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IMPARTIALITY, SOCIAL NETWORK EFFECTS AND COLLECTIVE MEMORY:
THREE ESSAYS ON TRUST IN POLICE

By

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B.A., University of Wisconsin-Madison, 2005
M.A., University of Michigan, 2009

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University of Louisville
Louisville, Kentucky

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MEMORY: THREE ESSAYS ON TRUST IN POLICE

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A Dissertation Approved on

July 17, 2019

by the following Dissertation Committee:

Frank Goetzke, PhD

Daniel DeCaro, PhD

Steve Koven, PhD

Cherie Dawson-Edwards, PhD

DEDICATION

This dissertation is dedicated to my two families

Mr. Robert O. Fischer

Mrs. Trudy A. Fischer

Mandy Fischer

Abigail Kershner

Johnny Kershner

George

Celise

And

Dr. Frank Goetzke

Dr. Rebecca Potter

Evelyn Potter

Tahlia Potter

Kola

who made me smile when there were tears

who encouraged me when I wanted to quit

You have made all the difference.

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ABSTRACT

IMPARTIALITY, SOCIAL NETWORK EFFECTS AND COLLECTIVE MEMORY: THREE ESSAYS ON TRUST IN POLICE

Matthew R. Fischer

July 17, 2019

This dissertation is an historical and empirical examination of police organizational efforts at influencing public perceptions of trust in police. It begins with an historical overview of police organizational reform, focusing on the various strategies employed by police reformers have attempted to influence public perceptions of police trustworthiness and legitimacy. It uses Rothstein's impartiality as Quality of Government thesis and the theory of collective memory to argue for an understanding of the importance of the normative context in which police tactics and strategies are deployed for garnering trust in police and how the presence of social network effects for trust in police complicate contemporary efforts at changing perceptions. The latter part of the dissertation tests for the existence of these effects empirically.

The dissertation is divided into three chapters. Chapter One gives an historical overview of police efforts to influence trust in police and argues that reformers have overlooked normativity and peer effects as factors influencing trust in police. Chapter Two investigates whether, in addition to police performance and procedural fairness, universal impartiality is a significant predictor of trust in police. Chapter Three tests for the presence of a social network effect for trust in police. It argues that one interpretation of the

consequences of the existence of a social network effect for trust in police is that it can lead to path dependent outcomes similar to the effects of collective memory.

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CHAPTER I

INTRODUCTION

The topic of trust in police is an important one. It seems that almost daily police find themselves in situations where institutionally they take three steps forward and four steps back. For every positive in-road police make earning the trust of the people they serve, new problems (or persistent old ones) threaten to undo their efforts. Trust in police in the United States has been back at its historical average of 52%, with African Americans sitting at around 30%. If people do not trust the police it is unlikely that they will cooperate with them, which is significant because the police need the cooperation of the public in order to co-produce public safety with them. A gap in trust in police means that police are less effective at controlling and deterring crime, which can affect how the public evaluate police performance, which can lead to decreased public support for police, which makes police less effective at their jobs. If enough people lose trust in the police, it may not be possible to ever regain that lost trust. Clearly, the stakes for understanding trust in police are high.

While real-world incidents threaten to undermine trust in police, the criminal justice literature on trust in police highlights some gaps in scholarly understanding about the factors which influence trust in police. The history of criminal justice thinking on the topic of trust in police shows that it has only been recently that scholars have been working from a reform aimed at improving perceptions of police trustworthiness and legitimacy that has

an empirical micro-foundation. However, this literature does not talk about how the normative context in which police tactics designed to increase police trust, like the procedural fairness perspective, influences individual- and social group-levels of trust in police. Second, the extant literature only accounts for the impact of individual perceptions on the decision to trust in police without considering that people tend to follow the attitudes and behaviors of their social reference groups when making decisions. The current dissertation attempts to address these two gaps in the existing literature.

This dissertation is comprised of three articles which are presented in Chapters 2, 3 and 4. The first article presents a review of literature organized around the topic of trust in police. The review begins with the inception of the so-called professional era of policing in the U.S., continuing through to the community policing era up to the present day and the advent of the procedural fairness perspective. The strengths and weaknesses of each are discussed, leading to the presentation of two critiques based on gaps within the literature. The first critique is that trust-building tools, like community policing or procedural fairness, must be grounded in a normative value in order to build the kind of broad-based trust and legitimacy those perspectives seek. The value of universal (deontological) impartiality provides a necessary context to the exercise of tools like procedural justice which people use to evaluate their encounters with police. The second is that gaining trust and legitimacy for police requires more than a shift police behavior during interpersonal contacts because people are also influenced in their attitudes and behavior by their social reference group. That people are influenced in their decision to trust police by the prevalence of that modality in their social reference group means that programs which only

address individual and interpersonal experiences between the police and the public may lead to ill-informed decision-making regarding policies designed to engage the citizenry.

Based on the European Social Survey Round 5, article two develops the first critique by examining empirically the concept of universal impartiality and its relevance as a factor that influences trust in police. Using structural equation modeling, this article demonstrates that, in addition to police performance and procedural fairness, universal impartiality is a predictor of trust in police. It is argued that Tyler's fairness and Rothstein's impartiality are not synonyms but represent two separate and distinct concepts, one of which is based on subjective perceptions (fairness) and the other which is a universal and an absolute (impartiality). The consequences discussed in the conclusion of the article are the following: impartiality is not an objective truth discovered by this study, but are instead, owing to the survey nature of the data set, what people expect from their police institutions.

Finally, the third article analyzes differences in individual levels of police trust using the concept of social network effects. The basic idea is that a person's decision to trust the police is at least partially dependent on the trusting culture in the city in which respondents live. Based on the Social Capital Benchmark Survey, the F.B.I.'s Uniform Crime Report and the Law Enforcement Management and Administrative Statistics data sets, an instrumental variable probit regression model was built to model trust in police mode choice as a function of personal, crime and city-specific variables, including network effects. Two city-level instrumental variables are used, based on U.S. Census data for median household income per capita and F.B.I. violent crime data, and found that a social network effect exists and can be derived quantitatively which permits measuring effect sizes. Since there is empirical evidence that trust in police decision-making depends on

network effects, police scholars may wish to focus not only on the quality of interpersonal contact but also the context in which those contacts are handled. A tie-in to universal impartiality is proposed as a way to address the influence of the social network effect.

The dissertation finishes up with a brief conclusion, summarizing the results, presenting the limitations and giving an outlook on further research in the area of police trust, impartiality and social network effects.

CHAPTER II

TRUST IN POLICE: A REVIEW OF LITERATURE AND TWO EXPANSIONS

Introduction

In the recent past there have been a number of high profile killings of unarmed African American males at the hands of police officers which has led to widespread protest against police violence across the country (e.g., Eric Garner, Michael Brown), the deaths of African Americans in police custody (e.g., Sandra Bland and Freddie Gray) and the perceived failure of the criminal justice system to yield convictions in these and other instances. The consequences of these high-profile events have been a decrease in trust and confidence in the police. For example, a Gallup poll published in 2015 saw trust and confidence among US residents tied with 1993 for the record low of 52% (Jones 2015). Further, a Pew Research poll reporting on the changes in rates of trust and confidence in the police by comparing 2015-2017 to 2012-2014 benchmarks found that that trust and confidence in the police decreased among Hispanics (2012-2014: 59%; 2015-2017: 45%), liberals (2012-2014: 51%; 2015-2017: 39%) and people under the age of 30 (2012-2014: 56%; 2015-2017: 44%) to below 50%. That same poll showed that for African Americans, trust and confidence in the police remains low: trust decreased from 35% to 30% over that same period (*ibid.*).

The scenario described above is not new for police in the United States. Going back to the 1930s, police scholars and practitioners have sought ways of improving the image of police in the eyes of the public in order to gain the public's trust and support (Fogelson

1977; Moore and Kelling 1983). Over the years, police reformers proposed a number of organizational strategies which sought by various means to increase public perceptions of police trustworthiness and legitimacy. Those strategies are: the police performance model, community policing and the procedural fairness perspective. The police performance model was an implicit trust model in that up to that point in U.S. history the police had a reputation for political meddling and corruption (*ibid.*). Early police reformers recast the police in the mold of J. Edgar Hoover's Federal Bureau of Investigation which made policing a professional career concerned only with the biggest crimes and the surest solves (Kelling and Moore 1988). The subsequent community policing philosophy was a reaction to the social and political isolation of police which occurred as a result of the professional model (Greene 2000). The goal was to encourage the public to coproduce public safety with the police and to build trust through these efforts (Rosenbaum 1988; Lurigio and Rosenbaum 1986). Yet, the failure to explicitly theorize and empirically scrutinize on the topic of police trust formation was a weakness of these early organizational attempts (Moore and Kelling 1983; Gill, Weisburd, Telep, Vitter and Bennett 2014). Although the police performance model and the community policing philosophy¹ remain the organizational paradigm in many departments (Zhao, Lovrich and Robinson 2001; Zhao, He and Lovrich 2003), the procedural fairness perspective, which is the most recent effort to build trust between police and the public, has received a great deal of scholarly attention over the past 20 years. Following the President's Task Force on 21st Century Policing, which advocated for legitimacy to be the goal of police reform in the United States (2015),

¹ There are more departments that use the police performance model than the community policing philosophy. Trojanowicz, Kapeler, Gaines and Bucqueroux (1998), as well as Zhao, He and Lovrich (2003) point out that many departments have adopted the language of community policing while the core functions of policing have not changed from the traditional police performance model.

the procedural fairness perspective proceeds from an individual motive-based model of trust that puts emphasis on the quality of interpersonal treatment and decision-making as the core components of improving perceptions of police trustworthiness and legitimacy (Sunshine and Tyler 2003; Murphy and Tyler 2017).

Examining historical attempts to influence public trust in police and understanding where those attempts are weak is important to developing a more complete conceptual picture of how police action influences public perceptions of police. This is certainly the case with the procedural fairness perspective which built upon the lessons of the police performance and community policing models to focus on the conduct of officers during interpersonal interactions with members of the public. However, while the procedural fairness perspective contributes greatly to understanding how perceived procedural fairness in police-public encounters can lead to increased perceptions of police trustworthiness and legitimacy, thinking about trust in police can still be extended. It is the goal of this paper to highlight two related points which delve deeper into the factors that influence trust in police. The first is that because individuals are embedded into social networks and those networks influence the individual's behavior that dealing with mistrust of the police must be expanded if it is to counteract the influence of that network. The second is that the most recent effort at trust-building, the procedural fairness perspective, needs a normative foundation to guide its implementation and use or it could be used as window-dressing to deal with negative public relations crises as the police performance model and the community policing philosophy before it.

The remainder of this essay unfolds as follows. The first section presents an historical review of literature organized around the theme of police organizational attempts

in the United States to improve perceptions of trustworthiness and legitimacy. Based on the review, section two provides two arguments for extending thinking about trust in police, namely, a) that trust-building more generally and procedural fairness more specifically need to be grounded in a normative framework to guide the exercise of public authority in such a way that procedural fairness can work and b) that focusing only on individual police-public interactions as the unit of trust analysis does not adequately account for the influence of social networks on individual decisions. Section three brings these two extensions together into a conceptual model before concluding.

Review of Literature

Police Performance. While it is not stated outright, implicit in the traditional crime control and deterrence model of policing is the notion that how well police do their jobs influences citizen satisfaction with and instrumental trust in police. If the public do not perceive the police as at least somewhat competent at their jobs they are unlikely to reward them with a high degree of satisfaction, trust or legitimacy. The genesis of the performance model can be traced back to the inception of the so-called professional era of policing instituted in the 1930s (and continued well on into the present day) which sought to change the image of policing in the eyes of the public (Fogelson 1977; Kelling and Moore 1988; Greene 2000). Until that time, policing in the United States was deeply intertwined with local politics as ward bosses and their political machines used publicly funded police forces to secure their community power base (e.g., distributing rewards in exchange for favorable voting behavior, etc.), leading to a reputation for abuse of police authority and the corruption of police institutions. The rise of the municipal reform movement and the

passage of the Pendleton Act (1883) saw major changes in the way police forces were organized and their relationship to local political authorities: police would become the most autonomous part of municipal government. Police reformers August Vollmer (1876-1955) and O.W. Wilson's (1900-1972) vision for a reformed police force was to adopt a narrow crime-fighting focus similar to what J. Edgar Hoover had done with the F.B.I. Police would become highly professional, adopting an impersonal, authoritative demeanor when interacting with citizens, and incorporate the latest in rapid response technology to improve police performance and to project force across entire cities. The goal of these reforms was to make the police more predictable, official and to imbue them with specialized crime-control and deterrence knowledge which would, in turn, rehabilitate the image of the police in the public's eyes and regain their trust through police professionalism and performance. The professional era of policing was born.

The heyday of the professional era model of gaining trust through performance lasted until the late 1960s/early 1970s when it met with a series of issues that highlighted some of its weaknesses. The first issue with the professional era's police performance model is that police performance, like that of other public services, is empirically difficult to assess because police work is multifaceted and often unseen by the public (e.g., Parks, et al. 1981). In the case of police work, it is frequently assumed that police performance can be measured based on arrest, clearance and crime rates or numbers of calls for service each have their own weaknesses (see: O'Brien 1996; Alpert and Moore 1993; Alpert, Flynn and Piquero 2001; Connell, Miggans and McGloin 2008). However, arrest and clearance rates may be high without leading to a reduction in crime rate because such rates do not account for the disposition of a case (i.e., how many cleared cases resulted in a conviction,

how many suspects were arrested without charges being brought, etc.). The number of calls for service can be influenced by both the presence or absence of satisfaction with and trust in police services, therefore making it a poor measure police performance. Further, research into the effectiveness of police tactics revealed that police working by themselves could do little to prevent, deter or solve crimes. Moore and Kelling (1983) state that in cases of property crimes without witnesses, police were successful in solving them (i.e., bringing charges against a suspect, being adjudicated in court) one out of five times (see also: Spelman and Brown 1984; Kelling, Pate, Dieckman and Brown 1974; see also: Sampson, Raudenbush and Earls 1997; Sampson and Bartusch 1998). Moreover, although crime control and deterrence at its most essential level tries to be a *preventative* strategy, it tends in practice to be *reactive*, which raises questions regarding the role police play in crime control and deterrence. Thus, although police performance was in theory related to the ability of police to control and deter crime, providing evidence to support that claim proved difficult.

Related to the difficulty of measuring empirically police performance, the second issue for the model was that the non-crime control-based order maintenance activities were more effective at increasing the public's perception of safety and, by extension, the amount of trust they placed in police. Findings from several foot patrol experiments nationwide found that fear of crime, not actual crime rates, was driven by public perceptions of social disorder (Spelman and Brown 1984; Kelling, Pate, Dieckman and Brown 1974; Bursik and Grasmick 1993). The discovery that perceptions of order and not actual crime rates was related to citizen fear of crime challenged one of the core tenets of professional policing model, namely, that perceptions of public safety would lead to satisfaction with and trust

in police through police performance (Greene 2000). Researchers discovered that visible signs of disorder, including but not limited to graffiti, vagrancy, public intoxication, abandoned parks and broken windows were interpreted as signals by local residents and potential offenders that public spaces were unmonitored and unprotected, which had the effect of driving residents out of those spaces and back into their residences while simultaneously inviting anti-social elements into them (Wilson and Kelling 1982; see also Sampson and Bartusch 1998; Bursik and Grasmick 1993). Although maintaining public order had always been a considered a component of police work, since the professional era, order maintenance was viewed as the secondary role of police behind the primary role of the police as crime-fighting experts. But if perceptions of safety, and, by extension, the decision to trust police are related to the secondary role and not the first, however, questions can be raised regarding the claims made about that model.

The third problem with the professional era's performance model was that the adoption of rapid patrol and response technology had isolated police socially from the public which meant that opportunities for trust-building and information gathering were reduced (Greene 1987, 2000; Kelling and Moore 1988; Moore and Kelling 1983; Trojanowicz 1986). Along with the discovery that the police could do little to control and deter crime by themselves was the parallel realization that police needed public cooperation with the police (e.g., willingness to follow police directives, willingness to pass on information) in order to carry out their primary function effectively. The problem for the professional era performance model was that it had lost trust and legitimacy in the eyes of a proportion of the public, particularly among minority groups living in disadvantaged, high crime neighborhoods, through the impersonal way officers treated members of the

public, the use of increasingly militant tactics and the social isolation inherent in choice of transportation modality (i.e., driving a patrol car versus walking a beat) (Greene 2000; Gill, et al. 2014). Coupled with the previous two issues, isolating police from the public only served to make police officers' jobs more difficult and less likely to provide evidence of effective police performance, which meant that the likelihood of the police changing public perceptions of trust was low.

In all, despite its intuitive appeal, the professional era's police performance model represents an early attempt and failure at garnering public satisfaction with, trust in and legitimacy for the institution of the police. A variety of issues, including measurement problems, role mismatch and social isolation undermined the model and left scholars and practitioners searching for an alternative that would directly address the public's lack of trust in the police. The Community era of policing would build upon the foundation laid by the professional era and to deploy a new philosophy: community policing.

Community Policing. The community policing philosophy was developed in part as a response to the shortcomings of the professional era's police performance model of crime control and deterrence: crime rates soared during the 1970s while police tactics before and during race riots were scrutinized in national commission reports on crime and police clashed violently with civil rights activists and Vietnam anti-war protesters on broadcast television (Rosenbaum 1988, Greene 2000; Gill et al. 2014). At the same time, two important discoveries – that fear of crime and disorder led members of the public to abandon public spaces and that police could do little to control and deter crime by

themselves – highlighted the need for a new approach to crime control that focused on order maintenance and the strengthening of neighborhood informal social control (Wilson and Kelling 1982; Skogan 1986; Bursik and Grasmick 1993). To make this new strategy work required cooperation between the police and the public to monitor public spaces and report crime. But attaining public cooperation would prove difficult for two reasons. First, police organizational legitimacy and performance was undermined by their seeming inability to control soaring crime rates (Greene 2000; Kelling and Moore 1988). Second, and most relevant for the topic of this paper, cooperation requires the public to trust the police, and for many, particularly among communities of color, trust was not immediately forthcoming.

The community policing philosophy has thus been studied over the past 40 years for its potential to a) reduce crime and fear of crime and b) improve police-public relations (Greene 2000; Fisher-Stewart 2007; Crowl 2017; Gill, et al. 2014). The most general conceptual model for community policing holds that increases in the quantity of police-public interactions will lead to greater crime control, deterrence, reductions in fear of crime and improvements in public trust for police (Moore, Trojanowicz and Kelling 1988: 8). It was thought to build trust between the police and the public through increased opportunities for social interaction as both groups work together to co-produce/improve a neighborhood's capacity for informal social control which together can indirectly have an impact on crime rates (Greene 2000; Trojanowicz, Gaines, Kappeler and Bucqueroux 1998). Community policing officers would also get out of their cars and walk a geographically stable beat to maximize opportunities for intelligence gathering and trust-building (Trojanowicz 1986).

Co-production was also a major theme of the community policing philosophy. Co-production is the idea that the consumers of a particular good or service can also contribute to the production of that good or service (for an overview, see: Parks, et al. 1981). Co-production is thought to be a way of making the providers of a public good or service more responsive to the needs of the people they served. Thus, in the case of community policing, the police and the community might come together to work on a neighborhood watch program in which police would hear from residents regarding crime problems in that area and then, with the community, engage in problem-solving to deal with that problem (e.g., Alpert and Moore 1993; Alpert, Flynn and Piquero 2001).

Community policing reformers proposed three changes to the structure and mandate of police organizations to facilitate these goals (Trojanowicz, Kappeler, Gaines and Bucqueroux 1998; Kelling and Moore 1988; Cordner 2001). First, whereas the professional era's organizational structure was a strict vertical hierarchy with decision-making authority resting at the top, community policing advocated a decentralized framework that gave greater latitude to officers in the field to deal with issues and thus to be more responsive to neighborhood or community concerns (Cordner 2001; Rosenbaum 1988). It has been argued that increasing the discretion available to "street-level bureaucrats" such as police will afford them more flexibility in problem-solving and even increase the likelihood of achieving socially equitable outcomes (Lipsky 2010; Maynard-Moody, Musheno and Musheno 2003; Maynard-Moody and Leland 2000).

Second, order maintenance activities which had during the professional era taken a secondary role to professional crime-fighting became a core component of efforts to combat fear of crime and encourage the public to retake their guardianship role over public

spaces (Cordner 2001; Rosenbaum 1988; Goldstein 1979). Police cannot be everywhere, so the public must contribute to monitoring and enforcing informal neighborhood order (Rosenbaum 1988). If visible signs of disorder create fear and make citizens avoidant of public spaces, restoring neighborhood order should lead again to public participation (Wilson and Kelling 1982). In reprioritizing order maintenance activities, reformers sought to create opportunities for police-public collaboration which would strengthen the informal capacity of the neighborhood to fight crime and maintain order.

Third, and a corollary of the decentralization of decision-making authority, community policing sought to incorporate the public more into the problem-solving process for crime in their area (Goldstein 1979; Sampson and Groves 1989; Sampson 2011; Gill et al. 2014). As with prioritizing order maintenance activities, incorporating residents into the process of finding solutions to local crime problems creates opportunities for social interactions and goal-driven cooperation which has been found in other contexts to generate social capital and trust between and among participants (see: Putnam, 2000; Ostrom 1990; Sampson 2012). Bringing residents into the problem-solving process would likely also result in some informational spillovers that would make residents more effective at controlling and deterring future disturbances to neighborhood order (Gill et al. 2014; Goldstein 1979; Bursik and Grasmick 1993).

However, like the professional era's police performance model before it, the impact of community policing on crime, fear of crime and trust in police has been difficult to assess empirically, and this difficulty can be attributed to the lack of a coherent conceptual model connecting the content of community policing programs to specific outcomes (Fielding 2005; Lurigio and Rosenbaum 1986; Gill et al. 2014). There is currently no

explicit theoretical foundation for community policing or conceptual model upon which criminal justice scholars agree (e.g., Cordner 2001; Oliver and Bartgis 1998), though a few prominent researchers (e.g., Kelling and Moore 1988; Trojanowicz 1986; Moore, Trojanowicz and Kelling 1988: 8) have alluded the existence of such an underlying social interaction theory for community policing but this theory has not been developed or mentioned in subsequent research. A consequence of the lack of theoretical foundation has been that although community policing programs can be found in most metropolitan police departments across the United States (Zhao and Thurman 1997; Zhao, Lovrich and Robinson 2001), community policing programs bear little resemblance to one another and thus generally defy comparison (e.g., Greene and Mastrofski 1988; Lurigio and Rosenbaum 1994; Gill et al., 2014). Even on occasions where comparison is possible (e.g., similarly sized patrol beats, police department size, experimental and control areas, etc.), few studies describe in detail what police did during the program which is of great interest to researchers looking to reveal causality (Connell, Miggans and McGloin 2008).

As of the time of writing and to the best of this author's knowledge, there are no studies which specifically assess the impact of community policing activities on trust in police, which makes assessing community policing's trust-building component unfeasible. This finding was a surprise given the number of scholars advancing the claim that community policing involves trust-building (e.g., Trojanowicz, Kappeler, Gaines and Bucqueroux 1998). There have been a number of studies that have looked at public satisfaction with policing services which compare the service delivery of large, highly centralized urban police departments characteristic of the police performance model with smaller, more decentralized community police departments indicative of community

policing units (e.g., Ostrom and Whitaker 1973, 1974). While not a direct measure of trust, satisfaction with service findings can at least be argued on conceptual grounds to be a correlate of trust: if an individual is satisfied with a particular service or product, in all likelihood that individual also trusts the quality of the products and services delivered by that producer and will continue to use them (e.g., Ranaweera and Prabhu 2003).

The empirical record for community policing's effect on crime has been mixed. Systematic analysis of community policing's effectiveness has been rare (Weisburd and Eck 2004). In their comprehensive review of the community policing literature since 1970, Gill et al. (2014: 412) found that in only 36.2% of the 47 comparison studies they surveyed showed a positive effect (i.e., reduction) on crime while an equal proportion indicated the opposite. Further, using longitudinal data to analyze a community policing program deployed in the suburbs, Connell, Miggans and McGloin (2008), who studied the impact of an officer-initiated community policing initiative on crime located in the suburbs of a major metropolitan area, concluded that the program was successful at lowering property crime rates in the area as a result of police-citizen interaction, but they also mentioned that their assessment was only possible because of the in-depth description of the intervention provided by police.

The community policing philosophy is, despite its indeterminate empirical record, an important step on the path to improving the police-public trust relationship. Community policing reformers, aware of the importance of personal contact and non-enforcement-related social interaction to gaining trust and cooperation in enforcement-related situations, set forth to design an approach to policing that at least nominally assigned a greater degree of importance to the police-public trust relationship. While community policing continues

to be a topic of consideration in the criminal justice literature on police-public cooperation, another more empirically grounded theory has risen to prominence in the search for improving public perceptions of police trustworthiness and legitimacy. That theory is the procedural fairness (justice) perspective.

Procedural Fairness. Despite the indeterminant effect of community policing on trust in police, the community policing philosophy highlighted conceptually the importance of social interactions for building positive perceptions of police officers and police institutions. Like the community policing philosophy before it, the procedural fairness and police legitimacy argument builds upon the insights gleaned from the previous generation's efforts. However, unlike the police performance and community policing models, procedural fairness has an empirical micro-foundation which supports its core claim. This has translated into the procedural fairness and police legitimacy perspective receiving a great deal of scholarly attention in efforts to rehabilitate the image of police officers and institutions.

The procedural fairness position holds that procedural fairness predicts trust in police and improves perceptions of police legitimacy (Tyler 1990, 2003). Legitimacy for police is important because individuals who view the police as legitimate are more likely to defer to them, cooperate with them and obey the law (Tyler 1990). The evaluation of procedural fairness takes places across two distinct axes: the quality of interpersonal treatment and the quality of decision-making (Tyler and Blader 2000). The quality of interpersonal treatment refers to the degree to which officers treat members of the public with dignity and respect while the quality of decision-making deals with the extent to which

officers explain their decisions, are perceived to be neutral and allow for members of the public to provide input. Perceptions of police trustworthiness and legitimacy are improved when police officers treat people fairly and with respect, explaining why officers made a particular decision and inviting and respecting input from those with whom they come into contact. If people witness police interacting with members of the public in these ways or are themselves subject to them, they infer that the larger organization is procedurally fair and therefore have trust in the institution of the police as well as support that institution's policies as legitimate, which means that they are more likely to cooperate with police and follow the law (Tyler 1990 2003, 2005; Murphy and Tyler 2017; Hough, Jackson and Bradford 2013; Tyler and Fagan 2008). Fairness of interactions is determined by individual subjective perceptions; there are no universal standards by which procedural fairness is measured (Tyler 2003).

The empirical base supporting the claim that the legitimacy of police institutions is derived from citizens' subjective perceptions that those institutions are procedurally fair is robust, both within its original Anglo-American context (Hinds and Murphy 2007; Sunshine and Tyler 2003; Tyler 2003; Tyler and Blader 2000; Tyler and Huo 2002) and outside in places such as Ghana, Slovakia, Slovenia, the Czech Republic and Hungary (e.g., Tankebe 2009; Reisig, Tankebe and Meško 2012; Moravcová 2016). Research into procedural fairness looks not only on its impact on individual perceptions of police legitimacy alone but has also compared procedural fairness to other predictors of willingness to trust and cooperate with police: distributive justice and police performance. Although the convergent and discriminant validity of the procedural fairness concept remains a source of tension (Gau 2011), the prevailing result has been that, *ceteris paribus*,

procedural fairness remains the most important predictor of public cooperation with police. For example, Tyler and Sunshine (2003) in a survey of over 1,600 residents of New York examining the antecedents of procedural justice found that, across all ethnicities, the quality of decision-making and the quality of interpersonal treatment comprised the main predictors of procedural fairness. In that same study, Sunshine and Tyler (2003) report on the factors which influence public support of police and policing activities and discovered that perceptions of police legitimacy predict cooperation and compliance with the police and the willingness to entrust police with broader discretion in their everyday tasks of maintaining law and order. The findings of Sunshine and Tyler (2003) echo the findings of Tyler and Huo (2002) in a survey of 1,656 people living in and around Oakland and Los Angeles which indicated individuals' evaluations of procedural fairness predicted both their satisfaction with the decision-maker and their willingness to accept a decision. However, even though the effects of procedural fairness are improved perceptions of trustworthiness and legitimacy, much of the evidence supporting these effects uses trust as an explanatory variable examining the impact of different types of trust (e.g., trust in procedural fairness, trust in distributive fairness) on self-reported willingness to comply with the law and legal authorities (see: Tyler 2005; Jackson, Hough, Bradford, Hohl and Kuha 2012; Hough Jackson and Bradford 2013; Barnes, Beaulieu and Saxton 2017).

This review of literature on previous research into trust in police highlights the major theme in the development of thinking regarding generating trust in police, which is the need for police and public to trust one another and work together. The irony of police performance model of the professional era was that the adoption of rapid response

technologies and a professional, paternalistic demeanor by police, both of which were designed to rehabilitate the reputation of police in the United States from being corrupt and political to being beyond reproach and neutral, were arguably the factors which contributed to an overall decrease in police effectiveness at stopping or deterring crime as police became isolated from the public. The simultaneous recognition that the public and the police co-produce public safety meant that, in order to maximize the use of limited police resources, cooperation between the police and the public was necessary in order to produce public safety (co-production). Police efforts to reach the public became the defining characteristic of the community policing philosophy. Getting police out of cars and closer to the people, despite its order maintenance purposes, was a clear attempt at putting police and the public into situations where they might engage in social interactions. Creating opportunities for police and public to work together to bring about changes in the safety of their neighborhoods is in-line with research suggesting that co-production generates social capital and trust (e.g., Ostrom and Ahn 2008; Putnam 2000). Unfortunately, the community policing philosophy lacked coherence as an organizational change philosophy and its goal of improving the police-public trust relationship eventually took a backseat to familiar crime control and deterrence strategies. The community policing philosophy also did not explicitly theorize on how to generate trust and cooperation when it was not forthcoming, as was the case in high crime, high poverty areas and minority communities. The procedural fairness perspective utilizes advances in social psychology to address the lack of theorization on social interactions and trust in the community policing and police performance models. Procedural fairness operates in interactions between police and the public by treating members of the public with dignity and respect and by appearing neutral

and transparent in decision-making. Empirical research backs up the procedural fairness perspective's claims to this, which also departs from previous scholarship.

Two Critiques and an Extension

When it comes to understanding what people consider procedurally fair in encounters with police, the procedural fairness perspective is well-equipped to provide an answer, but there are two ways in which thinking about trust in police more broadly and procedural fairness more specifically can be extended to provide a more nuanced understanding of what influences public trust in police. The first is that although people respond favorably to procedural fairness, without a normative principle to guide its application, the procedural fairness perspective may fall into a "procedural trap" wherein authorities use procedures to focus attention away from substantive issues like systemic racism, abuse of authority and state-sanctioned violence. The second is that the procedural fairness perspective's focus is on the individual social interaction, but the presence of a social network effect for trust in police would mean that people are often influenced in their decision to adopt a particular behavior by the prevalence of that behavior in their reference group and thus that the decision to trust is affected by more than individual social interactions. The extension is that universal impartiality is needed for an indirect big bang approach to get out of the procedural (and social) trap.

Universal impartiality. The community policing philosophy has been criticized as being window dressing for police departments that find themselves in difficult political

situations with the public they serve (e.g., Trojanowicz, Kappeler, Gaines and Bucqueroux 1998; Gill et al. 2014; Rosenbaum and Lurigio 1994; Greene and Mastrofski 1988; Zhao, Lovrich and Robinson 2001; Zhao, He and Lovrich 2003). Police executives could then proclaim that they were “doing something” to address citizen concerns about police violence, abuse of authority, systemic racism and other forms of corruption without taking other steps to reform or reorganize their organization or while using the language of community policing as a “cover for use of aggressive law enforcement tactics rather than serving the needs of their communities” (Trojanowicz, Kappeler, Gaines and Bucqueroux 1998: 3; see also: Crank 1994; Crank and Langworthy 1992). Supporting this claim is a study by Zhao, Lovrich and Robinson (2001) which examined change in three core functions of American policing under community policing (crime control, order maintenance and service provision) using panel data from national surveys of more than 200 municipal police departments conducted between 1993 and 1996². Their findings indicated that the three core functions of police have remained mostly unchanged during that period which the authors comment “seems to represent a method of strategic buffering of a largely unaltered core police operation reflective of the professional model” (*ibid.*: 365; see also: Zhao, He and Lovrich 2003).

The problem with the community policing philosophy, and to a similar extent the police performance and procedural fairness perspectives, is that they are essentially consequentialist in nature. They focus attention on the benefits to society of increased trust

² Although scholars differ on the starting decade for the community policing philosophy, a number of researchers have identified the 1990s as the high watermark for community policing, particularly after then President Clinton signed the Violent Crime Control and Law Enforcement Act of 1994 which created the Office of Community Oriented Policing Services to disburse discretionary funds to police agencies claiming to engage in community policing (e.g., Zhao, Scheider and Thurman 2002).

in police, improved perceptions of police legitimacy and greater public compliance with the law, all of which are laudable goals, but if there is no normative framework to guide the behavior of the organization, that it could fall into what Tankebe calls a “procedural trap” in which “legal and political authorities tend to focus attention on procedural justice in order to deflect attention away from more substantive issues” (2009: 14). In other words, much in the same way that the community policing philosophy was criticized for being a means of placating public outcry over police behavior (Greene and Mastrofski 1988; Rosenbaum and Lurigio 1994; Trojanowicz, Kappeler, Gaines and Bucqueroux 1998), the procedural fairness perspective is an instrument that can be used to fulfill the agenda of whoever wields it because the basis of fairness judgments are the subjective evaluations of individuals in contact with the police rather than a universal value or norm. What is needed to gain broad-based trust and legitimacy in police is the adoption of a normative framework to guide organizational behavior, such as Bo Rothstein’s Quality of Government thesis, which contends that public agencies which exercise their authority in a universal and impartial way enjoy greater trust and legitimacy because police tactics like those employed in the procedural fairness argument because they are intrinsically valuable given the inherent value of human life (Rothstein 2011).

Rothstein defines impartiality in the execution of public authority in the following way: “[W]hen implementing laws and policies, government officials shall not take into consideration anything about the citizen/case that is not stipulated beforehand in the policy or the law” (Rothstein 2011: 13). In other words, when wielding public power, agents of the state should do so in a predictable and unbiased way, in accordance with legal

stipulations³. Rothstein does not mean by this that no concerns other than those enshrined in law beforehand should be taken into account; it would be reasonable, for example, for time and budget constraints to be considered. But rather he places emphasis on the fact that no characteristics of the citizen or case outside of those stipulated in law or policy should be taken into consideration. He writes: “QoG [Quality of Government] as impartiality is procedural, which means that it can encompass very different policies and does not rule out support for specific groups or interests” (Rothstein 2011: 14). By way of example, Rothstein submits that, in terms of social policy, it would not violate the principle of impartiality to enact a law supporting poor families with children, but denying those same benefits to people from a specific ethnic background or to parents with a particular sexual orientation would (ibid.).

The argument made for universal impartiality being the basic norm which guides the exercise of police authority is that impartiality is, in addition to other police models reviewed in this paper, an important factor predicting trust in police, not a replacement for it. Much of the research on procedural fairness indicates that, net of other influences, including police performance and distributive fairness, procedural fairness is the most important predictor of willingness to cooperate with the police. However, trust is usually an explanans for self-reported compliance behavior rather than the outcome variable. Despite this, the standard claim about the workings of procedural fairness is that it improves perceptions of police trustworthiness and legitimacy, so at least on a conceptual

³ It is important to note here that Rothstein’s conceives of laws as necessarily affirming human rights and dignity, which makes his view on impartiality similar in practice to the German *rechstaat* in which the power of the state is constrained by the law. The *rechstaat* is similar to the Anglo-American concept of *rule of law* but differs in that it also emphasizes what is just based on equity, philosophy, ethics, law, etc. In this way, the *rechstaat* protects citizens from the arbitrary use of power by the state.

level procedural fairness should influence trust in police. A handful of studies have also compared the procedural fairness to the professional era police performance model in terms of which better predicts self-reported compliance with the law (e.g., Jackson et al. 2012; Hough, et al. 2013; Tyler 2005). The inclusion of police performance in a model exploring the impact of procedural fairness and universal impartiality on trust in police would be justified on the grounds that a) police performance makes an implicit trust claim and b) given the findings of Zhao, He and Lovrich (2003) that the core functions of policing have changed little from the days of the police performance model, it can be argued that that police performance model never really fell out of fashion and thus represents the standard way in which police organizations operate. Rothstein does not explicitly state that impartiality should lead to increased trust in police, but he does argue that governments which do not practice the ideal of impartiality in the implementation of public policy are viewed as illegitimate and untrustworthy (Rothstein 2011).

It might be argued by some that procedural fairness and impartiality are the same thing. It is problematic that both Tyler and Rothstein interchange the terms “fair” and “impartial” in their work. Although both theories use these terms as near synonyms, these terms differ in two important ways. First, as has been previously discussed, Tyler’s fairness is based upon subjective perceptions of police treatment from the perspective of the individual which means that what is fair can vary depending upon the individual doing the evaluating. Under this subjective view of fairness, it is possible that an action may be deemed fair by one person, yet that action may not be impartial. Someone may sanction aggressive policing tactics towards and harsher sentences for individuals from a particular ethnic background and see this as fair, but the actions the individual proposes would not

be universally impartial because the tactics do not apply to everyone and are not stipulated by law. Universal impartiality, on the other hand, is an absolute: it applies to everyone (universal) and individuals are either regarded impartially (i.e., reliably and without bias) or not. In this way, universal impartiality is the expectation and the value by which judgments regarding fairness ought to be made. This makes fairness a necessary but not sufficient condition for impartiality, because while it is possible to say that all which is impartial is fair, it is not possible to say that all which is fair is also impartial.

The second way in which procedural fairness and impartiality are different is that impartiality is concerned with the exercise of public authority whereas procedural fairness is concerned with the posture taken by agents of the state when interacting with the public, meaning that impartiality is a more encompassing concept than procedural fairness. Fair procedure is concerned with the subjective perceptions of the fairness of those who are subject to the “procedures” but not to the substantive criminal procedures, such as offering a *Miranda* warning, having the effective assistance of counsel at trial, the prohibition on cruel and unusual punishment, etc. Impartiality, by contrast, would apply to the manner in which police interact with members of the public (all citizens deserve to be treated with dignity and to understand what is happening to them) as well as to the substantive content of criminal procedure (*all* citizens deserve a *Miranda* warning, *all* citizens should be protected in their persons from harm while in custody, etc.).

Social network effects. The second critique in thinking about trust in police is that the procedural fairness perspective’s focus on individual social interactions does not acknowledge the fact that people are often influenced in their decision to adopt a particular

behavior by the prevalence of that behavior in their reference group and thus that the decision to trust is influenced by more than individual social interactions. It is not entirely clear from the police performance model or the community policing philosophy how police ought to engage the community so as to bring about a trust-based outcome, though for community policing it is likely that it used the same the sort of blanket approach taken by the police performance perspective. Tyler's conceptual model of process-based regulation begins with the procedural elements of a police-public interaction leading to individual-level outcomes such as general cooperation, compliance, empowerment, and immediate and long-term police decision acceptance (see Figure 1). Except for the police performance and community policing models, the procedural fairness perspective focuses almost exclusively on individual experiences with police.

[FIGURE 1]

But if generating trust in police were only a function of changing police tactics, then the procedural fairness model would be sufficient to change individual perceptions of police trustworthiness and legitimacy. People can be influenced in their decision to trust by the aggregate behavior of their social reference group – in other words, by the presence of a social network effect. A social network effect is defined as “the propensity of an individual to behave in some way with the prevalence of that behaviour in some reference group containing that individual” (Manski 1993: 531). Previous research outside of criminal justice has uncovered the presence of a social network effect for wearing a particular fashion (e.g., Gladwell 2000), automobile ownership (e.g., Goetzke and

Weinberger 2012) and obesity (e.g., Christakis and Fowler 2007; Fowler and Christakis 2008). Given the discovery of social network effects in such an array of different disciplines, it would not be a stretch to think that a social network effect for trust in police exists.

It is worth noting that specific study of social network effects in the criminal justice literature is limited. Brunson and Weitzer (2011), in a set of in-depth interviews with long-term residents in East and West St. Louis regarding whether, and if so how, citizens prepare for their contacts with officers before face-to-face encounters, point to the lack of network analysis in research explaining variation in perceptions of the police. They write: “Scholars are just beginning to study the role of vicarious influences, so this remains a significant gap in the literature on police-citizen relations. Indeed, most research continues to focus on individual-level factors rather than interpersonal influences on citizen perceptions of the police” (429). Their own study found that almost all the African American adults interviewed had transmitted to youth a “repertoire of ‘best practices’ in their contacts with officers” which were designed to reduce the chances of altercations and arrests of young people (*ibid.*: 449). Brunson and Weitzer further recommend that much more research should investigate the role reference group influences play in shaping attitudes toward the police (2011: 451).

A great number of studies have indicated that negative experiences with police officers and the criminal justice system are shared through family and friend networks or as a result of spatial proximity, though it should be noted that in these studies the authors were not explicitly looking for the presence of a social network effect: Feagin (1991) was exploring the effect of modern racial discrimination on middle class blacks; Brunson and

Miller (2006) and Brunson (2007) were looking at the experiences of African-American youth with law enforcement. For example, Feagin (1991) argues that in order to understand why individuals from different groups perceive discrimination differently it is important not only to consider the “cumulative character of an *individual*’s experiences with discrimination” but also “the *group*’s accumulated historical experiences as perceived by the individual” (114, emphasis added). Furthermore, Brunson and Miller (2006), performed in-depth interviews with 40 African American male and 35 African American female youth interviewees from St. Louis, Missouri, about their experiences and expectations for law enforcement. Over 90% of males and 85% of females indicated that they witnessed or knew someone who had been harassed or mistreated by the police, and describe in detail how other young men and women in their neighborhood are routinely treated by police, most of which involved police violence or other misconduct toward family and friends, which fostered anger and distrust toward the police. Moreover, Brunson (2007) in detailed interviews with 40 African American youth living in St. Louis city and county found that “[r]espondents offered detailed secondhand accounts of people being beaten by the police” and that most study participants “acknowledged that they had heard about many more instances of police violence than they had actually seen” (91). Brunson argues that regardless whether the secondhand accounts proved true, those accounts “reinforced study participants’ widespread beliefs about discriminatory policing practices” (2007: 92). Perhaps the most specific example of a social network effect is given by Dr. David J. Thomas, retired police officer and Senior Research Fellow at the National Police Foundation, in a blog post about the need for law enforcement to regain the public’s trust, when he writes: “The stories of the sheriff and the slave patrols play a part in the distrust

that the African American community has for law enforcement. These stories have been told for generations. As a child, I was told the stories by my father, who was born in 1914, and my grandfather, who was born in the late 1800s” (Thomas, n.d.).

One interpretation of the consequences of the presence of a social network effect for trust in police is that police trust might be path dependent. Social network effects imply multiple equilibria, or, to put it another way, that there can be different outcomes (equilibria) for trust in police (e.g., trust/not trust). Some of the outcomes for a social network effect are dynamic (unstable) and others are static (stable). The dynamic (unstable) equilibria can be “tipped” toward one static (stable) outcome or another if a critical share of the social reference group adopts that outcome (Gladwell 2000: 12; Grodzins 1957; Schelling 1971); however, as Arthur warns: “There is no guarantee that the particular outcome selected from among the many alternatives will be the ‘best’ one” (Arthur 1994: 1). The stable equilibria are the static path dependent outcomes which, owing to their stability, are very difficult to change and can persist over time. Path dependency thus represents a self-reinforcement mechanism in which each step along a given path makes continuing along that path easier while switching course becomes more costly (Arthur 1994; Pierson 2000).

The idea that static equilibria are “sticky” and resist direct efforts to change is similar to the sociological concept of collective memory. Collective memory refers to the “memory and representations of group pasts – whether these be ethnic, global, or other collective historical events” (Teeger 2014: 7). Bo Rothstein argues that collective memories are important to understanding an individual’s choice of strategy as they (collective memories) become a source of information regarding which individuals and

groups in society can be trusted. Rothstein thinks that in some societies, low trust social traps -- scenarios in which people could be made better off if they choose to cooperate but do not because no one wants to be the first to change -- are the result of collective memory. He writes: “The problem of low interpersonal trust comes from discriminated groups having been forced to live under public political institutions that have been, or which they have believed to have been, deeply dysfunctional for them. The collective memory of things such as gross police brutality, public lynchings and systemic discrimination has a tremendous effect on the belief systems of which the individuals in a group such as this become the bearers” (Rothstein 2005: 127-128).

In the context of police trust, social network effects (tipping points) and path dependency (collective memory) might explain the persistence of mistrust toward police found among African Americans and other minority groups in the United States. Historical police violence toward minority groups, housing segregation and Jim Crow undoubtedly had an impact on these group’s level of trust in police: the beginning of this paper referenced the perpetually low levels of trust and confidence in the police surveyed among African Americans but also that trust in police among Hispanics is also on the decrease; trust in the police for both groups has never broken the 50% point (Norman 2017). The idea that historical institutions can influence contemporary attitudes and behaviors is given support by the burgeoning literature on the persistent effect of historical institutions (for an overview, see: Nunn 2009). For example, Tankebe (2008; see also Tankebe 2009) traces contemporary police characteristics such as human rights violations, police corruption and police impunity to the operating organizational philosophy of former British colonial police. He points out that “[t]hese abuses have alienated the police even more from many

Ghanaians, which leads to significant distrust in the official mission of the police—‘service with integrity’” (Tankebe 2009: 1271). There are additional, non-police related examples as well: researchers have explored the link between historically high concentrations of slaves and persistent levels of inequality, weak institutions, violent and property crime in Colombia (Buonanno and Vargas 2016) and Brazil (Fujiwara, Laudaes and Valencia C. 2019), a “Hapsburg effect” for government trust (Becker, Boeckh, Hainz and Woessmann 2011) and the location of historical lynchings, anti-Civil Rights Movement violence and contemporary voting behavior among African Americans (Peterson and Ward 2015).

Extension. The question for police trust and legitimacy scholars is how to get out of a path dependent low police trust trap and “tip” a sufficient share of individuals toward trust in police. The procedural fairness perspective offers a conceptual model highlighting how individual interpersonal interactions between police and members of the public can lead to evaluations of procedural fairness, trustworthiness and legitimacy for police (e.g., Tyler 1990, 2003, 2005; Tyler and Huo 2002; Sunshine and Tyler 2003) and may be efficacious in dealing with the presence of social network effects (tipping points) and path dependency (collective memory), but because the model does not explicitly address them, they are unlikely to be factored into consideration of the police trust problem. Fortunately, Rothstein (2005, 2011) offers some guidance for overcoming collective memory and breaking out of a low trust social or procedural trap. His first suggestion pertains more specifically to battling corruption in institutions, but theoretically could work in any instance where some form of institutional path dependency exists, be that within police or

neighborhood institutions. Rothstein call this the indirect big bang approach to fighting corruption, the basic premise of which is that trying to deal with corruption in any institution incrementally and directly will probably fail because there are systems which underlie corruption which will resist explicit efforts to tinker with different parts of that system to try and eliminate that corruption (Rothstein 2011). What is needed is to combat corruption by getting the institution off balance, or, in other words, by addressing corruption in large-scale changes that moves too fast for institutional actors to adjust their tactics.

Rothstein's indirect big bang approach is clearly applicable to addressing the influence of social network effects and collective memories for trust in police. Collective memories cannot be rationally forgotten and attempts at altering perceptions of police trustworthiness and legitimacy incrementally leaves an overabundance of opportunities for the larger social network effect to counteract and return to the status quo (Rothstein 2005, 2011). For example, an indirect big bang approach to dealing with the impact of a social network effect for trust in police might work with key neighborhood or community institutions on non-law enforcement related matters that challenge the narrative influence of collective memories in a large-scale and conspicuous manner, somewhat similarly to programmatic content in community policing but with the major difference that the point is to challenge the influence of collective memory. The idea here is that police can set the social network "off-balance" such that individual-level efforts at trust-building might be successful. The type of indirect big bang approach needed to unbalance the influence of a social network effect and collective memory might, following Rothstein, be to take as a guiding normative principle for the exercise of police authority the concept of

deontological impartiality (2011). Deontological (or universal) impartiality is critical to escaping low trust social or procedural traps because it shies away from partial, biased behavior on the part of institutional actors, which has been a recurrent concern among minority and vulnerable populations regarding police services (e.g., Brunson and Miller 2006; Brunson 2007; Carr, Napolitano and Keating 2007; Brunson and Weitzer 2011). Adopting a normative value like universal impartiality might serve to set both police institutions and the publics they serve off-balance in such a way that changing individual attitudes and behaviors through procedural fairness becomes possible.

Conclusion

From the review of literature, it is apparent that criminal justice thinking about trust in police has gone through several stages, with each stage building upon the lessons of the preceding one. The police performance model moved far away from the highly suspect image of the previous “political” era of policing toward a more hierarchical, centralized and professional police department whose strengths were to be controlling and deterring crime and force projection through the adoption of rapid response technology such as the patrol car and the wireless radio. Police trust was thus a function of police performance. The community policing philosophy shifted slightly away from the police performance model, insomuch as it recognized the importance of police-public relations to controlling and deterring crime and fear of crime, to a more decentralized organization where decision-making authority was delegated down to street-level officers, according them greater discretion when deciding how to deal with the cases they encountered. Police trust was

here a function of social interaction and police performance. The procedural fairness perspective doubled-down on the social interaction aspect of community policing by concentrating attention on the behavior of police officers during police-public encounters, specifically on the quality of interpersonal treatment and the quality of decision-making, which lead to increased perceptions of police trustworthiness and legitimacy. Under procedural fairness, police trust is a function of officer behavior in interactions.

The critiques proposed in this paper follows this familiar theme. The first critique suggests that criminal justice thinking about trust in police more generally and procedural fairness more specifically need to be exercised within a normative framework to avoid falling into a low trust procedural trap. This is because the police performance and procedural fairness perspectives are essentially consequentialist in nature, which means that they can be used cynically to buffer police departments against public criticism of substantive organizational issues such as police accountability, responsiveness and corruption. The normative value proposed in this paper to guide the exercise of public authority is Bo Rothstein's universal impartiality which holds that governments that exercise power in a universal, predictable and unbiased (impartial) manner will enjoy greater trust and legitimacy. Universal impartiality is deontological, meaning that it takes as its view of persons that they are ends in themselves and should never be treated as a means. Rothstein's impartiality is also procedural, and so shares some similarity with the procedural fairness perspective, but rather than leaving the fairness of interactions to be evaluated subjectively, Rothstein's impartiality becomes the measure of fairness. Impartiality does not replace the procedural fairness perspective's process-based regulation model but rather extends it by grounding decisions about procedural fairness in the

normative framework of impartiality. Police trust therefore becomes a function of procedural fairness anchored in impartiality. The addition of impartiality to the process-based model can be seen in Figure 2.

[FIGURE 2]

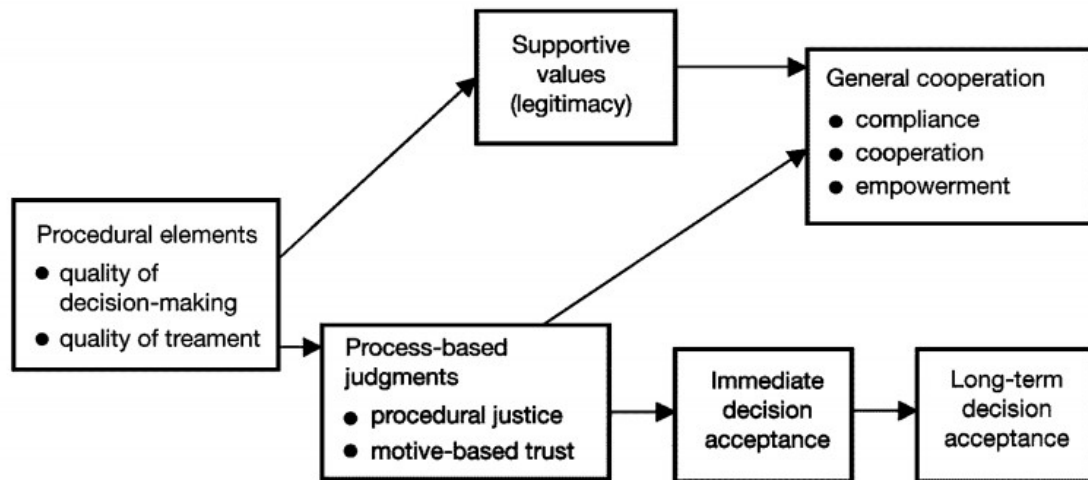
The second critique of criminal justice thinking about trust in police is the idea that individuals are influenced in their decision to trust not only by the behavior of police during social interactions but also vicariously through their social networks or peer reference groups. Excepting the police performance and community policing models, which took a blanket approach to changing perceptions of police trustworthiness, the procedural fairness perspectives both focus attention on individual perceptions to the exclusion of all other influences. This means that the procedural fairness model is not equipped to account for second-hand or vicarious information regarding police passed along through family and friend networks, which is problematic for these models as the work street-level officers do to improve perceptions of trust and legitimacy may be the policing equivalent to shuffling deck chairs on the *Titanic*: the non-trusting outcome will arrive regardless. Social network effects and their path dependent outcomes can be interpreted as the presence of collective memories. Collective memories include an individual's cumulative experiences of police contact as well as the collective experience of being a member of a particular societal group as interpreted by them. For African Americans and other minority groups, their collective experiences of the police are filled with state-sanctioned violence, abuse of authority and corruption. One of the most poignant images of the African American experience with

police is the photo of Civil Rights marchers going through Selma, Alabama on their way to the statehouse to protest for their right to vote. On the other side of the Edmund Pettus bridge were a wall of police officers with night sticks, dogs and fire hoses – not to protect the marchers but to deter them. Rothstein argues that memories such as the one just described cannot be rationally forgotten and become part of an individual’s mental map which tells them who in society is trustworthy. Taking social network effects seriously in criminal justice means including them and their consequences in conceptual models accounting for the factors which influence trust in police. Figure 2 shows how collective memories might fit into the larger structure of individual decision-making as it pertains to trust in agents of the state in general and police in particular.

In conclusion, it is possible to foresee a couple implications for policy of the expansion of this conceptual model. The first is that social network effects make switching course very difficult and costly, but not impossible. Thirty years ago, if you would have asked the average person what a conflict diamond was, they probably would not have known. A similar claim could be made about fair trade coffee. Today in 2019, by comparison, diamonds and coffee are expected to be conflict-free and fair trade. Changing perceptions of police trustworthiness and legitimacy will not happen overnight, but it can happen. But the presence of social network effects for trust in police makes change difficult. The procedural fairness perspective can use this to its advantage. Given that previous attempts at police reform have achieved mixed outcomes, it is not unreasonable to think there may be push-back to procedural fairness adoption across police forces. Linking the procedural fairness model to social network effects provides some impetus for skeptical police executives. Officers will be able, by their concerted actions, to have an

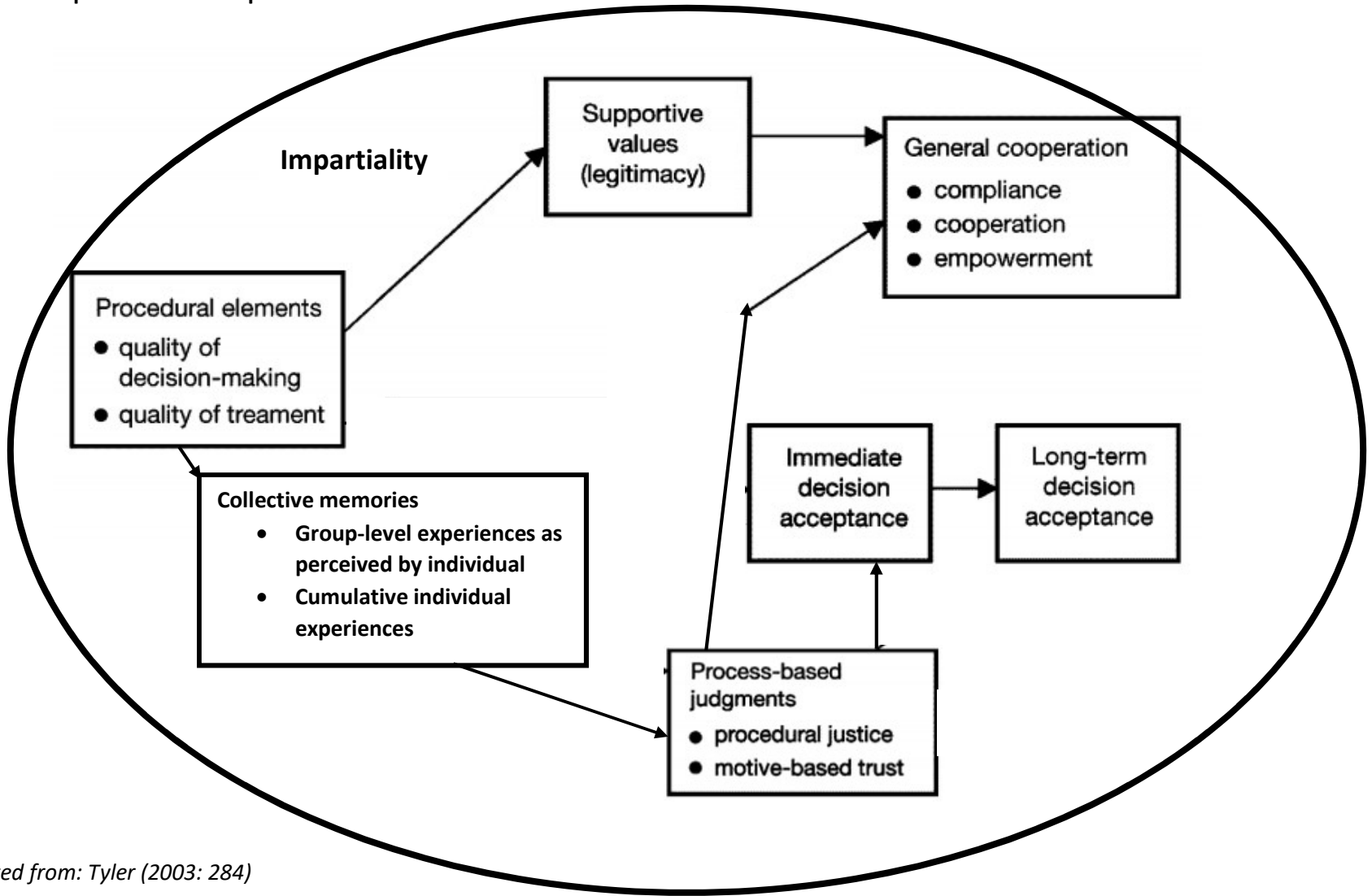
impact on levels of trust in local police through network diffusion. This provides another barometer for assessing the magnitude of a social network effect for trust in police, for example.

Figure 2.1. Tyler's model of process-based regulation



Source: (Tyler 2003: 284)

Figure 2.2. Expanded model of process-based



Adapted from: Tyler (2003: 284)

CHAPTER III

TRUST IN POLICE: DOES UNIVERSAL IMPARTIALITY MATTER?

Introduction

Procedural fairness, on its own, is a necessary but not sufficient condition to generate the type of broad-based trust and legitimacy highlighted by social scientists as essential to the effective operation of government more generally and policing in particular. A major reason, which forms the basis of the current paper, is that the procedural fairness argument is essentially consequentialist in that it focuses on the benefits to society of changing public compliance behavior with the law and legal authorities in the name of the greater good. While it is true that the *means* of reaching the kind of broad-based police trust and legitimacy is not entirely without consideration of how that trust and legitimacy is achieved, the *ends* of increased trust in police, improved perceptions of police legitimacy and greater compliance with the law are advanced as the true goal of police procedural fairness reform. What is required to achieve the broad-based trust and legitimacy in police is the adoption of a normative framework to guide the behavior of the organization, such as the impartiality as Quality of Government thesis, which argues that government institutions that wield public authority in a universal and impartial manner will enjoy greater trust and legitimacy because police tactics, such as those employed in procedural fairness perspective, are intrinsically valuable given that people are inherently valuable and deserve to be treated with dignity and respect.

Although the procedural fairness perspective uses the terms “fair” and “impartial” interchangeably, fair and impartial are not synonyms but rather denote two separate and distinct concepts: fairness is subjective, and impartiality is deontological. This deontological position generates trust because people expect that the police and other government agencies are reliably unbiased and non-discriminatory. The deontological ethical perspective of Immanuel Kant holds that the moral correctness of any action is determined by the Categorical Imperative which results in the view that people are ends in themselves to be treated with dignity and respect. What is missing is for this deontological position to be tested empirically along with procedural fairness and police performance as important predictors of trust in police.

Thus, the main question for this paper is whether universal impartiality, in addition to the procedural fairness and police performance modalities, is a predictor of trust in police. Procedural fairness and police performance should both remain important predictors of trust, but universal impartiality will likely also contribute substantively to overall trust in police. Using European Social Survey data (Round 5), this paper aims to explore the tension between procedural fairness and impartiality as important predictors of trust in police. The value of this paper is twofold. First, it empirically evaluates the importance of predictors for trust in police in light of the arguments for police performance, procedural fairness and universal impartiality respectively, which has not, at the time of writing, been accomplished before. Second, it brings into conversation the steadily growing criminal justice literature on procedural fairness with the political philosophy of impartiality as Quality of Government.

The remainder of the article plays out as follows. The first part presents a review of literature linking police performance, procedural fairness and universal impartiality to trust in police. The second section describes the methods and data to be utilized in the analysis. Section three presents and interprets the results of the analysis and engages in a brief discussion of the implications of this paper for policy and thinking about generating trust in police.

Trust in Police: What influences it?

Police performance. Classic crime-control theory says that police performance predicts trust in police: the better police are at controlling crime, the more the public trust and support them (Tyler 2005; Kelling and Coles 1997; Wilson and Kelling 1982). The idea that trust in police and attributions of police legitimacy are based upon police performance goes back to the inception of the so-called “professional” model of policing in the 1930s which, owing much to the influence of Taylorism, cast police as crime-fighting experts, specialists in understanding and controlling the criminal impulses of the anti-social element of society (Greene 1987, 2000). The performance model of trust in police was dominant until the late 1960s/early 1970s when the legitimacy of the police was shaken by several events. First, presidential commission findings indicated that urban race riots were frequently sparked as much by police behavior as by that of the public (Greene 1987; Abu-Lughod 2007). Second, anti-war Vietnam and civil rights protesters on college campuses challenged the legitimacy of police and National Guard orders to disperse by peacefully refusing to comply while being met with aggressive tactics on the part of both police and

National Guard members, sometimes to deadly consequences, as in the death of four student protesters at the Kent State University on May 4th, 1970 (Greene 2000). Third, studies of police foot patrol performance in high crime neighborhoods found that the fear of crime was divorced from actual crime rates, indicating that the perception of police presence and effectiveness was a more important predictor of trust in police and evaluations of their legitimacy than their actual performance (Moore and Trojanowicz 1988; Skogan 1986; Trojanowicz 1986). Further, these failures of police tactics were televised to families across the nation, decreasing public sentiments toward police legitimacy, and, by extension, police's claim to special knowledge regarding the maintenance of public order furthering (Greene 2000).

However, the legitimacy of the police and other government agents partly rests on the perceived competence of these agents to carry out tasks which society perceives as responsibility of those agents. If police cannot control and prevent crime, which is frequently the public view of police's function in society, what would be the point of the public cooperating them? If the public do not view the police as at least somewhat competent then they are not likely to trust them to do their jobs nor be willing to cooperate with them in the provision of public safety. An example of exactly this sentiment is captured by Brunson (2007) and Brunson and Weitzer (2009). Brunson (2007) interviewed 40 African American males with ages ranging from 13 to 19 living in and around the St. Louis area about their experiences with and attitudes toward police – including trust -- using a mixture of initial survey questions which became prompts during in-depth qualitative interviews. The teens were routinely frustrated by slow response times for police, prioritization of calls for service and law enforcement's inability to prevent and

solve crime (Brunson 2007: 81; see also Brunson and Miller 2006). When asked on the survey whether police did a good job preventing crime, 50% responded “Almost never”. In fact, one respondent discussed strategies for getting police to respond more quickly by lying to them about the nature of the crime in progress (Brunson 2007: 82). Further, Brunson and Weitzer (2009) interviewed white and black teens from three separate neighborhoods in St. Louis: one predominantly black, one predominantly white and one mixed neighborhood. Again, both black and white teens reported their perceptions that police services were better in white neighborhoods and that police in black neighborhoods would try to rush the handling of a call simply to be finished with it (Brunson and Weitzer 2009: 875-876). The totality of these experiences left the African American teens shaken in their trust toward police while white teens had a more positive view of police. None of them trusted the complaint process, which required the teens to go to a police station house in order to file the complaint. The point being made here is that police performance, while not the sole determinant, is certainly a component of overall evaluations of trust in police. As such, police performance is thought to relate positively with trust in police.

Procedural fairness. Tom Tyler’s procedural fairness (justice) policing perspective argues that procedural fairness predicts trust in police and improves perceptions of police legitimacy. This occurs because police act in a fair, respectful manner, explaining their decisions and permitting members of the public to explain their positions: if people witness these types of interactions or are subject to them, they infer that the organization is itself procedurally fair, and thus they have trust in it and support its policies *vis a vis* reporting crimes and such (Tyler 1990, 2003, 2005; Murphy and Tyler 2017; Hough, Jackson and

Bradford 2013; Tyler and Fagan 2008). The extent to which an interaction is deemed fair is based upon individual subjective perceptions of an interaction: there are no universal standards by which procedural fairness is measured (Tyler 2003). There are essentially two distinct axes along which individuals evaluate contact with police: quality of interpersonal treatment and quality of decision-making. Quality of interpersonal treatment involves, broadly, the extent to which officers treat those they have contact with dignity and respect, while the quality of decision-making concerns the extent to which officers explain their decisions, permit opportunities for input in problem-solving and neutrality.

The empirical base for procedural fairness is robust, including studies beyond the original Anglo-American context to include studies in Ghana, Slovakia, Slovenia, the Czech Republic and Hungary (Tankebe 2009; Reisig, Tankebe and Meško 2012; Moravcová 2016). While scholars disagree regarding the convergent and discriminant validity of the procedural fairness concept itself (Gau 2011), a common finding is that, net of other influences, including police performance and distributive justice, procedural fairness is consistently the most important predictor of willingness to cooperate with police. However, much of the evidence favorable to procedural fairness has only explored the impact of different types of trust (e.g., trust in procedural fairness, trust in distributive fairness, etc.) on willingness to comply with the law and cooperate with police and has used trust as an explanatory variable rather than as an outcome variable (see: Tyler 2005; Jackson, Hough, Bradford Hohl and Kuha 2012; Hough et al. 2013; Moravcová 2016; Barnes, Beaulieu and Saxton 2017). Among those, only Jackson, et al. (2012), Hough et al. (2013) and Moravcová (2016) have used ESS Round 5 data. For example, Hough et al. (2013), who also use the same ESS Round 5 data employed by this article, examine various

hypotheses related to an “empirical” view of legitimacy versus Bottoms and Tankebe’s (2012) dialogic view of legitimacy. They use different kinds of trust in police (trust in police procedural fairness, for example) to see how well those types of trust predict self-reported compliance behaviors in the UK. Hough et al. (2013) demonstrate that trust in police procedural fairness is the most important predictor of willingness to comply with the law. Tyler (2005) similarly looked at the predictive power of trust in police for complying with the law as well as the relationship between police policies and trust in police. He found that trust in police was significant for complying with the law and that fairness of procedures was the most important predictor of trust in police.

Universal impartiality. Since the writings of Max Weber, the public administration and governance literature has had an interest in impartiality and legitimacy. Both Bo Rothstein and Tom Tyler discuss trust in police and the attainment of political legitimacy. For Tyler, the answer is simply procedural fairness. Rothstein’s Quality of Government as impartiality thesis, on the other hand, says that trust in the police and legitimacy of government – high Quality of Government – comes from exercising public authority in a universal and impartial way (Rothstein 2005; 2011; Rothstein and Teorell 2008a, 2008b).

Unlike most of the criminal justice contributions, the argument presented in this paper is lent support for the idea that normative values guiding the use of procedural fairness from within the discipline by Justice Tankebe (2009; see also: Bottoms and Tankebe 2012). Tankebe’s (2009) critique of the procedural fairness (Tylerian) perspective is important for two reasons. First, similar to the position taken by this paper, he argues that that procedural fairness, police trust and legitimacy are, over and above considerations

for the “greater good” of increased law-abiding behavior, intrinsically valuable and should be pursued as such, regardless of the instrumental or utilitarian benefits those concepts may provide. Tankebe writes: “[t]he police have an intrinsic and non-negotiable obligation to exercise their authority within the limitations of normative values and expectations of the particular society in question, irrespective of any demonstrable instrumental benefits in terms of facilitation of police’s task in maintaining order” (2009: 14). However, while universal impartiality is here argued to be the normative value by which public authority is exercised, Tankebe stops short of providing any guidance as to which normative values are important.

Second, Tankebe argues for the importance of outcomes to individuals, despite the downplaying of outcomes in subjective assessments of police argued by Tyler. Tankebe contends that, while fair procedure might be important and mitigate perceptions of unfavorable outcomes, it cannot nullify the impact of unfair outcomes. People who regularly receive unfair outcomes are “likely to see the procedure as a sham, orchestrated to make them feel good when indeed it has no bearing on the outcome” (2009: 14). Without normative guidance in implementing policy and procedure, Tankebe notes that it is possible to be led into a “procedural trap” in which “legal and political authorities tend to focus attention on procedural justice in order to deflect attention away from more substantive issues” (*ibid.*). Impartiality in this sense is a guiding normative principle; it helps to avoid a “mindless utilitarianism” in public policy in which “basic human rights of (often poor) people are sacrificed in the name of some overall utility” (Rothstein 2011: 6). This is essentially Rothstein’s critique of the “good governance” approach taken in recent decades by political philosophy, public administration, criminal justice and financial entities such

as the World Bank: political legitimacy and trust cannot rest on procedures or the input side of a political system alone.

Rothstein does not deny that subjective perceptions of procedural fairness are important to government's ability to attain political legitimacy. In his discussion of the events leading up to the Yugoslavian civil war, he makes the following point: Political legitimacy depends more on the output side of a political system than the input side, meaning the exercise of public authority is more important than access to input (voting) or following the "will of the people" for gaining legitimacy. Rothstein continues: "As such, it [legitimacy] is connected to citizens' perceptions about procedural fairness in the implementation of public policies" (2011: 91). What is interesting about these lines is that Rothstein follows them in the next paragraph by saying "a state that systematically departs from the ideal of impartiality in implementing public policy will be seen as illegitimate" (2011: 92). Essentially, Rothstein's position is that, yes, subjective perceptions of procedural fairness are important to police and governments for attaining improved perceptions of legitimacy. But the norm by which individuals will evaluate the "fairness" of the procedure is by the universal and impartial nature of the implementation of that policy, not by some parochial concern with fairness as it applies to the individual.

The fact that both Tyler and Rothstein interchange fairness and impartiality regularly is problematic. Impartiality in the exercise of public authority may to some still sound very similar to Tyler's procedural fairness argument, but it is different in two important ways. First, fairness and impartiality are not synonyms. Universal impartiality is an absolute: it applies to everyone (universal) and people are either regarded impartially (that is, reliably and without bias) or they are not; there is no middle ground. Rather,

impartiality is expected and is the value by which evaluations of fairness are to be made. Tyler's fairness, by contrast, deals with subjective perceptions and interpretations and thus can vary depending upon the individual doing the evaluating. An action may be deemed fair by an individual yet the act itself not be impartial. An individual may favor aggressive police tactics against suspects from certain backgrounds but not others and view the use of these tactics as fair, but such actions would violate the principle of universal impartiality because those tactics do not apply to everyone, nor is sanction for such bias inscribed in the law. Fairness is thus a necessary but not sufficient condition for impartiality. While it is possible to say that all which is impartial is fair, it is not possible to state that all that is fair is impartial.

Second, the procedural aspect of procedural fairness does not seem to apply to the exercise of public authority but rather to the posture taken by agents of the state when interacting with the public. "Fair procedure" has less to do with substantive criminal procedures, such as offering a Miranda warning⁴, having the effective assistance of counsel at trial, prohibiting cruel and unusual punishment, etc. Instead, fair procedure describes how police should treat individuals and is entirely dependent upon the perceptions of the subject of those interpersonal "procedures". Impartiality, by contrast, would be applied to

⁴ The Miranda warning (often shortened to "Miranda", or "Mirandizing" a suspect is the name of the formal warning that is required to be given by law enforcement in the United States to criminal suspects in police custody (or in a custodial situation) before they are interrogated, in accordance with the Miranda ruling. The purpose of such is to ensure the accused are aware of, and reminded of, these rights before questioning or actions that are reasonably likely to elicit an incriminating response (U.S. Constitution Article 1 Section 8 Article 5).

Miranda v. United States, 384 U.S. 436 (1966), was a landmark case in the United States Supreme Court. The Court held that both inculpatory and exculpatory statements made in response to interrogation by a defendant in police custody will be admissible at trial only if the prosecution can show that the defendant was informed of the right to consult with an attorney before and during questioning and of the right against self-incrimination before police questioning, and that the defendant not only understood these rights, but voluntarily waived them.

substantive criminal procedure (*all* suspects are offered a Miranda warning, *all* suspects have the right of effective assistance of counsel at trial, *all* suspects should receive reasonable and humane punishments) as well as to the manner in which agents of the state interact with members of the public (*all* persons are to be treated with dignity and respect, *all* persons deserve to understand what is happening to them). The legitimacy of the state cannot rest solely on the interactive modality of government agents when they have contact with members of the public; it must be substantive and apply not only to how the public are treated but also to how law is implemented and evaluated.

A great example of this come from Jacinta Gau's (2013) study of the effects of requests by police for consent searches of cars on driver's perceptions of stop legitimacy (see also: Gau and Brunson 2012; Epp, Maynard-Moody and Haider-Markel 2014). Using a nationally representative sample of adults and teenagers in the U.S. from the 2008 Police-Public Contact Survey, Gau (2013) found that consent searches in traffic stops – searches in which officers requested consent to search a stopped vehicle – in contrast to traffic violation stops, decreased the trust and legitimacy perceptions of the stop by the driver despite procedural fairness being employed by the officer (see also: Engel 2005). She concluded that in consent searches, because pulling the driver over for an alleged traffic violation was a pretext to get consent to search the car, the consent request indicated to the driver that the officer was not being impartial. In other words, because the request was made on the suspicion that they (the drivers) had possibly committed a crime, the impartial reason (traffic violation) for the stop became partial (pretext to search), and the presence of procedural fairness in the stop became irrelevant. Gau's study provides further reason to suspect that procedural fairness alone is not sufficient to gain the type of broad-based

trust and legitimacy in police that the Tylerian procedural fairness perspective claims, but it is consistent with the main argument of this paper, as well as Rothstein's argument, that impartiality as a basic norm of the exercise of public authority is an important factor predicting trust in police.

One final point of difference involves the conceptualization of distributive justice and universal impartiality. An objection could be raised that Rothstein's impartiality is essentially Tyler's distributive justice. But there is an important way in which these conceptualizations differ. Impartiality, as a deontological normative value, is not concerned with subjective perceptions of police service distribution. Rather, impartiality in the exercise of public authority is an absolute, unqualified rule which should be followed regardless of fairness considerations as to the distribution of services. A social welfare program impartially implemented would provide security for all citizens regardless of wealth, but need is not distributed equally: such a system would provide more services for those with greater need for those services (Rothstein 2011: 24). Tyler's distributive justice, on the other hand, refers to it (distributive justice) as an instrumental motivation for cooperating with authorities focused on "the fairness of outcomes" (2011: 42; see also Tyler 2003, 2005) or whether "the police fairly distribute police services, providing 'equal protection for all'" (2011: 69). The major difference is that, under Tyler's conception of distributive justice, fairness of police service distribution deals with equality of service while Rothstein's impartiality holds that police services should be distributed impartially but with reference to those with greatest need.

In summary, the idea that the context of a universal, structural impartiality is, in addition to perceptions of police performance and procedural fairness, an important factor influencing public trust in and legitimacy for the police is not necessarily a new idea but one that has not been examined in this way. This essay addresses an often-overlooked dimension of procedural justice policing using data from the ESS Round 5 ‘trust in justice’ module, namely, what other factors besides performance and procedural fairness influence trust in police. The next section explains the data and methods for this study.

Data, Model and Variables

Data. Data for this study are taken from the European Social Survey (ESS) Round 5. The ESS is a biennial cross-national survey established in 2001 covering topics ranging from politics, human values, democracy and health inequalities. The ESS uses cross-sectional probability samples representative of all persons at least 15 years of age or older who live within private households in each country. Since its inception, 37 countries have participated in at least one round of the ESS.

The current Round 5 of the ESS, conducted in 2010, included a new module specifically developed for this round entitled Justice. It investigates public trust in criminal justice with particular emphasis on police and the courts (ESS Round 5 2018). The aim of this module was to capture individual-level perceptions of trust, legitimacy, cooperation and compliance, and it did this specifically by asking questions measuring confidence in the police and the courts, cooperation with the police and courts, contact with police and attitudes towards punishment (*ibid.*). There is currently no publicly available data set which

taps into public attitudes toward police as this one does. As discussed previously, Hough et al. (2013) have also used this data set to explore the antecedents of police legitimacy, but whereas Hough et al. (2013) uses only data for the UK, this paper makes use of the individual-level responses for each country in the dataset. Given that the current study is interested in exploring factors thought to influence trust in police, the ESS Round 5 is ideal.

Model. The model proposed in this paper is novel in the procedural fairness literature as it makes individual-level trust in police the outcome variable of interest rather than as a predictor of legitimacy. The model selected to investigate this question is a structural equation model (SEM). SEM allows for the analysis of covariances or means in experimental and non-experimental research designs (Kline 2016). This model has three distinct advantages over traditional regression models. First, SEM can distinguish between latent and observed variables, with multiple indicators possible for each latent construct (Acock 2013; Kline 2016). Concepts such as police performance, procedural justice and universal impartiality are better modeled as latent constructs than through individual variables. Second, whereas traditional regression models assume no error in indicators, SEM isolates measurement error from indicator variables to latent variables, thus granting stronger predictive power as random measurement error does not have explanatory power (Acock 2013: 113). Third, a traditional regression model would likely require the construction of an index or composite variable in order to more accurately model latent constructs, which potentially introduces more measurement error into the model. Indices have two major disadvantages compared to latent constructs. First, creating an index, unlike creating a measurement model, does not permit each response scale to vary freely,

potentially compounding measurement error. Second, using indices assumes that each observed variable in the index is weighted equally, whereas measurement models permit observed variables to make their own relative weights through their coefficients. As a result of these issues, SEM is a more appropriate choice of model than a traditional regression for this study.

The full structural equation model can be seen in Figure 1. It consists of a structural model predicting respondents' trust in police with three major policy variables and four controls. The three major policy variables are constructed as measurement models for police performance, procedural fairness and universal impartiality. The measurement model for each composed of three observed variables, which will be discussed below in greater detail. Four additional control variables thought to potentially influence trust in police, gender, the log of age and two education levels were included as well.

[FIGURE 1]

Dependent variable. The dependent variable for this study is individual-level *trust in police*. The ESS round 5 module 'Justice' asked respondents how much they personally trust the institution of the police using an 11-point scale with higher scores indicating more trust in police (0 = *no trust at all*; 10 = *complete trust*). This variable directly addresses the main question of this study: whether, in addition to procedural justice policing and police performance, the basic norm of universal impartiality has an impact on trust in police. The descriptive statistics for these and all other variables in the analysis are located in Table 1, below.

[TABLE 1]

Measurement Models. The primary measurement models in this analysis are latent constructs for police performance, procedural fairness and universal impartiality. Each has been argued to theoretically and/or empirically influence trust in police in the procedural justice literature.

The first measurement model is *police performance*. The idea that trust in police is related to police performance and output effectiveness comes from the traditional crime-control and deterrence approach to policing. The crime-control model of policing proposes that “if the police are successful in fighting crime, they [the police] encourage public trust and confidence and generally gain the help and support of the public for the police” (Tyler 2005: 325). In other words, the better the public perception that police are controlling and preventing crime, the more public trust they receive (Kelling and Coles 1996; Wilson and Kelling 1982). The ESS Round 5 contains three variables that gauge the extent to which the public view their police as effective in preventing and controlling crime: How quickly police arrive at a violent crime scene near to where respondent lives (*police responsiveness*: 0 = *extremely slowly*; 10 = *extremely quickly*), how successful police are at preventing crimes in country (*violent crime prevention*: 0 = *extremely unsuccessful*; 1 = *extremely successful*) and how successful police are at catching house burglars in country (*burglary prevention*: 0 = *extremely unsuccessful*; 1 = *extremely successful*). Each of these variables is hypothesized to relate positively to *police performance*.

The second measurement model is *procedural fairness*. Tyler's procedural fairness argument is that people who perceive police to have treated them fairly and with respect in their dealings will be more likely to trust police and to infer the trustworthiness of other police officers (2005; Lind and Tyler 1988; Tyler and Lind 1992). In other words, perceptions of procedural fairness are antecedents of trust in police. There are two key aspects to citizen evaluations: quality of interpersonal treatment, which includes process transparency and respect for the dignity and acknowledging the rights, and quality of decision-making, which includes police explaining their decisions (understandable actions) and the perceived fairness of the process (Sunshine and Tyler 2003; Tyler 2003, 2005). The principles of quality of treatment, decision-making and understandable actions are captured by survey variables asking respondents how often police make fair, impartial decisions in the cases they deal with (*fair treatment*: 1 = *not at all*; 4 = *very often*), how often police treat people in their country with respect (*respect citizens*: 1 = *not at all often*; 4 = *very often*) and how often police explain decisions when asked (*explain decisions*: 1 = *not at all often*; 4 = *very often*). Each of these variables is hypothesized to relate positively to *procedural justice*.

The third and final latent construct is *universal impartiality*. Rothstein's impartiality is concerned with universal application, regardless of socio-economic status or racial/ethnic or gender identity, victim or offender status, an absence of corruption (be it police, court or other administrative apparatus) and the absence of undue political pressure on police by politicians or public opinion. Universal impartiality should relate positively to trust in police. Three questions created using variables from the ESS Round 5 capture these points succinctly. The first item was created from a question which asked

respondents' perceptions of the extent to which rich and poor victims are treated the same. The second response (*rich and poor are treated equally*) is the basis for the creation of (*treat wealth equal: 0 = no; 1 = yes*). The third item (*incorruptible*) was created from the *never* category of variable (*plccbrb*) asking how often police in the respondent's country never take bribes (*incorruptible: 0 = no; 1 = yes*). The third and final item (political pressure) was created from the *disagree strongly* category of variable (*plciplt*) which asked the extent to which a country's police are unduly influenced by politicians or political pressure (*political pressure: 0 = no; 1 = yes*). Each item is hypothesized to relate positively to *impartiality*.

An question which asked respondents whether police in their country treat cases they deal with fairly and impartially (*fair treatment: 1 = not at all; 4 = very often*) was considered and rejected as a predictor of impartiality because, as has been previously discussed, fairness and impartiality are not synonyms, despite them being used interchangeably by both Rothstein and Tyler. Impartiality as a universal idea is categorical and cannot, by definition, be a matter of degrees, while the *fair treatment* variable is a measure of degree and is not categorical. Because it is a measure of degree rather than an absolute, it is likely that *fair treatment* was understood by respondents as referring to fairness rather than impartiality. Thus, while *fair treatment* may not fit well into the impartiality measurement model, it does do well to capture the subjective and graduated fairness dimension of the procedural fairness policing measurement model.

Control Variables. Four variables were added to account for unobserved heterogeneity in the population. These include an item for gender (*Female: 0 = Male; 1 = Female*), education level, divided into individuals with less than the secondary level of

education (*Less Than HS*: 0 = *No*; 1 = *Yes*) and those with a tertiary education or higher (*Academic Degree*: 0 = *No*; 1 = *Yes*). An age variable (*Inage*) was also included and logged. The theory presented in this paper does not provide guidance for the impact of these control variables on trust in police, but it is expected that female, age and higher levels of education relate positively with trust in police while lower levels of education relates negatively with trust in police. This is because females are more likely to be victimized and less likely to be offenders and therefore have a more trusting view of police. Age and education follow similar paths: adolescents are more likely to have run-ins with law enforcement while as people age, they tend to support and trust the police more; and, as educational attainment increases, so too does support for the role of legal institutions in maintaining public order.

[FIGURE 1]

Results and Discussion

The main finding of the structural model of this study – that universal impartiality is an important predictor of trust in police alongside police performance and procedural fairness policing – is empirically supported. In Model 1, the effects of police performance, procedural fairness and impartiality were analyzed as well as several control variables such as age (logged), gender and education level to assess the joint impact of all three constructs simultaneously on trust in police. As can be seen in Table 2, in the structural models, the main policy variable for this study, universal impartiality, as well as procedural fairness and police performance were all highly significant predictors of trust in police; that is, when people perceive police as being non-discriminatory, uncorrupted and free of undue

political influence, in addition to perceived fair and respectful police treatment, they are more likely to trust the police. This is consistent with previous research which has found that procedural justice is an antecedent to trust in police. However, unlike previous models of procedural justice, police performance, procedural fairness and universal impartiality are predictors of trust in police, not of perceptions of legitimacy. Among the control variables, only education at the bachelor's level or above was a significant predictor. The measurement model, seen in Table 3, indicates that all observed variables have the correct sign and significance in relation to their latent constructs.

[TABLE 3]

Model fit statistics indicate a good model fit. There are a plethora of model fit indices available, but at a minimum analysts tend to report the comparative fit index (CFI), Tucker-Lewis index (TLI, also Non-Normed Fit Index (NNFI)), and the root mean squared error of approximation (RMSEA) (Schreiber, Stage, King, Nora and Barlow 2006). The CFI adjusts issues with sample size found in several fit tests (i.e., chi-square, normed fit) and measures the discrepancy between the data and the hypothesized model (Gatignon 2011; Hu and Bentler 1999). A model is considered to have a “good” fit if the CFI is greater than or equal to 0.95. The CFI for both models is 0.983 and 0.973, respectively, indicating that this model is a good fit. The TLI compares the chi-squared value of the null model to the chi-squared test of the hypothesized model, correcting for negative bias. A TLI value greater than or equal to 0.95 is considered a good model fit. The TLI for both models 0.977 and 0.965, respectively. Finally, the RMSEA measures the discrepancy between the

population covariance matrix and the hypothesized model (with optimally chosen parameters) (Hooper, Coughlan and Mullen 2008). RMSEAs less than 0.8 indicate a good fit; the RMSEA for both models is 0.027. The overall R-squared for Model 1 is 0.97.

Several robustness checks were performed on the data to confirm the results. The first robustness check was to estimate the model using maximum likelihood (ML), quasi-maximum likelihood (QML), maximum likelihood missing values (MLMV) and asymptotic distribution free (ADF). The maximum likelihood family of estimators is sensitive to multivariate non-normality, but can be relaxed, provided the analyst recognizes that the standard error of the variance could be large. The result of running the main model with each estimator was that signs and significance for regression coefficients remained comparable, indicating that the findings reported here are robust. The estimator reported for this SEM model is a Maximum Likelihood (ML) estimator. Other estimator methods have certain advantages, for example, asymptotic distribution free (ADF) and quasi-maximum likelihood (QML or robust ML) deal with issues of heteroskedasticity, while maximum likelihood missing values (MLMV) can produce reliable estimates in the face of missing data. Approximately 36% of the observations in this model were missing on the dependent variable (*trust in police*). However, after testing each estimator separately on the main model, the same signs and significance for each measurement model were noted, indicating that the ML estimator was sufficient.

The second robustness check was performed by dividing up the data into three different groups with different sets of institutions: former socialist, Protestant and non-Protestant countries. Model 2 samples former socialist-bloc countries: Russian Federation, Ukraine, Bulgaria, the Czech Republic, Estonia, Croatia, Poland, Slovenia, Slovakia and

Hungary. Model 3 looks only at majority Protestant countries: Switzerland, Germany, Denmark, Finland, United Kingdom, Netherlands, Norway, Sweden. Model 4 samples majority non-Protestant countries: France, Greece, Spain, Portugal, Cyprus, Ireland, Israel and Belgium. This check was to ensure that the results were not driven by specific institutional traditions. Models 2 through 4, which tested the main hypothesis across a subsample of former socialist, current Protestant and non-Protestant countries for robustness, found that universal impartiality and procedural fairness remained highly significant predictors of trust in police. Consistent with previous research, police performance was also found to be significant predictor of trust in police; that is, when people perceived the police as being successful and competent at controlling crime, they were more likely to trust the police. As can be seen in Table 2, the signs and significance of the impact of the measurement models on trust in police are analogous, meaning that no one country or set of countries nor institutional arrangements drive the significant result in Model 1. However, in the subsamples the effect of universal impartiality and procedural fairness were diminished somewhat while police performance became more prominent. This diminution may suggest that both universal impartiality and procedural fairness are incorporated in perceptions of police performance, meaning that they may not be an “either/or” but instead a “both/and”. This check also shows that impartiality, at least within the European context, is universal: it is a positive and highly significant indicator for trust in police across national and institutional contexts, even though the significance of both impartiality and procedural fairness diminishes across models.

The findings presented in this study are important for criminal justice thinking and policy. The first implication is that while the search for police trust and legitimacy certainly

has a performance and procedural aspect, the normative context in which performance and procedure are deployed matters to individuals when making the decision to trust in police. In so doing, procedural fairness and impartiality are cast in a new light: police and legal authorities can deploy them and probably net “good” (read: providing self-regarding benefits) outcomes, but this is not the reason why they should be used. Instead, the fact that the ESS Round 5 captures these subjective perceptions is important because it indicates what individuals are looking for in their social contract. Impartiality is not an essential universal truth discovered through these models, but rather it is a social preference for a universal rule that people would like to have written into their social contracts in these societies, at least in the European context. Although the United States was not included in this dataset, the fact that Western European countries in the liberal tradition support impartiality suggests that the U.S., which also prizes classical liberalism, might, too. It is thus worth considering how the police procedures and tactics would be articulated under the rubric of universal impartiality.

Conclusion

The findings reported in this study support the idea that the normative value of universal impartiality is an important contextual component for understanding public trust in police.

The value of this paper is that it connects and builds upon Tyler’s and Rothstein’s theoretical and empirical work on procedural fairness and Quality of Government. Tyler’s procedural fairness takes a normative consequentialist position on legitimacy. The Tylerian position holds that procedural fairness is an antecedent to trust in police and that trust in

police can lead to an increase in perceived legitimacy for the police and compliance and cooperation with the law. However, Tyler's fairness is subjective, based upon individual perceptions, and not universal, which means that the procedural justice perspective leaves open the question of what the substantive content of laws ought to be and which laws ought to be followed to political philosophy (Tyler 2003).

Rothstein's approach, by contrast, is universal and deontological. The Rothsteinian perspective on Quality of Government is that public authority should be exercised impartially and in a procedurally fair manner. However, for Rothstein, procedural fairness is a necessary but not sufficient condition for impartiality because without an overarching value to guide the creation and implementation of public policy it is entirely possible that biased laws could be created and administered in a procedurally fair manner (Tankebe 2007; Gau 2013; Rothstein 2011) that would not be impartial. Rothstein, therefore, shifts further than Tyler, arguing that the normative context in which procedural fairness is employed is an important factor predicting not only trust in police but trust and legitimacy in government as well. However, Rothstein uses the terms fairness and impartiality interchangeably, which complicates efforts to disentangle conceptually whether he means subjective fairness or universal impartiality.

In considering the findings presented in this study, it is important to recognize three substantial limitations. The first issue is that data presented here are cross-sectional, limiting the scope for inferring causal relationships. Ideal data regarding police performance, procedural fairness and universal impartiality would be a longitudinal panel to better analyze their impact on perceptions over time. Perceptions of impartiality are not likely to change in the short term because of a new, more partial political and policing

regime. A society whose public expect universal impartiality will not throw that norm away even if the entire government behaves partially toward groups in society. However, the same cannot be readily said of procedural justice policing or police performance, particularly in places where universal impartiality is perceived to be low. Having data measured at regular intervals might help disentangle, for example, whether there is a causative relationship between police performance, procedural fairness and universal impartiality or whether past events – such as an historical trend of corruption in a country (collective memory), for example – creates multiple equilibria and leads to path dependent outcomes (Rothstein 2005; Charon and LaPuente 2011).

The second limitation is that it could be the case that individuals have a difficult time separating between procedural fairness and impartiality, creating a data measurement limitation. Indeed, fairness and impartiality are not equivalent concepts despite sharing some scope and reach in common. Even though the ESS Round 5 data set provides access to an array of individual perceptions regarding the police and the courts that is unsurpassed in its richness, questions such as that for *fair treatment* (“*In the cases they deal with, do police treat victims in a fair and impartial manner?*”) conflate the two concepts, making them analytically difficult to parse out, and thus having an impact on the level of certainty that can be carried by the conclusions presented here. The final issue is that, to date, a data set does not exist to test the main hypothesis of this paper within the American context. While the argument has been made above that Americans would follow their Western European counterparts in upholding the norm of impartiality, such a discussion is speculative at best. Future research on police performance, procedural fairness and

universal impartiality should focus on additional countries not included in the current analysis.

In conclusion, the main argument of this paper has been that universal impartiality, in addition to procedural fairness and police performance, is a significant predictor for trust in police. The empirical analysis supported this hypothesis. The significance of this paper is that it puts into conversation two scholars whose work has previously not been conversant with one another to present a model of trust in police that deepens the conceptual nuance of this most important issue.

Table 3.1: Descriptive statistics of model variables

Variable Name	Description	Min	Max	Mean	Std. Deviation
trustpolice	Trust in police	0	10	5.666	2.688
female	Gender (female)	0	1	0.512	0.499
ln(age)	Natural log of age in years	2.639	4.615	3.758	0.432
lessthanhs	Less than secondary education	0	1	0.279	0.449
bachorbet	Greater than or equal bachelor's degree	0	1	0.214	0.411
Impartiality					
politicalpress	Are police unduly influenced by political pressure?	0	1	0.189	0.391
treatwealth	Do police treat rich and poor victims of crimes equally?	0	1	0.474	0.499
incorruptible	Police do not take bribes	0	1	0.080	0.272
Procedural Justice					
treatfair	Do police treat cases fairly and impartially?	1	4	2.732	0.672
explaindecision	Do police explain decisions?	0	4	2.499	0.857
respectcitizen	Do police treat people with respect?	1	4	2.781	0.702
Police Performance					
preventviolcrime	How well do police prevent violent crime?	0	10	5.109	2.048
preventburgl	How well do police prevent burglary?	0	10	4.675	2.173
responsiveness	How quickly do police respond to violent crime in your area?	0	10	5.645	2.287

N=33,779

Source: European Social Survey, Round 5 (2010)

Figure 3.1. – Impact of police performance, procedural justice and universal impartiality on police trust

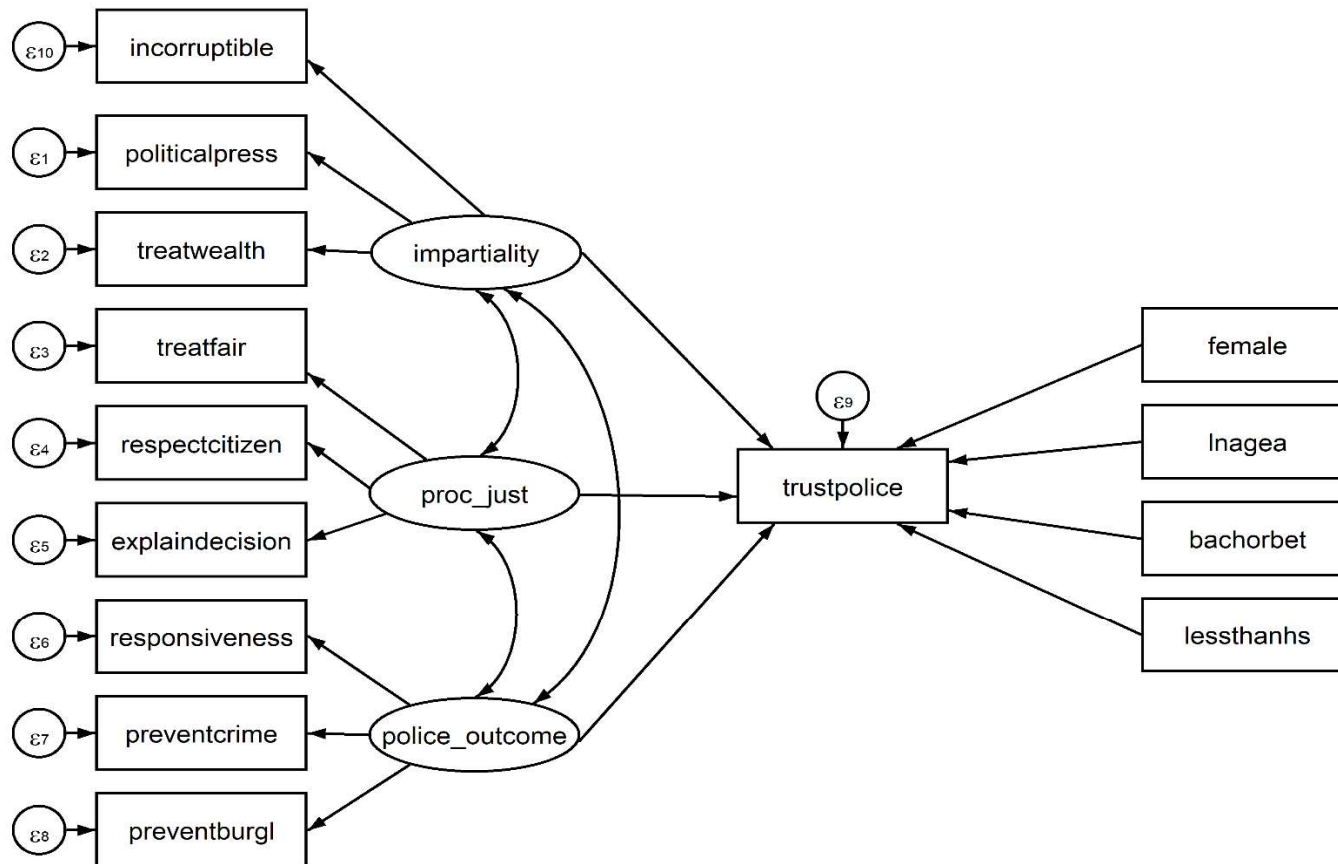


Table 3.2: Structural model estimating the impact of police performance, procedural fairness and impartiality on police trust

	Model (1)	Model (2)	Model (3)	Model (4)
	All Data	Former Socialist	Protestant	Non-Protestant
N	33,779	11,426	11,585	10,182
Partial R²	0.475	0.396	0.407	0.443
Impartiality	0.317*** (0.015)	0.281*** (0.027)	0.227*** (0.026)	0.188*** (0.024)
Procedural Justice	0.240*** (0.012)	0.151*** (0.021)	0.230*** (0.018)	0.256*** (0.018)
Police Performance	0.229*** (0.008)	0.283*** (0.015)	0.297*** (0.015)	0.315*** (0.015)
female	-0.001 (0.004)	0.011 (0.008)	0.007 (0.007)	0.018** (0.008)
(ln)age	-0.006 (0.004)	-0.038*** (0.008)	0.005 (0.008)	0.013 (0.008)
lessthanhs	0.003 (0.004)	0.010 (0.008)	-0.039*** (0.008)	-0.025** (0.009)
bachorbet	0.038*** (0.004)	0.032*** (0.008)	0.060*** (0.008)	0.011 (0.008)

*** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

Table 3.3: Measurement models and model fit for Model (1)

N	33,779		
Adjusted R²	0.970		
RMSEA	0.035		
CFI	0.973		
TLI	0.965		
SRMR	0.026		
		Coefficien	
		t	Std. Dev.
Impartiality			
politicalpress	0.261***		0.007
treatwealth	0.591***		0.007
incorruptible	0.310***		0.006
Procedural Justice			
policefairimp	0.804***		0.003
policeexplaindec	0.618***		0.004
policerrespect	0.800***		0.003
Police Performance			
preventviolcrime	0.840***		0.003
preventburgl	0.772***		0.003
policerresponse	0.613***		0.004

*** $p < 0.01$ ** $p < 0.05$ * $p < 0.1$

CHAPTER IV

TRUST IN POLICE: THE PROBLEM OF SOCIAL NETWORK EFFECTS AND PATH DEPENDENCY

Introduction

An important consideration in accounting for variations in trust in police is the role of social network effects and collective memory. Contemporary methods of increasing perceptions of trust and legitimacy toward police, like community policing and procedural fairness, look at the decision to trust police as most directly influenced by present positive police-public social interactions from which individuals infer the trustworthiness and legitimacy of police institutions. The community policing philosophy, for example, looks to the frequency of police-public contacts and the level of citizen involvement in problem-solving as the main methods for gaining public trust in police (Trojanowicz, Kappeler, Gaines and Bucqueroux 1998; Greene 2000; Gill, et al. 2014). The procedural fairness position holds that the quality of treatment in interpersonal contact is the mechanism by which individual perceptions of police trust are increased, leading transitively to heightened perceptions of institutional trustworthiness and legitimacy (Tyler 1990, 2003, 2005; Sunshine and Tyler 2003). The empirical record for community policing and procedural fairness seem to support these claims, yet variation remains in individual-level perceptions of trust in police (e.g., Tankebe 2009b; Reisig, Tankebe and Meško 2012; Moravcová 2016; Gill, et al. 2014).

In addition to concerns about the quality and frequency of police-public contact, another important factor influencing trust in police is that individual decisions to trust are influenced by the behavior of family members, friends and neighbors whose accumulated experiences and perceptions of police are collectively shared and passed along to subsequent generations, potentially leading to a path dependency for trust in police from which reversing course may be impossible. The implications of the existence of a social network effect for trust in police means taking seriously the impacts of previous contact with police represented through peer group influence and collective memories on individual behavior. It may not be sufficient, for example, for a single procedurally fair police-public interaction to overcome the collective memory of current peer group and past police antagonism influence to change individual perceptions of police trustworthiness and legitimacy.

Thus, the main question for this paper is whether a social network effect for trust in police exists. If it does, it is further argued that collective memory is one consequence of social network effects. Combining the Social Capital Benchmark Survey, the U.S. Decennial Census, the Law Enforcement Management and Administrative Statistics series and the F.B.I.'s Uniform Crime Report data, this paper aims to explore the impact of social network effects on trust in police. The value of this paper is threefold. First, it empirically and quantitatively tests for the existence of a social network effect for trust in police which, as of the date of writing, has not been studied previously in the criminal justice literature. Second, it brings together the concepts of social network effects and collective memory in the context of police trust. Third, it makes relevant for criminal justice the theory of collective memory, underscoring the importance of an individual's historical mental maps

and his/her contemporary attitudes, beliefs and behaviors which is germane to understanding the difficulty inherent in changing perceptions of police trustworthiness incrementally.

The remainder of the article proceeds as follows. The first part presents a review of literature linking social network effects to trust in police. The second section describes the methods and data to be utilized in the analysis. Section three presents and interprets the results of the analysis while section four engages in an extended policy discussion of the implications of this paper for policy and thinking about generating trust in police. The conclusion discusses some of the limitations of the present study.

Social Network Effects

Social network effects. Known variously as peer effects, social spillover effects, neighborhood effects, herd behavior and peer pressure, social network effects are defined as “the propensity of an individual to behave in some way with the prevalence of that behaviour in some reference group containing the individual” (Manski 1993: 531; see also: Brock and Durlauf 2001, 2002; Manski 2000). Put another way, a social network effect exists if individuals are influenced in their attitudes or behaviors by the aggregate attitudes or behaviors of their social reference group. Why might an individual might adopt the attitudes and behaviors of their peer reference group? The reason for adoption falls roughly into two categories. The first category is based on an individual having an underlying preference for conformity and find disutility in being the only person who thinks or behaves a certain way. The second category views the adoption of a modality (e.g., trusting police)

by others as a type of information signal: if other people in my reference group trust police, they must have information about the police that I do not.

The existence of a social network effect for trust in police is important for two reasons. First, it would mean that an individual's inclination to trust police would be influenced by the individual's reference group's aggregate-level behavior of trusting police. Thus, an individual who might otherwise be inclined to trust police may adopt a non-trusting posture toward them if his/her neighbors, family members and friends do not trust police. Previous research on endogenous social network effects has shown how individual-level decisions are influenced by aggregate-level group attitudes and behaviors; examples of the positive impact of endogenous social network effects on individual-level decisions can be found across a wide variety of social phenomena. In the fields of clinical and public health, it has been argued that network effects are germane to the behavioral trait of obesity and that obesity appears to spread through social ties (e.g., Christakis and Fowler 2007; Fowler and Christakis 2008a, 2008b). In transportation economics, scholars have found an endogenous social network effect for transportation mode choice (i.e., walking, taking transit, driving, car-pooling, etc.) and automobile ownership (e.g., Goetzke 2006; Goetzke and Weinberger 2012), indicating that individual mode choice is influenced by aggregate tract-level mode choice. And in marketing, research has shown that individuals have a higher probability of product or service adoption if they are connected to many other adopters (e.g., Katona, Zubczsek and Sarvary 2010; Trusov, Bucklin and Pauwels 2009). It is therefore not a stretch to suggest that a social network effect for police trust exists.

Second, the existence of social network effects implies multiple equilibria, meaning that the aggregate outcome may be path dependent. Path dependency is a self-reinforcement mechanism: each step along a given path increases the returns for and likelihood of continuing along that same path, while switching from that course to a previously viable alternative option cannot be accomplished without incurring significant costs (Arthur 1994; Pierson 2000). Social processes, like economic processes, may not move steadily toward an efficient equilibrium but instead the character of the equilibrium depends, at least in part, on the starting point and the process of getting there (Liebowitz and Margolis 2000). Path dependent processes will therefore not necessarily converge toward an optimal equilibrium but rather reach one of several equilibria, and “[t]here is no guarantee that the particular outcome selected from among the many alternatives will be the ‘best’ one” (Arthur 1994: 1). Thus, if a critical share of members within a reference group adopt that same modality (e.g., trusting police), the probability of another individual connected to that reference group adopting the same modality increases, while the probability of making the opposite choice (not trusting police) is significantly diminished. In other words, historical events can have durable, persistent effects on present behaviors that may be difficult to reverse.

The study of social network effects is not foreign to the criminal justice literature, but there is an important distinction between an endogenous social network effect and the contextual or “neighborhood effects” used in the criminal justice literature. The term “neighborhood effects” is used to describe the impact of two concepts: concentrated disadvantage and collective efficacy. Concentrated disadvantage refers to the one-way impact of the structural (ecological) characteristics of place on life outcomes, such as the

effect of concentrated poverty on child and adolescent development or the impact of shared perceptions of disorder on later poverty (Wilson 2012; Sampson 2012). Concentrated disadvantage is typically modeled using measures aggregated to the spatial unit of analysis (i.e., place-level, tract-level, block-level, etc.) and suggests that these contextual variables have a one-way impact on individual-level outcome variables.

The term “collective efficacy” on the other hand is used to refer to group-level norms of trust and reciprocity that influence individual behavior among spatially contiguous residents (Sampson, Raudenbush and Earls 1997; Sampson 2012, 2013; Morenoff, Sampson and Raudenbush 2001). Scholars have used collective efficacy to explain a variety of social phenomena, including disparities in crime rates across neighborhoods and communities: Where collective efficacy is high, levels of crime and violence are low and where collective efficacy is low, levels of crime and violence are high (Sampson, Raudenbush and Earls 1997; Sampson and Raudenbush 1999; Sampson 2012, 2013). The implication is that aggregate neighborhood social trust (collective efficacy) and shared perceptions of social disorder shape individual decisions to intervene on behalf of the neighborhood as an agent of social control, which is similar to the workings of a social network effect. However, collective efficacy is not modeled as an endogenous social network effect but rather as an individual-level perception of neighborhood- or community-levels of collective efficacy.

However, the discussion of social network effects presented in this paper and the literature on neighborhood effects in criminal justice differ an important way. Concentrated disadvantage might more accurately be described as a contextual effect rather than an endogenous social network effect. Contextual effects are one-way social interaction of

attitudes or behaviors from the group-level to the individual-level that vary with group characteristics (i.e., socioeconomic characteristics of the community population), whereas endogenous social network effects are bi-directional spillovers in which the attitudes or behaviors of the reference group affects the attitudes or behaviors of the individual (Manski 1993, 2000; Goetzke and Weinberger 2012). The contextual effect of socioeconomic status is unidirectional and varies along with the socioeconomic conditions and built environment characteristics in which residents find themselves: child and adolescent development, crime and violence are impacted by socioeconomic status, but socioeconomic status is not impacted by child or adolescent development, crime or violence. A truly endogenous social network effect would run both ways, as could be argued is the case for collective efficacy: individual-level decisions to intervene on behalf of neighborhood kids aggregates to the community level of collective efficacy while community-level collective efficacy influences individual-level decisions to intervene. This paper is concerned with analyzing the influence of endogenous social network effects on trust in police rather than the effects of neighborhood contextual effects on resident attitudes.

One way to conceptualize this difference between the two kinds of effects is that contextual effects vary by group characteristic, so contextual effects will vary with socioeconomic status, educational attainment, ethnicity, age, etc. This influence is only in one direction: group characteristics influence individual behavior, but individual behavior does not influence group characteristics (e.g., an individual attempting to increase his or her educational attainment does not mean that categories of educational attainment change). Endogenous social network effect varies with the prevalence of an attitude or behavior within a social reference group. That group may be made up of individuals with

various characteristics or even who live in spatially discontinuous areas. These effects are bi-directional; that is, as a behavior becomes prevalent amongst a critical share of that group, that group behavior influences the individual's behavior, but at the same time, the individual's behavior aggregates or makes up part of the group level behavior, indicating a reflection problem.

Data, Model and Variables

To examine whether a social network effect for trust in police exists, this paper draws from the Social Capital Benchmark Survey (Saguaro Seminar 2000), the 2000 F.B.I.'s Uniform Crime Report (Kaplan 2019), the Law Enforcement Management and Administrative Statistics Series (U.S. Department of Justice 2000) and the U.S. Decennial Census (U.S. Census Bureau 2000) databases. All data sets have the base year of 2000.

Data. The Social Capital Benchmark Survey aims to provide a standardized measurement of social capital across American communities which can be used to gauge variations in social capital in the future. To date, this survey remains one of the richest sources of social capital data in the United States. The survey, conducted via telephone interview from February to July 1999, consists of over 29,000 observations from 40 communities in the United States providing data which assesses individual-level perceptions and attitudes toward civic and social interactions. The restricted use version of the data set provides geocoding which enables matching of individual-level responses to

geographical places and adds a spatial dimension to the analysis of social capital. The survey is relevant to the current study because it contains the outcome variable (trust in local police), the main social network effect policy variable (police trust network) which can easily be derived from the outcome variable as well as the individual-level sociodemographic characteristics used as controls. The Social Capital Benchmark Survey has been used in the past to measure trust in police. For example, MacDonald and Stokes (2006) use *trust in police* as an outcome variable in their examination of whether community-level social processes related to social capital explain racial and community variations in the trust of police, but whereas they were interested in the role social capital plays in influencing trust in police at the individual-level, this paper is interested in the impact of an aggregate-level endogenous social network effect on individual-level trust in police. Sharp and Johnson (2009) test a variety of explanations for variation in distrust of local police in the U.S. using a derivation of the *trust in police* variable. However, their model uses contextual effects as a control for variation in the dependent variable due to unobserved heterogeneity in the city rather than taking as their main policy variable the endogenous social network effect for trust in police.

The 2000 U.S. Decennial Census provides a rich source of aggregate socio-demographic data and structural variables geocoded to the place-levels which permits merging with the Social Capital Benchmark Survey and the other data sources for the analysis which will be discussed. Decennial Census data has been combined with the Social Capital Benchmark survey in previous research to explore the impact of social capital on homicide rates (e.g., Rosenfeld, Baumer and Messner 2001; Messner, Baumer and Rosenfeld 2004), spatial and individual determinants of a variety of outcomes including

happiness, quality of life, newspaper readership (Williamson 2010) and social capital and segregated public schools (Jones-Sanpei 2009).

The F.B.I.'s Uniform Crime Report has served as a nationwide periodic assessment of reported crimes not available elsewhere in the criminal justice system since 1930. The 2000 Offenses Known and Clearances by Arrest data files, collect monthly data on the number of Index Crime offenses reported and the number of offenses cleared by arrest or other means. The counts include all reports of Index Crimes (excluding arson) received from victims, officers who discovered infractions, or other sources. Uniform Crime Report data can be merged by originating agency identifier to the Law Enforcement Agency Crosswalk Identifier which facilitates the matching of aggregate levels of crime to the place-level geographic areas.

The Law Enforcement Management and Administrative Statistics series is a periodic survey of law enforcement agency resources, personnel and responsibilities from law enforcement agencies at the state, county and municipal levels. Agencies reported in this series can be matched to specific place-level geographic locations using the Law Enforcement Agency Identifier Crosswalk data file.

Model. The model used for this paper is a two-stage instrumental variable probit (TSIVP) model to estimate an individual's decision to trust police or not as well as to account for endogeneity in the analysis. This method calls for a first step OLS regression with the endogenous effect as the dependent variable on the instrumental variables. The residuals of the first step and the measured endogenous effect are used in the second-step binary choice probit model (Woolridge 2015). An instrumental variable approach is

appropriate when analyzing social network effects. By the definition discussed earlier, social network effects are endogenous because they influence the dependent variable while being themselves influenced by the dependent variable. This scenario is called the reflection problem (Manski 1993; 2000) and it confounds analysis using linear approaches like the ordinary least squares model because that model cannot disentangle individual-level effects from contextual, endogenous or correlated effects. However, it is possible to use probit or logit models (e.g., two-stage instrumental variable probit, two-stage instrumental variable ordered probit), as described by Brock and Durlauf (2001, 2002) because these models are non-linear, which means that endogenous, contextual and correlated effects do not depend on one another as they do in linear approaches and thus their effects can be isolated for analysis. In this case the main policy variable, the aggregate-level police trust network, is endogenous to individual-level trust in police. In other words, both variables suffer from the reflection/simultaneity problem: aggregate-level network trust influences individual-level trust, which in turn is a component of aggregate-level network trust. In order to disentangle the individual- from the aggregate-level effect, it will be necessary to select valid instruments which affect the dependent variable through the endogenous explanatory variable, but which are exogenous to the outcome variable. Two instruments were selected and a discussion of them follows later.

Dependent Variable. The dependent variable for this study is individual-level trust in police. The Social Capital Benchmark Survey asked respondents how much they personally trust the institution of the police using a 4-point scale with higher scores indicating more trust in police (0 = *not at all*; 1= *a little*; 2= *some*; 3= *a lot*). Although this

variable measures trust by degrees, for the purposes of this study it was unclear what magnitude difference exists between “a little” trust and “some” trust. For this reason several specifications of the dependent variable were explored, ultimately leading to the creation of a dichotomous variable combining the top and bottom two categories so as to model a clear bifurcation of individual-level trust in police (0 = *not at all and a little*; 1 = *some and a lot*). The mean for individual-level *trust in police* is 0.808 which is very similar to the mean for the aggregate-level *trust in police network effect* which is 0.803. Merging the data sets together resulted in a reduction of the total N for the data set. Many of the observations from the Social Capital Benchmark Survey did not have place-level identifiers and so were excluded *a priori*, while data was not available for all police departments or for all months of the year in the Law Enforcement Management and Administrative Statistics which contributed to another drop in observations, leaving the total N for the model at 6,347. Because the loss of observations was largely due to combining data sets, the randomness of the sample is preserved. A list of variables, their sources and descriptive statistics are presented in Table 1, below.

[TABLE 1]

Explanatory variables. The main explanatory variable for this study is the place-level social network effect for trust in police which was created using the individual-level trust in police measure from the Social Capital Benchmark Survey. Equation (1) below shows the procedure for creating the network effect variable. This variable was created by aggregating individual-level trust in police to the place-level, subtracting the individual

from the aggregate and dividing the aggregate by the remaining number of residents at that place. As discussed in the section on social network effects, the resulting variable is an endogenous effect given its simultaneity; that is, the behavior of the individual is affected by the behavior of the peer group while the behavior of the peer group is also the aggregate of individual behavior. In this model the endogenous effects are addressed through an instrumental variable approach. A positive sign would signify the presence of a social network effect.

$$\frac{(\text{Place-level aggregate trust in police} - \text{Individual-level trust in police})}{(\# \text{ of respondents at place-level} - \text{individual respondent})} \quad (1)$$

Instruments. The challenge to using an instrumental variable approach is to find valid instruments which are only correlated to the endogenous explanatory variable that are not also correlated with the dependent variable. A valid instrument for this model should have an exogenous impact on the social network variable (aggregate-level of trust in police) but not have a direct effect on the individuals' trust in police. Two instruments were selected which are theoretically and empirically appropriate instruments. The first is the place-level median household income for 1999 taken from the U.S. Decennial Census 2000; the second is the violent crime rate per capita for 1968 taken from the F.B.I.'s Uniform Crime Report 1968. The rationale for choosing these instruments is that they are not directly correlated with the dependent variable but are correlated with the endogenous social network effect. Place-level median household income was chosen because it is exogenous and not correlated directly with individual-level trust in police: median income can influence aggregate trust in police in that higher median incomes are indicative of

greater aggregate trust in police but individual trust in police does not influence place-level median income. Violent crime per capita for 1968 are also exogenous and, due to its temporal distance from the Social Capital Benchmark Survey 2000, is unlikely to be correlated with individual-level trust in police. Place-level median income is expected to relate positively with the endogenous social network effect while violent crime in 1968 should be relate negatively to it.

Controls. Twelve control variables were added to account for variations in the outcome (trust in police) stemming from unobserved heterogeneity in the population. The first nine are comprised of respondent-level socio-demographic characteristics and are taken from the Social Capital Benchmark Survey 2000. These include an item indicating whether the respondent is male, black, Hispanic, currently rents his/her residence, respondent's age category, respondent's income level, whether the respondent is unemployed and whether the respondent has an educational attainment below the high school level. The last three control for place-level characteristics relevant for criminal justice analysis, including the number of full-time sworn officers with arrest powers per capita and community police officers as a percentage of full-time sworn officers with arrest powers. Both variables were drawn from the Law Enforcement Management and Administrative Statistics 2000 data set. The final variable, violent crime per capita for 2000, was drawn from the F.B.I.'s Uniform Crime Report 2000.

The theory presented in this paper does not offer specific guidance as to the expected signs for the control variables, but previous research has consistently indicated that trust in police tends to be lower for males, Blacks, Hispanics, renters, young people,

the unemployed and those with lower educational attainment (see: Sampson 2012; Brunson 2007; Brunson and Miller 2006; Carr, Napolitano and Keating 2007; Weitzer and Tuch 1999). Further, current numbers of regular police, community policing officers and violent crimes may also influence trust in police. The broken windows theory of crime control posits that community members would feel safer because of increased police presence (Wilson and Kelling 1982); the community policing philosophy was designed with the intention of building trust between police and minority communities (Trojanowicz 1986). Yet, the presence of additional community policing or regular officers could be interpreted by residents as a signal of relative security/insecurity, not to mention that trusting police is often a function of race and characteristics of the built environment. Further, current levels of violent crime can be interpreted that police are either very good at their jobs (crime control and deterrence) or very bad at it, meaning levels of trust in police might be influenced either way here as well.

Results

Using the instrumental variable approach, the instruments pass the overidentification, weak instruments and exogeneity tests. The overidentification test evaluates the joint null hypothesis that the excluded instruments are valid instruments, or, to put it another way, that they are uncorrelated with the outcome variable and correctly excluded from the estimated equation. A failure to reject the null hypothesis would bring into question the validity of those instruments; as can be seen in Table 2, the tests failed to

reject the null hypothesis, indicating that these are in fact valid instruments correctly excluded. The weak instrument test evaluates empirically whether the selected instruments are relevant to the endogenous variable. The test has as its null hypothesis that selected instruments are weak if they fail to pass a critical threshold. The critical value for weak instruments was exceeded, suggesting these instruments are relevant. The Wald exogeneity test evaluates whether an excluded endogenous variable is actually exogenous. The social network effect fails to reject the null hypothesis of the Wald exogeneity test, suggesting that the instrumented variable is exogenous. However, it is still expected from the perspective of theory that the social network effect for trust in police is endogenous regardless of the test. Therefore, two models are presented here which confirm the social network effect. Model 1 displays the first and second stage of the instrumental variable probit model with a binary dependent variable for trust in police while Model 2 shows the first and second stage of an ordered probit model with an ordinal dependent variable for trust in police. If both models are significant, it gives confidence that the social network effect indeed exists.

[TABLE 2]

As can be seen in Table 3, the main finding of Model 1 suggests that there is a social network effect for trust in police. That is the significant positive coefficient on the social network effect implies that individuals are influenced in their decision to trust police by the trust placed in police of those around them. Model 2's results, which can be seen in Table 4, mirror those of Model 1 in the sign and significance of the presence of a social

network effect. The fact that both Models 1 and 2 show the social network effect to be significant adds a level of confidence to the results presented here. In the first stage in both models the instruments are significant for the social network effect; that is, violent crime per capita in 1968 is negative and significant for the social network effect while place-level median income is positive and significant for the effect.

Several of the control variables had the correct signs and significance as predictors of individual-level trust in police, consistent with prior research (e.g., Weitzer and Tuch 1999; MacDonald and Stokes 2006; Sharp and Johnson 2009). Male, black and Hispanic are significant and negative for trust in police, as are young age, low income and educational attainment less than high school. Being single is significant and negative in Model 2, indicating that unmarried or never married individuals trust police less, but single is not significant in Model 1. The log pseudo-likelihood for the model is 4041.126.

[TABLE 3]

Two additional unexpected results were also uncovered. The first relates to place-level aggregation of violent crime and trust in police. In the model, violent crime per capita is not a significant predictor of trust in police. That is, an individual's level of trust in police is not influenced by an area's violent crime rates. This finding challenges the crime control and deterrence model of policing's performance-based approach to garnering public trust, which holds that police effectiveness at producing public safety related outcomes (e.g., low crime rate, absence of conspicuous neglect) influences individual levels of trust in police. What this result does not suggest is that police performance is irrelevant to considerations

of public trust in police; indeed, an incompetent police force would also be unlikely to enjoy a high level of trust from the public it serves (e.g., Sampson and Bartusch 1998). Rather, this result resembles an important finding of the 1970s that fear of crime, rather than actual crime rates, led individuals to abrogate their guardianship role of public spaces (Greene 1987, 2000). The significance of that conclusion, which is echoed here, is that crime rates do not have an impact on trust in police in the same way that crime rates do not have an impact on fear of crime.

The second unexpected result from this model is the non-significance of the number of police per capita and the percentage of the police force working as community policing officers in predicting individual-level trust in police. The presence of police has an impact on the social network effect such that more police makes the community trust the police less but doesn't have any additional effect on the individual's decision to trust police. The conspicuous presence of police officers in an area has been argued to have varying effects on police trust. On one hand, the classical broken windows and crime control and deterrence view is that additional police officers on foot patrol create a feeling of security in neighborhood residents owing to the accessibility of officers and increased formal order maintenance, reduced fear of crime and increased risk of apprehension (Moore, Trojanowicz and Kelling 1988). Under this view, "seeing" police in an area produces a net positive for that area, which hints at increased perceptions of the trustworthiness of police and police institutions. On the other hand, proponents of labelling theory and critics of the community policing philosophy argue that an increased police presence is a sign of an area's insecurity and delinquency, which could lead to increased fear of crime, shifts in perceptions of public disorder and suspicion among residents, all of which could contribute

to a reduction in the share of trust afforded to police officers (Greene and Taylor 1988; Goffman 1978). The finding from this model will not settle the debate; it is enough to note that in this model police per capita is significant for trust in police through the social network effect.

Policy Discussion

In the context of police efforts to foster trust with members of the community, this finding is important because it suggests that increased quality and quantity of police-public contact, fair procedure or positive outcomes may not be sufficient to counteract the social network effect. Individuals are embedded within social networks and share experiences and narratives with other members, meaning that police efforts at building trust with various communities cannot be a matter of simply change tactics: a critical share of the community must be swayed into trusting police before individuals in low police trust areas will change their behavior. At the same time, the results of this regression imply that trust in police, once attained by a critical number of individuals within a community, is unlikely to be easily lost as a result of individual police behavior.

One way of interpreting social network effects is through the concepts of tipping points and collective memory. A tipping point is a “moment of critical mass” at which an attitude or behavior within a group or within some proportion a group is widely adopted by other members of that group (Gladwell 2000: 12; Grodzins 1957; Schelling 1971). The presence of a social network effect implies multiple equilibria; that is, a process can have

several outcomes, some of which are static and others of which are dynamic. The dynamic equilibria are unstable and can be “tipped” toward one static modality or another if a critical share of individuals adopt that modality. Research has demonstrated that tipping points exist for wearing a style of clothing (e.g., Gladwell 2000), automobile ownership (e.g., Goetzke and Weinberger 2012) and racial segregation (Grodzins 1957; Schelling 1971).

The term collective memory is frequently used by sociologists to refer to “the memory and representations of group pasts—whether these be ethnic, national, global, or other collective historical events” (Teeger 2014: 71). Maurice Halbwachs, often credited with founding the theory (Teeger 2014), was primarily interested in the intersection of individuals as group members, space and the impressions they leave on one another, which is similar to the concept of social network effects. Halbwachs writes: “[M]ost groups...engrave their form in some way upon the soil and retrieve their collective remembrances within the spatial framework thus defined” (1992: 14). Previous research has demonstrated that incidents of police misconduct are shared through family, friend, neighbor and other social group networks and can affect individual perceptions of trust in police (see: Brunson 2007; Brunson and Miller 2006; Carr, Napolitano and Keating 2007; King, Messner and Baller 2009). However, these studies were qualitative in nature and not looking specifically for the presence of a social network effect for trust in police. Instead, researchers were interested in understanding how African American youth understand and evaluate police in their neighborhoods. Comments suggesting the presence of a social network effect were elicited as a corollary to the main objective.

Bo Rothstein contends that collective memories are important because they (collective memories) can explain individuals’ choice of strategy (i.e., trust/not trust) when

encountering other individuals, groups and public institutions. He argues that the theory of collective memory explains why some societies find themselves in a low trust social trap (Rothstein 2005). A social trap is a situation in which two parties could be made better off were they to cooperate with and trust one another, but neither party wants to be the first mover and so no one benefits. The difficulty in getting out of the social trap is heightened by the collective memory of past incivilities, real or perceived, which have endured and been passed down through generations and which cannot rationally be forgotten. Rothstein writes: “The problem of low interpersonal trust comes from discriminated groups having been forced to live under public political institutions that have been, or which they have believed to have been, deeply dysfunctional for them. The collective memory of things such as gross police brutality, public lynchings, and systematic discrimination has a tremendous effect on the belief systems of which the individuals in a group such as this become the bearers” (Rothstein 2005: 127-128).

This scenario can lead to a static path dependency for trust in police. As a critical share of an individual’s peer group do not trust police, the likelihood that the individual will also not trust police increases. Continuing along the non-trusting path makes subsequent steps along that path easier; however, the cost of returning to a previously viable alternative, in this case trusting police, becomes more and more difficult, if not impossible. Another way to think about what Rothstein is saying here is that memories of past events form part of an individual’s mental map regarding which groups and institutions in society can be trusted, which then influences in the present the decision to trust individual members from these groups or institutions. The effect of collective memory could be one reason why the violent crime per capita for 1968 variable was significant.

Individually people do not think of violent crime in 1968 when deciding to trust police, but collectively (e.g., through the social network effect) it has an impact. Thus, when it come to the decision to trust police, history matters.

Rothstein's idea that the collective memory of historical institutions could lead to path dependent outcomes is lent support by a burgeoning literature on the impact of historical institutions on contemporary behaviors and narratives (for an overview, see: Nunn 2009). Scholars have investigated the effect of slavery on economic development both in and out of Africa (Bertocchi 2016), the link between historically high concentrations of slaves and persistent levels of inequality, weak institutions, violent and property crime in Colombia (Buonanno and Vargas 2016) and Brazil (Fujiwara, Laudares and Valencia C. 2019), persistent rates of regional entrepreneurship in Germany (Fritsch and Wyrwich 2013), medieval persecution of Jews and anti-Semitic violence in Nazi Germany (Voigtlander and Voth 2012), a "Hapsburg effect" for trust in government (Becker, Boeckh, Hainz and Woessmann 2011) and lynchings, anti-Civil Rights Movement violence and contemporary voting behavior of African Americans (Peterson and Ward 2015). Perhaps the best example of the consequence of historical institutions on contemporary attitudes toward trust in police is given by Tankebe (2008; see also Tankebe 2009). He states that human rights violations, police corruption and police impunity are salient characteristics of police service in Ghana and that these characteristics can be traced to the operating philosophy of former colonial police. He writes that "[t]hese abuses have alienated the police even more from many Ghanians, which leads to a significant distrust in the official mission of the police— 'service with integrity'" (Tankebe 2009: 1271).

The challenge for police trust and legitimacy scholars is how to get out of a low trust path dependent trap and convince a critical share of individuals within a reference group to trust police and cooperate with them. Tyler's procedural fairness perspective offers some empirically-based guidance on this at the individual level (Tyler 1990, 2003, 2005; Sunshine and Tyler 2003); research has demonstrated if police deal with members of the public in a fair and respectful manner that individuals' perceptions of the trustworthiness and legitimacy of police institutions should increase, but what this paper has attempted to show is that peer group influence and collective memories are also factors that need to be addressed before a perspective like procedural fairness can gain the kind of broad-based trust and legitimacy police institutions desire. If collective memories lead to a path dependent outcome of low trust in police, however, it may be the case that individual trusting behavior may be difficult if not impossible to reverse. Thus, the stakes for police are extremely high.

Fortunately, Rothstein has some suggestions for overcoming collective memory and breaking out of a low trust social trap. His first suggestion is actually directed toward battling corruption within institutions, but the theory could conceivably work in any situation in which some form of institutional path dependency exists, be that police or neighborhood institutions. Rothstein calls this the indirect big bang approach to fighting corruption, and the basic premise is that trying to tackle corruption within an institution incrementally and head on is likely to fail because there is a system underlying the corruption that will resist direct efforts to tinker with different parts of the system to try and eliminate that corruption (Rothstein 2011). In other words, Rothstein is saying that small-scale, incremental changes will likely be counteracted by forces within an institution

to maintain the status quo. What is needed is to “attack” corruption by getting the institution off balance; that is, by addressing the corruption in large-scale, sweeping changes that do not give institutional actors a chance to adjust their tactics. Rothstein’s indirect big bang approach has clear parallels to addressing the influence of social network effects and collective memories for trust in police. Rothstein says that collective memories cannot be rationally forgotten; attempts at changing perceptions of police trustworthiness and legitimacy incrementally provides too many opportunities for the larger social network effect to adjust and return to the status quo (Rothstein 2005, 2011). An indirect big bang approach to dealing with a social network effect for trust might, for example, work with key neighborhood or community institutions on non-enforcement related matters that challenge the narrative influence of collective memories in a large-scale and conspicuous manner. In this way police can set the social network effect “off-balance” so that individual-level efforts at trust building have a chance to succeed.

What kind of indirect big bang approach is needed to unbalance the influence of a social network effect and collective memory? Following Rothstein, the answer is to take as a guiding normative principle for the exercise of police authority the concept of deontological impartiality (2011). Deontological (or universal) impartiality is central to overcoming low trust social traps because it eschews partial, biased behavior on the part of institutional actors, which has been one of the perennial concerns among minority and vulnerable populations regarding police services (see: Brunson and Miller 2006; Brunson 2007; Carr, Napolitano and Keating 2007). Adopting a normative value like universal impartiality might serve to set both police institutions and the publics they serve off-balance such that changing attitudes and behaviors becomes possible.

Conclusion

The findings reported here support the existence of a social network effect for trust in police. The value of this paper is that it reveals previously unaddressed factors, social network effects and collective memory, that influences trust in police, allowing for a more nuanced understanding of the challenge of garnering perceptions of trust and legitimacy for police. Contemporary approaches to changing perceptions of police trustworthiness do not consider the influence of peer effects or path dependency, meaning that their policy prescriptions may miss important opportunities for gaining the kind of broad-based perceptions of trust and legitimacy those approaches strive for.

In considering the findings presented in this study, it is important to recognize some limitations. The first limitation is that while the Social Capital Benchmark Survey remains one of the richest sources of data in the United States measuring social capital, trust, quality of life and other related concepts, an ideal dataset would be a longitudinal panel survey designed specifically to assess the factors influencing individual-level trust in police. The longitudinal panel design would allow the evaluation of changes in an individual's trust modalities over time, which makes possible the causal analysis of smaller-scale, individual-level police tactics aimed at gaining more trust for police with larger-scale, aggregate-level changes to police institutional behavior that may confound in cross-sectional analysis.

The second major limitation is that a quantitative research design such as that presented in this paper cannot fully capture the role or impact of collective memories on contemporary trust attitudes and behaviors. Much work on collective memory is qualitative

in nature (see: Teeger 2014; Brunson 2007; Carr, Napolitano and Keating 2007) and relies on in-depth interviews to probe not only the content of specific collective memories but also how those memories are used to explain current societal conditions. Teeger (2014) presents an excellent example of just this type of analysis. Teeger interviewed blacks and white South African managers and professionals to explore how they selectively use South Africa's apartheid past as an explanans for contemporary crime problems. Research findings indicate that blacks and whites invoke their apartheid past in differing ways to explain crime: as both continuity and rupture. Understanding how and when individuated collective memories of police malfeasance become salient is an important step toward breaking out of a low trust social trap and gaining the kind of broad-based trust and legitimacy currently sought by criminal justice practitioners and scholars.

In conclusion, the main argument of this paper has been that there is strong evidence for the existence a social network effect for trust in police exists and that its existence has important consequences for contemporary efforts to garner trust in police. The empirical analysis supported this hypothesis. The policy implication of the social network effect is that trust in police has a tipping point and can lead to path dependent outcomes which require the adoption of a guiding norm like impartiality in order to unbalance. The significance of this paper is that brings a deeper understanding of social network effects into the criminal justice literature from other fields which have studied network effects in the manner presented here in order to present a model of trust in police that deepens the conceptual nuance to this most important issue of trust in police.

Table 4.1: Descriptive statistics of variables.

Variable Definition	Min	Max	Mean	S.D.
Dependent Variable				
Trust in police	0	1	0.808	0.394
Main Policy Variable				
Social network effect for trust in police	0	1	0.803	0.099
Instruments				
Violent crime per capita for 1968	0	0.021	0.005	0.003
Place-level median household income for 1999 (per thousand)	12.917	88.771	37.091	7.168
Controls				
Male respondent	0	1	0.402	0.490
Black respondent	0	1	0.240	0.427
Hispanic respondent	0	1	0.107	0.310
Respondent residence: rent	0	1	0.415	0.493
Respondent age less than or equal to 30	0	1	0.274	0.446
Respondent income less than 30,000	0	1	0.357	0.479
Respondent unemployed	0	1	0.030	0.171
Respondent single and never married	0	1	0.343	0.475
Respondent education less than high school	0	1	0.319	0.467
Number of full-time sworn police per capita	0.001	0.006	0.003	0.001
Community police officers as percentage of total police	0.083	0.192	0	1
Violent crime per capita for 2000	0.000	0.028	0.010	0.005

N = 6,347

Table 4.2. Instrumental variable tests.

Tests of endogeneity (H_0 = variables are exogenous)	<i>Value</i>	<i>p</i>
Durbin χ^2	0.912	0.339
Wu-Hausman F	0.910	0.340
Wald χ^2	1.78	0.182

Overidentification (H_0 = instruments are valid)	χ^2	<i>p</i>
Sargan	0.006	0.937
Basman	0.006	0.937

Weak Instruments (H_0 = instruments are weak)	<i>Critical Value</i>	<i>[TSLS, LIML]</i>
Montiel-Pflueger F -statistic	98.092	[6.234, 13.560]

TSLS = Two-stage least squares; LIML = Limited information maximum likelihood

Table 4.3: Two-stage least squares equation model for trust in police

		Model (1)	
Type of Variable		Continuous	Binary
Method		OLS	ivprobit
Number of Observations		6,347	6,347
Adjusted/Pseudo R-squared		---	---
Police Trust Network Effect		---	2.266*** (1.108)
Violent Crime Per Capita (1968)		-2.239** (0.950)	---
Place-level Median Income (1999) Per Thousand		0.003*** (0.000)	---
	Male	-0.001 (0.002)	-0.137*** (0.039)
	Black	-0.003 (0.003)	-0.752*** (0.047)
	Hispanic	-0.009** (0.004)	-0.452*** (0.064)
	Rent	0.002 (0.002)	-0.046 (0.043)
	Age Less Than or Equal to 30	0.001 (0.003)	-0.287*** (0.048)
	Low Income	0.001 (0.002)	-0.120*** (0.044)
	Unemployed	-0.006 (0.007)	-0.118 (0.105)
	Single	-0.008*** (0.002)	-0.063 (0.046)
	Less Than High School Education	-0.003 (0.003)	-0.230*** (0.044)
	Police Officers Per Capita	-47.692*** (1.721)	5.723 (70.187)
	Percentage of Community Policing Officers	-0.017* (0.009)	-0.035 (0.100)
	Violent Crime Per Capita (2000)	0.226 (0.458)	6.693 (5.217)
	Constant	0.840*** (0.010)	-0.415 (1.094)

*p < .1, **p < .05, ***p < .01, robust standard errors are in parenthesis

Table 4.4: Two-stage ordered probit equation model for trust in police

		Model (2)	
Type of Variable		Continuous	Ordered
Method		OLS	oprobit
Number of Observations		6,347	6,347
Adjusted/Pseudo R-squared		0.417	0.061
Police Trust Network Effect		---	0.738** (0.377)
Violent Crime Per Capita (1968)		-2.965** (1.349)	---
Place-level Median Income (1999) Per Thousand		0.006*** (0.000)	---
Male		-0.000 (0.005)	-0.107*** (0.029)
Black		-0.011* (0.006)	-0.742*** (0.036)
Hispanic		-0.013 (0.009)	-0.366*** (0.049)
Rent		0.003 (0.006)	-0.012 (0.032)
Age Less Than or Equal to 30		0.003 (0.006)	-0.246*** (0.036)
Low Income		0.000 (0.006)	-0.040 (0.033)
Unemployed		-0.011 (0.014)	-0.114 (0.082)
Single		-0.018*** (0.006)	-0.103*** (0.034)
Less Than High School Education		-0.002 (0.006)	-0.111*** (0.033)
Police Officers Per Capita		-136.985*** (4.039)	-17.781 (62.193)
Percentage of Community Policing Officers		-0.011 (0.013)	-0.029 (0.074)
Violent Crime Per Capita (2000)		-5.292*** (0.806)	5.467 (4.564)
Constant		2.379*** (0.020)	---

*p < .1, **p < .05, ***p < .01, robust standard errors are in parenthesis

CHAPTER V

CONCLUSION

The overall findings of this dissertation are two. First, universal impartiality, in addition to procedural fairness and police performance, is a significant predictor of trust in police. That is, when people think about trusting police, considerations like police performance and procedural fairness are important, but so too do people think about impartiality. This is exactly Rothstein's point about impartiality fits in with subjective impressions of fairness. He argued that subjective perceptions of procedural fairness are important to government's ability to attain political legitimacy, but the norm by which individuals will evaluate the "fairness" of the procedure is by the universal and impartial nature of the implementation of that policy, not by some narrow concern with fairness as it applies to the individual. It is also interesting that police performance remains a significant predictor of trust in police. As discussed in the review of literature, the police performance model was an implicit trust model in that the better police performed the more likely people would trust them. The findings here support that claim.

The second finding is that a social network effect for trust in police exists and the magnitude of its influence can be measured. The coefficient on the police trust network variable was positive and significant, indicating the presence of a self-reinforcing social network effect. That is, individuals are influenced in their decision to trust police by the prevalence of that trust in that individual's social reference groups. This finding adds

broadens the criminal justice literature on the role of vicarious influences or social network effects on trust in police. The criminal justice audience for this article conceptualize social network effects as neighborhood effects which are essentially the uni-directional contextual effects of some place-level attribute that varies with group *characteristics*. Endogenous social network effects, on the other hand, are bi-directional social effects that vary with the prevalence of an attitude or behavior in someone's social reference group. One way to conceptualize this difference between the two kinds of effects is that contextual effects vary by group characteristic, so contextual effects will vary with socioeconomic status, educational attainment, ethnicity, age, etc. This influence is only in one direction: group characteristics influence individual behavior, but individual behavior does not influence group characteristics (e.g., an individual attempting to increase his or her educational attainment does not mean that educational attainment changes). Endogenous social network effect varies with the prevalence of an attitude or behavior within a social reference group. That group may be made up of individuals with various characteristics or even who live in spatially discontinuous areas. These effects are bi-directional; that is, as a behavior becomes prevalent amongst a critical share of that group, that group behavior influences the individual's behavior, but at the same time, the individual's behavior aggregates or makes up part of the group level behavior, indicating a reflection problem.

Together these findings suggest that generating trust in police requires more than fair procedure. It involves exercising fair procedure within an impartial normative context which underscores the sincerity and commitment of police to procedural fairness policies. It also involves incorporating elements of the community policing philosophy in that the presence of a social network effect on trust in police means that the procedural fairness

approach needs to operate at the individual as well as the network level. Doing so may require what Rothstein calls an indirect big bang approach that sets the collective narrative of police mistrust “off-balance” long enough for progress in trust-building to be made.

The dissertation had several limitations. The first limitation comes in article two with the need to use the European Social Survey Round 5. The European Social Survey is a rich trove of data on a variety of topics, including measures of personal well-being, politics, public attitudes toward climate change and justice. Despite this, the goal of this particular essay was to say something about police and impartiality in the United States. The United States has its own set of unique historical conditions which have led to current levels of police trust, which is true of the European data also, but which make direct comparisons based on the norms of institutions difficult. What can be said with some degree of certitude is that, at least in the European context, across countries and historical institutions, universal impartiality is a significant predictor of trust in police. Ideally, data such as these would be available in the American context. It could be argued that the United States and Western Europe would be somewhat comparable: both respond favorably to universal impartiality. However, that argument is speculative.

The second limitation comes from the character of the data in both empirical articles. Both the European Social Survey and the Social Capital Benchmark Survey are cross-sectional in nature, which limits the scope for inferring causal relationships. In the ideal scenario, police performance, procedural fairness, universal impartiality and social capital data would be together in a longitudinal panel which would allow for better analysis of the impacts of these concepts on perceptions over time. Concepts like universal impartiality and social network effects are not likely to change in the short term because of

a new, more partial political and policing regime. If a society has come to expect universal impartiality from its public officials it will not throw that norm away even if the entire state behaves partially toward groups in society. This is not the case, however, for procedural fairness policing or police performance, especially in locations where universal impartiality is perceived to be low. Similarly with social network effects, it is unlikely that the influence of social network effects would abate in the short-term, but it may be the case that the effect of social networks is not consistent over time and could be stronger at some points relative to events in the community. Having data measured at regular intervals might help disentangle whether there is a causative relationship between police performance, procedural fairness and universal impartiality or whether past events – such as historical corruption of institutions (collective memory) – leads to path dependent outcomes.

Another limitation is that people might have difficulty separating procedural fairness from impartiality. Even though the ESS Round 5 data set provides access to an array of individual perceptions regarding the police and the courts that is unsurpassed in its richness, questions such as that for *fair treatment* (“*In the cases they deal with, do police treat victims in a fair and impartial manner?*”) conflate the two concepts, making them analytically difficult to parse out, and thus having an impact on the level of certainty that can be carried by the conclusions presented here. One final limitation is that quantitative research designs may not capture the role or the impact of collective memories on contemporary trust attitudes and behaviors. Most collective memory work tends to be qualitative and relies on in-depth interviews to probe the content but also how these memories are used politically. It is important not only to understand what people’s perceptions of the police are but also to probe deeper into when and how these perceptions

articulate. So in addition to being able to understand how memory of the police is important to people, it should also be possible to measure how impactful those memories are viz a viz individual-level trust in police.

The extensions which future research should examine follow from the limitations of the present study. The first extension is that it is critical for the study of police, not only in terms of trust but also in terms of the information available about police departments, to have a deploy a standardized law enforcement survey taken at regular and routine intervals that includes some measures of public attitudes and behaviors towards police. The Law Enforcement Management and Administrative Statistics (LEMAS) series provides some portion of this data already, but it has two serious limitations. First, LEMAS is conducted every three to five years instead of every year, which is an issue because departmental priorities and funding can vary over time, and this leads to changes in the police services offered. With data collected every three to five years it is difficult to detect how these changes were brought about: perhaps there was a police surge followed by a gradual draw down of officers or perhaps a community policing unit was found to be compromised, leading to its dissolution. Knowing more about the department from year to year can aid greatly in utilizing police data with other data sets. The second issue is that LEMAS surveys change each time they are deployed making comparison longitudinal panel analysis impossible on all but the most general characteristics of departments. Having these surveys standardized will improve the type of analyses that can be conducted with this data.

Another extension is the need for an update to existing social capital and trust data in the United States. The Social Capital Benchmark Survey (SCBS) 2000 and 2006 remain some of the richest data sources for researcher looking to study these topics but they are at

the time of writing over thirteen years old. Further, only the SCBS is geocoded so it is not even possible to look at how levels of social capital or trust change over time (also means they can't be used as a panel). This is a problem for researchers looking to measure the effects of new police strategies and tactics on perceptions of police in the population served, such as is the case with procedural fairness, police performance and impartiality. It is likely the case that smaller, department specific databases exist that contain some of this data, but the lack of general availability of these databases and their lack of standardization means that they are not widely comparable which makes comparison over time studies difficult. A survey like the European Social Survey, which was used for one of the empirical articles in the present study, which is conducted every 2 years, and which adds new modules over time would be ideal in the American context, particularly if that data was geocoded.

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