

Gender and Mental Health: An Examination of Procedural Justice in a Specialized and
Comparison Court Context

by

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ABSTRACT

Procedural justice has become a widely researched topic in the criminological field with applicability to multiple arenas, including policing, corrections, and courts. Its main tenets suggest that through fair treatment, respectful dialogue and being given a proper voice, citizens will view their experiences with authority more justly. However, though the literature regarding procedural justice has grown immensely, it is still unclear whether certain characteristics of individuals, such as gender and mental health, play a role in their perceptions of procedural justice. Using secondary data originally collected for Rossman, Roman, Zweig, Rempel and Lindquist's Multi-Adult Drug Court Evaluation (MADCE), an attempt is made to address the previously neglected association between procedural justice, gender, mental health and the added aspect of specialized drug court participation. Results suggest that both gender and mental health, namely depression, play a significant role in predicting procedural justice. Additionally, being a drug court participant was significantly related to higher levels of perceived procedural justice. Implications for theory, research, and policy are discussed.

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INTRODUCTION

In the past few decades, research on procedural justice has expanded considerably, revealing empirical support in variety of contexts (Beijersbergen et al., 2015; Reisig & Lloyd, 2009; Reisig & Mesko, 2009). As legal institutions and society as a whole have evolved, so too has the realm of possibilities in which procedural justice may be applied (Kaiser & Holtfreter, 2016; Reisig & Bain, 2016; Tankebe, Reisig, & Wang, 2016). In recent years, there has also been an influx of specialized courts, created to give offenders higher levels of resources and community supervision and offering a larger role for them in their experience within the justice system. However, though procedural justice is a widely accepted theoretical concept, empirical questions regarding gender and mental health remain unanswered. Exploring how these interactions unfold between citizens and court officials will allow us to assess whether differences in perceptions of procedural justice, examined specifically through gender and mental health in a specialized court context, may inform the likelihood of reoffending.

Though multiple ways of securing voluntary compliance with the law exist, one of the most effective and preferential methods of authoritative institutions are to create a system that relies on fair treatment of members (Tyler, 2006). Such a design exists within the parameters of groups and legal institutions and works to provide coordination and cooperation among its members (Tyler, 2000). Resolutions of disputes can never satisfy every party involved. Instead institutions must rely on the fairness of treatment throughout the process leading to that decision (Tyler & Folger, 1980). Authority is obeyed because the public, as a normative group feature, has given legitimacy to uphold

moral values, and in turn will be compliant when decisions are made (Paternoster et al., 1997). Procedural justice is a major component of this dynamic because not only are fair outcomes needed to retain legitimacy, but there is also a demand for a strong sense of equity ingroup processes.

The goal of this research is to provide a current review of the literature in the area of procedural justice, as well as to figure in the added lens of its manifestation in gender, mental health, and specialized courts. Contributing to the varied literature between this area and gender, a secondary data analysis of the Multi-Adult Drug Court Evaluation (MADCE) is presented that analyzes a population of male and female offenders in both specialized drug courts and comparison sites, detailing whether gender and mental health are significant predictors of procedural justice in a specialized court setting. However, before a data analysis can occur, a better understanding of the literature must be obtained.

REVIEW OF THE LITERATURE

Procedural Justice

Procedural justice, as Walker, Lind and Thibaut (1979) simply described, is the fairness and satisfaction felt with the process utilized by institutions and authority to resolve a dispute. Procedural justice contrasts with the related concept of distributive justice, which entails the equity of the actual outcome or decision, not necessarily the process used to reach it. This ensures that an institution retains their legitimacy, as society must be willing to accept both positive and negative decisions (Burch, 2016). Having a high degree of perceived procedural justice in the processes enacted by institutions allows for an ease of compliance with the societal norms. This normative perspective leads to

greater efficiency in societal resource distribution, as well as cost savings for officials (Tyler, 2006).

Levanthal (1976) was an early proponent of the importance of fairness in procedural justice and acknowledged it as being a major criticism of equity theory, which concerns itself predominantly with only the *outcome* of a decision. He described it as a perceived fairness in the allocative process, or the cognitive map that an individual develops that eventually leads to the distribution of outcomes and rewards. A discussion of the network of procedures leading up to a final outcome was also of importance in Levanthal's (1976) work. He placed significant emphasis on decision makers being properly selected and evaluated. These evaluations of decision makers examine their use of procedures, whether or not they were fair, and how these procedures effected their outcome decisions. Fair processes, he argued, may lead to fair evaluations of rewards and sanction by those involved, regardless of if the outcome was beneficial to them.

There has also been research bold enough to state that encounters with police and courtroom processes are even more important than the distribution of sanction in citizen satisfaction (Tyler & Folger, 1980). This study examined two types of police-citizen encounters, including the apprehension of a suspect in some, and a simple call to police for help in others. Findings indicated that procedural and distributive justice were distinct from one another, but their effects were not completely independent of each other. However, those who saw the treatment they received from police as fair demonstrated higher levels of satisfaction regardless of whether they were cited, or if their problem was resolved.

Following these sentiments, multiple studies have been conducted involving student samples in areas of both the court and the classroom. Tyler, Rasinski and Spodick (1985) demonstrated that those that showed high levels of procedural justice or process control, through their perception of having a voice in the process, was significant regardless of the level of decision control. It is also important to note that these high levels of perceived fairness led to higher levels of leadership endorsement, such as with a judge or teacher. These findings regarding leadership have also been seen in the processes used by leaders. Tyler and Caine (1981) used a combination of four studies to understand how the level of leadership satisfaction is influenced by the procedures utilized by leaders when distributing outcomes. Use of fair procedures was reciprocated in high leadership endorsement levels and the findings were independent of decisional outcomes.

Growing out of Thibaut and Walker's (1975) control model of procedural justice, Tyler (1989) proposed a group-value model, which took into account the psychological contributions of how people perceive procedural justice. It also served as a key to understanding how relationships are formed inside of the groups to which people belong (Tyler & Blader, 2003). Tyler (2006), driven by the influences of Leventhal's (1976) framework, divided the model of procedural justice into six facets that authoritative institutions must demonstrate in conducting fair processes. They include: representation, consistency, impartiality, accuracy, correctability, and ethicality.

Though the parts of the model seem fairly simple to understand and implement, Tyler (2006) breaks each one down further. With representation, all parties should be

included in each stage of the decision making process. Outcomes and treatments for some parties should be the standard across all parties if an institutional process intends to also be procedurally just. The authoritative figure in control of the process should be impartial and use well-acquainted and complete information to make accurate decisions. If outcomes are deemed unfair or unjust, they must also have the corrective ability to change it. Relating back to the discussion on the norms of morality found in a group and their relation to compliance, the process must fit with these ethical standards and the morality that the larger societal group upholds. The facets of this model have led to a considerable amount of research that looks at them individually and together.

Tyler (1994) has also proposed dueling models to explain why people cooperate within groups. In the social-exchange resource model, people look to gain resources from their interactions within groups, which are closely linked to facets of distributive justice. In the identity-based model, people look to gain status and identity through social groups and tend to place importance upon procedural justice. Through aspects of experiences with the institutions of that group, which include neutrality, trust, and standing, a person's status and identity are formed. People inherently have a desire to belong to social groups and to be treated fairly within them, the justice system being no different. Tyler and Blader (2003) assert that the attitudes and values developed in or about these groups inherently cause cooperation. This cooperation comes from the amount of identity they receive from the group and has a direct link to a person's self-image, self-worth, and self-esteem, otherwise known as an encompassing "identity security".

The trust placed in third parties, such as the court system, is given with the understanding that decisions will come from a fair and neutral process. Giving respect and equal treatment, a form of informal group action, also reciprocates a sense of social status within the group that is important in the psyche of the citizen. The relationship to the third party can thereby have a stronger impact on feelings about the institution than even the issue that brings them before the court to begin with (Tyler, 1989; Richman, 2002; Tyler & Blader, 2003). This speaks to the psychological aspect of self-respect and dignity that people believe they deserve, and if it is not given, may result in weakening the legitimacy and attachment they feel toward the third party and group as a whole.

Giving subjects a voice in the process can also play a significant role in how they view their experience. Fairness, in regard to research by Thibaut and Walker (1975), entails both decision control, such as having a role in determining outcome, as well as process control, such as having a voice in the process leading up to a decision (Tyler et al., 1985; Tyler, 2006). The expectation of being given a voice in the process begins with people's first interaction with authority.

Interactions with police, which are typically the first contact people have with criminal justice authorities, may have an effect on their later perceptions of procedural justice. Attachment to the social order is taken at an objective standpoint by Paternoster and colleagues (1997) when they looked at the derivatives of an officer's use of fair procedures on domestic abuse and its suppression of further violence. Using data from Minneapolis, the location of multiple infamous spousal abuse studies, researchers responded to the commonly accepted notion that sanction and arrest, leading to future

deterrence was the answer. After testing a multitude of hypotheses related to procedural justice and future abuse, they found support for their initial assumptions. Comparatively, officers who treated suspects procedurally just, including offering them respect and a feeling of equity, had similar deterrence effects to arrest.

What the literature has shown is an understated level of importance people place on being treated fairly along the process leading to an outcome decision. What remains to be seen is whether perceptions of procedural justice vary by demographic factors, such as gender, and, as outlined further below, whether the inclusion of mental health variables adds to the prediction of perceptions.

Gender and Procedural Justice

Though gender has not been discussed extensively in respects to its variations in perceptions of procedural justice, it is an area of needed research. As noted earlier, legitimacy and compliance with the law work simultaneously. As an individual's level of viewed legitimacy grows so too does their willingness to comply with legal authority. Tyler (2006) states that background characteristics and prior views of legal institutions influence people's notion of procedural justice. Two of these background characteristics of importance that he controlled for are gender and race.

Some research has stated that women self-report higher levels of compliance than men (Tyler, 2006). Others have proposed that women are more likely than males to receive procedurally fair treatment (Mastrofski, Jonathan-Zamir, Moyal, & Lewis, 2016). Relatedly, general strain theory has been connected to gender and procedural justice in the argument that males and females have goals and perceptions of fairness that are

gender-specific (Broidy & Agnew, 1997). An increase in goals among women that emphasize receiving equal treatment may actually increase their need to be treated with higher levels of procedural justice. Initial contact with the police, which is an important factor in future consideration of satisfaction in elements of procedural justice, has shown to be a meaningful difference in how genders are treated in the criminal justice system (Visher, 1983). It may also suggest that procedural justice and its relative factors effect women to a higher degree than males (Lloyd, 2015).

When analyzing a multitude of studies regarding allocation differences between the genders, Major and Deaux (1982) discussed how women show a higher propensity to split rewards equally with their peers and are more willing to take less than their male counterparts. Men in their sample were in fact more likely to be generous with females than other males, which may also point to a chivalry bias. Overall, however, it points to traditional gender roles being filled, as women did not change their methods of allocation regardless of circumstance and expressed an increased interest in leveling the playing field when dealing with process situations. This argument lends support to the idea that women in particular see the process to receiving an outcome as being even more important than the outcome itself. This may also point to developmental differences between genders and their differential experience with authority.

Children are socialized differently depending on gender and race. The differences in socialization and specific gendered pathways to crime have been used to explain the gender gap found in official crime statistics (Daly, 1992). Using surveys, Fossati and Meeker (1997) examined how direct and indirect exposure to the court system affected

participants' views of procedural justice based on their gender. Though they did not find a significant difference in male and female perceptions of legitimacy in the courts, they did find significant gender differences in the experience and knowledge they had relating to the court system. In regards to the gender gap in crime, this lack of knowledge regarding the legal system may very well be connected to women's lack of experience with courts, as they are less likely to have any contact (Chesney-Lind, 2006).

However, there is no consensus on a gendered perspective of procedural justice. Gender differences and their influence on perceived procedural justice have been empirically strengthened, but this view has its skeptics, especially in the court system (Fossatti & Meeker, 1997). Kulik (1996) studied both the effects of chivalry bias as well procedural and distributive justice differences between genders. Other than finding no argument supporting the chivalry stance, she also noted that contrary to common belief, women demonstrated a higher perceived importance on outcome variables than men. Curran (1983) also looked to empirically test both the chivalry and labeling hypothesis on differential judicial treatment. Though neither theory found support, they did find differences between genders in factors related to procedural justice, including negotiation and prosecution, which is where women placed more importance.

Relatedly, gender was not shown to play a role in job satisfaction, which displays elements of procedural justice research (Smith & Plant, 1982). This finding was also supported in the work of Major and Deaux (1982), who noted the surprising nature of this because women are often situated in lower paying jobs than men, even with equivalent qualifications. They use this as an argument to state the possibility that women are more

resilient to unfair treatment than males but still regard procedural justice as more important than decisional outcomes. They end their discussion by saying that though early research points to an increase in importance on procedural justice factors compared to men, it is an area that is still in desperate need of research.

Gender and Mental Health

Gender is also an especially important demographic characteristic that predicts variation in mental health. Women have been shown to suffer from depression and anxiety to a greater degree than men. However, other disorders are more prevalent in men, such as antisocial personality disorder (Rosenfield & Mouzon, 2013; Gray & Saum, 2005; Broidy & Agnew, 1997). Some have described differences between sexes as a difference in a masculinity trajectory (Barrett & White, 2002). Beginning in adolescence, the masculinity found in individuals increases corresponding with competitiveness and confidence, resulting in a greater self-image of individuals. This explains the increase in a mental health disorder like antisocial personality disorder in males compared to women. Barrett and White (2002) also found that those in their study who demonstrated less masculinity exhibited more signs of depression, further supporting depressive symptoms being related to women.

A growing area available to researchers to test hypotheses regarding gender, procedural justice, and mental health has been the emergence of specialized courts. These courts are inherently procedurally just in their basic tenets, but whether elements of their allocation process demonstrate different effects on men and women remains an open empirical question.

Specialized Courts

The use of “problem-solving” courts in the modern legal system can be seen as an innovation that has grown in popularity across multiple platforms as it continues to demonstrate positive results (Dorf & Fagan, 2003). The original specialized drug court, found in Dade County, Florida in 1989, was a form of alternative social control that offered participants an adjudication process different from the traditional “assembly line” model of sanction seen in the past (Nolan, 2001; Packer 1964). As a response to the growing burden of drug cases in the legal system, brought on by increased sanction policies aimed at drug offenders and combined with a lack of community supervision and resources afforded to them, specialized drug courts were developed (Gottfredson, Kearly, Najaka & Rocha, 2007; Belenko, 1998).

There are many elements found in these drug programs that are not seen in conventional state and federal courts. An emphasis of these courts is often placed upon specific drug treatments being allocated to participants beginning early and throughout the entire program, as well as frequent status hearings with the judge where a flexible schedule of sanctions and rewards are known and followed by both parties (Walker, Pann, Shapiro, & Van Hasselt, 2016). A system of teamwork is developed between the prosecution, the defense, the judge, and social service programs, all combining expertise to work together for the success of program participants, and not as adversaries (Gottfredson et al., 2007). This teamwork is in sharp contrast to the detrimental relationships between actors in the courtroom that can lower an individual’s perceptions of fairness (Greene, Sprott, Madon, & Jung, 2010; Miller & Hefner, 2015). This

differentiates the drug court from earlier attempts at specialized intervention, which were inconsistent in allocating resources and allowed different agencies to work independently from one another (Belenko, 1998).

Though treating participants for drug abuse is high on the list of objectives of the court, they also often require certain levels of education, employment, and housing consistency to be obtained. Also, many drug courts serve participants that range in the seriousness of their offenses, as well as the point in the legal process they are entering from, either before a plea deal or after (Longshore et al., 2001). Participants who complete drug court successfully often have their charges either dismissed or lessened in severity (Belenko, 1998). Wilson, Mitchell and Mackenzie (2006) conducted a systematic review of research that looks at drug courts and their effect on recidivism. They found that the participants in drug courts were less likely to reoffend than similar participants in traditional court.

Resulting from an increased number of crimes being committed in Baltimore, the majority of which had an underlying element of drug use and addiction, specialized drug courts were created, and Gottfredson and colleagues (2007) used this as opportunity to analyze their effectiveness. The program required frequent treatment, status hearings, and drug tests. Failure to complete these functions resulted in sanctions ranging from an increased length of probation, to being dropped from the program and incarcerated. Findings showed that the increase in status hearings, drug tests, and treatment resulted in less drug use and criminal activity. These findings are also related to others that have

shown that processes involved in drug court give participants a feeling of satisfaction and help develop a level of trust with treatment staff and judges (Saum et al., 2002).

These specialized courts were also developed as a problem-solving methodology to offer attention to individuals that may often be overlooked in the regular justice system. A main facet of the courts involved the use of specialized techniques, including the introduction of psychological consideration that allows flexibility in decision making for those in charge (Rottman, 2000). This process of psychological analysis leading to the discovery of mental illness plays an integral part in how subjects should be treated in the program (Festinger et al., 2002). This specialization can also have therapeutic qualities (Kaiser & Holtfreter, 2016). Rottman (2000) outlines how specialized courts have demonstrated higher abilities to assemble and to offer treatments to its subjects, as well as to give them a voice they previously did not have. However, this is often not a defendant's first experience with the criminal system, and prior views regarding it are important to his or her later perceived level of procedural justice.

Defendants' predispositions to their evaluations of fairness may provide what Casper (1978) describes as a self-fulfilling prophecy. If people have a negative attitude or distrust of other government agencies, they may be increasingly likely to perceive distrust of the courts. However, prior experience in traditional courts could leave defendants more aware of the differences found between the two, especially in regards to procedural justice (Wales, Hiday, & Ray, 2010). Along with fairness in the outcome of a case, the men Casper (1978) studied demonstrated a concern for equity, in that they wanted the procedure and outcome to be equivalent to other defendants. Casper, Tyler and Fisher

(1988) also attempted to determine the level of satisfaction found in felony case defendants by looking at different elements of disposition, including pretrial detention, and the overall perceived fairness in both the process and outcome of their cases. Using male defendants across three states, a multitude of questions regarding both the defendants' counsel and the judge presiding over their cases were used to determine levels of perceived procedural justice. Procedural justice was related to all outcome satisfaction measures, especially with variables that stress decision control through plea-bargaining and being treated fairly in their initial contact with police.

Specialized mental health courts were developed under similar circumstances to drug courts, as the justice system encountered an increase in arrests of people with mental illness and a lack of resources to provide to them (Bernstein & Seltzer, 2003). Mental health courts have also demonstrated reductions in recidivism through the use of procedural justice and therapeutic jurisprudence. Mental health courts differ from traditional courts, by placing special importance on the involvement of stakeholders outside of the criminal justice field who offer community-based services, and a reward and sanction system that is intended to increase compliance (Heath, 2015). Wales, Hiday, and Ray (2010) tested the role that a judge can have when they treat defendants with respect by providing mediation tactics in decision making and giving participants services to help them abstain from further deviancy. It was also important that the judges provide an accountability from the courts' end that not only would the participants be given resources to desist from crime, but that those offering services and programs would indeed provide them sufficiently and to the level necessary to induce change. These

services in mental health can include ensuring that participants are taking the proper medication to treat their disorders (Heath, 2015).

Though many specialized courts have been generated to address either drug or mental health court, few have been developed that take comorbidity (those who suffer from both drug addiction and mental health issues) into account. Kondo (2000) notes the cyclical nature that offenders with these issues are susceptible too, often committing petty crimes that result in incarceration instead of treatment. Comorbidity has a high prevalence in that 29% of people who suffer from mental health disorders also display addictive substance abuse issues that make treatment extremely difficult, especially amongst the incarcerated (Regier et al., 1990).

If offenders are given treatment at all, it is often to treat mental health and substance abuse separately, not as a concurring issue (Drake et al., 1999). From these findings, specialized courts that can provide integrated outpatient treatment have shown effectiveness. In an Orange County comorbid specialized court, it was found that a more individualized and less punitive approach to treatment yielded the best results for participants (Mahoney, 2014). Individualized treatment seems far more realistic when taking into account that mentally ill citizens are more likely to come into contact with the justice system and that the impact of mental health on any person varies greatly (Hafemeister, Garner, & Bath, 2012).

Drug and mental health courts are by no means the first time procedural justice has been analyzed through a specialized court setting. Gover, Bank and MacDonald (2007) attributed the high success rate of a domestic violence court in South Carolina

(demonstrated by a reduction in re-arrests and an increase in victim safety) to the high levels of perceived procedural justice found in the court. Domestic violence courts differ from drug courts only slightly and still allow a collaborative process between its members involving mixed methods of treatment. Both defendants and victims were interviewed after court proceedings and asked a variety of questions, such as how equitable they believed the court process to be, and whether they received adequate time to express their side of the story. Similarly, Richman (2002) focused on how resources given to domestic violence victims by the courts, typically women from poor backgrounds, may be increasingly satisfying their specific needs and influencing procedural justice impressions. Being treated with respect and dignity, having status recognition, and building trust are all major factors of procedural justice that were linked to a reduction in familial disputes and resulted in higher levels of cohesion (Fondacaro, Jackson, & Luescher, 2002; Tyler, 2000). Overall, through collaboration and alternative dispute resolution tactics, both defendants and victims felt that they received respect from the court and that the process was equitable to them.

Outside of the criminal courts, the effects of procedural justice have also been demonstrated at the civil court level. Findings by McEwen and Maiman (1984) discuss how defendants who participated in mediation, contrary to adjudication, were more likely than their counterparts to pay the debts that they agreed they owed, rather than those that were imposed. These mediation tactics were found to be an important compliance tool and gave the parties involved the chance to participate. Similar results have also been seen in corporate litigation. Even when the sums of the money being negotiated were

immense, procedural justice factors in the mediation process played a large part in whether businesses accepted arbitration decisions (Lind et al., 1993).

The evaluations of specialized courts have suggested that those who participate go a longer period of time without recidivating (McNiel & Binder, 2007; Belenko, 1998; Spohn et al., 2001). In the specialized drug court context, far fewer future arrests were reported in the drug court participant group than a comparison probationary sample (Koetzle, Listwan, Gustafarro, & Kobus, 2015). In a completely female sample, Shaffer, Hartman and Listwan (2009) found that women who were involved in a drug court were far less likely to recidivate than women placed on probation. Though they use these findings as a basis to discuss the lack of literature dedicated to developing a gendered discussion into the mechanisms of specialized courts, they can only speculate on why specialized courts might be more effective for women, and point to treatment modalities as a potential source. One such drug court component others have shown to be of importance in drug court program success is procedural justice.

The qualities that procedural justice preaches, including giving a voice to participants that they feel has an impact on decisions, and respectful and fair treatment throughout the processes are all inherent qualities in specialized courts. However, Peters and Murrin (2000) have identified a need to examine individual traits of an offender, such as gender and race, in the specialized court context. The current study places specialized courts (where perceptions of procedural justice are expected to be significantly higher) at the forefront of our analyses, which is completed with the hopes of addressing the impact of both gender and mental health on procedural justice.

CURRENT FOCUS

The current study focuses upon perceptions of procedural justice, and the effects that both gender and mental health have on a participant's evaluation of the fairness of processes involved in the drug and comparison court settings. The perceptions of fairness variables found in the MADCE data are employed across 6-month participant interviews, analyzing for levels of perceived procedural justice between genders depending on drug court status. Using the MADCE data, procedural justice will be examined in the full sample and male and female subsamples. Of interest to the current study is the role of court status and mental health status in predicting procedural justice perceptions, particularly among women. The following hypotheses are tested:

1. Gender will have a significant effect on procedural justice, with women reporting higher levels of procedural justice perceptions than men.
2. Participation in a drug court will be a significant positive predictor of procedural justice.
3. Mental health, especially depression, will be a strong predictor of perceived procedural justice.
4. Participation in a drug court will have a stronger impact on procedural justice for woman compared to men.
5. Mental health will have a greater impact on perceptions of procedural justice for females.

METHODS

MADCE Data

The Multi-Site Adult Drug Court Evaluation (MADCE), provided by the Inter-University Consortium for Political and Social Research (ICPSR) is restricted data originally collected from 23 drug courts and 6 comparison courts. The 23 drug courts were dispersed across 8 different states including Florida (2), Georgia (2), Illinois (2), New York (8), Pennsylvania (2), South Carolina (1), and Washington (6). The 6 comparison sites used spanned across 4 states including Florida (2), Illinois (1), North Carolina (2), and Washington (1). The original study was developed as a multi-year analysis of the overall effectiveness of drug courts, focusing specifically on the rehabilitation and cost effectiveness aspects over time. The investigators also assessed the inner workings of drug courts and how attitudinal changes in participants may affect long term success in the program (Rossman et al., 2011).

Beginning in March 2005, participants were given surveys through a Computer Assisted Personal Interview system, at 6-month and 18-month intervals (Rossman et al., 2011). Participants were asked about demographics, background characteristics, and court context experiments. Multiple field visits were also conducted by the original researchers. To obtain independent measures of recidivism (i.e., as indicated by drug test results), oral fluid tests were also conducted at the 18-month follow-up. Data were also collected from the courts themselves, focusing on factors such as drug court eligibility, program administration, and available resources. Such extensive lengths were taken by

researchers in an effort to open the “black box” of unacknowledged drug court tactics and effectiveness that they believe existed in the literature (Rossman et al., 2011).

There were many distinct differences worth noting between the drug courts and comparison sites. First, participants received far more treatment in drug courts than they did in comparison sites (Rossman et al., 2011). Comparison court members also had substantially less judicial status hearings as well as contact with their supervision officer. Drug court participants were subjected to more drug tests, as well as sanctions for minor issues of non-compliance. Though comparison court members occasionally reported some access to treatment, it paled in relation to those in the drug courts.

The original study’s findings indicated strong support for the use of drug courts. Aside from limiting drug relapses and overall criminal behavior, participants reported less unemployment and need for financial services compared to the conventional or comparison courts. Rossman and colleagues (2011) placed much of the responsibility of these findings on two facets of the drug court: the role of the judge and the increased legal leverage participants were given throughout their court experience.

The MADCE data have been used in several other scholarly works. Zweig and Yahner (2012) utilized the self-report data related to victimization and compared it at the baseline and the 18th-month interval, demonstrating that previous victimization did increase criminal behavior at the later period. Green and Rempel (2012) examined MADCE and the effects that drug courts have on socioeconomic and mental health issues. Other than the initial findings that indicate the drug courts reduced familial conflict, they also found it did affect socioeconomic factors, such as homelessness. To

date, the MADCE data have produced a greater understanding of characteristics specific to participants in drug courts and how they are affected during the process, in addition to aspects of the drug courts themselves that make them successful. However, several empirical questions regarding the relationships between gender, mental health status, and procedural justice perceptions remain unanswered.

Sample

Data from both the baseline and 6-month intervals are used in the current study. The sample that was included in the baseline interviews totaled 1,784 participants (1,157 from drug courts and 627 from comparison courts). At the 6-month interviews, 14% of sample was not surveyed, dropping the total to 1,540 (1,012 drug court participants and 528 comparison court participants). Participants who were American Indian, Alaskan Native, Asian, Hawaiian, or identified as mixed race were dropped from our sample because their populations were too small to generalize to. As well, small amounts of missing cases were dropped from our key independent and control variables. The final sample size included in the current study is 1,006 participants (743 drug court members and 263 comparison court members).

Table 1 presents the background characteristics of the sample, arranged by the full sample as well as gender-specific subsamples. In the full sample males made up well over half of the sample (68.09%), as did whites (59.54%). Black participants made up around a third of the sample (34.89%) and Hispanic participants were the smallest group (5.57%). A vast majority of the sample was not married (88.27%) and a participant of a specialized court (73.86%). Education level was mixed with a little over a third having

Table 1.: Descriptive Statistics

Variable	Women		Men		Total		t test
	Percentage	(n)	Percentage	(n)	Percentage	(n)	
Procedural Justice (M _i ;SD)	24.78	(461)	24.07	(473)	24.29	(47)	-2.24*
Sex	31.91	(321)	68.09	(685)			
Marital Status							0.12
Not Married	88.79	(285)	88.03	(603)	88.27	(888)	
Married	11.21	(36)	11.97	(82)	11.73	(118)	
Race							
White	62.31	(200)	58.25	(399)	59.54	(599)	1.49
Black	30.84	(99)	36.79	(252)	34.89	(351)	3.4
Hispanic	6.85	(22)	4.96	(34)	5.57	(56)	1.49
Age: In Years (M _i ;SD)	34.12	(969)	33.71	(1112)	33.84	(1068)	-0.56
Education Level							
Did not graduate HS	43.30	(139)	35.18	(248)	37.77	(380)	6.13*
Graduated HS or GED	26.48	(85)	37.52	(257)	34.00	(342)	11.87***
College/ trade school	30.22	(97)	27.30	(187)	28.23	(294)	0.92
Court Status							0.36
Comparison Court	24.92	(80)	26.72	(183)	26.14	(263)	
Drug Court	75.08	(241)	73.28	(502)	73.86	(743)	
Total Prior Arrests (M _i ;SD)	8.73	(976)	9.33	(1054)	9.13	(1030)	-0.87
Addiction Severity (M _i ;SD)	9.65	(350)	9.20	(350)	9.34	(350)	-1.89
Mental Health							
Depression (M _i ;SD)	9.34	(670)	7.63	(545)	8.17	(593)	-4.3***
Antisocial Personality Disorder	33.33	(107)	47.15	(323)	42.74	(430)	17.06***
Narcissism	49.84	(160)	49.34	(338)	49.5	(498)	0.02
N		(321)		(685)		(1,006)	

Note: Chi-square tests were used for all categorical variables while t tests were used for continuous variables.

*** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$

not completed high school (37.77%), a little over a third graduating from high school or obtaining a GED (34.00%), and a little less than a third having experienced any level of higher education (28.23%). The average age and number of prior arrests of the sample was 33.84 years, and 9.13 prior arrests. A large portion of the sample suffered from antisocial personality disorder (42.74%), narcissism (49.50%), and depression (8.17 on average). Other count variables shown in Table 1 depict the participants' baseline addiction severity (9.34 average) as well as their level of perceived procedural justice (24.29).

“Super Weighting” of Variables

In an effort to increase the comparability amongst the drug and comparison courts researchers created “super weights” (Rossman et al., 2011). These super weights attach standard propensity scores to participants based upon a number of demographic variables (47 variables in total). The goal of this is two-fold. First, the weighting takes into account biases that are observed between drug court and comparison court participants, ultimately addressing selection bias. The second goal achieved by the weighting accounts for attrition bias between the three waves, and is similarly completed by using retention score modeling to compare the characteristics of those who are still involved or dropped out of the drug programs. What the weights effectively accomplish is to give higher weights to parts of the sample that are deemed underrepresented. Conversely, participants with higher propensity scores were given less weight due to their overrepresentation. Four super weights were created in total with one being applied to each of the three time waves and another that addresses the administrative data. For the purposes of the present

analysis, which only examines data from the baseline to 6-month time wave, only the one corresponding super weight is used.

Dependent Variable

The dependent variable in this study was the level of perceived procedural justice at the 6-month interval for both drug court and comparison court participants. The procedural justice measure was drawn from similar measures used in past scholarly work (Reisig, Bratton, & Gertz, 2007; White, Mulvey, & Dario, 2015). Procedural justice questions include: “The probation officer treated me with respect; the probation officer gave me a voice in the process; the probation officer treated me fairly.” The same questions were also asked from the standpoint of the judge. They include: “The judge treated me with respect; the judge gave me a voice in the process; the judge treated me fairly.” Each question used a Likert type scale that ranged from 1-5 with 5 indicating strongly-agree. The total value of a response from an individual ranged from 6-30. The reliability of this scale was strong ($\alpha = .87$).

Key Independent Variables

The independent variables of particular interest in the current study are sex, drug court participation, and mental health, particularly depression. Sex was coded as binary (1=female, 0=male). Court participation was also kept as binary (1=drug court participant, 0=comparison court participant). The mental health variables utilized in our analysis are indexes that were created by the original researchers and used in subsequent research (Zweig & Yahner, 2012; Green & Rempel, 2012). Severity of depression is based upon a 10-item depression scale, containing scores that ranged from 0-3, leading to

a range of scores from 0 to 30. Antisocial personality disorder was applied to participants who had both a conduct disorder and persistent and repetitive pattern of behavior (1=ASPD, 0=no ASPD). Narcissism was coded similarly (1=narcissism, 0=no narcissism) and was determined by participant responses to a two-item scale.

Control Variables

Multiple variables were controlled for in this analysis. Following many of the control variables used in Tyler (2006), this study controlled for marital status, race, age, education, and prior arrests. Education was collapsed into a categorical variable, separated by whether or not the participant had graduated high school, or received any post-secondary education. The baseline addiction severity of participants (a continuous measure) was also controlled for. Due to unequal distributions, a natural log was taken for prior arrests, while age was squared.

ANALYTICAL STRATEGY

All analyses were completed using STATA 14. As noted above, Table 1 presents demographics for both the full sample as well as the split sample between women and men. This approach follows Belknap and Holsinger (2006) and allows for an ease of access in comparing females and males.

To test the associations between gender and perceptions of procedural justice (the first research question), chi-square and t-tests were conducted. For t-tests this allows for a comparison of groups and whether the difference between two means or groups is statistically significant. Between two categorical variables, a chi-square test is performed. When comparing one categorical variable and one continuous variable, t-tests were used.

The first hypothesis is analyzed through the comparison of means between women and men in regards to procedural justice and whether gender is significant. Other mean comparisons of importance to this study are in regards to sex and mental health variables, especially depression.

From there, a bivariate correlation matrix was run to test the associations between our theoretical variable of interest (procedural justice), key independent variables (sex and mental health) as well as controls. Aside from providing an insight into significant relationships between variables, we can also rule out multicollinearity. No bivariate associations are greater than .38 with a mean VIF of 1.17 (see Appendix A for the correlation matrix).

The analysis of the effects that sex and mental health have in predicting procedural justice proceeded in two steps. First, omitted variables bias and heteroskedasticity were ruled out as potential issues. Ordinary least squares (OLS) regressions were run on both the full sample and a split sample between sexes¹. The full sample of participants included a base model, which included demographics, criminal history, and substance abuse. The second model of the full sample used the same variables but also included depression, anti-social personality disorder, and narcissism. Identical models are then replicated in the split sample analysis by sex. This will allow us to detail any effects that mental health has on both procedural justice as well as the other variables in the model. Our hypothesis will be confirmed if mental health demonstrates significant effects in predicting both procedural justice and increases the significance of

¹ Due to the distribution of the dependent variable, analyses using GLM models were also used. However, a decision was made to present models that use OLS because no significant differences were found between the two, and OLS provides for a better interpretation of the results.

gender and other variables in predicting procedural justice. Identical models are then replicated in the split sample analysis by sex.

RESULTS

In addition to the full sample and subsample demographics Table 1 includes the results for the chi-square and t-tests to compare differences across means and groups between women and men. The first finding seen in the table is that the difference between women and men in perceptions of procedural justice is statistically significant, with women perceiving slightly higher levels of procedural justice than males (24.78 to 24.07 respectively). Two of the mental health variables in the analysis, depression and antisocial personality disorder, also showed statistically significant differences between groups. Women demonstrated higher levels of depression (9.34) compared to men (7.63). In return, significantly more men (47.15%) suffered from antisocial personality disorder than did women (33.33%). Turning to the control variables, only education indicated significant differences between women and men. Far more women did not graduate high school (43.30% of women to 35.18% of men) and far more men achieved at least a high school diploma (37.52% of men to 26.48% of women).

Table 2 presents OLS regressions for the full sample of participants predicting procedural justice². Looking at one of our central theoretical variables in model 1, there is a positive and significant relationship between procedural justice and gender ($b=.62$,

² To account for variations between individual drug and comparison courts, a “fixed effects” method was also utilized. Studies that have been published with MADCE often use hierarchical linear modeling to capture variation. However, other research has shown that fixed effects are an effective tool in accounting for court variation without warranting more advanced hierarchical linear modeling (Johnson & Betsinger, 2009). However, a multicollinearity issue presented itself with our drug court participation variable. Coefficients were only slightly different without the use of fixed effects, so the decision not to include them in the final analysis was made. Despite this, we did continue to cluster by court site identification.

Table 2: Full Sample OLS Predicting Procedural Justice (Weighted)

Variables	Model 1		Model 2	
	<i>b</i>	(se)	<i>b</i>	(se)
Female	0.62*	(0.30)	0.79*	(0.36)
Married	0.45	(0.57)	0.38	(0.55)
Race				
Black	0.26	(0.52)	0.06	(0.48)
Hispanic	0.01	(0.65)	-0.07	(0.66)
Age	0.02	(0.09)	0.01	(0.10)
Age ²	0.00	(0.00)	0.00	(0.00)
Education Level				
Graduated HS or GED	-0.04	(0.57)	-0.11	(0.55)
College/ trade school	-0.26	(0.42)	-0.28	(0.40)
Drug Court Participation	2.15**	(0.63)	2.35***	(0.60)
Total Prior Arrests	-0.04	(0.11)	-0.16	(0.10)
Addiction Severity	0.10	(0.06)	0.15	(0.07)
Mental Health				
Depression	-	-	-0.14***	(0.03)
Antisocial Personality Disorder	-	-	-0.28	(0.32)
Narcissism	-	-	0.34	(0.31)
<i>R</i> ²		0.07		0.10

Note: *b* reflects the coefficient. (se) reflects robust standard error. Treatment site was controlled for in model. Reference categories include white participants as well as those who didn't complete high school.
 *** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$

$p=.05$). This means that females' perceptions of procedural justice are .62 higher than males, controlling for all other variables in the model. Consistent with the second hypothesis, drug court participation was also significant in predicting procedural justice. Holding all other variables constant, being a drug court participant resulted in perceptions of procedural justice that were 2.15 units higher on average than comparison court participants. Adding our mental health variables into the analysis was completed for model 2. With the addition of mental health, the effect of being female continues to show significance with the impact of the coefficient increasing from 0.62 to 0.79. The coefficient for drug court participation also increased from 2.15 to 2.35. The mental health variable that we predicted would have the greatest impact on predicting procedural justice, depression is also significant. This demonstrates support for the third hypothesis. Every one-unit increase in severity of depression results in a -0.14 decrease in perceptions of procedural justice. The R^2 is reported for both models in Table 2 (at 0.07 and 0.10 respectively). This means that model 1 explains 7% of the variation found in procedural justice while model 2 explains 10% of the variation, with the increase coming from the inclusion of mental health variables.

Table 3 presents OLS regressions for a split sample of women and men. Model 1 pertains to women and contains our controls but no mental health variables. It displays no significant relationships to perceptions of procedural justice except for being a drug court participant. The perceptions of procedural justice amongst drug court participants was 2.50 units higher on average than comparison court participants, controlling for all other

Table 3: Gendered OLS Predicting Procedural Justice (Weighted)

Variables	Women		Men	
	Model 1	Model 2	Model 3	Model 4
	<i>b</i>	<i>b</i>	<i>b</i>	<i>b</i>
	(se)	(se)	(se)	(se)
Married	-0.23	-0.41	0.87	0.83
	(0.68)	(0.62)	(0.66)	(0.62)
Race				
Black	0.11	-0.31	0.36	0.26
	(0.56)	(0.69)	(0.65)	(0.60)
Hispanic	0.62	0.40	-0.68	-0.66
	(1.11)	(1.15)	(0.94)	(0.92)
Age	0.16	0.13	-0.02	-0.03
	(0.24)	(0.25)	(0.11)	(0.11)
Age ²	-0.00	-0.00	0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)
Education Level				
Graduated HS or GED	0.64	0.60	-0.19	-0.30
	(0.61)	(0.64)	(0.69)	(0.65)
College/ trade school	-0.92	-0.93	0.14	0.06
	(0.63)	(0.66)	(0.48)	(0.45)
Drug Court Participation	2.50***	2.60***	2.07**	2.29**
	(0.59)	(0.62)	(0.69)	(0.67)
Total Prior Arrests	0.18	0.12	-0.14	-0.15
	(0.22)	(0.21)	(0.12)	(0.12)
Addiction Severity	-0.00	0.04	0.14	0.20*
	(0.08)	(0.08)	(0.07)	(0.08)
Mental Health				
Depression	-	-0.13***	-	-0.15**
	-	(0.04)	-	(0.05)
Antisocial Personality Disorder	-	0.09	-	-0.47
	-	(0.57)	-	(0.43)
Narcissism	-	0.11	-	0.42
	-	(0.57)	-	(0.37)
R ²	0.09	0.13	0.07	0.10

Note: *b* reflects the coefficient. (se) reflects robust standard error

Treatment site was controlled for in model

*** $p \leq 0.01$, ** $p \leq 0.01$, * $p \leq 0.05$

variables in the model. When looking at women with the addition of mental health in model 2, both drug court participation and depression were significant predictors of procedural justice. When depression level increased by one unit, it resulted in a 0.13 drop in perceived procedural justice. With the inclusion of mental health, the coefficient of participation in a specialized drug court increased to 2.60. This leads us to believe that mental health, especially depression, are causing suppression effects. We also report the R^2 for both models pertaining to women (at 0.09 and 0.13 respectively). This indicates that 9% of the variation found in procedural justice among woman participants is explained in model 1, while the inclusion of mental health variables in model 2 raises the explained variance to 13%.

Men were also examined distinctly in Table 3. In Model 3, the only significant variable found was drug court participation. Drug court participation led to perceptions of procedural justice that were 2.07 units higher than comparison court participants, holding all other variables constant. This finding fails to support the fourth hypothesis, since the effect of drug court for males and females was similar. In model 4, which included the mental health variables for men, depression was also significant in that every increase in the level of depression resulted in a -.15 decrease in procedural justice. No support was found for the fifth hypothesis since depression had similar effects on both genders. There was also a slight increase in the coefficient for drug court participation, from 2.07 to 2.29. The R^2 for both models 3 and 4, which are related to males, are also noted (0.07 and 0.10 respectively). This demonstrates that 7% of the variance found in procedural justice among men is explained by model 3 while 10% of the variation is explained in model 4

when incorporating mental health variables. Finally, additional testing was completed that looked at the equality of coefficients found in regressions between males and females. This analysis followed the formula presented in Paternoster et al. (1998) and looked at two theoretical variables of interest in drug court participation and depression. The effects of both variables were found to have similar effects on both males and females. The significance of these findings for theory, research, and policy are discussed in the next section.

DISCUSSION

Using secondary data, the present study examined the links between procedural justice, gender, and mental health status (namely depression) within the context of specialized courts. A number of our hypotheses were supported, while others were not. In analyzing the first hypothesis, women did report higher levels of procedural justice perceptions on average compared to males. Though the differences between males and females perceptions were not large, they were statistically meaningful. For the second hypothesis, in both the full sample and split samples drug court participation was a positive and significant predictor of procedural justice perceptions. With regard to mental health status and the third hypothesis, the findings revealed a significant and negative relationship between depression and procedural justice perceptions. However, both the fourth and fifth hypotheses failed to materialize. Although females had higher coefficients for drug court participation and demonstrated greater levels of depressive symptoms, the effects of drug court participation and depression on procedural justice perceptions were similar for both males and females. The results suggest several

implications for theory, research, and policy decisions made by key actors within the courtroom setting (e.g., the judge).

As noted at the outset, the procedural justice perspective has been widely researched and applied in a variety of contexts—both within and outside the criminal justice system (Reisig & Mesko, 2009; Wales et al., 2010; White et al., 2015). According to the main components of process-based models, voluntary compliance can be achieved through treating the public respectfully, which ultimately raises their level of legitimacy. To date, Tyler’s process based model has received considerable empirical support (Kaiser & Holtfreter, 2016). The current study adds to this growing literature base, suggesting that procedural justice perceptions are also important within the context of specialized courts. Our findings also show support for the process-based model. Factors such as being treated with respect, having the ability to express their voice, and being treated fairly were all important to perceptions of procedural justice. Having also looked at procedural justice through a gendered lens, there is a positive relationship with both men and women. However, women did perceive slightly higher levels of procedural justice. Another important factor that influenced procedural justice perceptions negatively in our study was mental health status, namely depression.

Limitations and Future Research

There are a few limitations worth noting here as well as several implications for future research. First, this study only used a 6-month follow up period. While this is certainly an improvement over cross-sectional designs, it is important to note that procedural justice perceptions may change over a longer observation period. Further

research should be conducted that looks at how perceptions of procedural justice may change over longer periods of time and the ways in which demographic characteristics interact with it. Also, the R^2 seen in the present models is admittedly low. This means that much of the variance found in procedural justice is not currently being discussed. Future research may want to consider including other potential explanatory variables into their analyses.

Dealing with the mentally ill presents an especially difficult problem for the criminal justice system, and it is unclear whether those who suffer from mental illness have trouble effectively judging the fairness of authoritative processes, or whether they are simply being treated less procedurally just. This raises a larger measurement issue that is lacking in this area of literature. Subsequent research that collects procedural justice data should examine both perceptions of procedural justice (as the current data does) as well as variables regarding actual treatment. Scholars should also continue to explore the links between gender and procedural justice. An obvious stepping-stone from this work would be to look for a link between the specific life experiences of women, especially taking into account race and class. Bloom et al. (2004) note that minority and disadvantaged women are the most affected by alleged gender-neutral drug policies, which may differentiate them from feeling as though they are members of the larger group.

Not only does gender play a significant role in predicting mental health (women being up to four times more likely to report issues), but is also a significant predictor of successful completion in specialized drug courts (Gray & Saum, 2005). This is especially

true in certain specialized courts, such as family drug courts, which are dominated heavily by women and thus demand specific attention (Lloyd, 2015). Though the current study places most of its importance on women and procedural justice and their specific relationship to specialized courts, the importance of the specific needs and perceptions of men should not be lost. Gender responsiveness to programs and their effectiveness in re-entry is a two-way street, and both men and women may have neutral and specific needs (Holtfreter & Cupp, 2007; Holtfreter & Wattanaporn, 2014; Wattanaporn & Holtfreter, 2014).

Many studies, especially ones originating with the MADCE data, have acknowledged the impactful role that a judge plays in the procedural justice process of a courtroom (Rossman & Zweig, 2012; Rossman et al., 2011; Zweig & Yahner, 2012; Wales et al., 2010). It is important that judges are impartial and make decisions in good faith, and take into consideration the views and expertise of others, including social workers (Tyler, 2006). The judge should be monitored not just by docket organizers, but also by the satisfaction of their participants. Frequent status hearings, which are a facet of many specialized courts, may be effective because it not only gives a judge the opportunity to be more familiar with the participants and their cases, but also alters their level of satisfaction. Being familiar involves having knowledge of the characteristics of individual participants, and altering their treatments and sanction schedules to cater to those needs. As seen in Festinger et al., (2002) the number of status hearings needed to demonstrate positive effects on participants is often dependent upon their psychological status, as some mental disorders require frequent status hearings compared to others.

As Tyler (1987) noted, leaders in the courtroom can gain compliance and support by giving the defendants a voice in the decision-making process. It is important that judges make an effort to show subjects that their point of view was taken into account, regardless of whether it influences their ultimate decision. Picking judges who are most likely to be efficient, and offering them training that helps familiarize them with the objectives of specialized courts and the expectations of their participants may also be effective in decreasing rates of recidivism (Rossman et al., 2012). Widening the eligibility for participants in specialized courts may provide cost savings and further reductions in levels of crime (Rossman et al., 2012). As they have been shown to decrease violent activity, drug courts may want to consider allowing some violent offenders who have been deemed likely to rehabilitate into their programs. Koetzle and colleagues (2015) suggested that allowing offenders with higher levels of potential reoffending could maximize the positive benefits a specialized court can have. Gender-specific crimes and otherwise victimless crimes, such as prostitution may benefit from an increase in acceptance to drug courts if an addiction is also involved.

Mulvey (2013) conducted qualitative research in which he interviewed and analyzed dozens of women and their case files that were involved in a specialized mental health court located in Phoenix, Arizona. It was found that gender-specific pathways to crime, including victimization, substance abuse, and marginalization, both educationally and economically, begged the need for alternative treatment specific to women. Bloom, Owen and Covington (2004) described how women with substance abuse problems also enter the justice system with specific health care needs, such as pregnancy, which also

calls for alternative treatment programs and policy changes. These specific treatments for women, and especially women of color, must address substance abuse, emotional and mental stability, and parenting (Holtfreter & Morash, 2003; Holtfreter, Reisig & Morash, 2004; Reisig, Holtfreter & Morash, 2006). Offering support by developing pro-social relationships, something that Daly (1992) proposes, can be a gender-specific pathway if a woman is abused in a relationship and is also of importance to the desistance from criminality for women (Leverentz, 2006). The dilemma that legislators must answer is whether or not the system can have different programs and treatments for different demographic groups, yet still be inherently equal.

Conclusion

As criminology continues to develop, addressing the theoretical impact that gender has on criminality and why it occurs will be imperative. The research regarding procedural justice is well developed and accepted, but there are still avenues that have been for the most part neglected and warrant further exploration. Among others, differences between gender and perceived procedural justice have the potential to demonstrate influences of process evaluation that may predict future behavior.

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APPENDIX A
CORRELATION MATRIX

Appendix I: Correlation Matrix

Variable	Y1	X1	X2	X3	X4	X5	X6	X7	X8	X9	X10	X11	X12	X13
Y1 Procedural Justice	1.00													
X1 Female	0.07*	1.00												
X2 Marital Status	0.02	-0.01	1.00											
X3 Black	-0.02	-0.06	-0.09**	1.00										
X4 Hispanic	-0.02	0.02	0.05	-0.16***	1.00									
X5 High School	0.04	-0.11***	0.01	-0.05	-0.04	1.00								
X6 Past High School	-0.02	0.03	0.05	-0.10**	-0.01	-0.45***	1.00							
X7 Age	0.15***	0.02	0.15***	0.18***	-0.08*	0.03	0.11***	1.00						
X8 Court Participation	0.22***	0.02	-0.00	-0.17***	0.06	0.08*	0.01	-0.12***	1.00					
X9 Prior Arrests	0.04	-0.02	-0.01	0.20***	-0.09**	-0.05	-0.03	0.30***	-0.07*	1.00				
X10 Depression	-0.015***	0.14***	-0.04	-0.13***	-0.01	-0.02	0.00	-0.06	0.11***	-0.06	1.00			
X11 ASPD	-0.06	-0.13***	-0.05	-0.02	0.01	0.01	-0.12***	-0.17***	0.01	0.04	0.19	1.00		
X12 Narcissism	-0.02	0.01	-0.06	0.09**	-0.02	-0.04	-0.09**	-0.08*	-0.03	0.05	0.24***	0.24***	1.00	
X13 Addiction Severity	0.08*	0.06	-0.06*	-0.09**	-0.03	0.01	-0.03	-0.01	0.09**	0.15***	0.23	0.31***	0.24***	1.00

Note: Table reports Bivariate associations

(Pearson's r)

*** $p \leq .001$, ** $p \leq .01$, * $p \leq .05$