



Contents lists available at ScienceDirect

International Journal of Law, Crime and Justice

journal homepage: www.elsevier.com/locate/ijlcrj

INTERNATIONAL
JOURNAL OF
LAW
CRIME
AND
JUSTICE

The impact of jury experience on perception of the criminal prosecution system

Jimin Pyo

Department of Criminal Justice, John Jay College of Criminal Justice, The Graduate Center, CUNY, 524 W, 59th st, New York, NY 10019, USA

ARTICLE INFO

Keywords:

Jury experience
 Citizen perceptions
 Criminal prosecution system
 Deliberative democratic theory

ABSTRACT

The present study tested the impact of jury experience on citizens' perceptions of the criminal prosecution system. Based on deliberative democratic theory which predicts the beneficial impact of jury experience on citizen-jurors' confidence and knowledge in law and the justice system, it was hypothesized that jury experience would be associated with favorable impression of the criminal prosecution system and that jury experience would have a positive impact on citizens' perceived knowledge of the criminal prosecution system. The present study through analyzing data collected by the American Prosecutors Research Institute (APRI), examined the effect of jury experience (versus no jury experience) on perceptions of the criminal prosecution system. Results show that jury experience positively influences citizen-jurors' impression and perceived knowledge of the criminal prosecution, supporting an attitudinal and educational impact of jury experience. Potential limitations of the study and policy implications are discussed.

1. Introduction

Despite the decline in the number of jury trials in the United States, they play vital roles in American society and culture (Hans, 2007; Vidmar, 2000). The jury trial is deeply related to many Americans' feelings of essential protection of their democracy and cultural tradition (Abramson, 2000; Marder and Hans, 2015). Although the United States jury system has a symbolic significance, little research has investigated the impact of the jury trial system as a democratic institution on citizens who serve as jurors. Many existing studies have explored jury/jurors' legal experiences as a decision-maker, or their judgment processes and/or judgment outcomes about a legal case (e.g., Bornstein et al., 2017; Devine, 2012; Devine and Caughlin, 2014). However, the impact of citizens' legal experiences in jury service on their beliefs and attitudes has been less well researched. Studies have ignored the question of the influence jury service has on citizen-jurors' perceptions toward the legal institutions/systems, even though its influence may bring broader social and political changes (Marder and Hans, 2015). The present study aims to contribute to filling this void by examining the impact of jury experience on citizens' perceptions of the legal system, especially focusing on the criminal prosecution system.

Public trust and confidence in institutions of social control can reflect the perceived legitimacy of law and the justice system, which is closely connected with people's compliance with the law and willingness to cooperate with legal institutions (Sunshine and Tyler, 2003). Jury service allows citizens to have a potentially positive first-hand experience of participating in the legal system. Measuring the impact of civic legal experiences as a juror on their attitudes and beliefs can provide a more sensitive indication of public views and confidence in the legal institutions/systems than does any generic opinion poll (Gastil et al., 2014; Hans, 2014). The findings of the current study can have important implications for policy makers and social commentators seeking ways to improve public support and confidence in legal and other public institutions as well as governmental legitimacy more broadly. Moreover, findings on how jury experience shapes citizens' perspectives, especially toward legal process would be useful for other countries

E-mail address: jpyo@jjay.cuny.edu.<https://doi.org/10.1016/j.ijlcrj.2017.11.006>

Received 10 April 2017; Received in revised form 20 November 2017; Accepted 23 November 2017

1756-0616/© 2017 Elsevier Ltd. All rights reserved.

(e.g., Taiwan and Mexico) that have recently considered implementing the citizen jury trial system (Gastil et al., 2014).

Deliberative democratic theory (Cohen, 1989; Elster, 1998; Pincock, 2012) predicts the beneficial impact of jury experience on public confidence and knowledge in law and the justice system. Central to deliberative democratic theory is that the experience of reasoned discussions among citizens about public concerns or common good helps develop their attachment to legal, political, and other public systems. Drawing on this theory, the present study supposes that the jury experience can stand in for such discussions, and have a positive impact on lay citizens' confidence and knowledge about the criminal prosecution system. Assuming that deliberation is central to the jury experience and has an attitudinal and educational impact on citizen-jurors, this study examined effects of citizens' legal experiences as a juror on their perceived confidence and knowledge about the criminal prosecution system. Using public survey data collected by the American Prosecutors Research Institute (APRI), this study compared respondents with and without jury experience within five years, in terms of their perceptions (impression and perceived knowledge) of the criminal prosecution in their communities.

2. Literature review

2.1. *Deliberative democratic theory*

According to deliberative democratic theory, an ideal citizen regularly takes part in local community activities, discuss public issues with one another, interact with government officials, and participate in periodic elections (Elster, 1998; Mathews, 1999; Pincock, 2012, as cited in Gastil et al., 2002, p. 585). The notion of deliberative democracy is rooted in the intuitive ideal of a democratic association whose affairs are governed by public deliberation and reasoning among equal citizens. It suggests that collective decision-making focused on common advantage can improve a sense of equality among its members, and shape the identity, interests, and attitudes of citizens in ways that lead to a deeper entry into public affairs. Deliberative democratic theory posits that considerable civic benefits can be accrued through experience of reasoned discussions among citizens about public concerns (Eveland et al., 2011).

Central to this theory is that the experience of civic discussion and deliberation about public concerns through public forums, conventions, and panels leads the citizens to develop their attachment to legal, political, and other public systems. Jury service can be regarded as a particularly potent form of deliberative democracy as "it engages citizens in deliberation with one another to resolve important social and political disputes" (Hans et al., 2014, p. 698). In this regard, the theory and practice of deliberative democracy has implications for the question of what impact citizens' experience of jury deliberation might have on their actions and beliefs. One key implication which has previously been tested by some jury scholars is that citizens' experience of jury service can generate greater civic engagement, thus producing a behavioral impact of jury experience. This can be defined as individual and collective actions designed to identify and address issues of public concern and which can take many forms from individual volunteerism to organizational involvement to electoral participation ("Civic engagement," n. d.). Based on the deliberative democratic perspective, studies have established the link between civic political engagement (i.e., electoral participation) and an institutionalized form of citizen deliberation (i.e., jury deliberation). For example, Gastil and colleagues' studies examining jury service and voting rates show that the experience of serving on a jury increases individuals' likelihood of future political engagement (Gastil et al., 2002; Gastil et al., 2008; Gastil et al., 2010). Results revealed increased voting in subsequent elections, suggesting a 'civic impact' of jury service which may promote citizens' sense of civic responsibility and their interests in civic engagement.

Another important but rarely explored implication derived from deliberative democratic theory is that through jury deliberation lay citizens develop confidence in legal institutions and become more educated about the law and the justice system. In other words, citizens' experience of jury deliberation can lead them to hold more positive views about the legal system along with substantial increases in knowledge about the law and the judicial branch. This suggests an educational and attitudinal impact of jury service in addition to its civic engagement effect.

However, the impact of citizens' legal experiences in jury service on their perceptions toward the legal institutions/systems has not been sufficiently addressed in jury research. Previous studies demonstrated the impact of jury service, mostly focusing on individuals' post-jury political participation or voting frequency (i.e., behavioral impact) (e.g., Gastil et al., 2002; Gastil et al., 2008; Gastil et al., 2010). Research has paid less attention to the relationship between the jury experience and citizens' perceptions toward law and the justice system (i.e., attitudinal impact).

2.2. *Existing studies on the impact of jury experience on perceptions of the legal system*

Only a few studies have considered the question of what influence jury experience has on citizen-jurors' perceptions toward legal institutions/systems. Through a series of post-jury service interviews, Consolini (1992) found that citizens who had participated on even one criminal jury tend to have more favorable attitudes toward the jury system and the courts. This was accompanied by considerable increases in knowledge about the judicial branch (e.g. knowledge of due process principles, how the process works). Similarly, Gastil et al. (2010) also suggest that jury service can influence citizens' attitudes toward the courts by showing that the vast majority of jurors in their post-jury trial surveys expressed satisfaction with their jury duty and positive views about the courts. A more recent study conducted by Gastil et al. (2014), tested the hypothesis that civic legal participation would change individual jurors' perceptions of the jury system as well as of the courts and judges. Jurors were interviewed before and several months after serving on a jury service. Findings showed quite persistent attitude and opinion changes (greater than four months) flowing from jury service. Many citizen-jurors showed a greater confidence in the jury system and state and local court judges than they did before

Table 1
Summary of findings on public perception toward legal system/institutions.

Authors	Type of criminal justice contacts	Type of outcome measures	Key findings
Mastrofski et al. (1996)	Police-citizen interaction in which there was a specific police requests for orderly, legal behavior	Citizen compliance	Disrespectful treatment by police was negatively associated with citizens' compliance with police
Kristina (2009)	Two types of police-citizen contacts – 1. citizen-initiated contacts (e.g., calling the police to report a crime) v. 2. police-initiated contacts (e.g., police stopping)	Citizens' view about police legitimacy and citizens' satisfaction with police	Both types of contacts predicted satisfaction with police during encounters, but procedural justice was more important than police performance in predicting public satisfaction with police when respondents had been involved in a police initiated encounter.
Dai et al. (2011)	Police-citizen encounter – 1. quality of interpersonal treatment: police care, disrespect, and force; 2. quality of police decision-making: accuracy, voice, and consistency	Citizen respect toward the police and compliance with police	Police disrespect and use of force influenced citizens' respect of police, and 'voice' was associated with compliance with police
Mazerolle et al. (2013)	A single short, police-initiated and procedurally just traffic encounter v. business-as-usual traffic stops	Perceptions of the police (both specific to the traffic encounter and of the police more generally), legitimacy, trust, and cooperation with the police in general	Citizens in the 'procedurally just traffic encounter' tend to have more positive attitudes and beliefs about the police in terms of both specific and general views of the police as compared to citizens in the business-as-usual traffic stops
Consolini (1992)	Jury experience	Knowledge and attitude toward the jury system and courts	Citizens with jury experience tend to have more favorable attitudes toward the jury system and the courts, along with considerable increases in knowledge about the judicial branch.
Gastil et al. (2010)	Jury experience	Attitudes toward the jury duty and courts	The majority of citizen-jurors in their post-jury trial surveys expressed satisfaction with their jury duty and positive views about the courts.
Gastil et al. (2014)	Jury experience	Attitudes toward the justice system, jury system, courts, and judges	Citizen-jurors showed a greater confidence in the jury system and state and local court judges than they did before experiencing a jury service

experiencing a jury service.

Overall, research suggests a significant impact of citizens' deliberative experience as a juror on the improvement of citizen-jurors' confidence/knowledge and the legitimacy of the legal system. Although findings from those studies are consistent with the implication of deliberative democratic perspective on the relationships of jury experience to citizen-jurors' perceptions on legal institutions/systems, their focus is limited to the perceptions on the courts and judiciary system. Little research has investigated the influence jury service has on perceptions toward other justice institutions beyond the courts. In this regard, the current investigation centers on impact of jury experience on perceptions of the criminal prosecution system. Improving our knowledge of possible factors influencing public perceptions on institutions of social control is essential, as it can predict the citizens' perceived legitimacy and confidence in the criminal justice system, which is closely connected with people's compliance with the law and willingness to cooperate with legal institutions (Sunshine and Tyler, 2003).

Findings from research on the relationship between police-citizen contacts and citizens' sense of police legitimacy provide insights for the present study. Table 1 summarizes research on the impact of police-citizen contacts on perception toward the police, and on the impact of jury experience on citizen-jurors' perception toward the legal institutions/systems. Studies have found that procedurally just police-citizen encounter which allows the citizens to characterize their contact with police as positive, can enhance citizens' perceptions of legitimacy and general views of police and future compliance/cooperation with the police (Dai et al., 2011; Kristina, 2009; Mastrofski et al., 1996; Mazerolle et al., 2013). Although citizens' contacts with police and participation in jury service occur at starkly different stages of the criminal justice process, jury service allows the citizens to have a potentially positive first-hand experience of contacting with the legal system. This in turn can have positive impact on citizens' view and confidence in the legal system.

2.3. Other factors influencing perceptions of law and the justice system

Because some individual characteristics and contextual variables can potentially influence juror attitudes and knowledge, these factors need to be considered to better understand the impact of jury experience.

First, race is an important potential confounding individual characteristics that should be controlled in predicting perceptions of the criminal justice system. Research has shown that African Americans have more frequent contact with the criminal justice system than Whites, which in turn is associated with more negative attitudes toward the criminal justice system (Maguire and Pastore, 2001; Sun and Wu, 2006). Furthermore, the racial-gradient hypothesis assumes differences in perceptions of justice/injustice about the

criminal justice system across races as their social experiences and (following) frames of reference about justice system are different (Buckler and Unnever, 2008; Buckler and Higgins, 2016; Hagan et al., 2005). According to the notion of racial-gradient, African Americans will perceive the most injustice, therefore having a skeptical view on the justice system.

Gender might induce different attitudes and behaviors about the criminal justice system due to psychological differences developed early in life and prior socialization into different social roles (Sun and Wu, 2006). Other gender biases that could arise due to different legal experiences between men and women. It has been reported that females tend to be treated less respectfully or seriously than males in legal situations, regardless of the types of legal roles they take, which in turn, possibly makes females have less positive perspectives toward law and the justice system (Winkle and Wedeking, 2003). In addition, individual experiences in *interacting with prosecutors* should also be considered as the influence of contact with the criminal justice system on citizens' perceptions of the legal system has long been acknowledged (Yankelovich, 1978).

One potential contextual factor is that different jurisdictions employ different prosecution approaches or philosophies, which may influence the citizens' perceptions of the criminal prosecution system in their communities. Community-oriented approach to crime control which involves proactive problem-solving partnerships with the community, can induce greater support from public (Brown and Reed Benedict, 2002). It is therefore reasonable to predict that people in the jurisdiction having more community-oriented prosecution approach to crime, may possess more positive attitudes and high levels of knowledge about the criminal prosecution system as compared to those exposed to traditional prosecution approach which focuses on folding offenders accountable and case processing.

3. Hypotheses

Based on both deliberative democratic theory and previous research, the present study proposes that experience as a juror would have positive impacts on citizen-jurors' perceptions of the criminal prosecution system. The present study hypothesizes that (1) jury experience would be associated with favorable impression of the criminal prosecution system in their communities. The study also predicts that (2) jury experience would have a positive impact on citizens' perceived knowledge of criminal prosecution system in their communities.

4. Method

4.1. Data source and sample

The present study used data collected by the American Prosecutors Research Institute (APRI) in the years 2005–2006. APRI's public survey was administered, using random digit dialing (RDD),¹ to 975 citizens aged 18 and over living in two jurisdictions (Nugent-Borakove et al., 2009). Table 2 shows selected characteristics of the two study sites. A key difference between the two jurisdictions is that one is more *traditional* in its approach to prosecution focusing on holding offenders accountable and case processing, and the other is more *community-oriented* in its approach to prosecution focusing on a dynamic partnership with the community to address the problems of crime. In this regard, the APRI's data makes it possible to compare jurisdictions' different prosecution approaches as contextual factors influencing citizens' perceptions of the criminal justice system. Interviews continued until 325 respondents in each of the jurisdictions, provided complete survey data.²

The survey examined citizens' attitudes and opinions on a number of factors related to criminal prosecution in their communities. These include seriousness of local crime, safety of the environment, organizational behavior of the prosecutor's office, participation in the community, community education, and task performance. Using the APRI data, this study examined the effects of jury experience on impression and perceived knowledge about the criminal prosecution system by comparing respondents with and without juror experience in the past five years.

One advantage of the APRI's data for the present study is that it asks citizens about their recent experiences with the courts over the past five years, unlike other surveys that ask about all court experiences over respondents' lifetime. Asking only about relatively recent experiences can provide a more reliable picture of the impact of citizens' jury experience on their perceptions of the legal institutions (Benesh and Howell, 2001).

4.2. Measures

4.2.1. Dependent variables

The first dependent variable, impression about the criminal prosecution system in the community, was measured by asking respondents how much they agree that "The prosecutor's office does a good job addressing neighborhood problems" on 5-point likert scale, with 1 being strong disagreement and 5 being strong agreement. The second dependent variable, perceived knowledge about the criminal prosecution process in the community, was measured by the question, "how knowledgeable are you of the legal reasons

¹ Only landlines were included in the RDD samples. In 2005, only about 7% of households nationwide were served by wireless service only. Blumberg, Stephen J., Julian V. Luke, and Marcie L. Cynamon. "Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution." *American Journal of Public Health* 96.6 (June 2006): 926–31.

² In site #1, the survey was administered twice (in December 2005 and in April 2006). In Site #2, however, only one survey was administered (in September 2006), due to concerns about conducting a public survey during an election campaign.

Table 2
Study site characteristics.

Office Characteristic	Site #1	Site #2
Jurisdiction	Single county	Single county
Total population served	873,000	810,946
Total budget	\$10,500,000	\$13,572,816
Total staff	174	307
Total attorneys	88	97
Felony cases closed	14,046	12,000
Misdemeanor cases closed	115,617	30,000
Prosecution approach	Traditional	Community Prosecution

This data is based on the Bureau of Justice Statistics 2001 census of state and local prosecutors.

why the prosecutor's office does or does not file charges against individual?" 5-point likert scale, with 1 being totally un-knowledgeable and 5 being very knowledgeable.

4.2.2. Independent variable

The independent variable, jury experience, was measured by asking respondents, "Have you ever served as a juror in your jurisdiction in the past five years?" with 1 for "yes" and 2 for "no."

4.2.3. Control variables

Control variables are related to citizen characteristics (i.e., race, gender, and interaction with prosecutor) and contextual factor such as jurisdiction's prosecution approach. Three categories of race were scored: 1 for Black/African American, 2 for White, and 3 for Other. Gender was scored as 1 for "male" and 2 for "female." Recent experience in interacting with prosecutor was measured by asking respondents, "How much interaction have you had with the (site name) prosecutor's office in the last 12 months?" 5-point likert scale, with 1 being none and 5 being a lot. This measure is limited to contact with staff in a prosecutor's office, but it is likely to reflect a potential impact of jury service. Similarly, it would be preferable to have some measure of the quality of interactions, or "likeability" of prosecutors' staff, but these measures were not available in the APRI data. Finally, prosecution approach was scored in two categories: 1 for traditional prosecution and 2 for community-oriented prosecution or community prosecution.

5. Data analyses and results

After excluding respondents with missing data on dependent variables, the final sample for the analysis consisted of 759, 521 from jurisdiction with traditional-prosecution and 238 from jurisdiction with community-prosecution. Approximately 64% of the sample was female. The majority of the respondents categorized themselves as 'White,' while 35% of the sample was 'Black/African-American,' and 3% identified as 'Other.' Among the 759 respondents, 14% reported that they have served as a juror in the past five years. Approximately 64% of respondents with jury experience was female and similarly, 65% of respondents without jury experience was female. There was no systematic difference in response for jury experience (Yes v. No) by gender ($\chi^2(1) = 0.02$, *NS*). There was no systematic difference in response for jury experience by race ($\chi^2(2) = 1.21$, *NS*). Two dependent variables (impression and perceived knowledge) were found to be weakly and positively correlated ($r = 0.08$). Table 3 shows more detailed descriptive statistics (mean and SD) for variables, broken down by jurisdiction. To assess the sensitivity of the results to missing data, the study applied weights based on the inverse of jurors (non-jurors)' probability of being selected in the final sample to each model in supplemental analyses, and the results were consistent with what the study presents below.

Table 4 presents ordinal logistic regression models predicting impression and knowledge about the criminal prosecution. The Brant test of parallel regression assumption shows that none of the regression models violated an assumption of proportional odds. Odds ratios were found to be the same across different levels of the outcome, which in turn provides a rationale for conducting an ordinal logistic regression.

Model 1 shows that jury experience was significantly related to impression of criminal prosecution system ($Exp(b) = 1.48$, $p < 0.05$, $n = 759$, 95% CI [1.02, 2.15]). Respondents with jury experience in the past five years were 1.48 times more likely than those without jury experience in the past five years to have a favorable impression about the criminal prosecution in their community. Model 3 shows that jury experience was also significantly associated with perceived knowledge of criminal prosecution system ($Exp(b) = 1.59$, $p < 0.05$, $n = 759$, 95% CI [1.10, 2.31]). Respondents with jury experience in the past five years were 1.59 times more likely than those without jury experience in the past five years to report high levels of perceived knowledge of the criminal prosecution.

Model 2 and Model 4 controlled for individual characteristics (i.e., race, gender and criminal justice experience) and contextual factor (i.e., prosecution approach). Models did not exhibit multicollinearity, indicating that predicting variables are independent of each other ($mean\ vif = 1.03$ for both models). Results show that the effect of jury experience was marginally significant, with the inclusion of race, gender, interaction with prosecutor, and prosecution approach ($Exp(b) = 1.38$, $p < 0.10$, $n = 759$, 95% CI [0.95, 2.01]). Respondents with jury experience in the past five years were 1.38 times more likely than those without jury experience in the past five years to have a favorable impression about the criminal prosecution in their community. The same pattern was found in the

Table 3
Descriptive statistics for independent and control variables.

	Jurisdiction A Traditional prosecution		Jurisdiction B Community-oriented prosecution		Total	
	Mean (SD)	Range	Mean (SD)	Range	Mean (SD)	Range
Jury experience (YES)	0.16 (0.37)	0-1	.10 (0.30)	0-1	0.14 (0.35)	0-1
Gender (Female)	0.64 (0.48)	0-1	0.66 (0.47)	0-1	0.64 (0.48)	0-1
Race						
White	0.55 (0.50)	0-1	0.78 (0.41)	0-1	0.62 (0.49)	0-1
Black/African American	0.43 (0.50)	0-1	0.17 (0.38)	0-1	0.35 (0.48)	0-1
Other	0.02 (0.16)	0-1	0.05 (0.21)	0-1	0.03 (0.18)	0-1
Interaction with prosecutor	1.20 (0.68)	1-5	1.23 (0.73)	1-5	1.21 (0.70)	1-5
Impression	3.02 (1.11)	1-5	3.67 (1.0)	1-5	3.22 (1.12)	1-5
Perceived knowledge	2.01 (1.0)	1-5	2.52 (1.23)	1-5	2.17 (1.10)	1-5
Age						
18-24	0.08 (0.27)	0-1	0.06 (0.24)	0-1	0.07 (0.26)	0-1
25-34	0.12 (0.32)	0-1	0.13 (0.33)	0-1	0.12 (0.33)	0-1
35-44	0.17 (0.38)	0-1	0.13 (0.34)	0-1	0.16 (0.36)	0-1
45-54	0.23 (0.42)	0-1	0.27 (0.44)	0-1	0.24 (0.43)	0-1
55-64	0.18 (0.38)	0-1	0.19 (0.40)	0-1	0.18 (0.39)	0-1
65-	0.20 (0.41)	0-1	0.22 (0.41)	0-1	0.21 (0.41)	0-1
no response	0.01 (0.11)	0-1	0.00 (0.06)	0-1	0.01 (0.09)	0-1
Total n	521		238		759	

Table 4
Ordinal regression models predicting impression and perceived knowledge of the criminal prosecution system ($n = 759$).

Predictors	Impression		Perceived Knowledge	
	MODEL 1	MODEL 2	MODEL 3	MODEL 4
	<i>EXP(b) (SE)</i>	<i>EXP(b) (SE)</i>	<i>EXP(b) (SE)</i>	<i>EXP(b) (SE)</i>
Jury experience	1.48 (0.28)*	1.38 (0.27) [†]	1.59 (0.30)*	1.76 (0.33)**
Interaction with prosecutor (reference: none)				
Very little		0.72 (0.21)		1.75 (0.53) [†]
Neutral		1.71 (0.70)		2.30 (0.88)*
some		0.47 (0.27)		2.51 (1.50)
A lot		2.21 (1.41)		4.35 (2.37)**
Race (reference: Black/African American)				
White		1.20 (0.17)		1.11 (0.16)
Other		0.82 (0.33)		0.98 (0.39)
Gender (Female)		1.05 (0.14)		0.81 (0.11)
Jurisdiction (community prosecution)		2.94 (0.44)***		2.34 (0.36)***
Model $\chi^2(df)$	4.33 (1)*	73.17 (9)***	6.01 (1)*	61.18 (9)***
Pseudo R^2	0.002	0.033	0.004	0.030

[†]p < 0.10, *p < 0.05, **p < 0.01, ***p < 0.001.

relationship between jury experience and perceived knowledge of the criminal prosecution. Jury experience remained significantly related to the perceived knowledge of criminal prosecution system ($Exp(b) = 1.76, p < 0.01, n = 759, 95\% CI [1.22, 2.56]$). Respondents with jury experience in the past five years were 1.76 times more likely than those without jury experience in the past five years to report high levels of perceived knowledgeable of the criminal prosecution.

In addition, respondents living in a jurisdiction with community-oriented prosecution approach, were significantly (2.94 times) more likely than those living in a jurisdiction with a traditional prosecution approach, to report a favorable impression about the criminal prosecution system in their community ($Exp(b) = 2.94, p < 0.001, n = 759, 95\% CI [2.19, 3.96]$). Respondents in the jurisdiction of community prosecution also showed significantly (2.34 times) higher levels of perceived knowledge of the criminal prosecution system in their community than respondents in the jurisdiction of traditional prosecution ($Exp(b) = 2.34, p < 0.001, n = 759, 95\% CI [1.73, 3.17]$). None of gender, race, and interaction with prosecutor were found to be related to impression of criminal prosecution system. In addition, neither gender nor race were found to be related to the levels of perceived knowledge of the

criminal prosecution system. However, significant relationship between the levels of interaction with prosecutor and perceived knowledge was found: when compared to the group of respondents without interactions with the prosecutors' office in the last twelve months, both respondents with neutral interaction and respondents with a lot of interactions with the prosecutor's office were significantly more likely to report higher levels of perceived knowledge of criminal prosecution system ($Exp(b)_{neutral\ interaction} = 2.30$, $p < 0.05$, $n = 759$, 95% CI [1.09, 4.89]; $Exp(b)_{a\ lot\ of\ interactions} = 4.35$, $p < 0.01$, $n = 759$, 95% CI [1.49, 12.66]).

The study also examined the impacts of jury experience separately for respondents in the jurisdiction of traditional prosecution and respondents in the jurisdiction of community prosecution, while controlling for the effects of individuals' characteristics (i.e., race, gender, and interaction with prosecutor). Although the respondents in both jurisdictions tend to report more favorable impression about the criminal prosecution system with versus without jury experience (over the past five years), this observed pattern was not statistically significant ($Exp(b)_{traditional\ prosecution} = 1.34$, $p = 0.17$, $n = 521$; $Exp(b)_{community\ prosecution} = 1.44$, $p = 0.38$, $n = 238$).

As for the effect of jury experience on the perceived knowledge, the significant effect of jury experience was found only for the respondents in the jurisdiction of community prosecution. In this jurisdiction, respondents with jury experience were 4.08 times more likely than those without jury experience over the past five years to report high levels of perceived knowledge about the criminal prosecution system when controlling for individual characteristics ($Exp(b) = 4.08$, $p < 0.001$, $n = 238$, 95% CI [1.94, 8.61]). Although the effect of jury experience on the perceived knowledge was not significant for respondents in the jurisdiction of traditional prosecution, the same pattern was observed ($Exp(b) = 1.31$, $p = 0.23$, $n = 521$).

6. Discussion

The present study examined the effects of jury experience on citizens' perceptions of the criminal prosecution system in the community in which they are embedded. Results showed that jury experience in the past five years is positively related to citizens' impression and perceived knowledge of the criminal prosecution system. Respondents who served on jury service in the past five years tend to perceive the criminal prosecution system in their communities more favorably and their knowledge of the criminal prosecution more highly, as compared to those without jury experience in the past five years. Although the effect of jury experience was attenuated after taking account for individual characteristics and contextual factor (i.e., prosecution approach), the positive relationship between jury experience and impression remained. The positive effect of jury experience on perceived knowledge of the criminal prosecution system was statistically significant even after controlling for other factors. Overall, this study shows an evidence of significant impact of civic legal participation as a juror on perceptions in the criminal prosecution system, suggesting that jury experience can influence citizens' attitudes and perceived level of knowledge toward the criminal prosecution system.

Prosecution approach was strongly related to both respondents' impression and perceived knowledge about the criminal prosecution system, holding other effects constant. Respondents living in a jurisdiction with community-oriented prosecution approach report more favorable impressions and higher levels of perceived knowledge about the criminal prosecution in their community, compared to those living in a jurisdiction with a traditional prosecution approach. Given that the community-oriented prosecution emphasizes a support and cooperation of citizens (Brown and Reed Benedict, 2002), people who are exposed to this prosecution approach have may more positive experience with the criminal prosecution system, which in turn also shapes their impression and confidence in their knowledge about the system.

Furthermore, there was a pattern (though not significant) in which respondents with jury experience in the past five years report more favorable impressions about the criminal prosecution, regardless of prosecution approach they are exposed to. This pattern was clearer for respondents in the jurisdiction of traditional prosecution than for respondents in the jurisdiction of community prosecution ($p = 0.17$ v. $p = 0.38$). Since people in the jurisdiction of community prosecution tend to have generally positive attitude toward the prosecution system, the impact of jury experience might be relatively greater for people in the jurisdiction of traditional prosecution. Although the jury experience was found to positively influence the perceived knowledge of the criminal prosecution system regardless of prosecution approach, it was statistically significant only for respondents in the jurisdiction of community prosecution. Since people in the jurisdiction of traditional prosecution tend to have lower confidence in their knowledge about the prosecution, the impact of jury experience might be relatively greater for people in the jurisdiction of community prosecution. Overall, those findings suggest that prosecution approach can have a major impact on citizens' perceptions of the criminal prosecution in their communities.

In addition, the results partly support the findings of previous studies that found a relationship between criminal justice experience and perceptions of the criminal justice system and institutions (Wortley et al., 1997; Yankelovich, 1978). Respondents who had neutral or a lot of interaction with the prosecutor's office in the last twelve months reported higher levels of perceived knowledge of the criminal prosecution system in their communities than those with no interaction with the prosecutor's office during the same period. Although the interaction with prosecutor did not significantly predict respondents' impression about the criminal prosecution system in their community, those who had neutral or a lot of interactions with the prosecutor's office showed a tendency to have more favorable impression of the community prosecution system than those with no criminal justice experience. However, given that the midpoint of the measure for interaction with prosecutor was "neutral," which might seem somewhat odd to respondents, more sophisticated measure for this variable are needed for accurate interpretations of these findings.

Neither impression nor perceived knowledge were influenced by race/ethnicity. This counters findings from previous studies that people of color, especially Black people, hold more negative attitudes toward the criminal justice system generally (Myers, 1996; Tyler, 2001; Woolard et al., 2008). There was only a slight tendency for White respondents to express more favorable views and higher levels of perceived knowledge of the criminal prosecution system in their communities when compared to Black/African

American respondents. In addition, gender was not found to significantly predict impression and perceived knowledge about the criminal prosecution system. These results indicate that race and gender have relatively low explanatory power compared to jury experience and prosecution approach. These findings should be regarded as tentative. Further study with more extensive measures of jury experience and jurisdiction types are required.

7. Limitations and future directions

Limitations of the present study and future directions are acknowledged. First, data were collected in only two sites, and thus have limited generalizability. In addition, it was not possible to control for confounding factors such as criminal justice-related experience (e.g., arrest history), effects of media, respondents' occupations, or education. The current study also does not consider the potential influence of types of jury trial, namely civil or criminal. Previous studies have found that civic engagement such as electoral participation is stronger among the criminal jurors than the civil jurors (Gastil et al., 2002; Gastil et al., 2008; Gastil et al., 2010). In this regard, additional studies should collect data, from more jurisdiction, about different types of jury experience as well as other confounding factors that were uncontrolled in current study.

Available measures were limited. First, the measure of individuals' knowledge of the criminal prosecution system reflects 'subjectively' perceived levels of knowledge about the criminal prosecution, rather than actual knowledge individuals possess. Second, since the measure of interaction with prosecutors is limited to respondents' self-reported contact with staff in a prosecutor's office, psychological or cognitive mechanisms involved in the observed effect of interaction with prosecutor cannot be examined. Measures of the quality and types of interactions, or likeability of prosecutors' staff are needed to better grasp the relationship between interaction with prosecutor and perception of the criminal prosecution system. Third, the long-term impact of jury service cannot be captured by asking about jury experiences over only the past five years. Although jury experience stands in for reasoned discussion which is the core of deliberative democratic theory, it is unclear whether every respondent with jury experience actually participated in reasoned discussion as the current study does not have a direct measure. Further studies, therefore, should be based on variables considering citizens' actual knowledge of the criminal prosecution system. Ideally measures would also include the quality and types of interactions (or "likeability") with prosecutors' staff, a long-term jury experience, and experience in reasoned discussion among jurors.

Another limitation of the study is that jury participation might be a self-selection process. Individuals with positive attitudes toward the criminal prosecution system and higher levels of perceived knowledge might be more likely to participate in jury service. A better way to examine the effect of jury experience on perceptions of criminal prosecution system is using a within-subjects design that compares citizens' perceptions of the criminal prosecution system before and after jury experience. Data collection before-and-after jury service will be needed to fully understand the effect of jury experience on citizens' perceptions of the criminal justice systems/institution.

Overall study design should also be strengthened. A propensity score matching (PSM) design is commonly used to construct treatment (jurors) and comparison groups (non-jurors) whose members are matched with similar propensity scores. A PSM design could provide a more accurate estimation of the effect of jury experience by reducing bias due to confounding factors. The PSM method could be applied for the same research question, with newly collected data including exclusive information on both cases of jurors and non-jurors.

Finally, in-depth interviews with some individuals who served on a jury could lead to a greater understanding of comprehensive details of individual jurors' subjective experiences that may function as a critical path linking jury service with their knowledge and attitude changes.

8. Conclusion

Despite limitations, overall findings are consistent with deliberative democratic theory, suggesting the beneficial impact of jury experience. Findings indicate that civic legal deliberation through participating in jury service allows the citizens to develop their confidence and knowledge in the criminal justice institutions/systems. Given that criminal justice institutions rely on positive public perceptions to function effectively, the observed effects of jury experience in this study are meaningful. Under deliberative democratic theory, the attitudinal and educational impacts of jury service on perception of the criminal justice institutions can have important implications for policy makers and social commentators seeking ways to improve public support and confidence in legal and other public institutions. This is also true for governmental legitimacy more broadly. Findings on how jury experience shapes citizens' perspectives, especially toward legal process would be useful not only for policy makers in the US but also for other countries (e.g., Taiwan and Mexico) that are currently considering implementing the citizen jury trial system. These countries may choose to adopt or reject the jury service based on their understanding about how jury service shapes the citizen-jurors' attitudes and beliefs (Gastil et al., 2014).

Existing studies on jury experience and citizen-jurors' attitudes toward the legal system have limited their focus to the courts and judiciary system. The current study expands investigation into other justice institutions beyond the courts. In doing so, this study informs ongoing effort to examine the influence jury service has on citizen-jurors. Overall, this enhances our understanding of the impact of jury experience on perceptions of the legal institutions/systems and more generally improving our knowledge of possible factors influencing public perceptions and attitudes toward the criminal justice institutions.

References

- Abramson, J., 2000. The jury and popular culture. *DePaul Law Rev.* 50 (2).
- Buckler, K., Unnever, J.D., 2008. Racial and ethnic perceptions of injustice: testing the core hypotheses of comparative conflict theory. *J. Crim. Justice* 36 (3), 270-278.
- Buckler, K., Higgins, G.E., 2016. Support for aggressive stop-and-frisk policy in NYC: does perceived policy effectiveness and perceived disparate treatment explain observed racial and ethnic divides? *J. Crime Justice* 39 (2), 303-323.
- Benesh, S.C., Howell, S.E., 2001. Confidence in the courts: a comparison of users and non-users. *Behav. Sci. Law* 19 (2), 199-214.
- Bornstein, B.H., Golding, J.M., Neuschatz, J., Kimbrough, C., Reed, K., Magyarics, C., Luecht, K., 2017. Mock juror sampling issues in jury simulation research: a meta-analysis. *Law Hum. Behav.* 41 (1), 13-28.
- Brown, B., Reed Benedict, W., 2002. Perceptions of the police: past findings, methodological issues, conceptual issues and policy implications. *Polic. An Int. J. Police Strategies Manag.* 25 (3), 543-580.
- Cohen, J., 1989. *Deliberation and Democratic Legitimacy*. pp. 67-92 In Hamilton, Alan and Pettit, Phillip eds.
- Consolini, P.M., 1992. *Learning by Doing Justice: Jury Service and Political Attitudes*. Doctoral dissertation. University of California, Berkeley.
- Dai, M., Frank, J., Sun, I., 2011. Procedural justice during police-citizen encounters: the effects of process-based policing on citizen compliance and demeanor. *J. Crim. Justice* 39 (2), 159-168.
- Devine, D.J., 2012. *Jury Decision Making: the State of the Science*. NYU Press.
- Devine, D.J., Caughlin, D.E., 2014. Do they matter? A meta-analytic investigation of individual characteristics and guilt judgments. *Psychol. Public Policy, Law* 20 (2), 109-134.
- Elster, J., 1998. *Deliberative Democracy*. Cambridge University Press, Cambridge.
- Eveland, W.P., Morey, A.C., Hutchens, M.J., 2011. Beyond deliberation: new directions for the study of informal political conversation from a communication perspective. *J. Commun.* 61 (6), 1082-1103.
- Gastil, J., Deess, E.P., Weiser, P., 2002. Civic awakening in the jury room: a test of the connection between jury deliberation and political participation. *J. Polit.* 64 (2), 585-595.
- Gastil, J., Deess, E.P., Weiser, P., Meade, J., 2008. Jury service and electoral participation: a test of the participation hypothesis. *J. Polit.* 70 (2), 351-367.
- Gastil, J., Deess, E.P., Weiser, P.J., Simmons, C., 2010. *The Jury and Democracy: How Jury Deliberation Promotes Civic Engagement and Political Participation*. Oxford University Press, New York.
- Gastil, J., Fukurai, H., Anderson, K., Nolan, M., 2014. Seeing is believing: the impact of jury service on attitudes toward legal institutions and the implications for international jury reform. *Court Rev.* 48, 124-130.
- Hagan, J., Shedd, C., Payne, M.R., 2005. Race, ethnicity, and youth perceptions of criminal injustice. *Am. Sociol. Rev.* 70 (3), 381-407.
- Hans, V.P., 2007. Introduction: citizens as legal decision makers: an international perspective. *Cornell Int. Law J.* 40, 303.
- Hans, V.P., 2014. Reflections on the Korean jury trial. *J. Korean Law* 14, 81.
- Hans, V.P., Gastil, J., Feller, T., 2014. Deliberative democracy and the American civil jury. *J. Empir. Leg. Stud.* 11 (4), 697-717.
- Kristina, M., 2009. Public satisfaction with police: the importance of procedural justice and police performance in police-citizen encounters. *Aust. N. Z. J. Criminol.* 42 (2), 159-178.
- Maguire, K., Pastore, A.L., 2001. *Sourcebook of Criminal Justice Statistics, 2000*. Hindelang Criminal Justice Research Center.
- Marder, N.S., Hans, V.P., 2015. Introduction to juries and lay participation: American perspectives and global trends. *Chicago-Kent Law Rev.* 90, 789.
- Mastrofski, S.D., Snipes, J.B., Supina, A.E., 1996. Compliance on demand: the public's response to specific police requests. *J. Res. Crime Delinquency* 33 (3), 269-305.
- Mathews, F.D., 1999. *Politics for People: Finding a Responsible Public Voice*. University of Illinois Press.
- Mazerolle, L., Antrobus, E., Bennett, S., Tyler, T.R., 2013. Shaping citizen perceptions of police legitimacy: a randomized field trial of procedural justice. *Criminology* 51 (1), 33-63.
- Myers, L.B., 1996. Bringing the offender to heel: views of the criminal courts. In: *Americans View Crime and Justice: a National Public Opinion Survey*, pp. 46-61.
- Nugent-Borakove, M.E., Rudzilowicz, L.M., Rainville, G., 2009. Exploring the Feasibility and Efficacy of Performance Measures in Prosecution and Their Application to Community Prosecution. United States Department of Justice, National Institute of Justice, Washington, DC NCJ 227668.
- Pincock, H., 2012. Does deliberation make better citizens. In: *Democracy in Motion: Evaluating the Practice and Impact of Deliberative Civic Engagement*, pp. 135-162.
- Sun, I.Y., Wu, Y., 2006. Citizens' perceptions of the courts: the impact of race, gender, and recent experience. *J. Crim. Justice* 34 (5), 457-467.
- Sunshine, J., Tyler, T.R., 2003. The role of procedural justice and legitimacy in shaping public support for policing. *Law Soc. Rev.* 37 (3), 513-548.
- Tyler, T.R., 2001. Public trust and confidence in legal authorities: what do majority and minority group members want from the law and legal institutions? *Behav. Sci. Law* 19 (2), 215-235.
- Vidmar, N., 2000. A historical and comparative perspective on the common law jury. *World Jury Syst.* 28, 34-35.
- Winkle, J., Wedeking, J., 2003. Perceptions and experiences of gender fairness in Mississippi Courts. *Judicature* 87, 126.
- Woolard, J.L., Harvell, M.P.P., Graham, P.D., 2008. Anticipatory injustice among adolescents: age and racial/ethnic differences in perceived unfairness of the justice system. *Behav. Sci. Law* 26 (2), 207.
- Wortley, S., Hagan, J., Macmillan, R., 1997. Just des (s) erts? The racial polarization of perceptions of criminal injustice. *Law Soc. Rev.* 31, 637-676.
- Yankelovich, S., 1978. *The Public Image of Courts: a National Survey of the General Public, Judges, Lawyers and Community Leaders*. Retrieved from Yankelovich, Skelly and White.