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Police Officer Attitudes about the Importance of External Procedural Justice

David Borchardt

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Police Officer Attitudes about the Importance of External Procedural Justice


by
David Borchardt


An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Philosophy

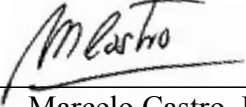
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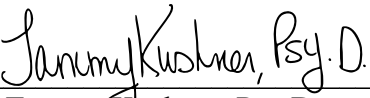
Approval Page

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Statement of Original Work

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David Borchardt

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November 21, 2022

Date

Dedication

To those who have stood the watch with me, Airmen and peace officers alike, but more recently, Alfredo A., Nick C., Ricky U., Troy M., Cody L., “Ashley,” Bobby B., Clayton L., Payton P., David A., Michael S., Sam H., and Brian A.

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Abstract

Police Officer Attitudes about the Importance of External Procedural Justice. Borchardt, David, 2022: Applied Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Keywords: police, procedural justice, organizational justice, citizen, legitimacy, officer

External procedural justice has been found to have a relationship with cooperation, compliance, and police legitimacy. Extant methods to increase external procedural justice during police-citizen interactions have been met with mixed results. Fair policing from the inside out proposes that organizationally just treatment of officers will lead to external procedural justice during encounters between officers and citizens. Police organizational justice, comprised of the dimensions of distributive justice, procedural justice, interpersonal justice, and informational justice, has been found to have a relationship with external procedural justice, however, the majority of research has been conducted using overseas samples. The minority of work in the U.S. has occurred exclusively in the Midwest. Additionally, the individual dimensions of organizational justice have been less frequently examined. Organizational justice has been found to be associated with many desirable outcomes both within the policing profession and in many other professions outside of policing. This study contributed to the current literature through use of an extra-Midwest U.S. police sample and examination of the relationship between the four dimensions of police organizational justice and external procedural justice. There were no significant correlations or linear regressions between the independent variables and the dependent variable. An analysis in which the four independent variables were combined into a composite organizational justice independent variable measured using a single scale yielded both a significant correlation and regression (Bolger & Walters, 2019; Colquitt et al., 2001; Donner, 2021; Donner & Olson, 2020; MacQueen & Bradford, 2015; Sun et al., 2020; Van Craen, 2016b).

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Chapter 1: Introduction

Police legitimacy has recently declined. Police legitimacy is the belief among a community that officers have a moral authority to enforce the law, maintain order, and be obeyed. One of the potential causes of the decline is hypothesized to be public sentiment regarding high-profile police killings of citizens. Public sentiment based on individual incidents is beyond the control of the police; however, the way an officer treats and interacts with a citizen during a first-hand encounter has been found to predict outcomes such as police legitimacy (Bolger & Walters, 2019; Donner, 2021; Donner & Olson, 2020).

Nature of the Problem

Forty-eight percent of American adults expressed a “great deal” or “quite a lot” of confidence in police in 2020, down from 53% in 2019 and down from 63% in the first decade of the century. When race is introduced as a variable, only 19% of African Americans express this same level of confidence, down from 37% 10 years ago (Jones, 2020). The 2020 murder of George Floyd at the hands of a police officer along with killings of African Americans, such as Daunte Wright and Philando Castile (Minnesota), Alton Sterling (Baton Rouge), Eric Garner (New York), Breonna Taylor (Louisville), Botham Jean (Dallas), and Walter Scott (Charleston), has been proposed as a significant contributor to the decline in police legitimacy and general views of the police (Donner, 2021; Donner & Olson, 2020).

In light of these incidents, improving public sentiment is challenging since police agencies and officers have no control over the negative effects of national events. An

officer's display of fairness towards a citizen during an interaction, known as external procedural justice, is, however, within the officer's control.

Officers' views of citizens and external procedural justice are not always positive. One study showed officers, overall, had lower ratings of the importance of external procedural justice and did not believe demonstrating elements of external procedural justice, such as respect and providing an opportunity for citizens to give their side of the story, was as important as citizens did (Bates et al., 2015).

Efforts to improve officer perceptions of external procedural justice have met mixed results. In one evaluation of external procedural justice training, respectful attitudes towards community members declined in both experimental and control groups. Furthermore, observation of videoed training simulations showed, overall, although police recruits in the experimental group were significantly more likely to be respectful and supportive initially following external procedural justice training, this effect decayed over time (Rosenbaum & Lawrence, 2017).

There is a gap in the current understanding of reasons why some officers display lower levels of external procedural justice. The purpose of this study was to examine sources of individual differences in police officers' external procedural justice beliefs.

Perceptions of Police Organizational Justice.

Police organizational justice (sometimes referred to as internal procedural justice) is an officer's perception of how that officer and the officer's peers are treated by people with formal authority over them on the job, such as supervisors, mid-level managers, the chief executive, or the collective organization. Police organizational justice is composed of four dimensions. Distributive justice refers to the fairness of outcomes. Procedural

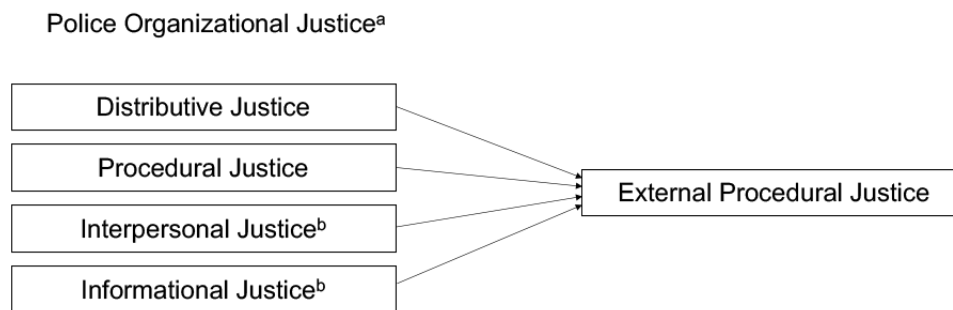
justice refers to the fairness of the process by which those outcomes are arrived.

Interpersonal justice refers to dignity and respect showed to officers by those with formal authority over them. Informational justice refers to the candidness of those with formal authority over officers in providing rationale and justification for outcomes (Colquitt, 2001; Colquitt et al., 2001).

Since the late 1990s, organizational justice has emerged as having both positive and negative relationships both in policing and professions outside of policing. A cross-profession meta-analysis found significant relationships between organizational justice and the quality and the quantity of work and noted a significant inverse relationship between organizational justice and misconduct. One study found police organizational justice predicted officer job satisfaction and decreased frustration and anger. Moreover, positive officer perceptions of police organizational justice remain deficient in policing (Diehl et al., 2018; Sun et al., 2019; Wu et al., 2018).

Figure 1

Conceptual Model



^aAlso referred to as police internal procedural justice

^bInterpersonal and informational justice are sometimes combined into a single dimension referred to as interactional justice

Organizational Justice Beliefs and External Procedural Justice.

Figure 1 depicts how the four dimensions of police organizational justice might affect external procedural justice. Van Craen (2016b) titled this relationship “fair policing from the inside out” and theorized a correlation between officer perceptions of organizational justice and officer perceptions of external procedural justice. Following this conceptualization, several studies found police organizational justice predicted external procedural justice in both police and correctional settings, although two studies did not find this relationship (Donner & Olson, 2020; Ivkovic et al., 2020, Jonathan-Zamir & Harpaz, 2018).

Distributive Justice. One study found distributive justice, as a dimension of organizational justice, predicted satisfaction with a student’s final grade in an undergraduate class as well as the mental linkage between inputs and positive outcomes among factory workers. Another study reported distributive justice predicted perceptions, such as overall satisfaction with outcomes in an organizational environment and organizational citizenship behaviors, which are behaviors benefitting the organization that are not a condition of employment (Colquitt, 2001; Colquitt et al., 2001).

In criminal justice settings, a systematic literature review noted distributive justice predicted officer satisfaction with hiring decisions, selection for special assignments, compliance with leadership decisions, willingness to report misconduct, and inversely predicted misconduct. Another study in the African country of Ghana found distributive justice predicted officer support for democracy. Furthermore, this same study found a link between distributive justice and external procedural justice; however, this finding was not replicated in Israel. The Israel study indicated distributive justice initially

predicted perceptions of public support and feelings of self-legitimacy, although significance disappeared in successive models (Donner et al, 2015, Jonathan-Zamir & Harpaz, 2018; Tankabe, 2014).

Procedural Justice. A study among undergraduate students noted procedural justice, as a dimension of organizational justice, predicted positive instructor evaluations and student compliance with classroom rules. A second study among working adults observed procedural justice predicted many outcomes such as job satisfaction and organizational commitment. Among police, one study discovered procedural justice correlated with support and satisfaction with democracy overseas. This study also found a link between police organizational justice and external procedural justice, although, again, this finding was not replicated in Israel (Colquitt, 2001; Colquitt et al., 2001; Jonathan-Zamir & Harpaz, 2018; Tankabe, 2014).

Interpersonal Justice. Interpersonal justice has been found to predict positive evaluations of instructors in an academic environment and willingness to voluntarily help other co-workers in a factory environment. Furthermore, interpersonal justice has been observed to have a relationship with several variables, including job satisfaction and evaluation of specific leaders (Colquitt, 2001; Colquitt et al, 2001).

Informational Justice. Informational justice was noted to predict collective esteem among both undergraduate students and factory workers. Furthermore, informational justice has been found to correlate to outcomes, such as evaluation of specific leaders and employee performance (Colquitt, 2001; Colquitt et al., 2001).

Links Between External Procedural Justice and Citizen Beliefs.

External procedural justice has been found to be linked to citizen beliefs about police legitimacy. It has been hypothesized legitimacy is one of at least two variables—the other being trust—that are important to a police agency’s relationship with its community and, in turn, the agency’s efficacy. A meta-analysis of police studies noted legitimacy maintained a significant relationship with the amount of cooperation offered to the police by a community. Another evaluation observed a relationship between legitimacy and cooperation, as well as several other outcomes the police require to function adequately (Bolger & Walters, 2019; Bottoms & Tankabe, 2012; Tankabe, 2013).

The relationship between external procedural justice and legitimacy is the premise of the self-interest or instrumental model, which posits that external procedural justice is important because it legitimizes outcomes, both present and future, and secures compliance in the future through assurance to those subject to the decisions of police that standards are equal and consistent. External procedural justice has been positively correlated to both police legitimacy and compliance in dozens of studies (Bolger & Walters, 2019; Colquitt, 2001; Walters & Bolger, 2019).

Background and Significance

Citizen perceptions of external procedural justice impact their overall views of police. About 61.5 million persons aged 16 or older experienced some sort of direct contact with police in 2018 (24% of the population). Of this number, a little more than half contacted the police for help, and under half were subject to involuntary contact with the police, the vast majority on traffic stops. Since relatively few Americans have direct contact with the police each year, views of the police by most Americans may be based

on vicarious experiences of family or friends, societal norms, and the media. Thus, a citizen's perception of external procedural justice in a single interaction could have far-reaching effects on public opinion and future interactions with officers (Harrell, 2020; Nagin & Telep, 2019).

The theory of planned behavior posits that perceptions of external procedural justice are important because attitudes are one of at least three antecedents of intentions to behave in a particular manner. Intentions are positively related to actual behavior, particularly in respect to situations where a person remains largely unaffected by subjective norms and the person's perceived behavioral control or the ease or difficulty in behaving in that manner (Ajzen, 1991). One meta-analysis found intention to act in a particular manner accounted for 22% of the variance in performing the act, and attitude about the behavior was responsible for 24% of the variance in the intention to act. Although attitudes by themselves have been theorized to be generally poor predictors of behavior, research to date indicates there is a moderate link between *officer* attitudes and behavior. Furthermore, in general, "the more favorable the attitude towards the behavior, the stronger should be the individual's intention to perform it" (Ajzen 1991; Armitage & Conner, 2001, p. 474; Ishoy, 2016; Nagin & Telep, 2019).

Existing methods to improve external procedural justice have not included a focus on police organizational justice and have instead consisted of external procedural justice training, scripted external procedural justice-based dialog, and leadership emphasis on external procedural justice in supervisory meetings or through mechanisms, such as COMPSTAT (Antrobus et al., 2018; Bates et al., 2015; Owens et al., 2018; Worden & McLean, 2018).

This study's research adds to the knowledge base of officer perceptions of external procedural justice as it relates to organizational justice because few extant studies utilize a U.S. officer sample, and none are set outside of the Mid-west. Of the dearth of studies examining the relationship between police organizational justice and external procedural justice, the preponderance involved samples outside of the U.S. in China, Croatia, Ghana, Israel, and Taiwan. This is problematic to the U.S.-knowledge base as strong differences in concepts of justice within different cultural contexts exist (Wolfe & Lawson, 2019). Of the four published studies utilizing U.S. samples, one was conducted using a sample of Connecticut prison correctional officers (Evans Peterman et al., 2021), and the remaining used samples drawn from individual police agencies in the Midwest. Furthermore, this study analyzed the dimensions of organizational justice mostly overlooked by the paucity of research. Although extant studies have found a relationship between police organizational justice and external procedural justice, these studies frequently collapsed organizational justice from four-factors to either a one-factor model, a two-factor model, or a three-factor model.

Purpose Statement

The purpose of this study was to examine the extent to which officer perceptions of the four dimensions of police organizational justice contribute to officer attitudes about the importance of external procedural justice. This study contributes to the existing literature by focusing on a U.S., extra-Midwest sample.

Barriers and Issues

The most intuitive approach to the research questions to be presented in this study would have been through an observational and quantitative methodology. Systematic

social observation would have allowed operationalization of behaviors and lead to a high level of statistical validity. Such a method was, however, time, cost, and resource prohibitive. The most feasible alternative was through a survey approach. Unfortunately, this presented many issues as well (Edmonds & Kennedy, 2017).

First, in dealing with variables, such as officer perceptions of external procedural justice in a survey approach, the researcher must trust that what an officer thinks will correlate with what the officer will do. The theory of planned behavior proposed that attitudes that are relatively free of subjective norms and perceived behavioral control will likely result in an intent to behave in a particular manner and the behavior itself. There is a high degree of variance, however, among individual situations and circumstances. Attitudes by themselves are inconsistent in predicting the outcome of actual events in any given situation. An officer who has a positive attitude of a particular behavior is likely to perform that behavior as long as the officer is not affected by external normative or situation-specific factors. Attitudes in combination with subjective norms and perceived behavioral control are much more accurate in predicting outcomes than attitudes alone (Ajzen, 1991; Armitage & Conner, 2001).

The next major threat to a survey approach in the study was in the sample characteristics. Cost and resource limitations made probability sampling impossible. The investigator utilized a convenience sample. In addition to problems with generalizability in such a sample, additional threats included reactivity to the assessment and the timing of delivery (Edmonds & Kennedy, 2017).

Instrumentation posed a challenge. No commonly used, reliable, and validated survey instrument pertaining to perceptions of the four dimensions of police

organizational justice and support for external procedural justice exist. The investigator, therefore, combined and modified two separate instruments to achieve the desired data. This introduced reliability risks including multi-collinearity (Tankabe, 2013).

Definition of Terms

Police organizational justice refers to an officer's overall perception of fairness of the officer's respective police organization management body in terms of outcomes (otherwise known as distributive justice), decision-making processes (procedural justice), treatment of the officer and fellow officers (interpersonal justice), and communication of information pertaining to outcomes and processes for deciding outcomes (informational justice; Colquitt, 2001; Colquitt et al., 2001).

Distributive justice is a dimension of police organizational justice and concerns the fairness of outcomes (Colquitt, 2001).

Procedural justice is a dimension of police organizational justice and concerns the perceived fairness of the processes by which outcomes are determined (Colquitt, 2001; Colquitt et al., 2001).

Interpersonal justice is a dimension of police organizational justice and concerns dignity and respect given to officers by those with formal authority over them. This includes chief executives, mid-level managers, and direct supervisors (Colquitt, 2001; Colquitt et al., 2001).

Informational justice is a dimension of police organizational justice and concerns the candidness of those with formal authority over officers in providing rationale and justification for outcomes (Colquitt, 2001; Colquitt et al., 2001).

Interactional justice was a dimension of police organizational justice first hypothesized in the late 1980s and early 1990s. It was later validated to consist of the two separate dimensions of interpersonal justice and informational justice. Some researchers continue to utilize it as a dimension of external procedural justice in lieu of the two separate dimensions mentioned (Colquitt et al., 2001; Nicklin et al., 2014).

External procedural justice refers to the perceived fairness by a citizen of an outcome determined by a police officer to which the citizen is subject to during a police-citizen interaction as indicated by aspects of voice provided by the officer, the impartiality of the officer, the fairness in the process, respect showed by the officer, and information provided through the officer's explanation of the reasons and rationale for the outcome (Antrobus et al., 2018, Colquitt, 2001).

Summary

There are indications police organizational justice has a positive relationship with external procedural justice in police citizen interactions, however, current research lacks insight into the relationship in terms of the dimensions of police organizational justice and, furthermore, includes few U.S.-based samples. This study sought to narrow the gap in the literature regarding officers' perceptions of police organizational justice and external procedural justice. The results of this study were desired to provide insight into practical methods for leveraging police organizational justice in order to improve external procedural justice in police-citizen interactions.

Chapter 2: Review of Literature

U.S.-based police officers have expressed a variety of emotions regarding their perceptions of the public in recent years. Feelings including cynicism and isolation and officers lament their perception of an unsympathetic, unreasonable, and ungrateful public, driven by an anti-police media bias. Furthermore, officers espouse contempt for a justice system that is no longer willing to provide them the benefit of the doubt. Rather, they perceive courts are quick to hand out prison sentences to officers for mistakes that are honest and reasonable in the eyes of those required to make life and death decisions in fractions of seconds. Likewise, officers perceive the leadership of police organizations as out of touch and distant from the realities of line-level work. Although several studies have concluded the amount of negative feelings among officers is no different in years prior to national events such as the murder of George Floyd, the sense of persecution of officers by citizens, the justice system, and even their own management is prominent. In such an environment, promoting more positive views of citizens may be challenging (Duechar et al., 2019; Marier & Fridell, 2020).

External Procedural Justice

External procedural justice is the fairness of the process by which an officer decides an outcome during a police-citizen interaction. Outcomes may include whether or not an officer issues a ticket, makes an arrest, or decides to file charges. In general, external procedural justice shapes a person's reaction to decisions, rules, and policies in both legal and political contexts. Although legitimacy is influenced by the outcome of a decision, it is theorized external procedural justice is the primary influence on a person's views of legitimacy and, therefore, compliance. Alternatively, gaining compliance

through other means, such as deterrence, is problematic since behavior changes when deterrence decays; whereas compliance through legitimacy instilled by external procedural justice is perpetual. Compliance is important to police in the short-term; however, legitimacy is more important in the long-term since it provides a critical reserve of support during times of crisis or intense public scrutiny. The relationship between external procedural justice, compliance, and legitimacy is complex and situational, and “individuals do not have a single schema” for all situations. Nevertheless, different people define external procedural justice similarly. Although situations differ, people’s perceptions of what is fair generally does not vary due to shared cultural norms and values (Tyler, 2006, p. 156).

Many studies examine external procedural justice, legitimacy, and compliance. A meta-analysis of 64 police studies was conducted to determine the most direct pathway from external procedural justice to compliance. Strong to weak effect sizes between external procedural justice and legitimacy, legitimacy and compliance, and external procedural justice and compliance were detected. Furthermore, the relationships between external procedural justice and legitimacy, legitimacy and compliance, and external procedural justice and compliance were significant. The relationship between external procedural justice and compliance became non-significant, however, when the samples were limited to longitudinal studies. Findings indicated beliefs about police legitimacy mediated the relationship between external procedural justice and compliance. Moreover, legitimacy was more of an influence on compliance than external procedural justice was on compliance directly (Walters & Bolger, 2018).

A second meta-analysis of 56 police studies discovered relationships between external procedural justice and both cooperation and legitimacy and a relationship between external procedural justice and cooperation. Furthermore, the study reported a moderation of age on the effect of legitimacy to compliance and on the effect of external procedural justice to cooperation. There was also a moderation of minority status on the effect of external procedural justice to legitimacy, legitimacy to cooperation, and external procedural justice to cooperation. Finally, a moderation of the location, the U.S. versus Europe, on the effect of external procedural justice to legitimacy, legitimacy to cooperation, and external procedural justice to cooperation was detected (Bolger & Walters, 2019).

A paucity of researchers have questioned the conclusions regarding the relationships between external procedural justice, legitimacy, cooperation, and compliance. Among the criticisms is the basis of the aforementioned conclusions on the assumption of a causal relationship between external procedural justice and police legitimacy. Some have argued this assumption is particularly flawed because perceptions of external procedural justice result from a life-long accumulation of “historical, cultural, community, and familial influences” and not simply one or more interactions with police (Nagin & Telep, 2019, p. 762).

Another criticism is that the normative aversion to mala in se crimes in society has a historical, even biblical precedent that would overwhelm perceptions of police legitimacy relating to serious crime. Finally, critics note the prominence of survey instruments used to measure external procedural justice, legitimacy, etc. are misleading since general perceptions are poor proxies for actual behavior. Others, however, have

disputed this (Ajzen, 1991; Armitage & Conner, 2001; Jonathan-Zamir & Harpaz, 2018; Nagin & Telep, 2019).

Other explanations have been offered for the numerous studies that conclude a positive relationship between external procedural justice, legitimacy, compliance, and cooperation. These alternative explanations include reverse causality and third common causes. An observation of a directional relationship between external procedural justice and legitimacy may be in error because human interactions are bi-directional and not one-way as research into the external procedural justice-legitimacy relationship assumed simply because of a difference in power, i.e., the authority of a police officer versus an ordinary citizen. Researchers have summarized that, in these situations, when respect is shown it is highly likely to be received and vice versa, and prior researchers' conclusions were actually rationalizations after-the-fact: in reality, the officer reciprocated dignity and respect, rather than initiated it (Nagin & Telep, 2019).

A third common cause, such as, race, ethnicity, and socio-economic class, may confound the relationship between external procedural justice and legitimacy. It has been proposed that those benefitting from a particular system of authority are likely more legally compliant and have higher perceptions of legitimacy to start with:

Particularly in the most disadvantaged communities where crime often concentrates, separating out the impact of procedurally just treatment on legitimacy perceptions and legal compliance from other influences, such as the historical legacy of police mistreatment, extreme poverty, racial isolation, and various forms of social dysfunction, is a daunting challenge that in our judgment no study has yet even come close to achieving (Nagin & Telep, 2019, p. 773).

Furthermore, relationships between external procedural justice, legitimacy, cooperation, and compliance may be confounded by the fact that a majority of Americans have no direct experience with police in any given year (Harrell, 2020).

The concept of external procedural justice, itself has been criticized as vague and “not the opposite of abusive, immoral, and illegal behavior” (Nagin & Telep, 2019, p. 774). The argument has been made officers can conduct an interaction with a citizen utilizing politeness alone and obtain compliance, but not have acted with external procedural justice as it is commonly defined in the literature. Finally, external procedural justice has its own merits in a democratic society that stand alone and apart from the benefits cited by others. A person or organization need not justify utilizing external procedural justice to an end of legitimacy, cooperation, or compliance. External procedural justice should be the norm and expected (Nagin & Telep, 2019).

Prior Attempts to Elevate External Procedural Justice

The positive correlations between external procedural justice, citizen compliance, citizen cooperation, and police legitimacy have led researchers to test potential methods that could be used to increase levels of external procedural justice during encounters. The extant research has yielded mixed results.

Training

Researchers have evaluated several efforts to train officers to use external procedural justice and inform them of its importance. One study analyzed both the short and long-term effects of external procedural justice training among Chicago police officers. The study found officers in the treatment group had higher perceptions of utilizing external procedural justice. The most favorable external procedural justice

concept among officers was voice, followed by respect, neutrality, and trust. Although the length of time that had elapsed between the training and post-intervention measurement ranged from one day to 10 months, the post-intervention effects appeared to be “relatively enduring” (Skogan et al., 2015, p. 330).

A similar evaluation of external procedural justice training revealed less favorable results. The quality interaction program (QIP) developed by the Chicago Police Department and University of Illinois at Chicago was based on tenets of external procedural justice, including voice, dignity, respect, fairness, impartiality, and genuine concern for a citizen’s welfare. The study showed respectful attitudes towards community members *declined* in both experimental and control groups. Additionally, although police recruits in the treatment group were significantly more likely to be respectful and supportive, these behaviors decreased over time. The training appeared to be hampered by the marginalization of external procedural justice by the police academy culture, which focused on officer safety, policy, and procedures (Rosenbaum & Lawrence, 2017).

The Chicago Police quality interaction program (QIP) was replicated using a sample of Scottish police recruits. Using two different police recruit classes, researchers found a statistical difference in six of 24 pre- and post-external procedural justice training survey items. In response to four items, respondents assessed themselves as having improved skills, primarily in communication, following the training. Two items, however, showed a *decrease* in perceptions of respect afforded to citizens. Additionally, no statistical significance was detected following systematic social observation of three role playing scenarios that measured external procedural justice behavior. Focus groups

revealed officers overwhelmingly regarded the training as onerous, contemptuous of their skills, and, in some cases, as patronizing (Robertson et al., 2014).

The most recent study that evaluated training measured levels of external procedural justice during encounters and officer attitudes towards those encounters in Australia. Officers who received the training showed significantly higher ratings in external procedural justice than those who did not, but there were limitations in this finding. Furthermore, field training officers' ratings of external procedural justice effectiveness were not significant (Antrobus et al., 2018).

Scripted Dialog

Although efforts to increase levels of external procedural justice through training are mixed, more success has resulted from scripted dialog. The Queensland, Australia community engagement trial (QCET) involved roadside checkpoint random breath tests (RBT). During such operations, motorists were instructed to pull to the side of the road whereupon an officer compelled a portable breathalyzer test in order to detect illegal levels of intoxication. Being non-consensual, such interactions had the possibility of being contentious. QCET provided a word-for-word scripted dialog on a notecard for officers to follow. The message included external procedural justice tenets of fairness, respect, trust, and confidence. Surveys measured citizens' views of police during the interaction, satisfaction with police, attitude towards the seriousness of drunk driving, and compliance. Citizens in the treatment group perceived more just treatment by police during the stop, reported their interaction during the RBT changed their views on driving drunk, and improved their overall perceptions of police. Furthermore, citizens in the experimental condition were more satisfied with the encounter with police. Finally,

citizens in the treatment group believed they complied more with the officer's directions (Mazerolle et al., 2012).

Data gathered during the QCET was re-examined to evaluate the effects of external procedural justice in overall citizen perceptions of police ability to solve crime, work with the community, prevent crime, and maintain order. This study found officers in the treatment group rated their own performance during the roadside breath test operations higher than the control group. Furthermore, drivers in the treatment group also rated police performance higher. Outside of the given encounter, the officers rated themselves higher than drivers rated them in terms of effectiveness at solving crime and working with the community. No significant differences in views on crime prevention and order maintenance were noted. Overall, officers had lower perceptions of the importance of external procedural justice and lower perceptions of the public's willingness to cooperate with police (Bates et al., 2015).

Although early studies seemed to promise beneficial outcomes to increasing external procedural justice through scripted dialog, future studies would report lesser results. QCET was replicated with Scottish police using scripted dialog during traffic stops. The replication was somewhat problematic since traffic stops are less routine in Scotland than they are in Queensland. Moreover, drivers in Scotland were often observed to be overly anxious during the experiment. The study revealed citizen perceptions of external procedural justice *increased* in the *control* areas as did citizen perceptions of trust in police, and satisfaction with police. The experiment was possibly confounded by the time of year (holidays), the length of the survey instrument, and the anxiety a citizen

experienced during the traffic stop. The results led to the concession that “dialogue alone is not enough” (MacQueen & Bradford, 2015, p. 436).

A qualitative follow-up to the Scottish QCET replication found important communication failures during implementation may have contributed to the findings. It was discovered officers received incomplete instructions or no instructions at all prior to the experiment which led to poor consistency in the delivery of the message or even outright abandonment of the treatment altogether. Furthermore, some Scottish officers perceived the intervention as being mandated from the top levels of the organization to remedy what senior management believed were officers’ inability to communicate with the public and complaints against officers. Moreover, officers perceived the intervention to be a senior management attempt to repair something that wasn’t broken and officers with many years of service perceived the training on what they considered the most basic of police skills, how to talk to citizens, as condescending. Additionally, officers felt the robotic recitation of the script, which was really intended as key messages, made them appear incompetent and lacking confidence. The general climate of the Scottish police, which had very recently undergone a major re-organization in which nearly a dozen legacy geographic forces were consolidated into a national police force with a centralized command structure, could have affected the study: Budgets and resources had been cut, morale had been damaged, and officers expressed suspicion of the new senior management. Finally, officers perceived that *experience* was the most prominent factor that shaped an officer’s ability to communicate with a citizen, and officers felt the intervention was “imposed by those, whether senior management or outsiders, who failed

to grasp the nature of the job and the nature of the people being dealt with” (MacQueen & Bradford, 2017, p. 339).

A scripted-dialog experiment in Adana, Turkey evaluated external justice during roadside speed intervention operations (Sahin et al., 2017). Similar to previous QCET-style studies, the nature of the encounter was a traffic violation and examined effects both in regard to the encounter and regarding the police in general. Motorists had their speed measured by a radar device by a Turkish National Police officer at the side of the road who would then radio ahead to another officer farther down the roadway who would instruct the offender to pull to the side. A *t*-test showed a significant difference in mean perceptions of the group that was subject to the scripted dialog during the encounter. There was also a significant difference in the treatment group’s perceptions of police generally, although it was marginal. Each of several types of models showed that the treatment had little effect on general perceptions of police but significantly improved encounter perceptions of external procedural justice during the traffic stop itself (Sahin et al., 2017).

Leadership Emphasis

Scripted dialog and officer training programs as a means to enhance external procedural justice have met mixed results. A leadership emphasis program led by police supervisors in Seattle, Washington was evaluated as another path to increased external procedural justice levels (Owens et al., 2018). During sessions with officers, supervisors facilitated conversations about fairly routine events that would not typically be considered worthy of discussion. While the researchers did not provide any examples, they indicated such events might include rather mundane, mostly non-confrontational

encounters with citizens that did not end in an arrest or a use of force. Instead of outcomes, discussions focused on how the officer used external procedural justice in the situation, and supervisors modeled elements of external procedural justice during the dialog. Arrests, uses of physical force, and citizen complaints were used as proxies for an absence of external procedural justice in police-citizen interactions. Officers in the treatment group were less likely than officers in the control group to make arrests although this result was not significant. Furthermore, during the six-week period after an officer experienced a treatment, the officer was between 16% and 50% less likely than they were prior to the intervention to be involved in a use of force, although this finding was similar in effect to several body worn camera studies and, again, non-significant. After collecting additional data, a treated officer was between 15% and 40% less likely to be involved in a use of force though some of these findings were non-significant. The intervention appeared to have no effect on citizen complaints (Owens et al., 2018).

An 18-month longitudinal study in Schenectady and Syracuse, New York measured perceptions of external procedural justice of both officers and citizens using interviews and systematic social observation (SSO; Worden & McLean, 2018). No significant differences between the first and the second wave of officer interviews were detected. Furthermore, no significant differences in interview waves occurred between the two agencies. Citizen data for each agency showed no significant differences except for one platoon of the Syracuse Police Department. Additionally, SSO data yielded few significant results. The exception was the third platoons of each agency post intervention. The researchers speculated the overall results could have been due to already existing high levels of public perceptions of external procedural justice that resulted in

diminishing returns and were unrelated to direct contact with an officer. Furthermore, the agencies' existing mechanism for accountability (COMPSTAT), which was used to communicate leadership emphasis of external procedural justice, was driven by numbers, and detracted from the overall study. Finally, the concept of procedurally just policing appeared to be difficult for police leadership to translate into officer actions other than vague admonitions to be polite and not use profanity. Most citizen responses were at one end of the spectrum or the other (i.e., very, very favorable, or very, very unfavorable) and could have been the result of confirmation bias (Worden & McLean, 2018).

Fair Policing from the Inside Out

Training, scripted dialog, and leadership emphasis as means of leveraging external procedural justice to improve police legitimacy and citizen cooperation and compliance are, overall, subject to mixed results. Van Craen (2016b) introduced another possible path based on the theory of "fair policing from the inside out" (p. 3). Fair policing from the inside out posits officers who are treated justly by police leaders will, in turn, treat citizens in the same regard. Van Craen based the theory on three mechanisms. First, Van Craen (2016b) contended social learning theory and behavior modeling, both good and bad, impacts the behavior of subordinates. Van Craen (2016b) applied the theory to both police supervisors and management in their relationship with line-level officers. Van Craen (2016b) drew mechanism two, negative emotions, from general strain theory and frustration-aggression theory. General strain theory includes goal blockage, loss of positive stimuli, and presence of negative stimuli. Supervisor or management disrespect towards officers is an example of negative stimuli. A supervisor or manager making decisions without input is an example of goal blockage, and a supervisor or

manager making decisions that disrupt an officer's routine without explanation or for seemingly capricious reasons is an example of loss of positive stimuli. Van Craen (2016b) hypothesized that aggression received from a supervisor or manager cannot be responded to in kind without serious consequences, including a reprimand, suspension, or firing, so the negative response is displaced onto citizens. The third mechanism, trust in citizens, posits organizational justice fosters trust in both the organization and supervisors (Agnew, 1992; Bandura, 1971; Dollard et al., 1939).

Police Organizational Justice and External Procedural Justice

Organizational justice and its related concepts have rarely been a subject of police research. Likewise, a dearth of research into the relationship between police organizational justice and external procedural justice has been completed. One of the earliest studies examined the relationship between support for external procedural justice and police organizational justice as part of a larger inquiry in the African country of Ghana. Police organizational justice included the dimensions of distributive justice and procedural justice, both of which predicted support for democracy. Additionally, both dimensions predicted support for external procedural justice, although distributive justice had a greater effect. This finding was later questioned, however, for vague wording of survey items that could have led a respondent to misinterpret items to apply to distributive justice rather than procedural justice and vice versa (Wolfe & Lawson, 2019; Tankabe, 2014).

Another study using a convenience sample of Chicago officers discovered perceptions of police organizational justice had positive and significant effects on perceptions of external procedural justice. Officer trust in citizens also affected

perceptions of external procedural justice. Additionally, certain demographic variables had significant relationships with perceptions of external procedural justice. These findings were based on police organizational justice measured as a single-scale variable (Van Craen & Skogan, 2017).

A study conducted at about the same time as the Chicago study used a convenience sample of Taiwanese police officers. This experiment included many variables, including officer anger, frustration, satisfaction, morale, and compliance with agency policy. Perceptions of police organizational justice were found to have a direct significant effect on perceptions of external procedural justice. A single-scale variable represented police organizational justice although it included items pertaining to procedural, distributive, and interactional justice (Wu et al., 2017).

Although the effect of perceptions of police organizational justice on perceptions of the importance of external procedural justice among officers may be assessed as promising up until this point, the following year, two studies were published with somewhat different results. A secondary analysis of the data previously gathered from Taiwanese police officers found the effect of perceptions of police organizational justice on perceptions of external procedural justice were *not* statistically significant. Perceptions of police organizational justice did, however, significantly affect the variable of moral alignment with citizens. Consequently, moral alignment with citizens exerted influence on support for external procedural justice. Although a direct relationship between police organizational justice and external procedural justice was not detected, there was an indirect relationship mediated by moral alignment with citizens. Consistent with the

majority of research, police organizational justice was measured as a single-scale variable (Sun et al., 2017).

A study of Israeli officers measured police organizational justice using the dimensions of distributive justice and procedural justice. Other variables included perceptions of public support and feelings of self-legitimacy. The researchers' overall model significantly predicted support for external procedural justice, however, neither of their dimensions of police organizational justice predicted support for external procedural justice. Years of officer experience exerted the most effect on external procedural justice overall, followed by feelings of self-legitimacy, and perceptions of public support. The researchers argued a relationship between police organizational justice and external procedural justice may not hold much promise but caveated their findings could be attributed to the highly centralized and militaristic organization of the Israel National Police. Moreover, they advocated that research needed to be replicated in different contexts (Jonathan-Zamir & Harpaz, 2018)

A convenience sample of Chinese police officers was used to evaluate perceptions of police organizational justice and external procedural justice. Unlike the Israeli study, this study revealed perceptions of police organizational justice had a direct effect on perceptions of external procedural justice among officers. Furthermore, there was an indirect effect of police organizational justice perceptions on external procedural justice. Similar to previous studies, several demographic variables demonstrated statistically significant relationships with perceptions of external procedural justice. Additionally, similar to many studies prior, police organizational justice was measured as a single-scale variable (Sun et al., 2019).

A convenience sample of officers from the Rockford, Illinois police department, which was about 40 miles from the site of the Chicago study a few years earlier, found officer perceptions of police organizational justice predicted positive perceptions of external procedural justice. Several demographic variables also exhibited significance. Again, police organizational justice was measured as a single-scale variable (Donner & Olson, 2020).

A subsequent study compared data from Chinese police officers and Taiwanese police officers previously gathered in earlier studies. Six of 12 regression models used perceptions of external procedural justice as the dependent variable. There was an initially significant relationship between perceptions of police organizational justice and external procedural justice in the fourth model of the Chinese sample. However, when the variable of trust in citizens was added to the fifth model, the relationship between perceptions of police organizational justice and external procedural justice became non-significant. The remaining regression models for Taiwanese officers revealed somewhat similar results. Police organizational justice was measured as a single-scale variable and the relationship between police organizational justice and external procedural justice was consistently mediated by trust in citizens, particularly in the Chinese sample (Sun et al., 2020).

A study evaluated a convenience sample of officers attending the Taiwanese Police College. This study found police organizational justice had a direct effect on external procedural justice and an indirect effect via self-legitimacy. Additionally, police organizational justice was measured as a single-scale variable (Chen et al., 2021).

Another study examined the relationship between police organizational justice and external procedural justice as part of a larger effort to evaluate whether or not officers with lower self-control would have a better perception of their own procedurally unjust practices. Using a sample from a medium-sized midwestern police department, external procedural *injustice* was found to be negatively correlated with police organizational justice and age and positively correlated with education level and cynicism. A regression model which included many other variables yielded an inverse relationship between police organizational justice and external procedural *injustice*. Police organizational justice was operationalized into a single-scale variable. This study represented only the fourth evaluation of the relationship between police organizational justice and external procedural justice utilizing a U.S. officer sample (Donner, 2021).

A final evaluation of police organizational justice and external procedural justice in the form of punishment-oriented attitudes measured perceptions from among Connecticut prison officers (who were not sworn police officers) who staffed both general population and special units as well as inmates from both general population and special units. Although an interaction between a corrections officer and offender in a prison is not the same as free-world police-citizen interaction, it is included due to the dearth of research on police organizational justice and external procedural justice. Police organizational justice, which included procedural justice from supervisors and co-workers, was negatively associated with punishment-oriented attitudes towards inmates and exhibited a large effect size (Evans Peterman et al., 2021).

Most extant research reveals a relationship between police organizational justice and external procedural justice, although there are exceptions. Contrary to several studies

testing the fair policing from the inside out hypothesis, a study of Zagreb, Croatia police officers did not detect a significant relationship between police organizational justice and external procedural justice. There was, however, a significant relationship between police organizational justice and trust in citizens and between community-oriented policing values espoused by the officers and external procedural justice. Furthermore, significant relationships between age and trust in the public and age and external procedural justice were detected (Ivkovic et al., 2020).

The Four Dimensions of Organizational Justice

Each of the four dimensions of organizational justice in widespread use have been found to influence a variety of outcomes. Research has been primarily conducted outside of the U.S. and findings are consistent with previous contentions that different dimensions have different relationships with different outcomes (Colquitt, 2001; Tyler, 2006).

Distributive Justice

Of the four dimensions of organizational justice, distributive justice has been studied for the longest period of time (Adams, 1965; Thibault & Walker, 1975). Distributive justice concerns the fairness of outcomes (Colquitt, 2001). A study of professionals working for multinational corporations in India found that distributive justice predicted vigor, dedication, immersion in work, and engagement. After introducing gender, age, job sector, and length of employment, distributive justice continued to predict all of these variables with the exception of immersion in work (Gupta & Kumar, 2013).

A study of employees in long-term medical care facilities in Virginia indicated distributive justice correlated with job and career satisfaction, perceptions of working conditions, work-life balance, and general well-being. These relationships ranged from moderate to strong. After controlling for demographic variables, distributive justice explained the least amount of variance of the four dimensions of organizational justice in a model that evaluated career satisfaction. Distributive justice also explained the least amount of variance among the four dimensions in a model that measured perceptions of working conditions. Furthermore, it explained the least amount of variance in three separate models that used perceptions of participatory decision-making, work-life balance, and general well-being as the dependent variables (Rai, 2015).

Another study conducted using a sample of telecommunications employees in Pakistan revealed strong correlations between distributive justice and satisfaction with an organization's performance appraisal system, satisfaction with an employee's last performance appraisal, and satisfaction with an employee's supervisor. Furthermore, distributive justice was found to be the primary dimension that predicted satisfaction with the results of an employee's last performance appraisal. Similarly, a study in India using a sample of public and private sector bank employees found distributive justice predicted not only performance appraisal system satisfaction, but also predicted satisfaction with the employee's supervisor, satisfaction with the feedback provided by the supervisor, and turnover intentions (Ahmed & Sattar, 2018; Taneja et al., 2015).

A study of professors at a Malaysian university examined the effects of the four dimensions of organizational justice. The study found distributive justice strongly correlated with and predicted both perceptions of intrinsic performance, which included

employee empowerment and self-motivation, as well as an extrinsic performance such as, pay, working conditions, and co-workers. Furthermore, the effect of distributive justice on intrinsic performance was far greater than the other dimensions on intrinsic performance although it was second to informational justice in relation to extrinsic performance (Ali, 2016).

A systematic review of policing literature found distributive justice predicted officer satisfaction with hiring decisions, selections for special assignments, compliance with managers' decisions, willingness to report misconduct, and inversely predicted misconduct (Donner et al., 2015). Additionally, distributive justice predicted support for democracy by officers in the African country of Ghana and predicted external procedural justice, although this finding was not replicated in Israel. Conversely, however, distributive justice predicted perceptions of public support for Israeli police and feelings of self-legitimacy among Israeli officers, although significance disappeared in subsequent models (Donner et al., 2015; Jonathan-Zamir & Harpaz, 2018; Tankabe, 2014).

Procedural Justice

Procedural justice concerns the perceived fairness of the processes by which outcomes are determined (Colquitt, 2001; Colquitt et al., 2001). Among university professors in Turkey, procedural justice was found to exert an effect on the exchanges between supervisors and subordinates in both public and private institutions. Furthermore, qualitative analysis found having voice, a key characteristic of procedural justice, was critical in the academic environment. Procedural justice predicted the vigor with which Indian professionals approached their work, their dedication levels, the degree of immersion in their work, and their engagement with the company. When

controlling for gender, job sector, position, and length of employment, however, procedural justice only continued to predict the degree of work immersion (Gupta & Kumar, 2013; Selekler-Goksen, 2016).

Procedural justice correlated with several positive outcomes among a sample of health-care employees working in long-term care facilities throughout Virginia. Moderate to strong correlations were found with general well-being, satisfaction with working conditions, job and career satisfaction, and work-life balance. After controlling for demographic variables, procedural justice explained just slightly less variance than informational justice and more variance than distributive justice in a model measuring the effects of each of the four organizational justice dimensions on career satisfaction. Procedural justice also explained more variance than distributive justice in a model using satisfaction with working conditions. Informational and interpersonal justice did not significantly predict any of variance in this relationship. The same relationship between these variables and the outcome of perceptions of participatory decision-making was observed in separate models evaluating employee views of participatory decision-making, work-life balance, and feelings of general well-being (Rai, 2015).

Additionally, procedural justice was found to correlate very strongly with Pakistani telecommunications employees' satisfaction with their company's performance appraisal *system*; the correlation was less so with a respective employee's last performance appraisal itself as well as the employee's satisfaction with their respective supervisor. Moreover, procedural justice was the most prominent predictor of satisfaction with a company's performance appraisal system. A different study in Pakistan among the employees in the print media sector examined all four dimensions of organizational

justice and found procedural justice exerted the most influence on turnover intentions. Additionally, a study among bank employees in both state-owned and private banks in India revealed satisfaction with the employee's supervisor and turnover intentions (Ahmed & Sattar, 2018; Hussain & Khan, 2019; Taneja et al., 2015).

A study of professors in a Malaysian university found the dimension of procedural justice correlated strongly with perceptions of extrinsic performance and very strongly with perceptions of intrinsic performance. Moreover, procedural justice predicted intrinsic performance, although the effect was far less than distributive justice. Furthermore, procedural justice did not predict extrinsic performance (Ali, 2016).

Within policing, procedural justice has been found to correlate with support and satisfaction among officers for democracy in Ghana and has been linked to external procedural justice. These findings were not observed among a sample of Israeli officers, however (Tankabe, 2014; Jonathan-Zamir & Harpaz, 2018).

Interpersonal Justice

Interpersonal justice, formerly a component of interactional justice, is one of two of the most recently validated dimensions of organizational justice. Interpersonal justice concerns dignity and respect given to officers by those with formal authority over them including chief executives, mid-level managers, and direct supervisors (Colquitt, 2001; Colquitt et al., 2001).

A Turkish study found interpersonal justice had an important effect during exchanges between leaders and subordinates at private universities, but not at public universities. Interpersonal justice predicted the amount of vigor, dedication, and the level of engagement among Indian working professionals across multiple corporations. When

gender, organizational sector, job position, and tenure were introduced as variables, interpersonal justice continued to predict engagement (Gupta & Kumar, 2013; Selekler-Goksen, 2016).

A study of employees of long-term medical care facilities in Virginia found interpersonal justice correlated weakly to moderately with outcomes including satisfaction with working conditions, general well-being, work-life balance, and job and career satisfaction. Interpersonal justice did not, however, significantly explain the variance in models that measured it against the other three organizational justice dimensions and controlled for demographic variables (Rai, 2015).

Pakistani telecommunications industry employees' perceptions of interpersonal justice were strongly correlated with their satisfaction with their supervisor. Interpersonal justice was somewhat less correlated with the results of the respective company's employee appraisal system and the employee's last performance appraisal itself. Additionally, interpersonal justice combined with informational justice were the strongest predictors of satisfaction with an employee's supervisor. A study in the adjacent country of India using a sample of both private and public sector bank employees found interpersonal justice predicted satisfaction with one's supervisor but did not predict other outcomes such as satisfaction with pay or turnover intentions (Ahmed & Sattar, 2018; Taneja et al., 2015).

A study of Malaysian university instructors revealed interpersonal justice strongly correlated with perceptions of intrinsic performance and moderately correlated with views of extrinsic performance. Interpersonal justice only *predicted* intrinsic

performance, however, and was the least in effect among the four dimensions of organizational justice (Ali, 2016)

Informational Justice

Similar to interpersonal justice, informational justice was formerly a component of interactional justice and is the second of the two most recently validated dimensions of organizational justice. Informational justice concerns the candidness of those with formal authority over officers in providing rationale and justification for outcomes (Colquitt, 2001; Colquitt et al., 2001).

Informational justice was found to be a significant antecedent during exchanges between supervisors and professors in both public and private universities in Turkey. Qualitative findings in the same environment indicated perceptions of a lack of transparency and even untrustworthiness accompany relationships that do not include informational justice. Informational justice predicted Indian professionals' vigor, dedication, degree to which they were contentedly immersed in their work, and engagement. When controlling for gender, organizational sector, job position, and tenure, informational justice continued to predict dedication and engagement (Gupta & Kumar, 2013; Selekler-Goksen, 2016).

Informational justice was found to be weakly to moderately correlated with working conditions, general well-being, work-life balance, and job and career satisfaction among a sample of employees in long-term medical care facilities in Virginia. Additionally, informational justice explained the most variance among the four dimensions of organizational justice in a model that measured job and career satisfaction that controlled for demographics. Conversely, however, informational justice was not

significant in models that evaluated perceptions of working conditions, participatory decision-making, work-life balance, and well-being (Rai, 2015).

Informational justice was found to be strongly correlated with Pakistani telecommunications employees' satisfaction with their individual supervisor; slightly less so with their satisfaction with the employee appraisal system itself, and somewhat less so with the results of their last appraisal. In nearby India, a study of bank sector employees found informational justice predicted satisfaction with the performance appraisal system and satisfaction with the employee's supervisor and the feedback provided by that same supervisor (Ahmed & Sattar, 2018; Taneja et al., 2015).

Informational justice was found to strongly correlate with perceptions of both intrinsic and extrinsic performance among a survey of professors at a Malaysian university. More critically, informational justice was found to predict both outcomes and was one of only two dimensions that predicted extrinsic performance. Furthermore, it exerted a stronger influence compared to distributive justice (Ali, 2016).

Outcomes Associated with Organizational Justice

Researchers have studied organizational justice extensively in the workplace. A meta-analysis comprised of 279 studies estimated effect sizes of the relationship between organizational justice and task performance, organizational citizenship behaviors, and counter-productive work behaviors (work deviance). The meta-analysis revealed weak to moderate mean effect sizes for the relationship between organizational justice and task performance, organizational justice to organizational citizenship behaviors, and organizational justice to counterproductive work behaviors. Additionally, they noted although organizational justice matters to all employees universally, in the presence of

poor socio-economic conditions, it matters *more*. Furthermore, organizational justice had a stronger relationship on task performance in countries where the perception of rule of law was lower than in countries where it was perceived as higher. The effect of poor socio-economic conditions on the previously mentioned relationships did not extend to the same degree to counterproductive work behaviors, which remained relatively the same regardless of whether socio-economic conditions were better or worse. Certain variables significantly moderated the strength of the relationship between organizational justice and the outcomes studied through the construction of more than a dozen weighted least squares regression models. For instance, human development significantly moderated the relationships between organizational justice and employee performance and organizational justice and citizenship behaviors. Overall, socio-economic factors contributed to the variations in strength among the relationships between organizational justice and the outcomes considered. The moderating effects of poor socio-economic conditions, which increased the strength of the relationship between organizational justice, organizational citizenship, and work performance, had the largest effect when employee confidence in and compliance with the laws of society, the availability of health care, education, and attainability of a satisfactory standard of living, were all very low. Furthermore, “existential uncertainty” seemed to make employees especially sensitive to the presence or absence of organizational justice, leading the investigators to conclude, “When times are rough, organizational justice matters most” (Diehl et al., 2018, p. 2394).

Outcomes Associated with Police Organizational Justice

Police organizational justice has been examined less in policing than in the workplace in general. Of the extant literature, many studies have demonstrated positive and complex relationships between organizational justice and desirable outcomes using police samples. One study examined the relationship between police organizational justice, organizational commitment, job satisfaction, and willingness to comply with policies among a random sample of 88 U.S. police agencies. Although police organizational justice was constructed using four dimensions, rather than the four dimensions mentioned previously, four different dimensions were selected: organization-wide justice, supervisory justice, leadership justice, and diversity justice. Organization-wide justice was defined as officer beliefs regarding the fairness of administrative actions, such as discipline, promotions, and the allocation of desirable assignments. Supervisory justice included the frequency with which officers perceived supervisors engaged in fair and transparent practices, including establishing expectations and seeking input on decisions. Leadership justice related to similar perceptions of the agency leader, such as the chief of police or sheriff. Diversity justice regarded the perceptions of fair treatment among officers regardless of race. Within the construct, organization-wide justice was the strongest predictor of organizational commitment, job satisfaction, and compliance with policies. Supervisory justice had a positive effect on organizational commitment and job satisfaction. Leadership justice had a positive effect on organizational commitment, job satisfaction, and compliance with policies. Finally, diversity justice had a positive effect on organizational commitment, job satisfaction, and compliance with policies. Additionally, other variables demonstrated significance,

including race and ethnicity, gender, supervisor status, officers who had at least some education above the undergraduate level, age, and agency type (Rosenbaum & McCarty, 2017).

A subsequent study examined police organizational justice and its ability to mitigate the effects of uncertainty in the workplace, and uncertainty caused by negative high-profile police-citizen encounters in recent years, upon officer job satisfaction among a sample of 868 U.S. border patrol agents. The study revealed perceptions of police organizational justice from the agents' supervisors, as well as from the border patrol command staff, affected job satisfaction. Both uncertainty within the workplace and uncertainty from recent negative media attention on police were found to be negatively related to job satisfaction. Moreover, perceptions of police organizational justice from command staff and workplace uncertainty demonstrated an interaction effect with job satisfaction in a second model and, overall, police organizational justice from command staff had the strongest effect on employee job satisfaction among those agents who were the most uncertain. Perceptions of self-legitimacy among agents also had a relationship with job satisfaction (Wolfe et al., 2018).

A study in Taiwan identified a significant relationship between police organizational justice and external procedural justice. Additionally, the model used in the study included officer anger and frustration, job satisfaction, morale, and officers' willingness to comply with policies related to interactions with citizens. There were not any significant associations between job satisfaction, morale, and compliance with policies or between police organizational justice and compliance with policies. Police organizational justice was, however, found to have a positive effect on job satisfaction

and morale, and an almost equal negative effect on anger and frustration. Job satisfaction had a positive significant effect on external procedural justice. Anger and frustration had a negative effect on compliance with policies, and a positive effect on external procedural justice. Moreover, police organizational justice had a significant, though indirect, effect on compliance, mediated by anger and frustration (Wu et al., 2017).

A study that examined police organizational justice in Argentina using a sample of Buenos Aires officers found police organizational justice and trust were correlated with compliance. This finding was interpreted to suggest an officer who perceives a supervisor as fair and trusting is more likely to be compliant with supervisor instructions and agency policies. Furthermore, prior experience, that is, having previous experience in another police agency, was also correlated with compliance, as was having a higher level of education. Finally, male officers, officers who had less education, and older officers, were more likely to perceive police organizational justice and have trust in their supervisors (Haas et al., 2015).

As part of an overall examination into the relationship between police organizational justice and external procedural justice, a study additionally examined Taiwanese and Chinese officers' trust in citizens and willingness to comply with police policy. The second of six models the investigators constructed for the study using a Chinese sample revealed a relationship between police organizational justice and willingness to comply with policy. The third of the investigators' Chinese models showed police organizational justice had an effect on compliance with policy. The sixth and final model for the Chinese officer data, which included willingness to comply with agency policy, showed a relationship between trust in citizens and external procedural justice;

however, the effects of police organizational justice and willingness to comply with policy were non-significant. Several demographic variables were also consistent throughout the regression analysis (Sun et al., 2020).

Six regression models using the Taiwanese sample yielded similar results. A positive correlation between police organizational justice and trust in citizens and willingness to comply with agency policy was present in all six regression models. Additionally, trust in citizens had a positive effect on compliance with policy and perceptions of police organizational justice. Furthermore, trust in citizens affected perceptions of both police organizational justice and external procedural justice in three models. Two models revealed assignment to a field station, and marital status (in one model) predicted trust in citizens. Finally, years of experience predicted trust in citizens in three models (Sun et al., 2020).

The relationship between police organizational justice and trust in the citizens was evaluated using the four dimensions of external procedural justice in a study drawn from four medium sized police departments in Michigan. A series of four models were utilized. The first model revealed police organizational justice predicted trust in citizens. The second model added organizational commitment, which, along with police organizational justice, was found to predict trust in citizens. The third model added views of community policing coded as unfavorable or neutral. Police organizational justice continued to predict trust in citizens in this model, as did both unfavorable and neutral views of community policing, however, organizational commitment lost significance. The final model consisted of the above variables and added the variables of gender, race, and age. Only police organizational justice, unfavorable views of community policing,

and neutral views of community policing predicted trust in citizens in this model (Carr, 2016).

A study conducted to explore the hypothesis that police organizational justice predicted officer perceptions of external procedural justice additionally proposed trust in citizens as one of three variables that intervened. This study discovered police organizational justice, age, and race predicted trust in citizens. This study was later criticized for the variable of trust in citizens being vague and poorly defined. To remedy the perceived deficiencies in this first study, another study utilized a sample of officers from four medium-sized mid-west police departments to further examine police organizational justice and officers' perceptions of trust in citizens using a refined trust in citizens variable. This study found police organizational justice had a positive effect on trust in citizens, as well as a positive effect on organizational commitment. Unlike the earlier study, the variables of age, gender, and ethnicity did not exert any influence on trust in citizens (Carr & Maxwell, 2018; Van Craen & Skogan, 2017).

Several additional variables were examined during a wider investigation into the relationship between police organizational justice and external procedural justice. This study found that police organizational justice correlated with age, education level, and negatively correlated with cynicism. Furthermore, an officer having a bachelor's degree or higher or having higher levels of cynicism predicted a decrease in perceptions of external procedural justice. Additionally, being a patrol officer, working vice, being a detective or other specialty officer, and perceiving higher levels of police organizational justice predicted perceptions of external procedural justice. Likewise, a patrol officer with higher years of service predicted perceptions of external procedural justice.

Furthermore, the effect of education on external procedural justice disappeared when the analysis was limited to patrol officers (Donner & Olsen, 2020).

Moral alignment with supervisors, moral alignment with citizens, and trust in citizens was examined abroad as part of the greater effort to examine the relationship between police organizational justice and external procedural justice. This study discovered police organizational justice had an effect on moral alignment with supervisors, moral alignment with citizens, and trust in citizens. Furthermore, moral alignment with citizens had both a direct and indirect effect on external procedural justice. Trust in citizens, gender, education level, and prior military service all had a direct effect on external procedural justice (Sun et al., 2018).

Another overseas study examined the relationship between police organizational justice and external procedural justice and found only an indirect effect; however, police organizational justice had a significant relationship on moral alignment with supervisors and moral alignment with citizens. Moral alignment with supervisors, in turn, had a significant relationship with moral alignment with citizens. Moral alignment with citizens exerted influence on first, trust in citizens, second, on police responsiveness, and, finally, on external procedural justice. Trust in citizens also exerted a positive influence on external procedural justice (Sun et al., 2019).

A previously mentioned study among Israeli officers did not find support for a relationship between police organizational justice and external procedural justice; however, the study did discover years of service exerted the strongest effect on external procedural justice, followed by self-legitimacy, perceptions of public support, and being a minority officer (Jonathan-Zamir & Harpaz, 2018).

A U.S.-based study explored the effects of police organizational justice on a variety of variables using a sample of officers from an unspecified urban police force. Police organizational justice, measured by perceptions of fairness of supervisors, other officers, and agency policy, contributed to what the investigators termed an organizational climate index. Furthermore, supervisors' behavior had the greatest effect on the organizational climate index. Officers who perceived a higher organizational climate index were more likely to perceive the agency as legitimate. Moreover, feelings of legitimacy affected endorsements of democratic policing, and democratic policing, in turn, increased support for external procedural justice with citizens. Finally, the model revealed race had an inverse relationship with perceptions of democratic policing (Trinkner et al., 2016).

Negative Effects of Police Organizational Justice

Scant literature cautions that police organizational justice may yield negative outcomes and at least one researcher has suggested leveraging police organizational justice may backfire. A convenience sample of Queensland, Australia police recruits was used to test the hypothesis that police organizational justice, particularly the sense of belonging to a group, could defeat individual inhibitions against improper behavior (Sargeant et al. 2017). That is, group cohesion as a result of police organizational justice could lead to blind obedience to illegal, unethical, or immoral orders, reinforcement of the police code of silence, and an us-versus-them solidarity. Recruits in the treatment group underwent two to three hours of training that encouraged reporting and intervention of racist and sexist behavior within the agency. The investigators concluded these recruits were less likely to blindly obey supervisors' directives. They further

discovered, although there was no direct effect of police organizational justice on compliance, there was an *interaction* effect. The investigators conceded limitations in their study and noted their results may differ in actual situations. They advocated for values training to supplement police external procedural justice training (Sargeant et al. 2017).

Summary

External procedural justice has been found to have a relationship with cooperation, compliance, and police legitimacy. Extant methods to increase external procedural justice during police-citizen interactions, such as training and scripted dialog, have been met with mixed results. The premise of fair policing from the inside out proposes that organizationally just treatment of officers will lead to increased levels of external procedural justice during encounters between officers and citizens. Police organizational justice, comprised of the dimensions of distributive justice, procedural justice, interpersonal justice, and informational justice, has been found to have a relationship with external procedural justice, however, the majority of research has been conducted using overseas samples. The minority of work in the U.S. has occurred exclusively in the Midwest. Additionally, the four dimensions of organizational justice have rarely been the subject of external procedural justice research. Organizational justice has been found to be associated with many desirable outcomes both within the policing profession and in many other professions outside of policing. The study will contribute to the existing literature through use of police sample outside of the Midwest and examination of the relationship between the four dimensions of police organizational justice and external procedural justice (Bolger & Walters, 2019; Colquitt et al., 2001;

Donner, 2021; Donner & Olson, 2020; MacQueen & Bradford, 2015; Sun et al., 2020; Van Craen, 2016b).

Research Questions

RQ1: To what extent do each of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) individually correlate with attitudes about the importance of external procedural justice among a sample of U.S. police officers?

RQ2: Which of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) uniquely predict attitudes about the importance of external procedural justice among a sample of U.S. police officers?

Chapter 3: Methodology

This study was observational, cross-sectional, and quantitative. The purpose of this study was to examine the extent to which officer perceptions of the four dimensions of police organizational justice contribute to officer attitudes about the importance of external procedural justice.

Participants

Study participants were police officers of the Spring Independent School District (ISD) Police Department, Aldine ISD Police Department, Houston ISD Police Department, Klein ISD Police Department, and Katy ISD Police Dept. These officers are licensed by the State of Texas and primarily employed in a full-time capacity. Officers are responsible for safety, security, and law enforcement for hundreds of elementary, middle, and high school campuses in the City of Houston and Harris County, Texas. Some officers are stationed on middle or high school campuses while other officers perform a patrol function which includes response to on-campus or near-campus incidents, traffic enforcement, and criminal investigations associated with faculty, staff, or students. Officers have full powers of arrest, search, and seizure for any persons or property within Harris County, Texas. All agencies operate 24 hours a day, seven days a week, and 365 days a year. Demographic information on the population of potential participants was obtained through an open records request to the Texas Commission on Law Enforcement which is the state-level regulatory organization over peace officers and police agencies. The total population of officers was 437 ($N = 437$). Houston ISD officers represented 45% of the population. The population was primarily male ($n = 308, 70%$) and African American ($n = 223, 51%$). Frequencies and percentages are presented in

Table 1. The population's officers averaged 43.77 years old. Additional descriptive statistics for age can be found in Table 2. Permission to conduct the research was obtained from the chiefs of all agencies.

Table 1

Agency, Gender, and Race of the Population

Descriptive Measure	<i>n</i>	%
Department		
Spring ISD Police Department.	61	13.96
Aldine ISD Police Department	67	15.33
Houston ISD Police Department	195	44.62
Klein ISD Police Department	51	11.67
Katy ISD Police Department	63	14.42
Gender		
Female	129	29.52
Male	308	70.48
Race		
Multicultural	2	0.46
African American	223	51.03
White	82	18.76
Hispanic	121	27.69
Asian	8	1.83
American Indian	1	0.23

Table 2*Age of the Population*

Age	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Age	44.29	11.09	437	0.53	23.00	72.00	0.14	-0.97

Sampling and Power Analysis

The study utilized a convenience sample. An a priori power analysis using G*Power was conducted. Previous research has detected correlations between police organizational justice and external procedural justice to range between $r = .15$ and $r = .36$ (Chen et al., 2021; Donner & Olson, 2020; Jonathan-Zamir & Harpaz, 2018). The power analysis for the study was conducted utilizing a fixed model R^2 deviation from zero with four predictors, a partial r of .15 ($r = .15$), an alpha level of .05 ($\alpha = .05$), and a beta level of .80 ($\beta = .80$). These inputs revealed the study required 86 participants ($n = 86$) to be sufficiently powered. A simple open-source online sample size calculator revealed 85 participants would be required to achieve a 95% confidence interval with a 5% margin on error.

Instrument

There is no existing and validated instrument measuring the four dimensions of officer perceptions of police organizational justice and external procedural justice. The study combined two sections of two existing instruments for the purpose of examining the extent to which officer perceptions of the four dimensions of police organizational justice contribute to officer attitudes about the importance of external procedural justice. Additionally, the survey collected demographic variables. These variables included

gender (1 = male, 2 = female), race (1 = multicultural, 2 = African American, 3 = white, 4 = Hispanic, 5 = Asian, and 6 = American Indian), and age.

Officer Perceptions of Organizational Justice Measurement

Officer perceptions of organizational justice were measured by the first fourteen items of the police officer's perceptions of organizational justice survey. This instrument used a four-point Likert scale (1 = Strongly Disagree; 2 = Disagree Somewhat; 3 = Agree Somewhat; 4 = Strongly Agree) to measure officer perceptions of police organizational justice as they related specifically to distributive, procedural, interpersonal, and informational justice. This instrument contains two items that measure distributive justice, six items that measure procedural justice, three items that measure interpersonal justice, and three items that measure informational justice. Examples of items include, "I am paid fairly considering the amount of effort I put into the job" (distributive justice); "Senior managers are open to differing views" (procedural justice); "My supervisor treats me with respect" (interpersonal justice); and "My supervisor explains procedures thoroughly" (informational justice). Permission to use and modify the instrument was obtained from the author (Carr, 2016; Carr & Maxwell, 2018; J. Carr, personal communication, September 26, 2021).

External Procedural Justice Measurement

External procedural justice was measured by seven items contained in a survey created by Donner and Olson (2020) to measure police organizational justice and external procedural justice on a four-point Likert scale (1 = Strongly Disagree; 2 = Disagree Somewhat; 3 = Agree Somewhat; 4 = Strongly Agree). Although the instrument examined the variables of interest to this study, the measurement of police organizational

justice did not include specific measures of distributive, procedural, interpersonal, and informational justice. The measure of external procedural justice used for the study included seven items, such as, “I am routinely impartial when dealing with citizens” and “I take the time to listen to citizens give their side of the story.” Permission to use and modify the instrument was obtained from the author (C. Donner, personal communication, September 26, 2021). The survey instrument is available at the appendix.

Research Design and Data Collection

The research design was observational, quantitative, and used a cross-sectional survey delivered electronically through email and using Google Forms. This method was preferred as delivery by email is inexpensive, affords rapid turn-around of data, and the cloud-based Google Forms is available without cost to the researcher. Google Forms has the capability to ensure all questions are answered so as to prevent missing values. Additionally, as an employee of the Spring Independent School District (ISD) Police Department, the researcher had access to the email addresses of those Spring ISD officers in the population through an email distribution list and, additionally, had experience using Google Forms to administer non-academic surveys and found it comparable to applications such as Qualtrics and SurveyMonkey. Access to other ISD police officers was by email through each agency’s chief. An experimental design was not adopted for the study due to the resources, time, and cost involved (Creswell & Creswell, 2018).

The data gathering period was September 6, 2022, to September 16, 2022, and was 11 days in duration. Following institutional review board approval in August of 2022, data gathering was preceded by an email advising participants of the forthcoming survey, its general purpose, and guarantees of anonymity. Three days later, the survey

link was forwarded by email. A reminder email was sent six days later. The reminder email contained an expression of appreciation for those who had completed the survey and a request for those who had not completed it to consider completing it with a reminder of a guarantee of anonymity.

Officers are sometimes wary or even distrustful of the intentions of agency leadership. The survey elicited information pertaining to how an officer perceived both the agency and their direct supervisor. The nature of these questions and identity of the researcher had the potential to contribute to a low response rate or reactivity to the assessment. In an attempt to mitigate these threats, the survey masked the participant's IP address and/or user account from the researcher and each communication regarding the survey to participants advertised its anonymity and emphasized the ethical and academic grounding of the study. Additionally, the combination of five agencies into a single population without identification of which agency the participant was employed with was intended to mitigate reactivity to the assessment. The participants were asked to provide their gender, race, and age. Furthermore, timing of the delivery was considered. For instance, early August, when school starts, is very busy for school officers and was intuitively a poor time to administer the survey (Edmonds & Kennedy, 2017; Reynolds et al., 2018).

Ethical Considerations

The study was submitted to the Nova Southeastern University Institutional Research Board (IRB) for approval and no research was undertaken until after approval was received. Furthermore, all activities were subject to the terms and conditions set forth

by the IRB. These included, but were not limited to, the development and use of informed consent mechanisms, informed consent checklists, and data collection instruments.

Data Security

Google Forms is a versatile open-source application which permits the deployment of surveys and the responses to be aggregated in a Google Sheets, Microsoft Excel, or comma separated value (.csv) spreadsheet format. Google Forms surveys may be delivered in a variety of ways including sharing directly with user accounts or the generation of a short URL (“hyperlink”) which may then be copied-and-pasted into an email message and forwarded. Anonymity of responses was guaranteed by setting the survey response settings to prevent the collection of user accounts or identifying information. By selecting this setting, the IP address and any user identifying information beyond what was elicited in the questions was unavailable to the Google Form originator. Initially, participant responses were located under the researcher’s personal user account (david.j.borchardt@gmail.com). This account is not shared with any other person and is password protected. The URL for the survey was forwarded to participants from the researcher’s employment email account (dborchar@springisd.org) to establish legitimacy, however, participant responses were maintained under the researcher’s personal Google account.

Anonymity

As part of the informed consent process, participants were advised their IP address and user account would not be accessible to the researcher or any other party. Furthermore, participants were informed their answers would be maintained and password-protected in the researcher’s personal Google account until the data collection

period had ended. After the data collection process concluded, participants' responses were downloaded and secured on the researcher's personal computer hard drive and removed from the researcher's personal Google account through deletion of the instrument and associated data. The researcher's personal computer is not shared with any other person and the researcher's personal computer account is password protected. Participants were advised the data collected would only be disclosed in aggregate form.

Preliminary Analysis

Data was imported into Intellectus Statistics.. In all cases, significance was set at $\alpha = .05$. One sample *t*-tests were first conducted to determine if the proportions of individuals with certain demographics were consistent with the proportions in the population regarding race and gender (using dummy variables) and age. These tests were conducted independently of each other. These *t*-tests allowed insight into the generalizability of the sample to the population. Since the data violated *t*-test assumptions of normality or homogeneity of variance, the analysis was supplemented with a two-tailed Mann-Whitney *U* test. Measures of internal reliability through calculation of a Cronbach's Alpha were conducted for each of the four dimensions of organizational justice and for external procedural justice.

Data Analysis to Address Research Questions

RQ1: To what extent do each of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) individually correlate with attitudes about the importance of external procedural justice among a sample of U.S. police officers?

The first research question was addressed through a Pearson correlation test between police organizational justice and external procedural justice.

RQ2: Which of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) uniquely predict perceptions of external procedural justice among a sample of U.S. police officers?

The second research question was addressed by conducting a linear regression to examine the ability of police organizational justice to predict external procedural justice.

Limitations

Independent school district (ISD) police departments are not general law enforcement entities. While officers deal with the public daily in the form of parents, citizens on traffic stops, and the general public who attend graduations and high school sporting events, the meaning of external procedural justice may be different to officers than in the context of the prior research which included general law enforcement agencies. Furthermore, the investigator holds a middle-management position in the Spring ISD Police Department. Police officers are sometimes distrustful of leadership motivations, despite assurances of anonymity, which may have constrained the response rate or resulted in officers inaccurately reporting their perceptions (Reynolds et al., 2018).

Summary

The study was observational, cross-sectional, and quantitative. The purpose of the study was to examine the extent to which officer perceptions of the four dimensions of police organizational justice contribute to officer attitudes about the importance of external procedural justice. Participants were police officers of five different independent school district police departments in the Houston, Texas region.. Data was gathered using

a survey design and delivered by email. Data was analyzed for internal reliability and comparison of the sample means to the population. The research questions were addressed through correlation and regression. Threats to the study included a low response rate, reactivity, and timing of delivery.

Chapter 4: Results

This chapter presents the sample, descriptive statistics, and analysis.

Sample Characteristics

One hundred thirteen ($n = 113$) responses were received. Two participants answered “no” to the screening question, “Are you a sworn/commissioned Texas Peace Officer?” and were exited from the survey instrument without being given the opportunity to submit demographics or answers to items leaving 111 responses ($n = 111$). Due to a researcher oversight, the settings on the Google Forms survey instrument, which would have made answering each question mandatory (to prevent missing data), was not activated until a short while after deployment and after some responses had already been received. This mistake resulted in several responses with unanswered questions or missing demographics.

Listwise deletion was performed for all analysis. One response that was missing answers to two items was deleted; another single response was deleted due to missing the age demographic and an answer to one item; one response was deleted due to missing the gender demographic; another single response was deleted for missing answers to two items. Finally, a response which indicated the age of the participant was “99” was deleted since this was outside of the population range (23,72). A total of 106 remaining responses ($n = 106$) were analyzed in all instances. Listwise deletion of each response with missing data was performed under the rationale that the results were unlikely to be affected by removal of cases due to missing data. The total cases removed was five out of 111 cases or 4.5% of the total responses.

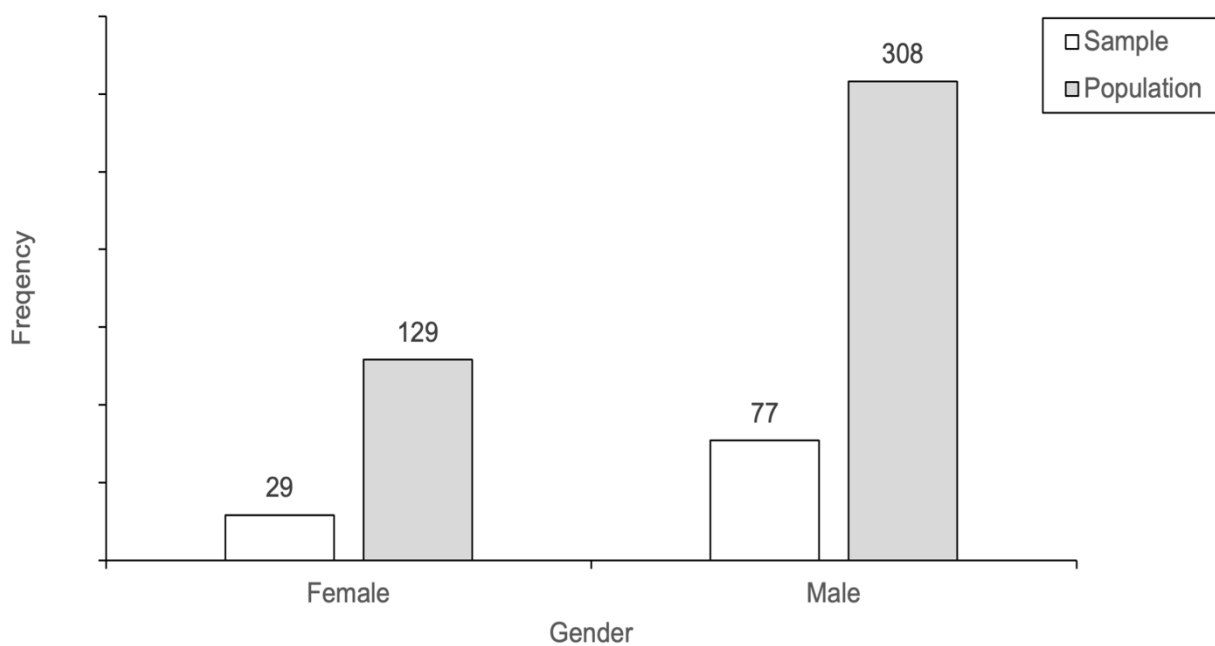
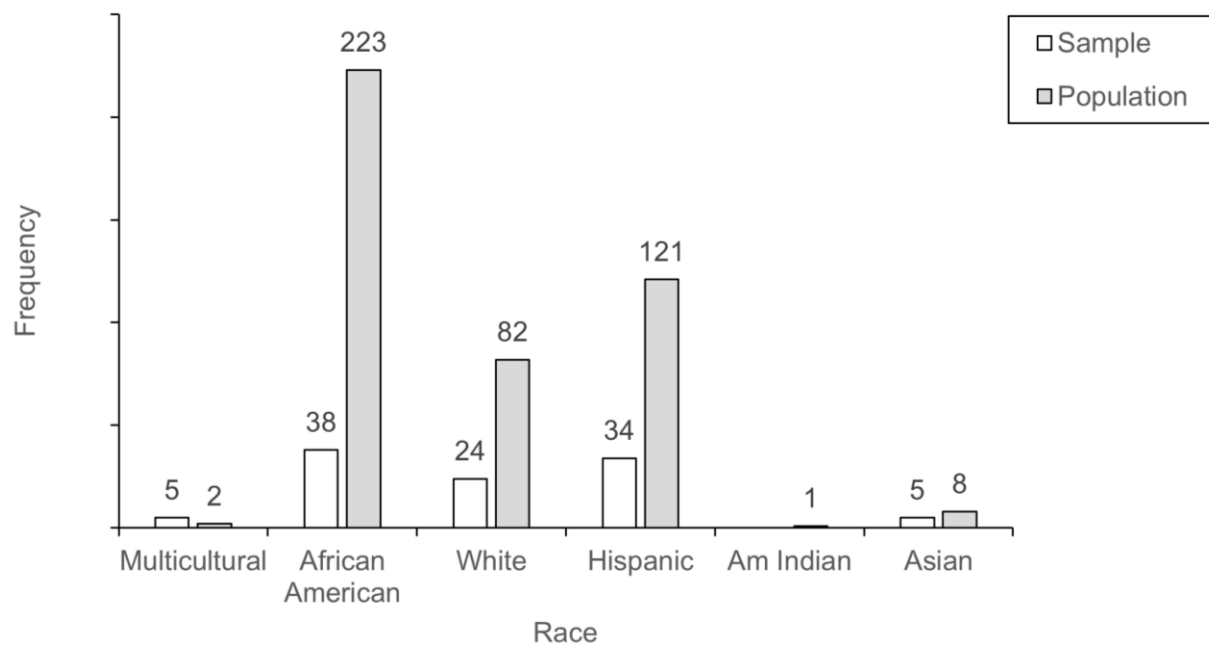
Demographics

The most frequently observed category of race within the sample was African American ($n = 38$, 35.85%). Demographic information on the population of potential participants employed by the five police departments was obtained through an open records request to the Texas Commission on Law Enforcement which is the state-level regulatory organization over peace officers and police agencies. The most frequently observed category of race within the population was also African American ($n = 223$, 51.03%). The most frequently observed category of gender in the sample was male ($n = 77$, 72.64%). The most frequently observed category of gender within the population was also Male ($n = 308$, 70.48%). Frequencies and percentages of gender and race are presented in Table 3 and illustrated in Figures 2 and 3.

Table 3

Gender and Race of the Sample Versus the Population

Descriptive Measure	Sample	Population
Gender		
Female	29 (27.36%)	129 (29.52%)
Male	77 (72.64%)	308 (70.48%)
Race		
Multicultural	5 (4.72%)	2 (0.46%)
African American	38 (35.85%)	223 (51.03%)
White	24 (22.64%)	82 (18.76%)
Hispanic	34 (32.08%)	121 (27.69%)
Asian	5 (4.72%)	8 (1.83%)
American Indian	0 (0.00%)	1 (0.23%)

Figure 2*Bar Graph of Gender of the Sample versus the Population***Figure 3***Bar Graph of Race of the Sample versus the Population*

The sample showed an average of 43.73 years of age ($SD = 11.30$, Min = 23, Max = 69). The average age of the population was 44.29 ($SD = 11.09$, Min = 23, Max = 72).

The summary statistics for can be found in Table 4.

Table 4

Age of the Sample Versus the Population

Age	<i>M</i>	<i>SD</i>	<i>n</i>	Min	Max
Sample	43.73	11.30	106	23.00	69.00
Population	44.29	11.09	437	23.00	72.00

Responses and Variables

Summary statistics were calculated for each of the 21 items. The range of the mean of all items was between $M = 2.49$ and $M = 3.96$. Summary statistics of responses to items may be found in Table 5.

Table 5
Summary Statistics for Survey Items

Item	<i>M</i>	<i>SD</i>	Strongly Agree	Agree Somewhat	Disagree Somewhat	Strongly Disagree
Distributive Justice 1	2.49	1.01	18 (17%)	38 (36%)	28 (26%)	22 (21%)
Distributive Justice 2	2.51	1.02	19 (18%)	38 (36%)	27 (25%)	22 (21%)
Procedural Justice 1	2.92	0.75	20 (19%)	64 (60%)	16 (15%)	6 (6%)
Procedural Justice 2	2.83	0.91	26 (25%)	46 (43%)	24 (23%)	10 (9%)
Procedural Justice 3	2.93	0.91	30 (28%)	49 (46%)	17 (16%)	10 (9%)
Procedural Justice 4	3.26	0.77	46 (43%)	45 (42%)	12 (11%)	3 (3%)
Procedural Justice 5	2.94	0.89	34 (32%)	37 (35%)	30 (28%)	5 (5%)
Procedural Justice 6	2.84	0.95	28 (26%)	45 (42%)	21 (20%)	12 (11%)
Interpersonal Jus. 1	3.61	0.64	72 (68%)	29 (27%)	3 (3%)	2 (2%)
Interpersonal Jus. 2	3.65	0.65	77 (73%)	23 (22%)	4 (4%)	2 (2%)
Interpersonal Jus. 3	3.62	0.61	72 (68%)	29 (27%)	4 (4%)	1 (1%)
Informational Jus. 1	3.40	0.69	54 (51%)	40 (38%)	12 (11%)	0 (0%)
Informational Jus. 2	3.34	0.70	49 (46%)	45 (42%)	11 (10%)	1 (1%)
Informational Jus. 3	3.33	0.73	50 (47%)	42 (40%)	13 (12%)	1 (1%)
External Proc. Jus. 1	3.64	0.81	83 (78%)	15 (14%)	1 (1%)	7 (7%)
External Proc. Jus. 2	3.96	0.19	102 (96%)	4 (4%)	0 (0%)	0 (0%)
External Proc. Jus. 3	3.96	0.19	102 (96%)	4 (4%)	0 (0%)	0 (0%)
External Proc. Jus. 4	3.78	0.44	84 (79%)	21 (20%)	1 (1%)	0 (0%)
External Proc. Jus. 5	3.70	0.54	77 (73%)	27 (25%)	1 (1%)	1 (1%)
External Proc. Jus. 6	3.76	0.43	81 (76%)	25 (24%)	0 (0%)	0 (0%)
External Proc. Jus. 7	3.89	0.32	94 (89%)	12 (11%)	0 (0%)	0 (0%)

Composite variables were calculated by averaging across all items used for each variable. Descriptive statistics for these variables are depicted in Table 6.

Table 6

Summary Statistics for Composite Variables

Variable	<i>M</i>	<i>SD</i>	<i>n</i>	<i>SE_M</i>	Min	Max	Skewness	Kurtosis
Distributive Jus.	2.50	0.98	106	0.10	1.00	4.00	-0.05	-1.08
Procedural Justice	2.96	0.67	106	0.07	1.33	4.00	-0.22	-0.68
Interpersonal Jus.	3.63	0.57	106	0.05	1.00	4.00	-1.91	4.34
Informational Jus.	3.36	0.60	106	0.06	2.00	4.00	-0.44	-0.89
Ext. Proc. Jus.	3.81	0.24	106	0.02	2.86	4.00	-1.57	2.44

Internal Reliability

A Cronbach alpha coefficient was calculated for each variable. The Cronbach's alpha coefficient was evaluated using the guidelines suggested by George and Mallery (2018) where $> .9$ excellent, $> .8$ good, $> .7$ acceptable, $> .6$ questionable, $> .5$ poor, and $\leq .5$ unacceptable. The items for distributive justice had a Cronbach's Alpha of .93 indicating excellent reliability. The items for procedural justice had a Cronbach's alpha coefficient of .86, indicating good reliability. The items for interpersonal justice had a Cronbach's alpha coefficient of .87, indicating good reliability. The items for informational justice had a Cronbach's alpha coefficient of .81, indicating good reliability. The items for External Procedural Justice had a Cronbach's alpha coefficient of .49, indicating unacceptable reliability. The second item of the external procedural justice variable ("I treat all citizens with respect, even criminals or those suspected of crimes.") was negatively correlated with the overall composite score. This variable was

automatically reverse coded to improve reliability. Internal consistency reliability measures for all variables are reported in Table 7.

Table 7

Measures of Internal Reliability

Variable	No. of Items	α	Lower Bound	Upper Bound
Distributive Justice	2	.93	.91	.95
Procedural Justice	6	.86	.83	.90
Interpersonal Justice	3	.87	.84	.91
Informational Justice	3	.81	.76	.86
External Procedural Justice	7	.49	.38	.61

Note. The lower and upper bounds of Cronbach's α were calculated using a 95.00% confidence interval.

Data Analysis to Address Research Questions

RQ1: To what extent do each of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) individually correlate with attitudes about the importance of external procedural justice among a sample of U.S. police officers?

Pearson Correlation Analysis

A Pearson correlation analysis was conducted between each of the composite variables (distributive justice, procedural justice, interpersonal justice, and informational justice) and external procedural justice. Cohen's standard was used to evaluate the strength of the relationship, where coefficients between .10 and .29 represent a small effect size, coefficients between .30 and .49 represent a moderate effect size, and coefficients above .50 indicate a large effect size (Cohen, 1988).

A Pearson correlation requires that the relationship between each pair of variables is linear (Conover & Iman, 1981). This assumption is violated if there is curvature among the points on the scatterplot between any pair of variables. The result of the correlation was examined based on an alpha value of .05. There were no significant correlations.

Table 8 depicts the results of the correlation for all independent variables.

Table 8

Correlations

Variables	<i>r</i>	95.00% CI	<i>n</i>	<i>p</i>
Distributive Justice and External Proc, Jus.	.06	[-.13, .25]	106	.554
Procedural Justice and External Proc. Jus.	.05	[-.15, .23]	106	.639
Interpersonal Justice and External Proc. Jus.	.06	[-.13, .25]	106	.531
Informational Justice and External Proc. Jus.	.10	[-.09, .28]	106	.316

Regression Analysis

RQ2: Which of the four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) uniquely predict attitudes about the importance of external procedural justice among a sample of U.S. police officers?

None of the predictors emerged as significant. This was to be expected since none of the simple correlations between the predictors and external procedural justice were significant. Table 9 depicts the results of the linear regressions.

Table 9
Linear Regressions

Variables	<i>B</i>	<i>SE</i>	95.00% CI	β	<i>t</i>	<i>p</i>
Distributive Justice	0.01	0.02	[-0.03, 0.06]	0.06	0.59	.554
Procedural Justice	0.02	0.03	[-0.05, 0.09]	0.05	0.47	.639
Interpersonal Justice	0.03	0.04	[-0.06, 0.11]	0.06	0.63	.531
Informational Justice	0.04	0.04	[-0.04, 0.12]	0.10	1.01	.316

All 14 items originally constituting distributive, procedural, interpersonal, and informational justice were combined into a single composite organizational justice variable. These items had a Cronbach's alpha coefficient of .88, indicating good reliability. The lower bound was .85 and the upper bound was .91. A significant positive correlation of .30 was observed between the organizational justice variable and external procedural justice indicating a moderate effect size ($p = .002$, 95.00% CI = [.12, .47]). This suggests that as organizational justice increases, external procedural justice tends to increase.

Chapter 5: Discussion

This study used a sample of independent school district police officers in the Houston, Texas metropolitan area to examine the relationship between the four dimensions of police organizational justice (distributive, procedural, interpersonal, and informational justice) and external procedural justice. This chapter comments on the findings, addresses contributions to the existing literature, implications for practice, re-examines limitations, and makes recommendations for future research.

Findings

Regarding the first research question, the null hypothesis cannot be rejected. The four indicators of police organizational justice (distributive, procedural, interpersonal, and informational) did not individually correlate with attitudes about the importance of external procedural justice among the sample. Regarding the second research question, the four indicators of police organizational justice did not predict attitudes about the importance of external procedural justice among the sample. The null hypothesis cannot be rejected.

The findings of this study were inconsistent with the majority of extant research which found organizational justice correlates with and predicts external procedural justice. Findings were, however, consistent with at least two studies concluding no relationship existed. It is important to note however, in each instance of previous research, organizational justice was measured as a single-scale variable and was not, as in this study, disaggregated into dimensions. Furthermore, no previous study has used an independent school district police officer sample (Chen et al., 2021; Colquitt, 2001;

Donner, 2021; Donner & Olson, 2020; Evans et al., 2021; Ivkovic et al., 2020; Jonathan-Zamir & Harpaz, 2018).

Based on the seemingly robust relationship between police organizational justice and a variety of other desirable variables documented in the research, and with the knowledge that both police organizational justice and external procedural justice are regarded as complex, the researcher conducted a post hoc analysis in which all four independent variables were combined into a single-scale organizational justice variable. This single-scale variable was found to have a significant relationship with external procedural justice (Antrobus, 2018; Carr & Maxwell, 2018; Sargent et al., 2017; Tyler, 2006; Wolfe et al., 2018).

The current research including this study suggest there are three possibilities: Organizational justice and external procedural justice are related, but better measurement, particularly of external procedural justice, is needed. Organizational justice and external procedural justice are not related. Organizational justice and external procedural justice are related, but only in certain contexts.

Contributions to the Existing Literature

This study contributes to the existing literature in several ways. First, this study adds to a very small body of extant police research into organizational justice and its related concepts. Similarly, it contributes to a dearth of research into the relationship between police organizational justice and external procedural justice. Even fewer studies in this realm have utilized a U.S. officer sample, and this study constitutes the first to draw a sample from outside of the Midwest. Moreover, few other studies have offered the premise that external procedural justice may be increased by leveraging organizational

justice. Rather, all extant literature involves pragmatic methods for improving external procedural justice through scripted dialog, officer training, or management oversight. Additionally, this study is one of only a few studies to construct organizational justice utilizing four dimensions and one of even fewer to do so using a sample of police officers. Furthermore, the good and excellent internal reliability of the independent variables supports the contention that organizational justice *can* be disaggregated into dimensions. More specifically, it advances the notion that distributive, procedural, interpersonal, and informational justice are indeed those dimensions within organizational justice. Additionally, this study advances knowledge that may one day result in the creation of a commonly used, reliable, and validated survey instrument pertaining to perceptions of the four dimensions of police organizational justice and support for external procedural justice. Finally, this study supports the use of Carr and Maxwell's (2018) items to measure the four dimensions of organizational justice (Colquitt, 2001; Colquitt et al., 2001; Nagin & Telep 2019; Worden & McLean, 2018).

As the first study of officers outside of the Midwest, this research draws into question the assumption that U.S. officers conceptualize external procedural justice in the same manner. Specifically, the unacceptable reliability of the dependent variable supports the idea that strong differences in concepts of justice within different cultural contexts exist and expands this hypothesis to possibly include *regional* contexts as well. Another possibility is that independent school district officers, as a subset of U.S. officers, conceptualize external procedural justice differently than general law enforcement officers due to their specialization. This may signal that, in addition to cultural differences, an officer's *assignment* may exert influence on how that officer

conceptualizes external procedural justice. Clearly, a better understanding of the interaction between the region or assignment of the officer, and the way in which they perceive external procedural justice, can yield better understanding (Jonathan-Zamir & Harpaz, 2018; Wolfe & Lawson, 2019).

The low reliability of external procedural in this study strengthens the argument that external procedural justice is a vague and poorly defined concept. Furthermore, the lack of significant findings advances the possibility that relationships between external procedural justice and other variables are complex and previous findings of significant relationships between external procedural justice and other variables are the result of third common causes such as race, ethnicity, and socio-economic class. Notably, while previous research in U.S. settings has included primarily white officers, this study was overwhelmingly composed of African American and Hispanic officers (Carr & Maxwell, 2018; Nagin & Telep, 2019; Tyler, 2006; Wolfe & Lawson, 2019).

Contributions to Existing Theory

This study does not advance Van Craen's (2016b) theory of "fair policing from the inside out" and the idea officers who are treated justly by police leaders will, in turn, treat citizens in the same regard, though the unacceptable reliability of external procedural justice in this case confounds clear implications (p. 3). Generally, in this study, participants rated their supervisors very high in terms of respect shown, refraining from improper comments, and truthfulness, however, this did not manifest to significant correlations with external procedural justice.

Implications for Practice

Based on the extant literature it seems premature to conclude practitioners should abandon pursuit of organizational justice in order to increase external procedural justice with citizens, however, it does seem somewhat reasonable to conclude from this study there is unlikely to be a “one size fits all” manner in which to do so. Furthermore, it appears reasonable to conclude practitioners should not assume, based on the research to date, that *one* of the four dimensions of organizational justice has more value than the other. It appears advisable that practitioners should make an effort to determine *how* line-level officers conceptualize organizational justice (how they view interactions with management) and *how* they conceptualize external procedural justice (what they believe is “the right thing to do” when dealing with citizens) and be deliberate in matters which are “important” to the overall rank and file. For instance, practitioners would be advised to expend political capital to secure a pay raise to bring officers parity with other police departments in the area (distributive justice), avoid the temptation to simply promote an officer to a coveted position without process or with only a token process for convenience sake (procedural justice), promote an organizational culture that demands courtesy and respect be demonstrated to line level officers by supervision (interpersonal justice), and take time and effort to inform line-level officers face-to-face about the reasons and rationale for decisions made at a high level that may be onerous to officers (informational justice). More pragmatically, assuming there are no backfire effects, agencies should focus on awareness through training of supervisors and leadership on “well-rounded” organizational justice, i.e., more than just the fairness of the outcome of decisions (distributive justice).

Training

To date, training efforts have focused on making line-level officers aware of the benefits of demonstrating external procedural justice during police-citizen interactions. These efforts have meet mixed results and gains often decayed after time. Intuitively, this makes sense if an officer is admonished to treat citizens with, for instance, dignity and respect, however, the officer's supervisor or agency leadership does not model dignity and respect. Rather than training classes, professional development of supervisors and agency leadership, that focuses on teaching and modeling organizational justice. If the end result is not improved external procedural justice, it will, at the very least encourage other benefits such as job satisfaction and morale, organizational commitment, and compliance with decisions (Antrobus et al. 2018; Nagin & Telep, 2019; Rosenbaum & Lawrence, 2017; Rosenbaum & McCarty, 2017).

Few studies have evaluated incorporating organizational justice into police professional education and technical training. One study found the manner in which organizational justice coursework is presented may be important. Leaders who are enrolled in a class to improve their fairness may take offense and not be receptive to the subject matter. Classes advertised with the goal to improve the *perception* of a leader's fairness by line-level employees may be more successful. Furthermore, organizational justice material presented in small doses over a period of weeks or months appears to have a better probability of success than a single dosage over the course of a day or more. Additionally, organizational justice coursework does not appear to be conducive to a "one size fits all" delivery and is likely to be more successful if tailored to an organization through use of a needs assessment. Moreover, a study of organizational

justice education among cadets at the U.S. Military Academy at West Point indicated traditional lecture with accompanying slides was rated as the least popular among several subjects but rose to among the best when the delivery method was altered to an interactive discussion using a game show format (Sarlicki & Latham, 2005; Swain et al., 2019).

Policy

Implications for policy are less clear. What seems to be clear, however, is that organizational justice is deficient in policing. Professional development for police leaders, which could offset this deficiency, does not typically occur until later in an officer's career. National programs such as the FBI National Academy, Southern Police Institute, and state programs such as the Law Enforcement Management Institute of Texas's Leadership Command Course are typically reserved for police executives later in their career long after their leadership styles have been developed, for better or for (but usually) for worse. This is in contrast to military programs which begin leadership professional development well prior to assuming a line-level supervisor position (such as the in-residence U.S. Air Force's Airman Leadership School for line-level personnel) and continue that development (such as the in-residence Non-commissioned Officer Academy for sergeants). While costs to conduct external procedural justice training would likely be less significant than organizational justice professional development, police leadership should take a hard look at spending more money to a more pervasive effect (Reynolds et al., 2018).

Limitations Revisited

This study was possibly affected by previously mentioned limitations. The internal reliability findings of the external procedural justice construct had a Cronbach's alpha coefficient of .49, indicating unacceptable reliability. This is in contrast to the previous use of these seven items among a sample of Rockford, Illinois officers, which was found to have a Cronbach's alpha of .71, indicating acceptable reliability. There are a number of possibilities for failing to obtain acceptable reliability for this composite variable in this study (Donner & Olson, 2020).

Officers in this study rated themselves very highly in terms of their impartiality, respect shown to citizens, listening skills, quality of decisions, and participatory decision-making. This study employed a four-point Likert scale (1 = Strongly Disagree; 2 = Disagree Somewhat; 3 = Agree Somewhat; 4 = Strongly Agree) consistent with its prior utilization. The mean for this study was 3.81 ($M = 3.81$) whereas the mean for the original study was 3.48 ($M = 3.48$). There are a number of possibilities to account for this disparity. As previously indicated, independent school district (ISD) police departments are not general law enforcement entities. ISD officers' concept of "the public" includes students, parents, citizens on traffic stops, and the general public who attend graduations and high school sporting events. Both the meaning of external procedural justice and its actual deployment may be different to ISD officers than in the context of the prior research among general law enforcement agencies. This difference may account for the high self-ratings. Another possibility is that officers rated themselves higher than what a member of the public or systematic social observer would have. This phenomenon has been previously observed (Bates et al., 2015). Another possibility rests in the

geographical location of this sample versus previous U.S. samples located in the Midwest. A final possibility may be due to investigator error. Close inspection of the external procedural justice items in their original publication reveals a single data point (factor loading) missing from the seventh item in a chart in the study's appendix. Furthermore, the text of the article refers to the composite as a "6-item scale." While there is no explicit mention that the seventh item was excluded from the final analysis, these circumstances indicate it is possible a six-item composite variable would have been more robust and reliable than the seven-item composite variable used in this study (Donner & Olson, 2020, p. 398).

There are indications in the data that reactivity may have affected the study. As previously indicated, the researcher holds a middle-management position in one of the five departments surveyed. Despite assurances of anonymity, officers are often distrustful of the intentions of management. Additionally, a prior study examining external procedural justice as a dependent variable identified a backfire effect. Later qualitative investigation into that study's results revealed a portion of this backfire effect was due to distrust of management (MacQueen & Bradford, 2015; MacQueen & Bradford, 2017; Reynolds et al., 2018).

Data in the demographic portion of this study seem to indicate officers *may* have been affected by the researcher's rank and position. Demographic information on the population of potential participants was obtained through an open records request to the Texas Commission on Law Enforcement (TCOLE) which is the state-level regulatory organization over peace officers and police agencies. This retrieval of records showed two (2) participants in the population who self-identified themselves as multicultural to

the state agency, however, the sample contained five (5) participants who identified themselves in the demographic section as multicultural. The demographic information was retrieved in April of 2022 and the survey was administered in September 2022. Furthermore, a listwise deletion included a participant who indicated their age was “99,” which was well-outside of the population age range provided by TCOLE and a 99-year-old police officer would be a well-known outlier within the Houston metropolitan law enforcement community. It is possible these disparities indicate participants attempted to hide their identities due to the sensitivity of the questions and mistrust that the survey was not anonymous. This sentiment could have continued on to the substantive items. It is important to note, however, there are multiple benign explanations for the disparities as well, including simple input error or a shift in a participant’s cultural identity over a period of time.

Recommendations for Future Research

Perhaps the most perplexing aspect of the current study is the unacceptable reliability of the dependent variable. This makes the non-significance of the independent variables and external procedural justice more difficult to assess, particularly in light of distributive justice and procedural justice having repeatedly been found to be a significant variable in prior criminal justice contexts. Closer examination of the data in this study reveals, several items in external procedural justice had low variability, a small standard deviation, and a mean very close to the maximum score ($M = 3.96$, $Max = 4.0$). In the researcher’s experience, officers are generally less proficient at practicing external procedural justice than this data reflects. Furthermore, prior literature has documented instances of officers rating themselves higher than other more objective observers in

terms of external procedural justice demonstrated. The question remains why the internal reliability of this variable was unacceptable. Reactivity remains a distinct possibility and means to mitigate this threat are discussed below, however, other possibilities exist as well including the absence of moderator variables, which a prior researcher suggested could confound the results, and which were included in the use of these items in previous literature (Bates et al., 2015; Donner et al., 2015, Donner & Olson, 2020; Jonathan-Zamir & Harpaz, 2018; Tankabe, 2014; Wolfe & Lawson, 2019).

Instrument Wording

The possibility exists that the items used to composite external procedural justice were not ideally worded. For example, the item “I regularly allow citizens to express their point of view before making a decision regarding their case” might be interpreted by a participant as a *desired behavior*, thus eliciting a response of “strongly agree” regardless of whether or not this is a behavior they routinely perform. More abstract questions might elicit a response free of reactivity. For instance, an item used by a prior study to measure external procedural justice read “If you let people vent their feelings first, you are more likely to get them to comply with your request.” This item is less direct and could elicit a “strongly disagree” response without any seemingly negative implication since the questions includes an outcome to the officer’s behavior not just the behavior itself. Future studies should consider alternate items and scales for external procedural justice (Donner & Olson, 2020; Antrobus et al., 2019, p. 49).

Additionally, prior research has identified a distinction in perceptions of line level officers between organizational justice demonstrated by agency management as a whole and by individual officers’ supervisors. Items compositing the dimensions of both

informational and interpersonal justice in this study began with “My supervisor...” whereas questions concerning the dimension of procedural justice referred to agency management as a whole. Prior studies have posited the mixing of an officer’s perceptions of their supervisor and perception of agency management may confound results. Future research should consider this distinction in the wording of instruments (Rosenbaum & McCarty, 2017).

Instrument Deployment

Another opportunity to improve reliability and measurement may lie in the deployment of the instrument. While concerns about reactivity due to officer mistrust is always of concern in management-driven police research, a different sort of reactivity may take place as well: Several potential participants in this study with whom the researcher works expressed positive sentiment about contributing to the sample in order to further the researcher’s academic progression. Additionally, on two occasions, participants emailed the researcher with a message stating they had completed the survey. Furthermore, the researcher appears to be generally liked by subordinates (possibly in part due to the researcher’s knowledge and practice of organizational justice). There is the possibility that participants attempted to answer questions in ways that would prevent a perceived negative consequence which manifested in low reliability. There is the *additional* possibility that a similar calculus was utilized by officers to “help” the researcher. In other words, some participants without understanding of the statistical methods to be used in analysis possibly answered items in a manner they believed would result in statistical significance and not exclusively on their own perceptions. While the researcher was only familiar with approximately 15% of the eligible population, it may

have affected the outcome. Future studies are ideally deployed by a neutral source without any personal or professional familiarity with the population and studies should not retain any perception of being management driven.

Additional Instrument Refinement

Systematic social observation (SSO) is the best method for eliminating officer biases which manifest in a survey instrument. In lieu of SSO, future research should be mindful of mitigating bias through various methods which include but aren't limited to requesting participants explain item responses or prefaces to the survey asking participants to self-reflect prior to answering the items.

The manner in which officers conceptualize external procedural justice must continue to be investigated. As advocated by other researchers, studies such as this one and others must be replicated in not only a variety of countries, but a variety of regions within those countries, and furthermore within different policing contexts. U.S. and Texas policing has a wide degree of specialization: general law enforcement officers, federal officers, school district officers, transit officers, housing officers, hospital officers, wildlife officers, highway officers, internet crime officers, etc. It is possible that conceptualization of external procedural justice may have a high degree of variance not only between countries, but between regions, and the type of work being done. Future research in understanding and operationalizing external procedural justice must be completed (Jonathan-Zamir & Harpaz, 2018).

Organizational Justice

Prior research has identified that the dimensions of organizational justice (distributive, procedural, interpersonal, and informational) are used in different

combinations depending upon the context. Regarding this, future research should consider scenario-based items designed to tease out the nuances of schemas used by officers. Additionally, this study is evidence that organizational justice *can* be measured by dimensions but leaves the question *should* it be measured with four dimensions. This study found no significance between the four dimensions of organizational justice and external procedural justice, however, a post hoc analysis in which all four independent variables were combined into a single-scale organizational justice variable did have a significant relationship with external procedural justice. While the temptation may exist to measure organizational justice solely as a single-scale variable, prior research has advocated measuring organizational justice using four dimensions, though there is less agreement about what those precise dimensions might be. Moreover, a great deal of research has been conducted on the organizational justice dimensions utilized overseas among the banking, office, and university settings with significant findings. The absence of significant findings in this study may indicate future researchers should consider dimensions of organizational justice may not be static and may differ between both cultures and professions. Regardless, future research must continue to refine and develop dimensions of organizational justice rather than measurement *solely* as a single variable. In particular, future research should include both dimensional variables *and* an overall composite variable in methodology (Carr & Maxwell, 2019; (Tyler, 2006; Wolfe & Lawson, 2019).

Conclusions

External procedural justice is unlikely to be a highly correlated and consistent set of beliefs about the way officers view their interactions with the public. More than likely,

it is highly complex and varies from country to country, regions within that country, and potentially between police specializations. Much work remains to discern how officers perceive the public during police-citizen encounters. While organizational justice is somewhat better understood, it too is complex and the relationship between its dimensions and external procedural justice remain the subject of mixed findings. From this complexity the question emerges whether or not real change in policing can be achieved through organizational justice, whether it's through external procedural justice or other positive outcomes. At least one prior writing insists it can (Aston et al., 2021).

This study has contributed to the literature by examining a U.S. police sample outside of the Midwest. Additionally, the sample contained officers with roles outside of what most would consider traditional law enforcement. The findings support calls for continued research in the area of external procedural justice, however, also identifies *new* questions which challenge previous assumptions about the universality of how officers conceptualize external procedural justice. Practically speaking, this study reinforces potential value in departments emphasizing organizational justice between management and supervisors and line-level officers for its numerous benefits, but also to the benefit of improved interactions with the public; an important caveat to this reinforcement provided by this study is that there appears to not be a “one size fits all” method of doing so.

Future research into external procedural justice should focus on both the refinement of the existing predictors utilized in this study and continued exploration of other predictors including public support, self-legitimacy, trust in citizens, and cynicism. At the same time, continued refinement of the dimensions of organization justice and evaluation as a predictor of external procedural justice has value among these other

variables because police leadership has greater ability to influence organizational justice. Continued research in this area is needed to effect change in the relationship between the police and the public (Donner & Olson, 2020; Jonathan-Zamir & Harpaz, 2018; Van Craen & Skogan, 2017).

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Appendix

Survey

Distributive justice items

I am paid fairly considering the amount of effort I put into the job.

I am paid fairly considering the amount of education, training, and experience I have.

Procedural justice items

Senior managers are open to differing views.

In my department, my opinions are valued and taken into account.

In my department, good performance is recognized and awarded.

In my department, training and development is provided according to need.

The department acts fairly regarding career progression.

Senior management ensures that all personnel are adequately informed on important issues.

Interpersonal justice items

My supervisor treats me with respect.

My supervisor refrains from improper comments or remarks.

My supervisor takes steps to deal with me in a truthful manner.

Information justice items

My supervisor explains procedures thoroughly.

My supervisor provides needed information in a timely manner.

My supervisor's explanations of procedures are reasonable.

External procedural justice

I am routinely impartial when dealing with citizens.

I treat all citizens with respect, even criminals or those suspected of crimes.

I take the time to listen to citizens give their side of the story.

I routinely explain my decisions when dealing with citizens.

I regularly allow citizens to express their point of view before making a decision regarding their case.

I treat all citizens with politeness and respect, even when they are not polite to me.

I make sure that citizens understand the process by which I treat them.