but the relationship between them is frequently not reported (Butter, Hermanns and Menger, 2013; Green, Staerkle and Sears, 2006; Leverentz, 2011; Surette et al., 2011).

In addition, scholars have examined related concepts that illuminate the nature and structure of crime policy attitudes. For example, a study of attributions of crime by Unnever et al. (2010) found that most Americans subscribe to both a dispositional and situational attribution

⁶ Mascini and Houtman (2006) also uncovered a third dimension – support for decriminalization.

style, and that these two factors were positively correlated. Given that attributions for crime are strongly related to crime policy preferences, these results suggest that most Americans support both punitive and progressive responses to crime. Unnever and his colleagues (2010: 449) conclude that "most Americans, even those who would be portrayed as being punitive or those who would be described as progressive, are pragmatic in their approach to crime control. That is, the majority of Americans believe that crime reduction policies must address the underlying structural causes of crime while holding individual offenders responsible for their behavior."

Although scholarship on the structure of attitudes toward crime policy is limited, research suggests they are multidimensional. However, research has not yet clarified the relationship between punitive and progressive attitudes, nor has it developed theoretical explanations that would account for such a relationship. Toward this end, we develop a basic multidimensional conceptualization of public opinion on crime in the following section. A unidimensional conceptualization of public opinion that places punitive attitudes on one end of the continuum and progressive attitudes on the other implies a perfect negative relationship between the two. However, as we argue below, there is a conceptual basis to expect punitive and progressive attitudes to be distinct from one another. Moreover, drawing on Durkheim, there are good reasons to expect the relationship between these dimensions to be positive rather than negative.

CONCEPTUALIZING PUBLIC OPINION TOWARD CRIME POLICY

Public attitudes toward crime policy are complex, reflecting an unclear mix of people's values, beliefs, personal and vicarious experiences, and emotions. Thus, conceptualizing the nature and structure of these attitudes is challenging. In this study, we test two hypotheses about the structure of public attitudes toward crime policy. The first hypothesis is that people's

attitudes toward crime policy are comprised, at their most basic level, of two general or dominant dimensions: punitive and progressive attitudes. We anticipate that people's attitudes may also be comprised of additional residual or idiosyncratic dimensions associated with specific policies (like capital punishment), institutions (like police or courts), or issues that are salient in a specific time and place. Thus, the two general dimensions we specify are the *minimum* necessary to account for the structure of people's attitudes toward crime policy. The second hypothesis is that the relationship between punitive and progressive attitudes is positive, not negative. We test both hypotheses using data from a survey of citizens in seven Caribbean nations.

In this section, we begin by conceptualizing attitudes and attitudinal structures. Next, we explain the nature of punitive and progressive attitudes and why we expect to find evidence of the existence of both dimensions. Finally we explain how our conceptualization of punitive and progressive attitudes has specific implications for the relationships between these dimensions.

The Structure of Attitudes

Although the word "attitude" is often used in casual or imprecise ways, Allport (1935: 798) notes that "the concept of attitude is probably the most distinctive and indispensable concept in contemporary American social psychology." Ajzen (1989: 241) defines attitudes as "an individual's disposition to respond favorably or unfavorably to an object, person, institution, or event…" Similarly, Petty and Cacioppo (1981: 7) define attitudes as "a general and enduring positive or negative feeling about some person, object, or issue." Cognitive psychologists view attitudes as evaluative information encoded and stored in long-term memory (Judd et al., 1991). Theories of memory suggest that this information is organized into schematic frameworks or "associative networks" consisting of nodes that store evaluative thoughts (Gardner, 1982;

Romaniuk and Sharp, 2004). The notion of these schematic frameworks, associative networks, and connections between nodes suggests that attitudes have patterns or structures. As Fleishman (1988: 159) notes: "people's positions on a variety of seemingly disparate issues often appear to form meaningful, coherent patterns." Thus, a fundamental question within specific attitudinal domains concerns the nature and structure of attitudes.

Scholarship on the nature and structure of specific attitudes is common in the social sciences, especially in political science (e.g., Feldman and Johnston, 2013; Finifter, 1970; Fleishman, 1988; Greene, 2005) and marketing (Low and Lamb, 2000; Mano and Oliver, 1993; Westbrook and Oliver, 1991). Political science research on the antecedents and consequences of political ideology is particularly relevant for the study of attitudes toward crime policy. Most of that research is based on the implicit assumption that political ideology is unidimensional, ranging from liberal to conservative (or vice versa). An emerging body of research challenges this simplistic notion, suggesting that political ideology is a more complex concept than previously thought (e.g., Feldman and Johnston, 2013; Fleishman, 1988; Jost, Federico, and Napier, 2009; Peffley and Hurwitz, 1985). Research on the structure of political ideology is less concerned with identifying its antecedents and consequences than with clarifying its nature and dimensionality. Most of this research finds that political ideology is multidimensional, thus raising important questions about the findings from previous research on its antecedents and consequences that treated it as unidimensional.

Punitive Attitudes

Punitive attitudes are those that support policies intended to punish offenders for their misdeeds. Social theorists argue that we have witnessed a "punitive turn" over the last several decades, as evidenced by the profusion of:

"Harsher sentencing and the increased use of imprisonment, 'three strikes' and mandatory minimum sentencing laws; 'truth in sentencing' and parole release restrictions; 'no frills' prison laws and 'austere prisons'; retribution in juvenile court and the imprisonment of children; the revival of chain gangs and corporal punishment; boot camps and supermax prisons; the multiplication of capital offences and executions; community notification laws and paedophile registers; zero tolerance policies and Anti-Social Behaviour Orders. There is now a long list of measures that appear to signify a punitive turn in contemporary penality" (Garland, 2001: 142).

We view the programs and initiatives cited by Garland as specific and tangible manifestations of a more basic human instinct to punish (Newman, 1985).

There are many reasons to believe that human beings may have a fundamental punitive instinct that is activated upon the perception of wrongdoing by others. Some scholars argue that the urge to punish is part of our "evolutionary heritage" (Hoffman and Goldsmith, 2004: 631). Ethologists and evolutionary biologists have documented punishment behaviors in animal societies (Clutton-Brock and Parker, 1995; De Waal, 1991, 1996). These behaviors are used to "establish and maintain dominance relationships, to discourage parasites and cheats, to discipline offspring or prospective sexual partners and to maintain cooperative behavior" (Clutton-Brock

⁷ Our argument about the presence of a punitive instinct is value neutral in the sense that it does not associate punitiveness with specific penal goals like rehabilitation and retribution (Maruna and King, 2009).

and Parker, 1995: 209). Examples of group ostracism⁸ in reaction to the perceived wrongdoing by group members can be found in both non-human primate and primitive human societies (Hoffman and Golfsmith, 2004). Evolutionary research suggests that punishment has significant adaptive value for human beings by enhancing cooperation in groups (Boyd and Richerson, 1992; Gächter, Renner, and Sefton, 2008). Punishment is evident in all legal systems and the imposition of sanctions on individuals by groups is "among the human universals of behavior cataloged by ethnographers" (Hoffman and Goldsmith, 2004:627). Thus, research suggests that punitive attitudes may flow from an elementary human instinct to punish wrongdoers.

Progressive Attitudes

Progressive attitudes are those that support prevention policies that address the "root causes" of crime, as well as rehabilitative and re-entry programs that aim to reduce recidivism and reintegrate offenders into society. Just as the will to punish may be a fundamental human instinct, the desire to find alternatives to punishment or to adopt humane, proportional, or just sanctions may flow from a mix of similarly fundamental instincts like fairness, empathy, mercy, and forgiveness (Wright, 1911). As Hoffman and Goldsmith (2004) note, "The two faces of justice – to deal firmly with transgressors, but not too harshly – reflect an intrinsic human sense of fairness…" Durkheim (1893, 1895, 1900) recognized the human urge to punish, but also our capacity to balance that urge with sympathy and compassion (also see DiCristina, 2000; Walsh, 2000). Similarly, many faith systems encourage both punishment and forgiveness (Maruna and

-

⁸ Hoffman and Goldsmith (2004) note that the term ostracism "describes a continuum of many different kinds socially exclusionary behaviors" that range from mild (a disapproving stare) to severe (banishment or execution).

⁹ The term "progressive" is used widely in the literature. Its use here does not assume that support for progressive policies is associated with any one ideological perspective or political party (cf. Mascini and Houtman, 2006).

King, 2009). Punitive sentiments may therefore be accompanied by progressive sentiments that derive from our instincts for fairness, empathy, mercy, and forgiveness. ¹⁰

Moreover, the instincts from which these progressive sentiments derive may have an evolutionary basis. Walsh (2000: 856), drawing on Durkheim, notes that overly oppressive punishments overstep their "adaptive usefulness" and may be harmful from an evolutionary perspective. More lenient or "restitutive" forms of justice offer "a balance between helping to calm moral outrage and exciting the emotions of empathy and sympathy." Walsh (2000:858) also points out that "reconciliatory behavior is common among primate species." Fitness and Peterson (2008: 259) provide an evolutionary basis "for interdependent, social animals to suppress or moderate the urge for revenge for the sake of a greater benefit, such as maintaining important relationships." They argue that historically, "humans who forgave one another were more reproductively successful than humans who did not, because of the security and resource benefits provided by close, caring others." Similarly, from an evolutionary psychology perspective, Petersen, Sell, Tooby and Cosmides (2012) find that the associative value of an offender influences individuals' preferences for punitive or reparative responses to wrongdoing. Fu, Watkins, and Hui (2004) argue that forgiveness preserves social harmony and stability. Thus, from an evolutionary perspective, forgiveness may serve an adaptive function (Walsh, 2000).

The beneficent instincts we have described in this section may instill in all human beings the empathetic will to avoid punishment in some instances (prevention) and to allow certain transgressors the opportunity to alter their behavior (rehabilitation) and rejoin the group

_

¹⁰ Our argument that punitive and progressive sentiments may exist alongside one another differs from the theoretical model presented by Unnever and Cullen (2009: 286), who posit a negative relationship between empathy and punitiveness, such that "people who empathetically identify with offenders are more likely to give them a 'second chance', and those that cannot 'walk in their shoes' are more likely to endorse punitive crime control policies."

(reconciliation and reintegration). Progressive attitudes may flow from a constellation of elementary and beneficent human instincts like compassion, mercy, forgiveness and empathy.¹¹

The Nature and Structure of Public Opinion toward Crime Policy

Based on research from economics (Gachter, Renner and Sefton, 2008), ethology and sociobiology (Boyd and Richerson, 1992; Clutton-Brick and Parker, 1995; de Waal, 1991; Hoffman and Goldsmith, 2004), evolutionary psychology (Fitness and Peterson, 2008; Petersen et al., 2004; Walsh, 2000), and neurology (Bernhardt and Singer, 2012), we have briefly outlined a conceptual foundation for the emergence of punitive and progressive attitudes toward crime policy. This conceptual foundation has important implications for thinking about the nature and structure of public opinion toward crime policy. First, it suggests that punitive and progressive attitudes may be separately and fundamentally rooted in human nature. Thus it would be inaccurate to conceive of them as mutually exclusive or as opposites on a single continuum. Instead, it would be more accurate to conceptualize them as related but distinct dimensions of attitudes, each free to vary independently. The notion that attitudes have patterns or structures derives from decades of research in social psychology. Just as research in political psychology shows that people's attitudes do not fall on a unidimensional continuum with liberalism and conservatism at opposite ends, people's attitudes toward crime policy may be similarly complex.

Moreover, if our thesis that punitive and progressive attitudes have an instinctual basis in human nature is valid, we see no a priori reason to expect the relationship between them to be hydraulic or compensatory, such that more of one implies less of the other. In fact, there are

_

¹¹ Neuroscientists have traced the neural basis of empathy using functional magnetic resonance imaging, thus providing useful insights about how the brain processes empathetic responses. For instance, research shows that empathetic responses to the pain of others activate the same regions of the brain as pain experienced firsthand, leading some to conclude that empathy is partly based on "shared networks" (e.g., Bernhardt and Singer, 2012: 2).

conceptual and theoretical justifications for expecting the relationship between these two attitudinal dimensions to be *positive*. First, our conceptualization suggests that people have some level of instinctual will to punish, but they also have an empathetic instinct to avoid punishing and to allow certain transgressors the opportunity to alter their behavior and reconcile with the group. This logic challenges the implicit assumption in some of the previous research that punitive and progressive attitudes are opposites of one another and thus, by implication, that the relationship between them is negative. Second, though we do not consider the role of sympathy directly in our analysis, Durkheim's (1893, 1895, 1900) perspective on the role of sympathy in shaping people's attitudes toward wrongdoers also implies a positive relationship between punitive and progressive attitudes. Durkheim (1900/1969) writes: "[I]f, on the one hand, our greater humanity causes us to shun cruel punishments, it should, on the other hand, make the inhuman acts repressed by punishment appear all the more odious to us." DiCristina (2000) summarizes Durkheim's view as follows: "feelings of human sympathy make us sensitive to all forms of human suffering...thus two opposing pressures emerge from the development of human sympathy: a growing contempt for punishment, which impels us to temper punishment, and a growing contempt for human criminality, which drives us to intensify punishment." These social forces generate an ironic pattern in which the relationship between sympathy and punishment severity "is more likely to be positive than negative" (DiCristina, 2000:500).

THE PRESENT STUDY

In spite of the many advances that have been made in research on public opinion toward crime policy in recent years, the nascent literature examining dimensionality leaves much for us to learn about the structure of crime policy attitudes. To build on this body of research and to

test the conceptualization posited above, the present study examines the structure of public opinion on crime policy using survey data from seven Caribbean nations. The first hypothesis we will test is that the minimum number of dimensions necessary to account for people's attitudes toward crime policy is two: punitive attitudes and progressive attitudes. This hypothesis allows room for the possibility that other more idiosyncratic factors may emerge in addition to the two we have articulated. If we find that attitudes toward crime policy are multidimensional in the ways we have articulated, we will test a second hypothesis that the relationship between punitive and progressive attitudes is positive.

We test these two hypotheses using survey data from a random sample of more than 11,000 people in seven Caribbean nations: Antigua and Barbuda, Barbados, Guyana, Jamaica, Saint Lucia, Suriname, and Trinidad and Tobago. The survey measured public opinion about multiple facets of criminal justice policy in these nations, thus enabling us to conduct important comparative analyses not previously possible. Cross-national research on these issues is vital for testing the generality or universality of theories about the nature, structure, and antecedents of public opinion.

Research Setting

Most of the research on public opinion on crime policy has taken place in developed western democracies. The Caribbean region represents a useful laboratory for the study of these issues due to significant variation across nations in crime, racial and ethnic diversity, culture, and levels of development. All seven nations examined in this study are former European colonies that gained their independence within the past 55 years; six are former British

-

¹² A few scholars have examined public opinion cross-nationally (see, for example, Costelloe et al., 2002; Mayhew and van Kesteren, 2002; Unnever and Cullen, 2010b).

colonies and one (Suriname) is a former Dutch colony. 13 Colonialism has exerted a powerful influence on these Caribbean nations, and each continues to struggle with post-colonial issues.

Since independence, these seven nations have experienced significant social change, including improvements in infrastructure, technology, and human development. They also face rising violent crime rates and the rapid spread of gangs and organized crime (UNDP, 2012). The Caribbean is now one of the most violent regions in the world, with homicide rates increasing to alarming levels in recent years (UNDP, 2012; UNODC, 2011). Figure 1 illustrates average homicide rates for the seven nations in this study from 2000-2009. Homicide rates for the U.S. and the U.K., where much of the research in this genre has taken place, are also included for the sake of comparison. Despite this regional trend, crime rates vary widely among these seven nations, from Suriname and Barbados (with average annual homicide rates of 7.3 and 8.9 per 100,000 people, respectively) to Jamaica, one of the most violent nations in the world (with an average annual homicide rate of 51.6 per 100,000 people). ¹⁴ Perhaps unsurprisingly, perceived security among citizens also varies across these nations, with residents of Barbados expressing the greatest sense of security and those in Jamaica and Trinidad and Tobago expressing the least (UNDP, 2012).

—INSERT FIGURE 1 ABOUT HERE—

Citizen feelings of insecurity are linked to growing crime rates, but may also be associated with a lack of confidence in governmental institutions meant to control crime. Many Caribbean nations have wrestled with similar postcolonial issues related to the legitimacy and capacity of criminal justice systems. Various forms of corruption and misconduct among justice

¹³ The colonial history of the Caribbean is complex, with some nations being colonized by more than one European power at various stages in their history (Higman, 2011).

¹⁴ Homicide rate data were obtained from the United Nations Office of Drugs and Crime (UNODC). Average annual homicide rates were computed using the three most recent years available, including Barbados (2008-2010), Jamaica (2009-2011), and Suriname (2007-2009).

officials have contributed to serious deficits in the perceived legitimacy of criminal justice systems. For example, in a 2010 survey of more than 11,000 residents in seven Caribbean nations, 49.6 percent of respondents agreed that the justice system is corrupt. This figure ranged from a low of 33.8 percent in Barbados to a high of 69.8 percent in Trinidad and Tobago. The UNDP's *Caribbean Human Development Report* (2012: 139) concluded that "police abuses, sentencing disparities and substandard confinement conditions all contribute to a massive crisis of legitimacy in the region's criminal justice systems." Investigating public opinion about crime policy in this unique setting, where the topic is highly salient but where salience levels vary across nations, is useful for drawing comparative inferences about the nature and structure of public opinion.

METHODS

Data

The data used in this study come from a face-to-face survey carried out as part of a United Nations Development Program (UNDP) project focused on citizen security in the Caribbean. The survey covered a variety of topics including perceptions and fear of crime, victimization, perceptions of the police and the justice system, policy preferences, and community cohesion. The 2010 UNDP Citizen Security Survey includes data from 11,155 Caribbean residents who were randomly selected from seven countries to be interviewed between November 2010 and February 2011. Within each nation, the sample was selected using a multi-stage, stratified sampling design and was weighted to be representative of the

-

¹⁵ The number of respondents from each country included: Antigua and Barbuda (1,512); Barbados (1,512); Guyana (1,512); Jamaica (2,000); Saint Lucia (1,512); Suriname (1,512); and Trinidad and Tobago (1,595).

target population (UNDP, 2012).¹⁶ The target population was households with at least one resident of the household over the age 18 who resided permanently in the country.

Item Selection

Since our primary goal in this paper is to test hypotheses about the structure and dimensionality of public opinion on crime policy, we assembled an item pool intended to measure the two hypothesized dimensions and we relied on a series of exploratory and confirmatory factor analyses. We selected 11 items from the survey that reflect punitive and progressive attitudes toward crime policy (see Table 1). Six of the items are intended to measure punitive attitudes. These items tap into respondents' support for harsher punishments, greater use of imprisonment, capital punishment, extrajudicial punishment, and other punitive solutions to crime. Five of the items are intended to measure progressive attitudes toward crime policy. These items tap into respondents' support for improved education, job creation, programs for young people, investment in poor communities, and poverty reduction as mechanisms for reducing crime. All items are measured using Likert scale response formats ranging from one to five, with one indicating "strongly disagree" and five indicating "strongly agree."

-

¹⁶ The stratification process included three stages. Stage 1 involved dividing each country into regions using existing regional boundaries. Stage 2 involved first dividing each regional stratum into urban and rural areas and then randomly selecting primary sampling units (PSUs) within those areas using a probability proportional to size (PPS) selection process. Cluster sampling methods were then used within each PSU to complete the selection of households. Survey sampling methodologies in developing countries present numerous challenges due to poorly developed address systems, geographic information systems, and census data systems (United Nations, 2005). Given these challenges, the multi-stage sampling process used in this study, while not unique or advanced in comparison with similar efforts in developed nations, represented an ambitious effort and a significant improvement over previous data collection efforts in the region.

¹⁷ Unfortunately, the data set used in this study contains an incomplete set of items for tapping into progressive policy sentiments. While it contains a robust set of items for measuring prevention policies that address root causes of crime, it does not capture support for rehabilitation of offenders, which is a component of the progressive agenda (Cullen, Wright and Chamlin, 1999).

Model Estimation and Selection

Our model estimation and selection process proceeds through a series of steps relying primarily on exploratory and confirmatory factor analysis to identify the underlying structure of the item pool. Many of the procedures used in normal theory confirmatory factor analysis (CFA) with continuous indicators need to be adapted for use with categorical indicators. The modeling framework we chose treats the ordinal response (y) to each survey item as a crudely categorized approximation of an underlying continuous response variable (y*). According to Brown (2006:390):

"The underlying y^* variables are related to observed categorical variables by threshold parameters (τ). In the case of a binary indicator (y=0 or 1), the threshold is the point on y^* where y=1 if the threshold is exceeded (and where y=0 if the threshold is not exceeded). Polytomous items have more than one threshold parameter... the number of thresholds is equal to the number of categories minus one."

Although thresholds are an important part of the parameterization of the factor models used here, they are not of substantive interest in this analysis. Because the indicators are categorical, we used a robust (mean and variance adjusted) weighted least squares (WLS) estimator available in *Mplus* (Muthén and Muthén, 1998-2007). Monte Carlo simulations have shown that the robust WLS estimator performs well in models with categorical outcomes, including those with skewed distributions and small samples (Flora and Curran, 2004; Muthén et al., 1997).

RESULTS

Descriptive statistics for all items are shown in Table 1 for all respondents. Mean scores on each item are presented by nation in Table 2. The descriptive statistics presented in Tables 1 and 2 are useful for drawing some basic inferences about the way Caribbean residents think about punitive and progressive approaches to crime. For instance, respondents overwhelmingly

support the use of progressive measures like education (87.5%), job creation (93.0%), and poverty reduction (89.3%). At the same time, there appears to be strong support for some of the punitive measures as well. For instance, 83.2 percent of respondents agree that criminals should be punished more harshly and 63.5 percent support the death penalty. There appears to be much less support for extrajudicial approaches that involve the police behaving outside the law to control violent crime or kill violent criminals. Curiously, while more than 80 percent of respondents want to see criminals punished more harshly, only 26.9 percent agree that the government should build more prisons. 18 In a region where the military is often viewed with higher regard than the police or the judiciary, 45.1 percent of respondents agree that the government should rely more on the military to control crime. While respondents overwhelmingly support progressive measures across the board, their support for punitive measures appears to be mixed. At the same time, the fact that more than 80 percent of respondents endorse progressive measures and agree that criminals should be punished more harshly suggests that they do not view punitive and progressive measures as an either-or proposition. As a key example, the mean scores presented in Table 2 reveal that although Jamaicans express strong support for punitive measures, which would be expected given the high rates of violence in that nation, they also support progressive measures more strongly than respondents from any of the other six nations.

—INSERT TABLES 1 AND 2 ABOUT HERE—

Bivariate correlations between the eleven items are shown in Table 3, with polychoric correlations shown below the diagonal and Pearson correlations shown above the diagonal. The correlation matrix reveals that the items intended to measure progressive attitudes have strong

-

¹⁸ Although we cannot directly test Pickett and Baker's (2014) hypotheses about acquiescence bias among survey respondents, the fact that only 26.9 percent of respondents agreed that the government should build more prisons is inconsistent with these hypotheses.

positive correlations with one another, while the relationships between the items intended to measure punitiveness are smaller in magnitude and not as clear.

—INSERT TABLE 3 ABOUT HERE—

The first step in our model estimation process involved testing the fit of a baseline confirmatory factor analysis (CFA) model including all respondents and eleven items measuring two factors: punitive attitudes and progressive attitudes.¹⁹ The baseline CFA model fit the data poorly (RMSEA=.138; CFI=.937; TLI=.920; WRMR=10.41). Allowing the factor loadings and factor correlations to vary by country and incorporating adjustments for clustering due to complex sampling failed to improve the fit of the model sufficiently (RMSEA=.064; CFI=.923; TLI=.945; WRMR=9.53). Based on this evidence, after completing this first phase of the analysis, we concluded that the two-factor model was mis-specified.

The second step in our model estimation and selection process involved turning to exploratory factor analysis (EFA) to examine the underlying structure and dimensionality of the item pool. We chose an oblique rotation method (Geomin) that allowed the correlation(s) between factors to be freely estimated.²⁰ The EFA results demonstrated clearly why the baseline model did not fit the data well. Three eigenvalues were greater than one, and model fit statistics suggested that the three factor model fit the data best. While the progressiveness items all loaded strongly on one factor, the punitiveness items loaded on two factors. Two items (q55c and q55d)

-

 $^{^{19}}$ We evaluated model fit using multiple measures, including the root mean square error of approximation (RMSEA), the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the weighted root mean square residual (WRMR). We do not rely on χ^2 in this paper because it has been shown to be too strict when using large samples, with minor deviations incorrectly leading to an inference of poor model fit (Bowen and Guo, 2012). For RMSEA, Browne and Cudeck (1993) conclude that values of .06 to .08 constitute acceptable fit, while values of .01 to .06 constitute "close fit." Hu and Bentler (1999) also treat a RMSEA value of .06 as the upper threshold for close fit. For CFI and TLI, Hu and Bentler (1999) suggest that values of .95 or greater indicate close fit. For WRMR, simulation evidence suggests that values below 1 are indicative of good fit (Yu, 2002). The *Mplus* technical support team advises against the use of WRMR in multiple-group models, therefore we only report WRMR for single-group models (Muthén, 2013).

²⁰ We chose Geomin over other oblique rotation methods on the basis of simulation evidence which reports that it provides "the most promising rotation criterion when little is known about the true loading structure" (Asparouhov and Muthén, 2009, p. 16).

loaded strongly on the first factor, which we interpret as a classic measure of punitive attitudes. Four items (q55g, q55h, q55p, and q55q) loaded on the second factor. The meaning of this factor is not as clear in that it includes two items measuring support for the use of extrajudicial measures by the police, one item measuring support for building more prisons, and one item measuring support for military involvement in crime control. However, the latter two items had low factor loadings relative to the others and one of them (q55q) cross-loaded on two factors.

The final step in our model estimation and selection process involved testing a CFA model that specified three dimensions, as suggested by the EFA. The fit of the model improved significantly over the previous specifications, but overall fit remained poor (RMSEA=.107; CFI=.964; TLI=.952; WRMR=6.95). We retained the basic structure of this model but made three adjustments. First, we dropped two items with low loadings (< |0.4|) from the model (these included items q55p and q55q). Second, we freed some model parameters to vary by nation, including factor loadings, factor means, and factor correlations. Third, we accounted for clustering using the methods available in *Mplus*.²¹ After making these modifications, the model fit the data well (RMSEA=.046; CFI=.977; TLI=.983). Table 4 presents the factor loadings for this multiple group model and Table 5 shows the correlations between factors.

—INSERT TABLES 4 AND 5 ABOUT HERE—

Recall that we began by specifying a baseline CFA model with two dimensions: punitive attitudes and progressive attitudes. This baseline model did not fit the data well, thus we relied on EFA to explore the underlying structure and dimensionality of the item pool. The findings from the EFA suggested that a three-dimensional model of attitudes toward crime policy fit the

21

²¹ Mplus makes two adjustments for clustering due to complex sampling (Asparouhov, 2005; Asparouhov and Muthén, 2006. It adjusts the chi-square test of model fit using a correction factor similar to the approaches proposed for robust chi-square testing by Satorra and Bentler (1988) and Yuan and Bentler (2000), and it adjusts the standard errors of the parameter estimates using a Huber-White sandwich procedure.

data better than a two-dimensional model. The three-factor model includes three dimensions that we interpret as punitive attitudes, attitudes toward extrajudicial solutions, and progressive attitudes. We then used CFA to test this three factor model and found that it fit the data well after some adjustments, including dropping two problematic items, specifying a multiple-group modeling framework that allowed loadings to vary by country, and adjusting for clustering.

The results of our analysis provide strong support for the first hypothesis. Punitive and progressive attitudes are not opposite ends on the same continuum, they are separate constructs. Though we did not anticipate the emergence of a third dimension, our findings are consistent with the hypothesis that two factors are the minimum to account for people's attitudes toward crime policy. We interpret factor 1 as a general measure of support for punitive solutions, factor 2 as a measure of support for extrajudicial solutions, and factor 3 as a measure of support for progressive (preventive) solutions. All three factors appear to be measured well as indicated by strong measures of fit and the strong factor loadings shown in Table 4.

The results of our analysis provide moderate support for the second hypothesis, with some qualifications. The factor correlations shown in Table 5 reveal positive correlations across the board between factor 1 (support for punitive solutions) and factor 3 (support for progressive solutions). This finding demonstrates strong support for the second hypothesis. However, a third dimension also emerged in this analysis (factor 2: support for extrajudicial solutions). The correlations between this factor and factor 3 (support for progressive solutions) are negative across the board. Thus, support for extrajudicial solutions does appear to have a compensatory relationship with support for progressive solutions. People who believe the police should go outside the law to deal with violent offenders are less likely to endorse progressive social

measures for preventing crime. We discuss this finding in greater detail in the discussion section below.

DISCUSSION AND CONCLUSION

This study proposed and tested a multidimensional conceptualization of public opinion toward crime policy. We hypothesized that a minimum of two general dimensions – punitiveness and progressiveness – were necessary to account for people's opinions on crime policy. Our findings from seven Caribbean nations show that public opinion is indeed multidimensional. These results are generally consistent with prior research by Mascini and Houtman (2006) and Duffee and Ritti (1977) that examined the dimensionality of public opinion on criminal justice policy and uncovered both punitive and progressive dimensions.

Our results challenge existing conceptualizations or measures of public opinion about crime policy that treat punitive and progressive attitudes as polar opposites. In contrast to the view that punitive and progressive attitudes have a negative, hydraulic, or compensatory relationship, we find that punitive and progressive attitudes have a significant *positive* relationship in all seven nations. Here our results differ from those of Mascini and Houtman (2006), who did not find a significant correlation between these factors, and from Pickett et al. (2013) and Ramirez (2014), who both found a negative correlation between similar measures.

We also found a third dimension, which emphasizes support for extrajudicial responses to criminal offending. Attributions about the causes of crime may help explain the emergence of this factor as well as its negative relationship with the progressive attitudes dimension. Previous research has shown that attributions about the causes of crime influence policy preferences (Unnever, Cochran, Cullen and Applegate, 2010; Johnson, 2008). It may be that those who

support extrajudicial solutions believe crime is the result of individual failings or personal characteristics that are difficult to change (dispositional attributions) whereas those who favor addressing the root causes of crime attribute criminal behavior to poor environments and other social factors (situational attributions).

Another possible explanation for the emergence of the extrajudicial solutions factor may be the lack of confidence that Caribbean residents have in the efficacy of their nations' criminal justice systems. As described previously, Caribbean nations have struggled with a variety of post-colonial issues since independence. One such issue is how to build and sustain fair and effective criminal justice systems that preserve human rights and the rule of law while simultaneously holding offenders accountable and controlling crime. The rapid spread of gangs and gang violence in the region makes these issues particularly salient for residents. In such a context, citizens may be willing to support police acting outside the rule of law if doing so reduces crime and enhances public safety. More research is needed in different settings to help illuminate possible contextual effects.

Overall, our findings call into question the results of research that has treated public opinion as unidimensional, whether implicitly or explicitly. A unidimensional conceptualization of public opinion ignores systematic and meaningful complexity in how people think about criminal justice policy. Ignoring this complexity can generate a variety of conceptual and inferential problems. Mapping multidimensional attitudes in unidimensional space distorts the way people really think about these issues, and the failure to conceptualize public opinion accurately can result in misunderstandings about the public's true preferences.

Most advances in research on public opinion toward crime policy have been associated with the causes or covariates of public opinion. As Unnever and Cullen (2009, p. 284) note:

"there is a growing literature that explores the *empirical* correlates of individuals' punitive sentiments. The modus operandi of these studies is to identify a variable neglected by past research and then to demonstrate its ability to explain variation in public opinion (e.g. about capital punishment). These investigations have been invaluable in creating a knowledge base on the predictors of punitiveness (e.g. attribution styles, political orientation, race and racism, religious beliefs). But their theoretical contributions have been more limited. Conceptual discussions typically revolve around the 'neglected variable' of interest..."

With its primary focus on the causes or covariates of public opinion, this body of research has paid less attention to specifying and testing alternative conceptualizations of public opinion itself. To paraphrase Feldman and Johnston (2013), ignoring conceptual and empirical complexity in attitudes toward criminal justice policy has significant consequences for theoretical models of its antecedents. If one accepts this assertion, then previous research that has not tapped into this conceptual and empirical complexity may provide an incomplete picture of the antecedents of attitudes toward crime policy.

Research on attitudes toward crime policy would benefit from a greater investment in the use of construct validation procedures. A common practice in this area of study is for scholars to develop additive indices to measure key attitudinal dimensions without using additional psychometric tests to assess the construct validity of the resulting measures. The use of rigorous factor analytic or item-theoretic analyses would enable researchers to draw clearer inferences about the structure and dimensionality of public opinion, which would in turn inform theoretical models about the antecedents of these attitudes. This conceptual development is essential to the ongoing growth of this body of research. The continuing quest to identify new independent

variables thought to influence public attitudes may be premature in the absence of a greater body of conceptual and empirical research on the nature and structure of these attitudes themselves.

This study has several implications for policy and practice. Although politicians often operate on the assumption that they must be "tough on crime" to reflect the will of the people, our results suggest that policymakers do not have to choose between being tough on crime and supporting progressive strategies. These are not mutually exclusive policy options. The evidence from seven Caribbean nations, together with previous research in the U.S. and Europe, suggests that the public favors a multidimensional response to crime reduction. This knowledge is important for political leaders in developed nations like the U.S. that are currently experiencing a period of declining crime rates, rising concerns about the effects of mass incarceration, and tight fiscal budgets. Our results suggest that the public is likely to favor recent "smart on crime" initiatives in the U.S. and elsewhere, which promote more balanced policy choices and have garnered bipartisan political support. This knowledge is also important for policymakers in developing nations like those in our sample, as they work to build credible criminal justice and social systems capable of preventing crime, holding offenders accountable, preserving human rights and the rule of law, and cultivating the support and confidence of the populace.

Our use of cross-national data from the Caribbean to examine the nature and structure of public opinion on criminal justice policy provides a unique contribution to the literature, given that most research in this area has been conducted in the U.S. and other developed nations. The salience of crime varies substantially across the seven nations included in this study, from the placid island of Barbados to Jamaica, one of the world's most violent nations. This variation represents a useful laboratory for considering the generality or universality of public opinion on these issues. While some have argued that the unique history and culture of the U.S. may

explain why pragmatic Americans support both punitive and progressive responses to crime and delinquency (e.g. Cullen, et al., 2007), our results from a very different setting suggest that such a pattern may be more universal than previously thought. More research in a wider variety of settings is necessary to test the validity of this conclusion.

Although this study makes useful contributions to the research on public attitudes toward crime policy, it is not without limitations. The principal limitation is that the set of items used to measure progressive attitudes in this study focuses primarily on policies aimed at reducing the "root causes" of crime, and does not include items tapping support for rehabilitative or re-entry programs intended to reduce recidivism. Future studies should include a more comprehensive set of items to measure progressive attitudes. It is important to note, however, that this limitation does not influence our principal finding that public attitudes toward crime policy are multidimensional, since adding more items will not decrease the dimensionality of the item pool but may, in fact, increase it. In addition, more research is needed to explore other potential dimensions of public opinion toward crime policy, including those that may be issue-based (e.g. capital punishment or drug treatment), associated with certain types of offenders (e.g. juveniles versus adults), or linked to particular criminal justice institutions (e.g. the police or the courts). Addressing these issues will contribute to the development of a more robust body of research on public attitudes toward crime policy. This body of research must take the conceptualization and measurement of public attitudes as seriously as the efforts to understand the antecedents and consequences of these attitudes.

REFERENCES

Ajzen I (1989) Attitude structure and behavior. In: Pratkanis AR Breckler SJ and Greenwald AG (eds) *Attitude Structure and Function*. Hillsdale, NJ: Lawrence Erlbaum Associates, pp 241-274.

Allport GW (1935) Attitudes. In: Murchison, C. (ed) *Handbook of Social Psychology*. Worcester, MA: Clark University Press, pp 798-844.

Applegate BK (2001) Penal austerity: Perceived utility, desert, and public attitudes toward prison amenities. *American Journal of Criminal Justice* 25: 253-68.

Asparouhov T (2005) Sampling weights in latent variable modeling. *Structural Equation Modeling* 12:411-34.

Asparouhov T and Muthén B (2006) Multilevel modeling of complex survey data. *Proceedings* of the Survey Research Methods Section of the American Statistical Association 2718–2726.

Asparouhov T and Muthén B (2009) Exploratory structural equation modeling. *Structural Equation Modeling* 16: 397-438.

Beckett K (1997) *Making crime pay: Law and order in contemporary American politics*. New York: Oxford University Press.

Bernhardt BC and Singer T (2012) The neural basis of empathy. *Annual Review of Neuroscience* 35:1-23.

Bowen NK and Guo S (2012) *Structural Equation Modeling*. New York: Oxford University Press.

Boyd R and Richerson PJ (1992) Punishment allows the evolution of cooperation (or anything else) in sizable groups. *Ethology and Sociobiology* 13: 171-195.

Brown TA (2006) *Confirmatory Factor Analysis for Applied Research*. New York: The Guilford Press.

Browne MW and Cudeck R (1993) Alternative ways of assessing model fit. In: Bollen KA and Long JS (eds) *Testing Structural Equation Models*. Newbury Park, CA: Sage, pp 136-162.

Butter R Hermanns J and Menger A (2013) Simultaneous prediction of punitive and rehabilitation-oriented attitudes towards probation: An ecological approach. *Probation Journal* 60(1): 24-39.

Clutton-Brick TH and Parker GA (1995) Punishment in animal societies. *Nature* 373: 209-216.

Costelloe MT Chiricos T Burianek J Gertz M and Maier-Katkin D (2002) Social correlates of punitiveness toward criminals: A comparison of the Czech Republic and Florida. *The Justice System Journal* 23(2): 191-220.

Cullen FT Cullen JB and Wozniak JF (1988) Is rehabilitation dead? The myth of the punitive public. *Journal of Criminal Justice* 16: 303-317.

Cullen FT Fisher BS and Applegate B (2000) Public opinion about punishment and corrections. In: Tonry M (ed) *Crime and Justice: A Review of Research*, 27. Chicago: University of Chicago Press.

Cullen FT Pealer JA Fisher BS Applegate BK and Santana SA (2002) Public support for correctional rehabilitation in America: Change or consistency? In: Roberts JV and Hough M (eds) *Changing Attitudes to Punishment: Public Opinion, Crime, and Justice*. Portland, OR: Willan Publishing, pp 128-147.

Cullen, FT Vose BA Lero Jonson CN and Unnever JD (2007) Public support for early intervention: Is child saving a "Habit of the Heart"? *Victims and Offenders* (2)2: 109-124.

Cullen FT Wright JP and Chamlin MB (1999) Social support and social reform: A progressive crime control agenda. *Crime and Delinquency* 45(2): 188-207.

de Waal F (1991) The chimpanzee's sense of social regularity and its relation to the human sense of justice. *American Behavioral Scientist* 34:335-49.

de Waal F (1996) *Good Natured: The Origins of Right and Wrong in Humans and Other Animals.* Cambridge, MA: Harvard University Press.

DiCristina B (2000) Compassion can be cruel: Durkheim on sympathy and punishment. *Justice Quarterly* 17(3): 485-517.

Doble J (2002) Attitudes to punishment in the US – punitive and liberal opinions. In: Roberts JV and Hough M (eds) *Changing Attitudes to Punishment: Public Opinion, Crime, and Justice*. Portland, OR: Willan Publishing, pp 148-162.

Doob AN and Webster CN (2006) Countering punitiveness: Understanding stability in Canada's imprisonment rate. *Law and Society Review* 40(2): 325-368.

Durkheim É (1893/1984) *The Division of Labor in Society*. W.D. Halls, trans. New York: The Free Press.

Durkheim É (1895/1983) Crime and social health. Reprinted as "Durkheim's Reply to Tarde." In: Lukes S and Scull A (eds) *Durkheim and the Law* [A Scull, trans.]. New York: St. Martin's Press, pp 92-101.

Durkheim É (1900/1983) Two laws of penal evolution. Reprinted as "The Evolution of Punishment." In: Lukes S and Scull A (eds) *Durkheim and the Law* [A Scull, trans.]. New York: St. Martin's Press, pp 102-32.

Feldman S and Johnston C (2013) Understanding the determinants of political ideology: Implications of structural complexity. Forthcoming in *Political Psychology*.

Finifter AW (1970) Dimensions of political alienation. *The American Political Science Review* 64(2): 389-410.

Fitness J and Peterson J (2008) Punishment and forgiveness in close relationships: An evolutionary, social psychological perspective. In Forgas J and Fitness J (eds) *Social Relationships: Cognitive, Affective, and Motivational Perspectives*. New York: Psychology Press (pp 255-269).

Fleishman JA (1988) Attitude organization in the general public: Evidence for a bidimensional structure. *Social Forces* 67(1): 159-84.

Frase RS (2001) Comparative perspectives on sentencing policy and research. In: Tonry M and Frase R (eds) *Sentencing and Sanctions in Western Countries*. New York: Oxford University Press, pp 259-292.

Fu H Watkins DW and Hui EKP (2004) Personality correlates of the disposition towards interpersonal forgiveness: A Chinese perspective. *International Journal of Psychology* 39: 305-316.

Gachter S Renner E and Sefton M (2008) The long-run benefits of punishment. *Science* 322: 1510.

Gardner MP (1982) Attribute determinance: A function of past memory and external factors. In: Mitchell A (ed) *Advances in Consumer Research (Vol. 9)*. Ann Arbor: Association for Consumer Research, pp 179-82.

Garland D (2001) *The Culture of Control: Crime and Social Order in Contemporary Society*. Oxford: Oxford University Press.

Gault BA and Sabini J (2000) The roles of empathy, anger, and gender in predicting attitudes toward punitive, reparative, and preventative public policies. *Cognition and Emotion* 14(4): 495-520.

Gerber J and Englehardt-Greer S (1996) Just and Painful: Attitudes Toward Sentencing Criminals" In Flanagan T and Longmire D (eds) *Americans View Crime and Justice: A National Public Opinion Survey*. New York: Sage, pp 62-74.

Greene S (2005) The structure of partisan attitudes: Reexamining partisan dimensionality and ambivalence. *Political Psychology* 26(5): 809-22.

Hartney C and Marchionna S (2009) *Attitudes of US Voters toward Nonserious Offenders and Alternatives to Incarceration*. Oakland, CA: National Council on Crime and Delinquency.

Higman BW (2011) A Concise History of the Caribbean. Cambridge, UK: Cambridge University Press.

Hoffman MB and Goldsmith TH (2004) The biological roots of punishment. *Ohio State Journal of Criminal Law* 1: 627-641.

Hu L and Bentler PM (1999) Cutoff criteria for fit indices in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6, 1-55.

Hutton, N (2005) Beyond populist punitiveness? Punishment and Society, 7, 243-258.

Indermaur D and Roberts LD (2011) Punitiveness in Australia: Current status, trends, and strategic responses. In: Kury H and Shea E (eds) *Punitiveness-A Global Phenomenon? Punitivity International Developments (Volume 1)*. Bochum, Germany: Brockmeyer-Verlag, pp 181-202.

Johnson B (1994) To rehabilitate or punish: Results of a public opinion poll. *American Jails* 8: 41-43.

Johnson D (2009) Anger about crime and support for punitive criminal justice policies. *Punishment & Society* 11(1): 51-66.

Jost JT Federico CM and Napier JL (2009) Political ideology: Its structure, functions, and elective affinities. *Annual Review of Psychology* 60: 307-338.

Judd CM Drake RA Downing JM and Krosnick JA (1991) Some dynamic properties of attitude structures: Context induced response facilitation and polarization. *Journal of Personality and Social Psychology* 60: 193-202.

King A and Maruna S (2009) Is a conservative just a liberal who has been mugged? *Punishment and Society* 11(2): 147-169.

Low GS and Lamb CW (2000) The measurement and dimensionality of brand associations. *Journal of Product and Brand Management* 9(6): 350-370.

Mano H and Oliver RL (1993) Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research* 20(3): 451-466.

Maruna S and King A (2009) Once a criminal, always a criminal?: 'Redeemability' and the psychology of punitive public attitudes." *European Journal of Criminal Policy and Research* 15: 7-24.

Mascini, P and Houtman D (2002) Resocialisatie als tegenpool van repressie. Een diepgeworteld criminologisch misverstand. *Tijdschrift voor Criminologie* 44(1): 25-45.

Mascini P and Houtman D (2006) Rehabilitation and repression: Reassessing their ideological embeddedness. *British Journal of Criminology* 46:822-836.

Mayhew P and van Kestern, J (2002) Cross-national attitudes to punishment. In: Roberts JV and Hough m (eds) *Changing Attitudes to Punishment: Public opinion, Crime, and Justice*. Portland, OR: Willan Publishing, pp 63-92.

McCorkle RC (1993) Research note: Punish and rehabilitate? Public attitudes toward six common crimes. *Crime & Delinquency* 39(2): 240-252.

Miyazawa S (2008) The politics of increasing punitiveness and the rising populism in Japanese criminal justice policy. *Punishment and Society* 10: 47-77.

Muthén L (2013) Administrator posting on the Mplus discussion board (January 4). http://www.statmodel.com/discussion/messages/11/11403.html?1357431506

Newman G (1985) The Punishment Response. Albany, New York: Harrow and Heston.

Peffley MA and Hurwitz J (1985) A hierarchical model of attitude constraint. *American Journal of Political Science* 29(4): 871–90.

Peter D. Hart Research Associates (2002) Changing Attitudes Toward Crime and Criminal Justice. New York: Open Society Institute.

Petersen MB Sell A Tooby J and Cosmides L (2012) To punish or repair? Evolutionary psychology and lay intuitions about modern criminal justice. *Evolution and Human Behavior* 33: 682-695.

Petty RE and Cacioppo JT (1981) *Attitudes and Persuasion: Classic and Contemporary Approaches*. Dubuque, IA: Brown.

Pickett JT and Baker T (2014) The pragmatic American: Empirical reality or methodological artifact? *Criminology* 52(2): 195-222.

Pickett, J. T., Mancini, C., & Mears, D. P. (2013). Vulnerable victims, monstrous offenders, and unmanageable risk: Explaining public opinion on the social control of sex crime. *Criminology*, *51*(3), 729-759.

Piquero A Cullen F Unnever J Piquero N and Gordon J (2010) Never too late: Public optimism about juvenile rehabilitation. *Punishment and Society* 12(2): 187-207.

Riley PJ and Rose VM (1980) Public vs. elite opinion on correctional reform: Implications for social policy. *Journal of Criminal Justice* 8: 345-356.

Ramirez, M. D. (2013). Punitive Sentiment. Criminology, 51(2), 329-364.

Ramirez, M. D. (2014). Racial Discrimination, Fear of Crime, and Variability in Blacks' Preferences for Punitive and Preventative Anti-crime Policies. *Political Behavior*, 1-21.

Roberts JV Stalans LJ IndemaurD and Hough M (2003) *Penal Populism and Public Opinion: Lessons from Five Countries*. Cambridge: Oxford University Press.

Romaniuk J and Sharp B (2004) Conceptualizing and measuring brand salience. *Marketing Theory* 4(4): 327-342.

Satorra A and Bentler PM (1988) Scaling corrections for chi-square statistics in covariance structure analysis. *Proceedings of the Business and Economic Statistics Section of the American Statistical Association* 308-13.

Surette R Chadee D Heath L and Young JR (2011) Preventive and punitive criminal justice policy support in Trinidad: The media's role. *Crime*, *Media*, *Culture* 7(1): 31-48.

UNDP (2012) Caribbean Human Development Report 2012: Human Development and the Shift to Better Citizen Security. New York: United Nations Development Program.

Unnever JD Cochran JK Cullen FT and Applegate BK (2010) The pragmatic American: Attributions of crime and the hydraulic relation hypothesis. *Justice Quarterly* 27(3): 431-457.

Unnever JD and Cullen FT (2009) Empathetic identification and punitiveness: A middle-range theory of individual differences. *Theoretical Criminology* 13(3), 283-312.

Unnever JD and Cullen FT (2010a) The social sources of Americans' punitiveness: A test of three competing models. *Criminology* 48(1): 99-130.

Unnever JD and Cullen FT (2010b) Racial-ethnic intolerance and support for capital punishment: A cross-national comparison. *Criminology* 48(3): 831-864.

United Nations (2005) *Household sample surveys in developing and transition countries*. New York: United Nations Department of Economic and Social Affairs, Statistics Division.

UNODC (2011) *Global Study on Homicide 2011*. Vienna, Austria: United Nations Office on Drugs and Crime.

Walsh A (2000) Evolutionary psychology and the origins of justice. *Justice Quarterly* 17(4): 841-864.

Westbrook RA and Oliver RL (1991) The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research* 18(1): 84-91.

Yu C (2002) Evaluating Cutoff Criteria of Model Fit Indices for Latent Variable Models with Binary and Continuous Outcomes. Doctoral dissertation. Los Angeles, CA: UCLA.

Yuan K and Bentler PM (2000) Three likelihood-based methods for mean and covariance structure analysis with nonnormal missing data. *Sociological Methodology* 30:167–202.

FIGURE 1: COMPARISON OF HOMICIDE RATES IN SEVEN CARIBBEAN NATIONS WITH US AND UK, 2000-2009

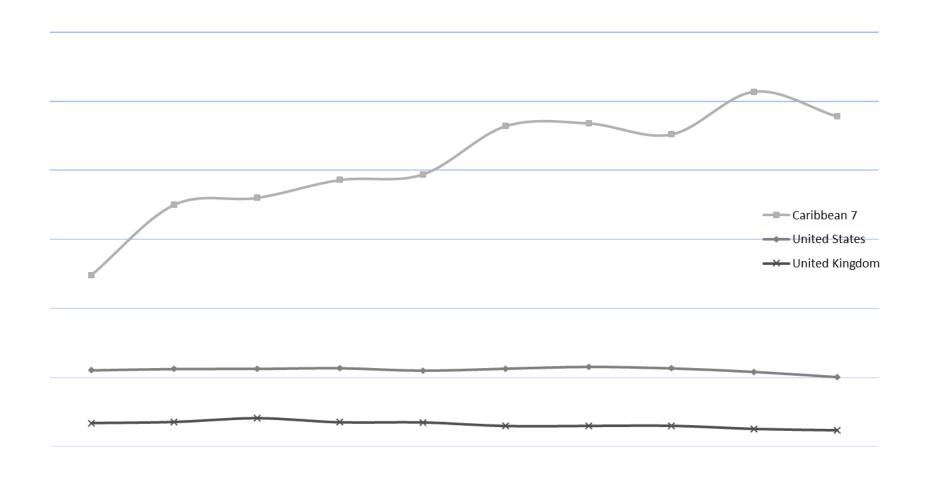


TABLE 1: DESCRIPTIVE STATISTICS FOR FULL SAMPLE²²

Item	Survey Question	Min	Max	Mean	Median	% Agree ²³	Dimension
q55c	Criminals should be more harshly punished	1	5	4.19	4	83.2%	Punitive Attitudes
q55d	I support the death penalty	1	5	3.70	4	63.5%	Punitive Attitudes
q55g	It is alright for the police to break the law in order to better control violent crimes	1	5	2.32	2	21.2%	Punitive Attitudes
q55h	The police should be given a free hand to kill criminal gunmen	1	5	2.63	2	30.9%	Punitive Attitudes
q55p	In order to reduce the crime rate the government should build more prisons	1	5	2.62	2	26.9%	Punitive Attitudes
q55q	In order to reduce the crime rate the government should rely more on the military	1	5	3.19	3	45.1%	Punitive Attitudes
q55j	In order to reduce the crime rate the government should invest more in education	1	5	4.31	4	87.5%	Progressive Attitudes
q55k	In order to reduce the crime rate the government should invest more in programmes for young people	1	5	4.42	5	92.1%	Progressive Attitudes
q55l	In order to reduce the crime rate the government should invest more in job creation	1	5	4.48	5	93.0%	Progressive Attitudes
q55n	In order to reduce the crime rate the government should invest more in the communities of the urban poor	1	5	4.31	4	88.2%	Progressive Attitudes
q55o	In order to reduce the crime rate the government should invest more in reducing poverty	1	5	4.35	5	89.3%	Progressive Attitudes

For all items, 1=strongly disagree and 5=strongly agree.
 This column includes respondents who selected either "agree" or "strongly agree".

TABLE 2: MEAN SCORES BY NATION 24

Item	Survey Question	A&B	BAR	GUY	JAM	STL	SUR	T&T	Dimension
q55c	Criminals should be more harshly punished	4.06	3.93	4.07	4.33	4.41	4.09	4.38	Punitive Attitudes
q55d	I support the death penalty	3.67	3.73	3.59	3.82	4.16	2.84	4.02	Punitive Attitudes
q55g	It is alright for the police to break the law in order to better control violent crimes	2.33	1.97	2.37	2.07	2.51	2.89	2.23	Punitive Attitudes
q55h	The police should be given a free hand to kill criminal gunmen	2.52	2.10	2.71	2.55	2.92	2.97	2.65	Punitive Attitudes
q55p	In order to reduce the crime rate the government should build more prisons	2.72	2.02	3.14	2.41	2.56	2.66	2.86	Punitive Attitudes
q55q	In order to reduce the crime rate the government should rely more on the military	3.19	2.63	3.27	3.64	2.75	3.22	3.35	Punitive Attitudes
q55j	In order to reduce the crime rate the government should invest more in education	4.22	3.88	4.37	4.61	4.37	4.31	4.31	Progressive Attitudes
q55k	In order to reduce the crime rate the government should invest more in programmes for young people	4.32	4.19	4.42	4.70	4.55	4.32	4.38	Progressive Attitudes
q55l	In order to reduce the crime rate the government should invest more in job creation	4.3	4.25	4.49	4.76	4.60	4.39	4.40	Progressive Attitudes
q55n	In order to reduce the crime rate the government should invest more in the communities of the urban poor	4.19	4.17	4.32	4.50	4.35	4.25	4.33	Progressive Attitudes
q55o	In order to reduce the crime rate the government should invest more in reducing poverty	4.24	4.06	4.40	4.64	4.38	4.26	4.36	Progressive Attitudes

 $^{^{24}~}A\&B=Antigua~and~Barbuda;~BAR=Barbados;~GUY=Guyana;~JAM=Jamaica;~STL=St.~Lucia;~SUR=Suriname;~T\&T=Trinidad~and~Tobago.$

TABLE 3: CORRELATIONS BETWEEN ITEMS²⁵

Item	Dimension	q55c	q55d	q55g	q55h	q55p	q55q	q55j	q55k	q55l	q55n	q55o
q55c	Punitive Attitudes	1.0	.353	.028	.121	.012	.141	.164	.181	.192	.163	.160
q55d	Punitive Attitudes	.458	1.0	.095	.202	.063	.084	.058	.091	.094	.088	.076
q55g	Punitive Attitudes	.013	.101	1.0	.567	.230	.154	072	115	099	099	095
q55h	Punitive Attitudes	.149	.240	.653	1.0	.230	.197	.013	036	030	025	062
q55p	Punitive Attitudes	.007	.076	.267	.275	1.0	.326	.047	009	001	.029	.035
q55q	Punitive Attitudes	.172	.121	.179	.179	.361	1.0	.148	.110	.128	.097	.173
q55j	Progressive Attitudes	.223	.098	133	003	.048	.200	1.0	.675	.609	.496	.482
q55k	Progressive Attitudes	.249	.140	187	070	023	.151	.789	1.0	.743	.580	.546
q55l	Progressive Attitudes	.271	.150	164	066	008	.174	.740	.839	1.0	.591	.597
q55n	Progressive Attitudes	.224	.122	153	047	.023	.138	.621	.694	.714	1.0	.626
q55o	Progressive Attitudes	.234	.129	155	087	.029	.211	.632	.682	.731	.753	1.0

²⁵ Polychoric correlations are shown below the diagonal; Pearson correlations are shown above the diagonal.

TABLE 4: LOADINGS FOR 3-FACTOR CFA MODEL

Factors and Items	Antigua	Barbados	St. Lucia	Guyana	Trinidad	Suriname	Jamaica
Factor 1: Support for punitive solutions							
q55c: Criminals should be more harshly punished	0.614	0.676	0.701	0.592	0.702	0.569	0.729
q55d: I support the death penalty	0.649	0.756	0.739	0.608	0.690	0.592	0.691
Factor 2: Support for extrajudicial solutions							
q55g: It is alright for the police to break the law in order to better control violent crimes	0.833	0.799	0.829	0.854	0.895	0.713	0.870
q55h: The police should be given a free hand to kill criminal gunmen	0.816	0.842	0.773	0.771	0.741	0.870	0.681
Factor 3: Support for progressive solutions							
q55j: In order to reduce the crime rate the government should invest more in education	0.827	0.688	0.788	0.872	0.847	0.862	0.788
q55k: In order to reduce the crime rate the government should invest more in programmes for young people	0.931	0.889	0.871	0.914	0.922	0.877	0.909
q55I: In order to reduce the crime rate the government should invest more in job creation	0.892	0.844	0.893	0.919	0.908	0.882	0.944
q55n: In order to reduce the crime rate the government should invest more in the communities of the urban poor	0.805	0.858	0.757	0.833	0.863	0.833	0.758
q55o: In order to reduce the crime rate the government should invest more in reducing poverty	0.811	0.777	0.774	0.865	0.869	0.809	0.798

TABLE 5: FACTOR CORRELATIONS FOR 3-FACTOR CFA MODEL

Factors	Antigua	Barbados	St. Lucia	Guyana	Trinidad	Suriname	Jamaica
Punitive / Extrajudicial	0.088	0.026	0.311	0.291	0.200	0.968	0.233
Punitive / Progressive	0.394	0.166	0.180	0.339	0.380	0.189	0.348
Progressive / Extrajudicial	-0.229	-0.242	-0.115	-0.270	-0.135	-0.014	-0.265