# THE IMPACT OF A VETERAN IDENTITY AMONG KEY PERSONNEL ON SUCCESSFUL OUTCOMES IN VETERAN TREATMENT COURTS

by

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#### Abstract

## THE IMPACT OF A VETERAN IDENTITY AMONG KEY PERSONNEL ON SUCCESSFUL OUTCOMES IN VETERAN TREATMENT COURTS

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Bureaucrats routinely engage in discretionary decision-making that results in the distribution of values for society. Scholars across various domains are challenged with reconciling the ostensibly contradictory values of bureaucratic policy-making and democratic governance. The theory of representative bureaucracy introduces a measure of equity, legitimacy, and responsiveness into these processes. A bureaucracy that is representative of the public it serves across various sociodemographic characteristics is posited to increase equity, legitimacy, and responsiveness in policy processes and outcomes. Although research finds evidence supporting the relationship between bureaucrats and substantive outcomes for those with shared sociodemographic characteristics, the characteristics and settings under study are limited.

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Veteran treatment courts (VTCs) provide an optimal level of analysis for representative bureaucracy theory. The focus on a veteran identity among treatment team members within VTCs addresses two frequently cited limitations with the theory. A veteran identity increases our understanding of politically relevant social identities and the VTC setting increases knowledge on the determinants of active representation. The research question is concerned with exploring the relationship between a veteran identity among treatment team members and favorable outcomes for veterans entering and proceeding through the treatment program.

A quantitative research design is used to test the relationship between a veteran identity and policy outputs and outcomes, measured by entries, sanctions, incentives, and graduations. A cross-sectional design used an original survey instrument to gather data from all treatment team members within VTCs in three contiguous states in the Southern region of the United States. Binomial logistic regression was used to estimate probabilities of the outcomes.

This study is an original contribution. Not only are the findings beneficial to the VTC community, but they can also be generalized to the larger problem-solving court community in which VTCs reside.

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#### Chapter 1

#### Introduction and Overview

Since the erosion of the politics-administration dichotomy, the field of public administration has been presented with the challenge of reconciling the values inherent within our democratic system of governance with the allocation of values by individual bureaucrats.

The core values of equity, legitimacy, and responsiveness are central to our democratic system of government. Bureaucratic agencies routinely produce policies that are often more widespread and impactful than those produced by the executive, judicial, and legislative branches of government. The scope of bureaucratic polices dictates the need for equity, legitimacy, and responsiveness in policy processes and outcomes. Equity and legitimacy are inexorably linked to the public's perceptions of the policy process, while legitimacy and responsiveness are linked to policy outcomes.

Central characteristics of bureaucratic decision-making present a dilemma for the democratic administration of public policies. Individual bureaucrats routinely engage in discretionary decision-making that impact policy processes and outcomes. Vague or poorly written directives and mandates facilitate the necessity for discretion among bureaucrats as they interpret and implement policy. As a result, individual bureaucrats routinely

engage in both means and ends policy-making. Numerous external and internal controls exist as means to control the immense political power wielded by bureaucrats. However, many of these controls are noted for their relative limitations in proscribing bureaucratic policy-making.

The theory of representative bureaucracy is conceptualized as a way of reconciling democratic values with discretionary policy-making by bureaucrats. A bureaucracy that is structured to resemble society along key sociodemographic characteristics and social identities is posited to instill the values of equity, legitimacy, and responsiveness in policy processes and outcomes. Policy processes are more likely to be perceived as equitable and legitimate if the personnel structure of bureaucracies approximates the composition of society. Following from this logic, a diverse bureaucratic personnel structure is more likely to produce policy outcomes that are responsive to the demands of diverse segments of the population.

#### Research Question

This study applies representative bureaucracy theory to a veteran treatment court (VTC) setting. It explores the relationship between members of the VTC team with a military background and policy outcomes. More specifically, the research question centers on determining whether a veteran identity among treatment team members results in favorable outcomes for veterans entering and proceeding through the treatment program.

#### Significance of Research

VTC team members routinely engage in discretionary decisionmaking that directly impacts the success of veterans in the treatment program. The significance of this study is understanding the role and impact of the personnel structure of these courts on policy processes and outcomes. A personnel structure that is representative of the population it serves, measured along key sociodemographic characteristics and social identities, is crucial to the democratic values of equity, legitimacy, and responsiveness. Policy processes are likely to be perceived as equitable and legitimate if the personnel within VTCs closely mirror those in society. Similarly, diversity in personnel structure is likely to produce policy outcomes that are responsive to the broad demands of the population.

The findings are not confined to VTC settings. VTCs are the latest iteration of problem-solving courts which have become increasingly popular due to their ability to address the underlying causes of criminal behavior among unique populations. Examples of problem-solving courts include drug courts, mental health courts, family violence courts, and drunk driving courts. The findings on the role and impact of personnel structures on policy

processes and outcomes within VTC settings can be generalized to the larger problem-solving court community.

The theoretical foundation for these arguments is grounded in representative bureaucracy. Representative bureaucracy is posited as a means for reconciling two seemingly contradictory aspects of bureaucratic decision-making (Frederickson et al., 2016). On one hand, bureaucratic decision-making is highly politicized. Individual bureaucrats routinely engage discretionary decision-making that allocates values for society (Meier, 1993a). On the other hand, democratic governance is firmly entrenched in the values of equity, legitimacy, and responsiveness. Individual bureaucrats are presented with means-ends decision processes, which are underscored by contradictory values such as efficiency and accountability.

The theory of representative bureaucracy attempts to address this aspect of bureaucratic decision-making within the context of democratic governance through two methods of representation. One of the central questions representative bureaucracy attempts to answer is whether bureaucracies represent the diverse interests and values of the public (Frederickson et al., 2016). Passive representation is grounded in the demographic and socioeconomic characteristics of individual bureaucrats. A bureaucracy that is passively representative is one that closely resembles the

public it serves across key indicators, such as race, gender, and ethnicity. Public agencies that are broadly representative are posited to increase perceptions of equity and legitimacy in policy processes.

The second method of representation is based on addressing whether the interests and values of the public are accurately represented by bureaucratic policy outputs and outcomes (Frederickson et al., 2016). Active representation extends from passive representation. While passive representation is a characteristic, active representation is based on processes. Active representation occurs when bureaucrats assume a representative role that impacts policy preferences. This results in substantive outcomes for segments of society with shared demographic characteristics or social identities. By actively representing a diversity of attitudes and values, policy outputs and outcomes are posited to uphold the democratic ideal of responsiveness.

The theory is explicit in linking passive representation to active representation (Meier, 1993a). The passive to active representation linkage is grounded in three temporally linked concepts. Similar demographic characteristics or social identities are posited to be linked to similar socialization experiences (Meier, 1993a). These shared characteristics lead to similar attitudes and values, which have a direct impact on actual behavior

(Meier, 1993a). What follows from this framework is the representative bureaucracy thesis on bureaucratic decision-making. A policy that is politically relevant to a bureaucrat's demographic characteristics or social identity is likely to impact a bureaucrat's policy preferences. This could result in substantive policy outcomes for those in the community with shared demographic characteristics or social identities (Meier, 1993a).

Research finds evidence supporting the relationship between the demographic characteristics and social identities of bureaucrats and favorable policy outputs and outcomes for those with shared characteristics and identities. The race, gender, and ethnicity of bureaucrats within educational settings dominate the representative bureaucracy literature. Several studies find evidence of the relationship between racial minorities and substantive outcomes in educational settings and the Equal Employment Opportunity Commission (EEOC) (Hindera, 1993a; Hindera, 1993b; Meier & Stewart, 1992; and Meier, Stewart, & England, 1989). Other studies find a relationship between gender and substantive outcomes in educational and local government settings (Keiser, Wilkins, Meier, & Holland, 2002; and Meier & Funk, 2017). Finally, the relationship between Latino and Hispanic administrators and favorable outcomes for minorities is found within

educational settings and the EEOC (Hindera, 1993b; Meier, 1993b; and Meier & O'Toole, 2006).

While these findings provide support for the representative bureaucracy thesis, scholars call for the need to expand our understanding of the determinants of active representation. Determining which social identities are politically relevant and under which organizational settings active representation is likely to occur is key to the development of the theory (Keiser, 2010). Expanding beyond race, gender, ethnicity, and educational settings increases our understanding of the key determinants of active representation and affords the findings to be generalized to the larger population.

The need to expand the characteristics and identities under study is grounded in one of the conditions for active representation. The passive to active representation linkage requires politically relevant demographic characteristics or identities (Meier, 1993a; Meier & Funk, 2017). Not all demographic characteristics or identities impact the political attitudes and values of bureaucrats. Also, individual bureaucrats have multiple and often competing identities (Keiser, 2010). These identities can arise through various sources, such as group membership and profession (Gay & Tate,

1998; and Keiser, 2010). These multiple identities can attenuate a bureaucrat's political attitudes and values.

From a more macro-level, increasing the number and type of organizations under study increases our understanding of the determinants of active representation. Representative bureaucracy research is explicit in recognizing the influence of the agency on a bureaucrat's values and attitudes (Keiser, 2010; Meier, 1993; and Thompson, 1976). Because of the nature of adult learning, a bureaucrat's attitudes and values continue to evolve after being employed in an organization. Agency socialization can have a moderating effect on active representation. The impact of the agency underscores the need to expand the number and type of organizational settings in representative bureaucracy research. By doing so, the findings can be generalized to larger populations.

#### Expected Contributions

This research addresses the voids in the representative bureaucracy literature and limitations in VTC research. A veteran identity is a relatively underexplored construct and the focus on a veteran identity expands the number of social identities under study. There are no known studies that explore the relationship between the personnel structure of VTCs and policy processes and outcomes. Exploring the relationship between a veteran

identity among treatment team members and favorable policy outcomes for veterans in the program attempts to bridge this gap in the literature.

To date, there are no known studies that apply representative bureaucracy to a VTC setting. The VTC setting increases the number and type of bureaucratic organizations under study and expands our understanding of the determinants of active representation. This increases the generalizability of findings on representative bureaucracy. Also, VTCs are relatively understudied organizations which has led to a need for research on their processes and outcomes.

Finally, VTCs are the latest iteration of problem-solving courts. The application of representative bureaucracy to a VTC setting allows the findings to be generalized to the larger problem-solving court community. The application of representative bureaucracy to a VTC setting can increase our understanding of the relationship between the personnel structure and successful outcomes for individuals entering and proceeding through problem-solving courts.

#### Theoretical Limitations

The primary focus in this study is the relationship between a veteran identity among members of the treatment team and policy outcomes. Representative bureaucracy and interdisciplinary research informs the

inclusion of several control variables in the model. However, several key determinants of active representation will not be included in the study due to theoretical and empirical limitations. The intersection between multiple bureaucratic identities, such as race and gender, can attenuate the linkage between passive and active representation (Keiser, 2010). Identifying and measuring the influence of multiple identities on policy processes and outcomes is complex. To date, representative bureaucracy research lacks a theoretical and empirical design to effectively address this aspect of multiple identities (Keiser, 2010). Because of these complexities, intersectionality will not be measured.

Critical mass is a factor that is posited to strengthen the link between passive and active representation. Research suggests that active representation is dependent upon a minimum number of bureaucrats sharing politically relevant demographic characteristics or identities (Keiser, 2010; Meier, 1993a; and Thompson, 1976). However, like intersectionality, the concept of critical mass presents similar theoretical and empirical challenges (Keiser, 2010). Although data will be aggregated to the courtlevel, the limitations associated with critical mass preclude its inclusion into the model. The concept of stratification is a moderating variable in the passive to active representation linkage. The central issue of stratification is the appropriate level within the organization where representation is likely to occur (Keiser, 2010; and Meier, 1993a). Research on stratification finds evidence to support its existence at all levels of the bureaucracy—from upper-level to street-level bureaucrats (Keiser, 2010). However, a measure of stratification will not be incorporated into the study design.

#### **Overview of the Dissertation Sections**

The dissertation contains the following sections: front matter; introduction and overview; representative bureaucracy literature review; VTC literature review; methodology; data development and findings; interpretation and conclusion; references; and appendices. The front matter contains the title page, abstract, and table of contents. The abstract provides an overview of representative bureaucracy theory, its application to VTCs, and the research question. The abstract includes the methodological approach and procedures to test the relationship between a veteran identity and policy outcomes. The original contribution and implications of this study are also highlighted. The introduction provides an overview of the context and background of the study. It also clearly identifies the research question

and the relevance of the study. The original contribution of this research and the theoretical limitations are identified.

The representative bureaucracy literature review begins with an overview of the theoretical justifications for the theory which stems from reconciling the seemingly contradictory values of democratic government and bureaucratic policy-making. What follows is an in-depth examination of the theory's evolution, assumptions, core components of passive and active representation, the model that outlines a temporal linkage between these components, and how a representative bureaucracy is posited to uphold the core values of equity, legitimacy, and responsiveness. The measures and operationalization of passive and active representation are identified. The conditions and determinants for active representation, with an emphasis on research and findings relevant to VTCs, are identified and examined. This section culminates with a critique of representative bureaucracy theory, identifying voids in the research and the contributions of this study to the theory.

The VTC literature review provides an overview of the unique issues confronting Afghanistan and Iraq veterans that prompt the development and growth of VTCs across the nation. This is followed by an in-depth discussion on VTCs, which includes their evolution, guiding principles, common

structural and administrative features, funding sources, treatment plan characteristics, decision-making processes, and policy outcomes. The variation in core aspects across these courts is then examined. Salient to this research is the number and type of treatment team members with a military background. Other key aspects of variation include early identification protocols, eligibility requirements, admission postures, sanctions, incentives, and graduation requirements. The overview of VTCs culminates with a conceptual critique of these courts.

The VTC literature review concludes with the application of representative bureaucracy theory to a VTC setting. Theoretical justifications are provided, which includes the values of democratic administration and the impact of policy processes and outcomes. The conditions and determinants of active representation within a VTC setting are identified and discussed. Finally, the features of VTCs that provide the optimal level of analysis for representative bureaucracy theory are identified.

The methodology section opens with an overview of the study design, methodology, statistical analyses, and interpretation that will be used to test the relationship between a veteran identity and policy outcomes. Following this overview, the methodology section provides an in-depth description of the sample frame, survey instrument, and survey implementation

procedures. The features of data storage, analysis protocols, and steps to ensure confidentiality are highlighted. The section includes a discussion on the measures of reliability and validity. The method for data analysis is identified and discussed, which includes statistical measures for spuriousness of data and binomial logistic regression at the court-level. The dependent variables, primary independent variable, and control variables are conceptualized and operationalized. The algebraic form for logit regression is provided. Potential methodological limitations and the measures used to address these limitations are discussed. The hypothesized outcomes for the relationship between a veteran identity and the seven dependent variables are provided. The section concludes with an overview of the contributions and implications of the research.

The data development and findings section provide an objective overview of the data. The use of binomial logistic regression based on the level of measurement of the data is discussed along with assumptions of logistic regression. The data development section details the procedures for cleaning the data and provides a descriptive overview of the final court-level characteristics of the sample. The logistic regression output and point estimates of probability provide insight on the relationship between

predictor and outcome variables. The findings section provides a broad outline of the findings from the research.

The interpretation and conclusion section begin with a more nuanced interpretation of the data. Representative bureaucracy theory and relevant interdisciplinary research are used to guide the interpretation of findings on the relationship between veteran identity and the outcome variables. Limitations and future research are provided. The section discusses the impact of the research and findings on public policy.

The reference section includes all cited research and the appendices contain information on the VTC eligibility laws within the states in the sample frame, non-paragraph form of dependent variables in the model, and survey questions.

#### Chapter 2

#### **Representative Bureaucracy**

The term representative bureaucracy was first coined by J. Donald Kingsley in his 1944 work, *Representative Bureaucracy, An Interpretation of the British Civil Service,* which studies the structure and characteristics of their civil service system. The theory of representative bureaucracy, as currently structured, is grounded in the core axiom that individual bureaucrats who are representative of the citizens they serve, based on varying socioeconomic and sociodemographic measures, will yield favorable policies as a measure of responsiveness to the citizens. The theory has been applied to numerous bureaucratic levels and settings to understand and implement accountability, representativeness, equity, and legitimacy within the bureaucracy.

#### Core Components of Representative Bureaucracy

Under the label of bureaucratic politics theories, representative bureaucracy explicitly acknowledges the political decision-making of individual bureaucrats. Bureaucratic decisions are often political decisions, characterized by the allocation of resources within society (Meier, 1993a). There is also a commonly held conviction that many organizational decisions are performed or influenced by individual administrators (Mosher, 1982).

This breaks from the public administration orthodoxy which separates the policy process into a means-ends dichotomy. In this dichotomy, individual administrators are viewed as neutral administrators of policy. The valueladen aspect of policy development remains within the realm of political entities overseeing bureaucracies.

Bureaucratic politics acknowledges the inability to separate these two aspects of public policy. Individual bureaucrats are not devoid of values as they engage in political decision-making. Individual administrators are then thrust into means-ends decision making processes. More importantly, outputs and outcomes are likely influenced by the bureaucrat's attempt at reconciling competing and contradictory values, such as efficiency and accountability. The theory of representative bureaucracy attempts to address the inherent issues of democratic administration (Frederickson et al., 2016). *Passive Representation* 

In the theory's attempt to address these issues, two central questions are addressed by representative bureaucracy theory. The first question is based on whether public agencies represent the diverse interests and values of the public they serve (Frederickson et al., 2016). The individual characteristics of bureaucrats, measured across various demographic and socioeconomic characteristics, is the central concern with this question. In

what is termed passive representation, the issue is whether the bureaucracy resembles the public across various demographic and socioeconomic characteristics.

In what Pitkin (1967) refers to as descriptive representation, the concept centers on the composition of political organizations. Descriptive representation is based on whether those organizations accurately resemble those they represent (Pitkin, 1967). Mosher (1982) argues that passive representation centers on the "origin of individuals and the degree to which, collectively, they mirror the whole society" (p. 15). A passively representative bureaucracy is structured so that its members resemble the public they serve across various demographic and socioeconomic characteristics, such as race, gender, and ethnicity.

Because bureaucrats routinely engage in political decision-making, there is a commonly held belief that the administrators making the decisions should resemble those who are likely to be affected by their policies. Public agencies that encompass bureaucrats that are broadly representative of the public, measured across various characteristics, are believed to more closely uphold Lincoln's vision of a government 'by the people' (Mosher, 1982).

#### Symbolic Representation

Closely related to passive representation is the concept of symbolic representation. Pitkin (1967) operationalizes symbolic representation in a political context to mean that representatives do not necessarily need to directly resemble those in the public. Instead, the symbolic representation by bureaucrats work on the cognitive perceptions of the public by "standing for" their interests in a non-formalistic perspective (Pitkin, 1967). Members of the public are likely to hold positive feelings about bureaucracies that mirror the public's composition and individual bureaucrats with similar demographic characteristics (Keiser, 2010). A bureaucracy that is representative works symbolically to instill the principles of equity and legitimacy in policy processes and outcomes.

#### Active Representation

The second question addressed by representative bureaucracy is based on whether the interests and values of the public are accurately represented by the policy outputs and outcomes produced by public organizations (Frederickson et al., 2016). Active representation is an extension of passive representation and is the second component within the theory of representative bureaucracy. Whereas passive representation is based on the characteristics of the bureaucracy, active representation centers on processes.

Active representation marks a significant change from public administration orthodoxy which views bureaucrats as neutral and impartial administrators of policy. Active representation involves bureaucrats assuming a representative role that impacts policy preferences resulting in favorable outputs and outcomes for members of the public with similar characteristics. The theory asserts that bureaucrats routinely engage in the allocation of values with relatively few controls and presents active representation as tool for reconciling bureaucratic power with democratic ideals. Instead of impartial cogs in the bureaucratic wheel, administrators may actively represent the interests of those who share similar demographic and socioeconomic characteristics. For example, minority bureaucrats assuming a minority representative role will produce policy outcomes amenable to those in the public sharing similar characteristics.

#### Passive and Active Representation Linkage

The logic of representative bureaucracy explicitly links passive representation to active representation (Meier, 1993a). The theory contains three propositions that are temporally linked, starting with the impact of *social origins*. Social origins, measured across various demographic and
socioeconomic characteristics, have a significant impact on socialization experiences among individuals (Meier & Nigro, 1976; Meier & Stewart, 1992; Meier, 1993a; and Selden, 1997). This step in the process is captured by the theory's concept of passive representation. Second, an individual's socialization experiences, such as childhood experiences, influence and shape political attitudes and values (Meier & Nigro, 1976; and Selden, 1997). The theory maintains that members with similar social origins share similar socialization experiences. Following this assumption is the premise that an individual's values and attitudes are directly influenced by their socialization experiences (Meier & Nigro, 1976; Meier & Stewart, 1992; and Meier, 1993a). Finally, attitudes and values are strongly correlated with actual behavior (Meier & Stewart, 1992; and Meier & Nigro, 1976). Because individual bureaucrats maximize their own values when engaging in discretionary decision-making, there will be a corresponding congruence of values between policymakers and members of the public who share similar attitudes and values (Meier, 1975). Support for this premise is drawn from decision theory, which argues that "if values are similar, rational decisions made so as to maximize these values will also be similar" (Meier, 1975, p. 528).

For social origins, research finds evidence supporting the relationship between race, gender, and ethnicity and substantive outcomes. Contemporary research on representative bureaucracy recognizes the importance of the findings. For example, studies find evidence supporting the relationship between African Americans and favorable policy outputs and outcomes within educational settings and the Equal Employment Opportunity Commission (EEOC) (Hindera, 1993a; Hindera, 1993b; Meier & Stewart, 1992; and Meier, Stewart, & England, 1989). Other studies find a relationship between women bureaucrats and substantive outcomes in educational and local government settings (Keiser, Wilkins, Meier, & Holland, 2002; and Meier & Funk, 2017). Latino and Hispanic bureaucrats produce favorable policy outputs and outcomes for those with shared ethnic characteristics in educational systems and the EEOC (Hindera, 1993b; Meier, 1993b; and Meier & O'Toole, 2006).

However, the components of socialization and attitudes within the model do not meet the same empirical specifications. The linkages between social origins and socialization and social origins and political attitudes provide potential limitations to the overall theory (Meier & Nigro, 1976). For the social origins and socialization linkage, there is wide variation in socialization experiences across different groups and research suggests that

individuals with varying social origins can have similar socializing experiences (Meier & Nigro, 1976). These aspects of individual socialization present the model with complexities in accurately measuring the relationship between social origins and socialization. Following from the current logic of the theory, there is a relationship between social origins and socialization that impacts attitudes. The model could therefore be reoperationalized to "assert that social origins are good predictors of attitudes" (Meier & Nigro, 1976, p. 460).

The social origins and attitudes linkage also has potential limitations. The link between social origins and attitudes could be attenuated by the role and impact of agency socialization. Agency socialization may have a significant impact on political attitudes beyond that of childhood experiences which introduces a discrepancy in the social origins and attitudes linkage (Meier & Nigro, 1976). The continuous nature of adult learning highlights the role of agency socialization, which centers on the principle that socialization continues throughout one's life even after entering government service (Keiser, 2010; Meier, 1993a; and Meier & Nigro, 1976).

# Social Identities

Representative bureaucracy research extends the scope of social origins through the inclusion of social identities. Although demographic

origins and social identities are conceptually the same, social identities are more inclusive and their use marks an evolutionary shift in terminology (K.J. Meier, personal communication, February 26, 2018). Individual bureaucrats have more than one identity that arises beyond their innate characteristics (Keiser, 2010). In addition, individual bureaucrats can gain a sense of identity through membership in groups based on various characteristics (Keiser, 2010). Social science research on the impact of multiple, and often competing, identities on political attitudes also informs the debate (Gay & Tate, 1998). Individuals are not wholly defined by their innate characteristics, such as race, gender, or ethnicity (Gay & Tate, 1998). Instead individuals derive their identities from multiple sources, such as their job or religion, which moderate political attitudes and values (Gay & Tate, 1998). Much like social origins, relevant identities are those that are linked to political attitudes and values (Meier & Funk, 2017). However, identities are more expansive in scope and can include, but are not limited to: race, gender, ethnicity, sexual orientation, class, ideology, geography, or educational background (Keiser, 2010; and Meier & Funk, 2017). Studies exploring the impact of identities on policy preferences will be examined later in this study.

### **Evolution of Representative Bureaucracy**

The justification for the theory is grounded in fundamental aspects of bureaucratic decision-making processes and outcomes within the bureaucracy. Individual bureaucrats routinely engage in discretionary decision-making that directly impacts policy outputs and outcomes. Contributing to this process are the individual attitudes and values held by administrators. Instead of neutrally administering the goals and policies set forth by the organization, the attitudes and values held by individual bureaucrats enter the decision-making equation that affect outcomes. The importance of this premise is highlighted by the widely held belief that bureaucracies are responsible for producing a vast array of outputs and outcomes, such as laws, rules, administrative rulings, and policies that have an immense impact on a large portion of society (Dolan & Rosenbloom, 2003a).

This underscores a long-standing debate between two opposing viewpoints within the field of public administration on the proper role of administrative decision-making. On one hand, orthodox public administration theory is prescriptive, supporting the premise that politics should be separated from the administration of organizations. The classical paradigm views the politics-administration dichotomy as a means for

instituting formal controls on the decision processes and outcomes within bureaucracies. In the dichotomy, a distinct line between politics and administration is drawn, separating the two into separate domains. Valueladen decision making on public policy outcomes, or ends, is viewed as the exclusive domain of the bureaucracy's political masters. Following from the influence of Wilson (1887) and Weber (1946), individual bureaucrats are regarded as neutral and impartial administrators of policy.

Conversely, the bureaucratic politics paradigm opposes the separation of these two aspects of the policy process into mutually exclusive functions. This view is explicit in recognizing that individual administrators routinely engage in discretionary decision-making. The value-laden nature of administrative decision-making erodes the line demarcating politics and administration held by the orthodoxy. Albeit from different perspectives, this view is supported by the influential work of Simon (1997) and Waldo (2007), who critique the politics-administrative dichotomy. They note that administrative decision-making is not a value-free process devoid of politics.

What remains after the erosion of the orthodoxy is a central challenge facing democratic governments. This challenge is based on the ability of governments to reconcile the core principles of a representative government with the impactful policy-making conducted by unelected bureaucrats (Dolan

and Rosenbloom, 2003b). The reconciliation of democratic values in decision-making processes within bureaucracies is a central theme within the field of public administration (Waldo, 2007).

# Early Representative Bureaucracy

The theory of representative bureaucracy attempts to provide a solution to this problem. However, as originally envisaged by Kingsley the concept of a representative bureaucracy is contrary to contemporary views on its form and function. Kingsley's idea of a representative bureaucracy is not inclusive or broadly representative of the population, nor does it act for the interests of broad segments of the population (Meier, 1975). Kingsley (1944) calls for representation in which a civil servant's "views are identical with those of the dominant class as a whole," resulting in value congruence, or means-ends agreement, between civil servants and their political masters (p. 278). By staffing the bureaucracy with individuals who are reflective of the ruling social class in terms of values, representation serves as a tool for responsiveness and accountability to their political masters (Kingsley, 1944). Kingsley's focus on class-based characteristics, while differing from mainstream applications of social origins and identities, contributes to the concept of passive and active representation.

Following closely after Kingsley's application of representative bureaucracy to the British Civil Service, Levitan (1946) is considered the first to introduce the theory to the American system of government. Levitan (1946) notes that the equitable and legitimate application of public policy is directly tied to the composition of the bureaucracy. In expanding the characteristics of passive representation, he calls for a bureaucracy that is truly representative of society across measures of "skill, class, and personality background" (Levitan, 1946, p. 583). Beyond the issue of bureaucratic responsibility addressed by a representative bureaucracy, policy legitimacy was believed to be directly tied to the composition of the bureaucracy. A bureaucracy that accurately mirrors the heterogenous composition of society is posited to increase policy legitimacy (Levitan, 1946). Conversely, a bureaucracy that does not reflect society's composition is posited to be hostile to legitimate policy formulation (Levitan, 1946).

Long (1952) argues that a truly representative bureaucracy is a pillar of democracy in both form and function. A bureaucracy that is reflective of the nation has the potential to be more democratic than traditional pillars of our government like the legislature (Long, 1952). He provides a measure of representativeness which is a bureaucrat's prior "affiliations, training, and background" (p. 812). In his historical review of the U.S. Civil Service, Van

Riper (1958) calls for a bureaucracy that is "broadly representative" so that there is little distinction between the bureaucrats who administer public policy and those in which the policy is intended. Van Riper (1958) provides that a bureaucracy is representative if it includes a "reasonable cross-section of the body politic in terms of occupation, class, geography, and the like" (p. 552).

Mosher (1982) contributes to the evolution of representative bureaucracy through his distinction between passive and active representation. Passive representation centers on the origin of individual bureaucrats and whether they collectively "mirror the whole society" (Mosher, 1982, p. 15). Active representation follows from passive representation and is based on the expectation that individual bureaucrats "press for the interests and desires of those whom they are presumed to represent, whether they be the whole people or some segment of the people" (Mosher, 1982, p. 14). His distinction between passive and active representation is crucial to the development of the theory of representative bureaucracy. According to Dolan and Rosenbloom (2003a), the significance of this distinction informs the "subsequent analysis and theoretical development of representative bureaucracy" (p. 5).

In his book, *Representative Bureaucracy*, Krislov (2012) provides a normative argument for a bureaucracy that is representative of the public it serves. Observing this argument from both a supply- and demand-side perspective, a representative bureaucracy is posited to have a significant impact on the legitimate and democratic administration of government and its policies. A representative bureaucracy has the advantage of the inclusion of multiple perspectives in policy processes through both political and functional representativeness (Krislov, 2012, p. 63). The resulting policies are more likely to receive public acceptance. The policies produced are more likely to be perceived as legitimate by the public because of the diversity of personnel engaged in the policy processes (Krislov, 2012).

### **Democratic Ideals**

A conceptual and pragmatic dichotomy exists between the immense political power inherent within the bureaucracy and the necessity of democratic values (Krislov & Rosenbloom, 1981; and Meier, 1993a). Numerous theories attempt to reconcile the immense political power of the bureaucracy and the democratic values of equity, legitimacy, and responsiveness. From an organizational level, the field is highlighted by the continual search for resolving the seemingly contradictory business value of efficiency with the democratic values of accountability and equity (Waldo,

2007). For example, recent reinventing government initiatives, such as the theory of New Public Management (NPM), incorporate business values, such as efficiency, into the administration of public agencies (Kamensky, 1996). The application of private business standards to public entities raises concerns over their potential to erode the democratic ideals of equity (Hood, 1991).

From an individual level, a representative bureaucracy is hypothesized to be a solution to the dilemma of reconciling political power and democratic ideals (Meier, 1975; and Meier, 1993a). The theory of representative bureaucracy is a normative theory that is amenable to empirical evaluations (Keiser, 2010; and Meier, 1993a). The normative values of a representative bureaucracy that broadly reflects the diversity of the public is posited to enhance the democratic values of equity, legitimacy, and accountability (Keiser, 2010; and Selden, 1997).

These ideals follow the temporal logic with the key aspects of passive and active representation. A passively representative bureaucracy is one that mirrors the society it serves across demographic and socioeconomic characteristics. Passive representation upholds the core democratic values of equity and legitimacy in policy processes and outcomes. A public agency that demonstrates equality of access to government employment to all members

of society can be seen as increasing equity (Keiser, 2010). By making the bureaucracy more representative of the larger population in which it resides, the perception of equitable and legitimate policy processes and outcomes is likely increased.

Active representation of a diversity of interests, values, and opinions held by the public is posited to produce policies that reflect the attitudes and values of the public. By representing the interests of a heterogenous population, a representative bureaucracy institutes measures of responsiveness and accountability in policy processes and outcomes (Keiser, 2010). The result is an increased level of public support for government (Keiser, 2010). The importance of which cannot be overstated, as a "major task of governance is to gain support for policies" (Krislov, 2012, p. 4).

The theory also acknowledges the role and impact of bureaucratic power on policymaking within the polity. Two sources of bureaucratic power are expertise and an advantage in information (Selden, 1997). By holding expertise over the policymaking processes and access to information not readily available to the public, bureaucrats establish and maintain power over policy formulation and implementation. Although the theory holds that similarity in attitudes and values between the bureaucrats and the public will produce amenable policy outcomes, these decisions may differ because of

advantages in expertise and information held by bureaucrats during the policy process (Meier, 1975; and Meier, 1993a). Any differences in policy outputs and outcomes only serve to further rationalize the process of bureaucratic decision-making by supporting the standards of administrative responsibility and democracy (Meier, 1975). The process of representation presumes similarity in outcomes between bureaucrats holding information advantages and expertise over the policy arena and members of the public if they were similarly situated (Meier, 1993a).

## **Representative Bureaucracy Assumptions**

The theory of representative bureaucracy is grounded in three assumptions. The first assumption is a logical extension of the fundamental paradigm shift in public administration resulting from the erosion of the politics-administration dichotomy. With the recognition that administrators do not fit the Weberian ideal of neutral and impartial automatons within the bureaucracy, the first condition recognizes the political and discretionary nature of bureaucratic decision-making. The first assumption of bureaucratic representation is grounded in the fundamental recognition that bureaucrats exercise discretion (Meier, 1975; and Meier, 1993a). This feature is inclusive to bureaucrats at all levels of the organization, from upper-level executives to street-level bureaucrats. They all exercise discretionary-decision making

affecting policy outputs and outcomes (Meier, 1993a). For example, Lipsky (2010) argues that street-level bureaucrats, such as police officers, teachers, and social workers, exercise discretion on organizational rules and policies that result in policy outcomes. The policymaking role of individual bureaucrats at all levels of government cannot be overstated. The impact of discretionary decision-making at all levels of administration on policy outputs and outcomes has led some to refer to the bureaucracy as the fourth branch of government (Long, 1952).

The second assumption of the theory builds on the recognition that bureaucrats exercise discretion at all levels of government. To address the discretionary policy-making power of bureaucrats, external and internal controls exist to limit bureaucratic discretion (Meier, 1975; and Meier, 1993a). External controls are intended to limit the amount of discretion applied by bureaucracies in carrying out the policies enacted by legislatures, mandates, or laws (Meier, 1993a). Examples of external controls include legislative oversight, budgetary audits, annual reports, and laws (Meier, 1975; and Meier, 1993a). The cumulative intent of external controls is to constrain the discretion that is inherent within bureaucracies through the interpretation and application of policy.

Another form of external control that deserves attention is the role of an electoral incentive. Most bureaucrats are largely immune from being influenced by elections (Levitan, 1946; Meier, 2000; and Mosher, 1982). The appointment characteristics of most bureaucrats underscores this premise. Apart from a relative few elected and politically appointed bureaucrats at the upper-levels of the government, most mid- and street-level bureaucrats are appointed to their positions based on merit or hiring practices. While those elected and politically appointed bureaucrats may be directly or indirectly tied to an electoral incentive, the discretionary policy-making role of most bureaucrats is not impacted by the election process. Mosher (1982) summarizes this point precisely when he rhetorically poses the question "how does one square a permanent civil service—which neither the people by their vote nor their representatives by their appointments can readily replace—with the principle of government 'by the people'?" (p. 7).

Internal controls also limit the discretion of bureaucrats. Upper-level bureaucrats implement various forms of internal controls seeking to limit the policymaking role of street-level bureaucrats (Meier, 1993a). Similar in form to external controls, the various internal controls include written rules, operating procedures, policies, reporting requirements, or audits (Meier,

1993a). The function of internal controls parallels that of external controls to limit the amount of discretion within the lower-levels of the bureaucracy.

However, there is a caveat with many of these control mechanisms. External controls may lack effectiveness in controlling the policy-making role of bureaucrats due to their inability to eliminate discretion altogether (Meier, 1993a). Bureaucrats are adept at adapting to their political and policy environment. Legislative oversight, budgetary audits, annual reports, and laws introduce a measure of control, but they lack the ability to completely proscribe discretion at all levels of policy implementation. Bureaucrats are still held to the standards of effectiveness and efficiency in public policy implementation and service which demands a level of discretion.

Many internal controls suffer the same fate of external controls in limiting bureaucratic policy-making. The vast array of internal regulations may institute a measure of control, but these policies are unlikely to completely proscribe discretion. Street-level bureaucrats will always maintain some measure of discretion (Meier, 1993a). This may be a result of the characteristics of policies. Poorly written or vague policies, rules, regulation, or directives incorporate a level of ambiguity into the decision process (Lipsky, 2010). Many of these internal controls are so voluminous they become contradictory (Lipsky, 2010). For example, domestic violence

laws in the State of Texas remove discretion from law enforcement officers by mandating an arrest in certain situations. However, there will almost certainly be circumstances that preclude a mandatory arrest for domestic violence. Such as domestic violence between a husband and wife where underaged children are present, which presents the arresting officer with a larger problem of leaving the children unattended or thrust into state custody if both parents are arrested per policy. This highlights a major limitation with restricting discretion among street-level bureaucrats, namely inefficient policies and ineffective organizations (Meier, 1993a).

The third, and final, assumption in the theory of representative bureaucracy derives from the classical notion of rationality. It posits that individual bureaucrats seek to maximize their own values when engaging in discretionary-decision making (Meier, 1993a). By acknowledging that bureaucrats engage in value-laden policymaking, this assumption is a logical extension of the paradigm shift away from the politics-administration dichotomy. The personal values maximized by individual bureaucrats can range widely. However, these values typically do not center on palpable benefits. Instead, bureaucrats seek to maximize intangible values such as satisfaction, career advancement, or furthering public interests (Meier, 1993a).

# Measures and Operationalization of Passive Representation Measures of Passive Representation

An overview of passive representation studies in the U.S. finds that the demographic characteristics of race, ethnicity, and gender dominate the literature (Keiser, 2010). The key feature of these studies is centered on exploring the extent to which bureaucracies are representative across demographic and socioeconomic indicators, such as race, gender, and ethnicity. The findings from these studies can provide a measure of the public's perceptions of equity and legitimacy in policy processes and outcomes (Keiser, 2010). These studies focus on various levels of the bureaucracy, ranging from federal to local governments. For example, Grabosky and Rosenbloom (1975) explore the representation of racial and ethnic minorities within the federal civil service. Hall and Saltzstein (1977) explore the representation of African Americans and Hispanics in municipal government. Nachmias and Rosenbloom (1973) explore the racial and ethnic minority composition of federal agencies. Cayer and Sigelman (1980) explore the representation of racial and ethnic minorities and women in state and local governments.

Contemporary research expands beyond these innate characteristics to include a wide-range of demographic and socioeconomic characteristics.

Findings from this research provide support for the impact of politically relevant characteristics within a bureaucratic setting. These studies include religious denominational commitment (Freeman & Houston, 2010), political affiliation (Kropf, Vercellotti, & Kimball, 2013), age, education, income, size of birthplace, social class, region of birth, and father's occupation (Meier, 1975), individuals of Aboriginal descent and individuals with disabilities (Ng & Sears, 2014), and sexual orientation (Thielemann & Stewart, 1996).

Several studies extend the scope of demographic and socioeconomic characteristics by exploring identities within a bureaucratic representation setting. Although these studies focus on active representation, they illustrate the expansion of bureaucratic characteristics beyond innate qualities. Arroyo and Peek (2015) construct a child welfare caseworker identity through demographic, education, and employment characteristics and find evidence impacting attitudes toward non-custodial fathers. Gade and Wilkins (2013) explore the relationship between a veteran identity among counselors and veteran's perceptions of positive behaviors that impact the quality of services received in a VA vocational rehabilitation program.

The expansion of immutable characteristics of administrators under study serves to further extend the theory's understanding of which characteristics are politically relevant. Key to the development of these

characteristics is their impact on democratic values. A bureaucracy that is not reflective of the public it serves is likely to reduce perceptions of equity, responsiveness, and legitimacy in policy processes and outcomes. *Operationalization of Passive Representation* 

Beyond general percentage calculations of the identified demographic characteristic or identity under observation, passive representation has been measured by several statistical measures. Subramaniam (1967) uses a representation index in his descriptive analysis of the civil services of six countries. A representation index is a ratio that is computed by dividing the percentage of a specific characteristic within the bureaucracy by the percentage of the corresponding characteristic within the population (Meier, 1993a; and Selden, 1997). A representation index value of 1 indicates an exact composition ratio, meaning the characteristic or identity within the bureaucracy perfectly reflects the corresponding characteristic or identity within the population (Meier, 1993a; and Selden, 1997). Values below 1 indicate that the characteristic is underrepresented within the bureaucracy, while values above reflect overrepresentation within the bureaucracy (Meier, 1993a; and Selden, 1997).

A second measure of representation is the measure of variation (MV) which was developed by Nachmias and Rosenbloom (1973) in their study

that examines the racial and ethnic composition of federal bureaucracies (Meier, 1993a; and Selden, 1997). The MV is a supplementary measure of representation that addresses some of the inferential limitations inherent within the representation index (Nachmias & Rosenbloom, 1973). The MV captures the extent of integration within the bureaucracy by racial and ethnic minorities (Nachmias & Rosenbloom, 1973). The MV ratio derives from computing the "observed number of racial/ethnic differences in an agency to the maximum number of differences that could occur given the total number of employees in the agency and equal representation of each racial/ethnic group" (Kellough, 1990). The MV output can range from 0 to 1. This provides a measure of racial and ethnic integration for several groups occurring simultaneously within organizations compared to the public (Meier, 1993a). Scores closer to 0 indicate less integration occurring for one racial or ethnic group, whereas scores closer to 1 indicate more equal integration for each category of racial or ethnic group (Kellough, 1990).

A third measure of representation is the combined use of the Lorenz curve and Gini index of concentration. This statistical measure is derived from economic analyses on inequality in income distribution. Meier (1975) uses this measure to determine whether the civil service composition of six nations are reflective of the public. Both statistical analyses provide a

measure of racial or ethnic inequality in bureaucracies. The Lorenz curve presents a graphical representation of the numerical data captured by the Gini index of concentration (Meier, 1975; and Selden, 1997). The Lorenz curve visually represents the cumulative percentage of bureaucrats with a specific characteristic on a vertical axis and the cumulative percentage of the population with the corresponding characteristics on a horizontal axis (Meier, 1975). A visual representation of inequality is provided by the distance of inequality curve, which is a line that extends below a straight line connecting the two axes representing perfect equality (Meier, 1975). The Gini index of concentration ranges from 0 to 1, with scores closer to 0 indicating perfect equality and scores closer to 1 indicating perfect inequality (Meier, 1975; and Selden, 1997).

These three methods provide a general overview of the statistical analyses of passive representation within bureaucracies. These methods provide descriptive outputs that are used to determine the representativeness of bureaucracies across various demographic or socioeconomic characteristics. However, these methods do not provide any measure of the impact of passive representation upon policy processes or outcomes.

# Measures and Operationalization of Active Representation Measures of Active Representation

The theory of representative bureaucracy maintains that for active representation to occur, passive representation must first exist within the organization. Similarities in demographic and socioeconomic origins are posited to be tied to similarities in socialization experiences, which leads to shared attitudes and values, and culminates with policy outcomes that are beneficial to demographically represented groups (Meier, 1993a). Because administrators maximize their values when exercising discretionary decision-making, similarity in values between representatives and those represented should produce amenable policy outcomes.

However, active representation is a process that does not afford exact specification (Meier, 1993a). This is the result of several aspects inherent within the process of active representation. First, because of expertise and information advantages in the policy arena, the bureaucrat may produce policy outcomes that differ from those preferred by those sharing similar characteristics (Meier, 1993a). Researchers are also presented with challenges in measuring the behavior of bureaucrats within organizations. The actual process of active representation has not been empirically captured (Meier & Funk, 2017). This presents representative bureaucracy

research with an empirically valid measure that approximates the process of active representation.

Researchers conclude that the best measure of active representation is policy congruence (Meier, 1993a; Meier & Stewart, 1992; and Selden, 1997). Policy congruence is a measure that best captures the relationship between representatives and those represented. Meier and Stewart (1992) indicate that policy congruence occurs when bureaucratic policymaking parallels the preferences of those in the public. The policy preferences of a passively representative bureaucracy are likely to be shared by those within the public who share similar characteristics. As a result, a bureaucrat that assumes a representative role will produce policy outputs and outcomes that are favorable and supported by the public (Meier, 1993a). This measure of active representation is posited to be the "most consistent with the theory of representative bureaucracy" (Meier & Stewart, 1992).

#### **Operationalization of Active Representation**

Because policy congruence between representatives and those represented is an indirect process, there are two steps involved with operationalizing active representation. The first step in empirically measuring active representation is to identify policy outputs and outcomes that would be beneficial to the represented group (Meier, 1993a). The final

step in operationalizing active representation is measuring the similarity between the policy outputs and outcomes hypothesized to benefit a particular group and the actual organizational policy outputs and outcomes (Meier, 1993a). Once this policy output and outcome relationship is identified, multiple regression is the most appropriate statistical tool for analyzing active representation (Meier, 1993a). Multiple regression allows researchers to control for confounding variables that may impact the relationship between hypothesized and actual policy outputs and outcomes (Meier, 1993a).

#### Conditions for Active Representation

Two conditions are identified as prerequisites to the passive to active linkage. The first requirement is based on the characteristics of the bureaucrats themselves. For the passive to active representation link to occur, the demographic characteristic or social identity of the bureaucrat must be politically relevant (Keiser, 2010; Meier, 1993; and Thompson, 1976). The demographic characteristic or social identity in question must be linked to politically relevant attitudes and values. The second requirement is grounded in one of the theory's assumptions and extends from the first requirement. For passive representation to be linked to active representation, the bureaucrat must have discretion over policies that are relevant to their key demographic characteristics or social identities (Keiser, 2010; Meier, 1993a; and Selden, 1997). A lack of discretion over policies that are relevant to the bureaucrat's social characteristics or social identities will attenuate the linkage between passive and active representation.

## Demographic Factors

One of the first conditions that must be met in the passive to active representation linkage is the requirement of politically relevant demographic characteristics or identities. Not all demographic or socioeconomic characteristics impact a bureaucrat's political attitudes and values. The demographic or socioeconomic characteristic "must somehow produce a value that is addressed in the policy process" (Meier, 1993a, p. 10).

Within the context of the Unites States bureaucracy, there are several key demographic characteristics that produce relevant political attitudes and values. Krislov (2012) contends that contemporary bureaucratic structures are divided along lines relating to race, ethnicity, and gender. Meier (1993a) contends that ethnicity is not as likely to impact political attitudes and values, while gender is likely to impact attitudes and values relating to workplace issues. However, race is often seen as the most significant demographic characteristic. Several scholars contend that race has the most

impact on political attitudes and values (Meier, 1993a; Meier & Stewart, 1992; and Thompson, 1976).

Several studies explore the relationship between key demographic characteristics and identities and substantive outcomes. More specifically they examine whether bureaucrats with key characteristics and identities, such as race, gender, and ethnicity, produce policy outputs and outcomes favorable to those with shared characteristics.

Studies find evidence to support the relationship between race and favorable policy outputs and outcomes. Using several years of data, Meier et al., (1989) find evidence to support the relationship between black teachers and favorable outcomes for black students, measured by academic groupings, discipline, and educational outcomes. They discover statistically significant associations between black teachers and all outcome measures, which was stable across all years of data. Teachers are significantly associated with more gifted class placements and fewer educable mentally retarded (EMR) class placements and fewer trainable mentally retarded (TMR) class placements (Meier et al., 1989). Teachers are also significantly associated with lower percentages of corporal punishment, fewer suspensions, and fewer expulsions (Meier et al., 1989). Finally, teachers are significantly associated with higher graduation rates (Meier et al., 1989).

Meier and Stewart (1992) find evidence to support the relationship between black teachers and principals and substantive outcomes for black students, measured by student performance, gifted class placement, disciplinary actions, and placement in special needs classes. They find statistically significant associations between black teachers and principals and black student outcome measures, compared to all other students. Teachers are significantly associated with fewer assignments to special needs classes and more assignments to gifted classes (Meier & Stewart, 1992). Principals are significantly associated with fewer student assignments to special needs classes (Meier & Stewart, 1992). Regarding disciplinary actions, teachers are significantly associated with lower percentages of corporal punishment, fewer in-school suspensions, fewer regular suspensions, fewer expulsions, and fewer court referrals (Meier & Stewart, 1992). Principals are significantly associated with fewer students held back and fewer drop-outs (Meier & Stewart, 1992). In addition, teachers are significantly associated with higher scores on standardized tests across all grade-levels (Meier & Stewart, 1992).

In the first of two studies within the Equal Employment Opportunity Commission (EEOC), Hindera (1993a) finds evidence to support the relationship between race and gender and favorable policy outputs and

outcomes, measured by discrimination charges filed on behalf of minority complainants. He discovers statistically significant associations between black male and female administrators and favorable policy outputs and outcomes for minority complainants. Black male and female administrators are significantly associated with filing more charges on behalf of black complainants (Hindera, 1993a). This study provides evidence supporting the relationship between race and substantive outcomes for those with shared characteristics, but also finds evidence that gender impacts the values of administrators.

In the second study on the EEOC, Hindera (1993b) extends the previous work by including data on Hispanic administrators. He finds statistically significant associations between black and Hispanic administrators and administrative charges on behalf of minority complainants. Black administrators are significantly associated with filing more charges on behalf of black complainants and Hispanic administrators are significantly associated with filing more charges on behalf of Hispanic complainants (Hindera, 1993b).

Meier & Stewart (1991) explore the relationship between ethnicity and substantive outcomes for students within U.S. school districts, measured by academic groupings and disciplinary actions. Hispanic representation is a

measure of the percentage of Hispanic teachers and school board members (Meier & Stewart, 1991). They find statistically significant relationships between Hispanic representation and Hispanic student academic groupings and disciplinary actions. Teachers and school board members are significantly associated with fewer assignments to both types of special needs classes and more assignments to gifted classes (Meier & Stewart, 1991). Hispanic representation is significantly associated with lower discipline across all three domains—corporal punishment, suspensions, and expulsions (Meier & Stewart, 1991). Finally, Hispanic teachers and school board members are significantly associated with lower drop-out rates and higher graduation rates (Meier & Stewart, 1991).

Selden (1997) explores the relationship between racial and ethnic minority and women supervisors and favorable policy outputs and outcomes within the district offices of the Farmers Home Administration (FmHA), measured by rural housing loan eligibility decisions. The study finds statistically significant associations between African American, Hispanic, and Asian FmHA supervisors and home loan eligibility determinations. African American supervisors are significantly associated with higher percentages of favorable eligibility decisions for African American applicants (Selden, 1997). This finding remains consistent for Hispanic and Asian supervisors, with

both groups of supervisors significantly associated with higher percentages of favorable eligibility decisions for their respective applicants (Selden, 1997). These findings provide support for the active representation thesis within the bureaucratic representation logic.

However, the results on the impact of key demographic characteristics on favorable policy outputs and outcomes are inconsistent. Many studies only find a modest or no interaction effect between demographic characteristics and substantive outcomes. Some studies find evidence contrary to the hypothesis linking passive and active representation. For example, Selden (1997) did not find evidence supporting a gender representative role among supervisors in home loan eligibility determination decisions for women applicants. Meier and Stewart (1992) observe that black teachers are significantly associated with more black student drop-outs. Also, black principals are significantly associated with higher rates of corporal punishment and more in-school suspensions (Meier & Stewart, 1992).

Hindera (1993a) finds that white female EEOC administrative personnel are significantly associated with filing fewer administrative charges on behalf of female complainants. In addition, black male EEOC administrators are significantly associated with filing fewer administrative

charges on behalf of female complainants (Hindera, 1993a). In the second study, Hindera (1993b) finds similar disparities between demographic characteristics and policy preferences. White administrators and Hispanic administrators are significantly associated with filing fewer administrative charges on behalf of black complainants (Hindera, 1993b). Within an agency with an explicit mission of advocating on behalf of minorities, these findings run contrary to the central bureaucratic representation thesis.

#### Discretion

The second required condition for the passive and active representation linkage is discretion. Closer observation of this factor reveals that it is composed of two conditions that follow a sequential order. First, for passive representation to translate to active representation, bureaucrats must have discretion in the policy-arena (Keiser, 2010; Meier, 1993a; Selden, 1997; and Thompson, 1976). This factor logically follows from the first assumption embedded within the theory of representative bureaucracy that bureaucrats exercise discretion in decision-making processes. However, discretion, absent other mediating factors, is insufficient for passive and active representation linkage. Bureaucrats are often afforded some amount of latitude because internal organizational rules and regulations are finite and cannot completely prescribe the decision processes (Meier & Bohte,

2001). The second key component of discretion then centers on the link between discretion and policies that are relevant to a corresponding demographic origin or identity (Meier, 1993a; and Thompson, 1976). For example, minority administrators employed by an organization that does not impart any benefits to their respective minority group are unlikely to engage in discretionary decision-making on relevant policies (Thompson, 1976). The cumulative effect of these two components can be summarized by the statement that discretion alone is insufficient, it must be supported by policies that are relevant to a key demographic origin or identity. According to Meier (1993a), discretion must involve values that are "likely to be socialized by demographic experiences" (p. 19).

Studies exploring the relationship between key demographic characteristics of bureaucrats and discretion over salient policies find evidence of active representation. Keiser et al., (2002) introduce a measure of discretion through a hierarchy variable which is hypothesized to positively impact active representation among female teachers in organizations with flatter hierarchal structures. They find statistically significant associations between female teachers in flat organizations and all four academic performance measures for female students. In flat organizations, female teachers are significantly associated with increases in SAT and ACT scores,

higher above criterion SAT or ACT equivalent scores, and more female students taking and passing advanced placement exams (Keiser et al., 2002).

Meier and Bohte (2001) introduce a measure of discretion in their model that explores the relationship between African American and Latino teachers and favorable outcomes for minority students, measured by higher test scores. Discretion is operationalized as a span of control by first-line and mid-management over teachers (Meier & Bohte, 2001). They find a positive association between minority teachers in higher span of control organizations and minority student test scores. Teachers with more discretion are associated with higher scores on the standardized state-level exam, compared to minority teachers with less discretion (Meier & Bohte, 2001).

Sowa and Selden (2003) explore the role of discretion on favorable loan eligibility decisions for minorities in the county offices of the Rural Housing Loan Program of the Farmer's Home Administration (FmHA). Discretion is measured by a scale of supervisor's perceptions of discretion over policy outcomes, while controlling for demographic characteristics (Sowa & Selden, 2003). The study finds a statistically significant relationship between discretion and loan eligibility decisions favoring minorities. Supervisor's perceptions of discretion over the policy arena is significantly

associated with higher percentages of favorable loan eligibility decisions (Sowa & Selden, 2003). Although it did not reach statistical significance, minority supervisors are associated with a lower percentage of favorable loan eligibility decisions for minority clients (Sowa & Selden, 2003). This finding provides support for the impact of discretion among bureaucrats above demographic characteristics.

#### Determinants of Active Representation

Although the theory of representative bureaucracy is explicit in linking passive and active representation, research continues to explore the determinants of active representation (Dolan & Rosenbloom, 2003a). This argument traces its lineage to Thompson (1976), who observes that the question is not if passive representation leads to active representation, but what circumstances lead to its nexus. The issue then centers on what organizational and individual factors lead to the assumption of a representative role among bureaucrats.

#### Attitudes and Values

Although the theory of representative bureaucracy is explicit in recognizing the role and impact of bureaucratic attitudes in the sequential model affecting behavior, research on attitudes and values is limited (Meier & Nigro, 1976). However, recent research has begun to examine the

moderating effects of attitudes within the bureaucratic representation equation (Dolan & Rosenbloom, 2003c). This research attempts to empirically measure the relationship between bureaucratic attitudes and favorable policy outcomes.

Selden (1997) examines whether the attitudes of minority bureaucrats impacts favorable policy outputs and outcomes for minorities. Bureaucratic attitudes are captured by a minority representative role index which captures whether an administrator embraces and supports minority interests in policy processes and outcomes (Selden, 1997). The study also examines the impact of stakeholder influence and traditional bureaucratic values on a bureaucrat's minority representative role. The study finds statistically significant associations between bureaucrat's minority representative role and demographic characteristics, perceived role expectations by stakeholders, and traditional bureaucratic values (Selden, 1997). Minority bureaucrats are significantly associated with a minority representative role perception (Selden, 1997). Minority administrators who perceive that stakeholders expect them to implement beneficial policies for minorities is significantly associated with a minority representative role (Selden, 1997). A traditional bureaucratic role perception is negatively associated with a minority representative role (Selden, 1997).
The study also explores the relationship between a minority representative role and favorable policy outcomes for minorities. Selden (1997) finds a statistically significant association between these two variables, with higher percentages of minority loan eligibility determinations associated with administrators who perceive their role as minority representatives. Although racial and ethnic minority administrators are positively associated with minority eligibility determinations, the finding is not statistically significant (Selden, 1997). This indicates that a minority representative role exerts a stronger influence on bureaucratic behavior than demographic characteristics.

# Agency Socialization

Seen as a moderating factor, agency socialization is an important factor in the relationship between a bureaucrat and substantive policy outcomes. This factor is borne from both the implicit and overt role of the agency in affecting bureaucrat's discretionary decision-making. The implicit function of agencies in the decision-making processes centers on the core aspect of adult learning. Learning does not cease upon entering service in the bureaucracy (Keiser, 2010; Meier, 1993a; and Meier & Nigro, 1976). The implicit impact of the agency can thus influence the relationship between bureaucrats and policy outputs and outcomes.

The agency also maintains an overt role in controlling the amount of discretion afforded to bureaucratic decision-making. One of the assumptions embedded within the theory of representative bureaucracy is the necessity for external and internal controls of bureaucratic discretion (Meier, 1975; and Meier, 1993a). However, these controls are noted for their relative ineffectiveness in eliminating discretionary decision-making and agency socialization can be a measure of influencing bureaucratic behavior (Meier, 1993a). There are several noted methods agencies can utilize that support the socialization process of bureaucrats. The first two are closely related and specifically address the character and nature of the bureaucrats themselves. The recruitment of individuals with specific demographic characteristics, educational achievements, or values is likely to yield bureaucrats that are amenable to agency values or goals (Meier, 1993a). The logical extension of agency recruitment is the role that self-selection plays in the process. Bureaucrats may have specific attitudes or values that attract them to employment with a specific agency (Meier, 1993a). Other less obtrusive methods of agency socialization include "prolonged exposure to a certain organizational culture, a specific set of role expectations, and a particular array of professional associations" (Thompson, 1976, p. 204). The aggregate

effect of these socializing methods can attenuate the passive and active linkage.

Several studies examine the impact of socialization on the relationship between a bureaucrat and their attitudes affecting policy preferences. Meier and Nigro (1976) introduce a measure of agency socialization in their study on the attitudes of executive-level bureaucrats across twelve policy areas. They use path analysis to explore the impact of demographic characteristics and agency affiliation on executive's attitudes on the policies (Meier & Nigro, 1976). They find that agency affiliation, measured by length of service in the agency, is two to five times more impactful on attitudes toward ten of the twelve policy areas, compared to demographic characteristics (Meier & Nigro, 1976).

Meier and Stewart (1992) find significant associations between black teachers and poorer black student performance and black principals and more disciplinary actions, across indicators of drop-outs, corporal punishment, and in-school suspensions. This finding is contrary to the representative bureaucracy thesis and could be attributed to the role of organizational socialization (Meier & Stewart, 1992).

Selden (1997) incorporates a measure of socialization into her minority representative role perception model. Socialization is

operationalized by years of employment in the government, number of days in training, and number of years in a supervisory position (Selden, 1997). She finds a statistically significant association between the number of years of federal employment and a minority representative role. As the years of government employment increases, a minority representative role significantly decreases among administrators (Selden, 1997).

Because of agency socialization, the mechanisms linking passive and active representation are likely to be weakened. However, there is a noted caveat to this premise. Some agencies explicitly advocate for certain individuals or groups (Meier, 1993a). Agencies such as the Department of Veterans Affairs (VA), Department of Agriculture, and EEOC are unequivocal in their role of actively representing the interests of their constituents. In these agencies, the link between passive and active representation is likely to be strengthened (Meier, 1993a).

The studies by Hindera (1993a) and Hindera (1993b) find statistically significant evidence of a relationship between minority administrators and favorable outcomes for minority complainants in the district offices of the EEOC, an organization with an explicit goal of minority representation. These findings support the hypothesis that active representation is likely to be supported in agencies that socialize employees to support agency goals.

However, both studies find statistically significant evidence that contradicts the impact of agency socialization within this setting. Hindera (1993a) finds that black male administrators and white female administrators are significantly associated with filing fewer charges on behalf of female clients. Hindera (1993b) finds that white and Hispanic administrators are significantly associated with filing fewer charges on behalf of black clients. The findings from these studies provide mixed evidence for the impact of agency socialization on attitudes and values affecting a representative role. *Intersectionality* 

Another factor that could weaken a bureaucrat's representative role is the impact of multiple identities. Individual bureaucrats have multiple individual and group identities that can include race, gender, ethnicity, sexual orientation, job title, or any other politically relevant trait (Gay & Tate, 1998; Keiser, 2010; Meier & Funk, 2017). The intersection of competing identities is likely to moderate a bureaucrat's political attitudes and values (Gay & Tate, 1998). These multiple, and often competing, identities could serve to weaken the relationship between bureaucrats and their substantive outcomes favoring certain groups with shared identities. Research attempts to identify and measure the relationship between multiple identities and favorable policy outputs and outcomes. However, contemporary research on

intersectionality has not formulated a measure or theory that affords the prediction and empirical measurement of multiple identities on substantive policies (Keiser, 2010).

Although not a representative bureaucracy study, Gay and Tate (1998) use a cross-section design to explore the intersection between race and gender among black females using a nationally representative sample. Measures of a respondent's race and gender are juxtaposed with one another to gain insight into which identity is more salient (Gay & Tate, 1998). They find that black women identify more strongly with their race than gender (Gay & Tate, 1998).

Within an agency with an explicit mission of advocating on behalf of minorities, Hindera (1993a) finds that white female and black male EEOC administrative personnel are significantly associated with filing fewer charges on behalf of female clients. Hindera (1993b) finds similar disparities in the relationship between administrators and policy outcomes, with white and Hispanic administrators significantly associated with filing fewer charges on behalf of black complainants. Selden (1997) did not find any evidence that supports a relationship between women supervisors and favorable home loan eligibility determination decisions for women applicants in FmHA district offices. These findings could suggest the impact

of intersectionality on bureaucrat's attitudes and values that affect substantive outcomes.

## **Representative Bureaucracy Applied to Political Actors**

In addition to recent research that expands the scope of demographic and socioeconomic characteristics through social identities, the theory of representative bureaucracy is applied to policy-makers traditionally thought to be outside the realm of the theory. The logic of representative bureaucracy can apply to elected officials in the face of electoral incentives (K.J. Meier, personal communication, February 21, 2017). Key to this principle is the representative role and impact of elected and appointed officials. Regardless of whether an official is elected or appointed, representation as a form of action, is a central component of politics (Pitkin, 1967).

Elected officials are not immune from the logic of representative bureaucracy. Politically relevant social origins and identities, socialization experiences, and attitudes can impact the policy preferences of elected officials. Substantive outcomes of elected officials are likely impacted by the key factors within the bureaucratic representation framework. In their application of representative bureaucracy to elected officials within a local government setting, Meier and Funk (2017) attest to this premise by stating that bureaucratic representation "does not occur in a vacuum" (p. 125).

Meier and Funk (2017) explore the relationship between gender identities among elected and administrative personnel within Brazilian local governments and substantive outcomes for women. The study tests two constructs of representative bureaucracy. The top-down logic theorizes that more women in elected positions will lead to more women in the bureaucracy, the second construct explores the relationship between gender identity among elected officials and substantive outcomes for women. They find statistically significant associations between women in elected positions and higher percentages of women in the upper-ranks of bureaucratic organizations (Meier & Funk, 2017). The study also finds statistically significant relationships between the presence of women in elected positions and policy outputs and outcomes favoring women. More women on the city council, more women in the municipal executive administration, and having a woman head the social assistance agency are significantly associated with more pro-women policies (Meier & Funk, 2017).

Meier & Stewart (1991) examine the relationship between Hispanic teachers and school board members, operationalized as Hispanic representation, and favorable outcomes for Hispanic students, measured by ability groupings, disciplinary measures, and performance. They find statistically significant associations between Hispanic representation and all

three measures of student academic outcomes. Hispanic representation is significantly associated with fewer assignments to both types of special needs classes and more assignments to gifted classes (Meier & Stewart, 1991). Hispanic representation is significantly associated with fewer students disciplined, measured across all three domains—corporal punishment, suspensions, and expulsions (Meier & Stewart, 1991). Finally, Hispanic representation is significantly associated with lower drop-out rates and higher graduation rates among Hispanic students (Meier & Stewart, 1991).

Meier and O'Toole (2006) examine the relationship between minority political and bureaucratic educators and favorable outcomes for minority students, measured across nine performance indicators. They first test the relationship between Latino school board members and policy outcomes for Latino students as an indicator of political control of the bureaucracy (Meier & O'Toole, 2006). The study finds statistically significant associations between school board members and student outcomes on all but one performance measure. School board members are significantly associated with more students passing the state-level examination, more students attending class, more AP class placements, more students taking the AP exam, more students taking either the ACT or SAT, higher average SAT

scores, higher average ACT scores, and more students scoring 1110 or higher on the SAT or its equivalent (Meier & O'Toole, 2006). The results on Latino school board members could be interpreted as the relative importance of political control on discretionary decision-making by bureaucrats.

To interpret the combined impact of political and bureaucratic actors, the study adds Latino teachers to the same equations. The relationship between Latino school board members and student performance drops dramatically, with only three of the nine categories remaining statistically significant (Meier & O'Toole, 2006). Conversely, there are statistically significant associations between Latino teachers and student performance outcomes on all nine indicators (Meier & O'Toole, 2006). Teachers are significantly associated with a higher percentage of students passing the state-level test, higher attendance rates, more AP class placements, more students taking the AP test, more students passing the AP exams, more students taking either the ACT or SAT, higher average ACT and SAT scores, and more students scoring 1110 or higher on the SAT or its ACT equivalent (Meier & O'Toole, 2006). The inclusion of Latino teachers tempers the findings on the scope and magnitude of political control of the bureaucracy in this setting.

Meier and Rutherford (2017) examine the relationship between black school board members, black school administrators, and black teachers and favorable outcomes for black students, measured by ability groupings and disciplinary measures. They find statistically significant associations between all three levels of minority school district members and student outcome indicators. For ability groupings, school board members and teachers are significantly associated with more assignments to gifted classes (Meier & Rutherford, 2017). Administrators are significantly associated with more intellectually disabled assignments and teachers are significantly associated with fewer intellectually disabled assignments (Meier & Rutherford, 2017). School board members and administrators are significantly associated with more emotionally disturbed classifications, while teachers are significantly associated with fewer classifications into this category (Meier & Rutherford, 2017). Finally, administrators are significantly associated with higher percentages of learning-disabled classifications and teachers are significantly associated with lower percentages of learning-disabled classifications (Meier & Rutherford, 2017).

A similar pattern emerged for students on disciplinary indicators. Administrators are significantly associated with more expulsions while teachers are significantly associated with fewer expulsions (Meier &

Rutherford, 2017). Similarly, administrators are significantly associated with higher percentages of suspensions while teachers are significantly associated with lower percentages of suspensions (Meier & Rutherford, 2017).

## Critique of Representative Bureaucracy

What follows from the overview are several critiques leveled at the normative and conceptual aspects of the theory. From a normative perspective, the debate centers on the aspect of active representation (Keiser, 2010). Active representation runs contrary to the orthodox ideals of neutral administration of public policies espoused by Wilson and Weber. The normative argument for active representation maintains that a bureaucracy composed along characteristics that mirror society will produce substantive policy outcomes that reflect the diversity of society. Having a diverse array of input in the policy processes is likely to result in diversity of policies, a measure intended to address the inherent problems associated with balancing democratic ideals and bureaucratic decision-making. The democratic ideals of responsiveness and accountability are posited to be instilled in policy processes and outcomes.

However, there are some who identify problems associated with active representation. Mosher (1982) identifies limits to the processes and outcomes associated with the concept, stating that active representation "run

rampant within a bureaucracy would constitute a major threat to orderly democratic government" (p. 15). In this argument there is acceptance with a certain level of active representation, beyond which begins to run contrary to the very ideals active representation was intended to instill. What constitutes an acceptable level of active representation is open to debate.

Some researchers also question the distributional equity of active representation. In what is labeled a zero-sum game, active representation on behalf of one group could be at the expense of another group (Meier, Wrinkle, & Polinard, 1999). In modern governments facing challenges surrounding scarce resources, this aspect of active representation could present conceptual challenges to core democratic principles. Substantive policy outcomes for one group sharing similar characteristics and values with bureaucrats could come at the expense of other groups who don't share those similarities. This concept stands in direct contrast to the democratic ideals of equity, legitimacy, and responsiveness. The result could be a perceived lack of equity, legitimacy, and responsiveness in the policy processes and outcomes.

From a conceptual standpoint, some researchers note inconsistencies in defining key concepts within the theory (Kennedy, 2014; and Meier, 1975). Appropriate measures of passive representation vary. Some researchers

posit that passive representation requires equivalency or proportionality in demographic characteristics between the bureaucracy and the population (Dresang, 1974; and Kranz, 1975). While others provide a more inclusive definition of passive representation, calling for a bureaucracy that is representative across numerous characteristics (Meier et al., 1999; and Thielemann, & Stewart, 1996). The amount of variation in appropriate measures of passive representation can result in disparities in the composition of bureaucracies. The social composition of the bureaucracy, across key demographic characteristics such race, ethnicity, and gender, has significant political importance to the democratic ideals of equity and legitimacy.

Inconsistencies in appropriate definitions of active representation also exist. Appropriate measures can range from implied forms of representation to overt forms of behavior. For example, some scholars interpret active representation to equate acting for others or representing their interests, while others maintain that it involves pressing for their interests and desires (Pitkin, 1967; and Mosher, 1982). While some contemporary researchers promote policy congruence as the standard for active representation, the disparity across appropriate measures of active representation presents potential limitations to the theory.

Another critique of the theory comes from debates that center on the determinants of the passive to active representation linkage (Meier, 2010). A review of representative bureaucracy theory identifies several factors that are the subject of debate. These factors include identifying which demographic characteristics or identities are politically relevant, critical mass, intersectionality, bureaucratic settings under study, and stratification (Keiser, 2010). Stratification centers on the locus of representation. The central issue of this moderating factor is the appropriate level within the organization where representation is likely to occur (Keiser, 2010; and Meier, 1993a). The debate is centered on whether upper-level bureaucrats, mid-management level bureaucrats, or street-level bureaucrats are the most conducive to supporting a representative role. Critical mass suggests that active representation among bureaucrats is dependent upon a minimum number of bureaucrats with similar politically relevant demographic characteristics or identities (Keiser, 2010; Meier, 1993a; and Thompson, 1976). The complexities in defining and empirically measuring critical mass and intersectionality present problems for the development of the theory (Keiser, 2010). Understanding what levels and under what conditions representative bureaucracy is likely to occur is key to the development of the theory.

The demographic characteristics and settings under study provide another limitation to the theory. Historically, the demographic characteristics of race, gender, and ethnicity garner the bulk of attention, while settings are generally limited to educational systems (Keiser, 2010). Extending the number of demographic characteristics under study improves our understanding of which social origins impact attitudes and values affecting substantive outcomes and provides insight into the interactive effects of multiple identities. Increasing the number of bureaucratic settings under study increases our understanding of the role and impact of the agency on active representation and provides the ability to generalize findings to the larger population.

The general critique of the identities and settings under study highlights a void in representative bureaucracy research. There is an identified need to expand the number of social identities and types of settings under study. To date, there is only one study that explores the impact of a veteran identity through the lens of representative bureaucracy. The study by Gade and Wilkins (2013) is a demand-side study conducted in a healthcare setting. Owing to a unique culture that extends beyond their service in the military and into civilian life, veterans are a distinct population with highly politicized problems, such as healthcare and criminal justice

involvement. Public policies aimed at addressing these unique problems are evident throughout all levels of government. This presents a need to explore the role and impact of a veteran identity on policy outcomes within a representative bureaucracy context.

Also, there are no known representative bureaucracy studies within a veteran treatment court (VTC) setting. The number of VTCs have increased across the nation to address the unique problems facing veterans in the criminal justice system. The collaborative and non-adversarial decision processes on the administration of treatment plans highlights the bureaucratic nature of these courts. Key personnel within these courts routinely make decisions that directly impact the success of veterans within the program. The relationship between the demographic characteristics and identities among key personnel and substantive policy outcomes underscores the need for expanding the scope of settings in representative bureaucracy research to include VTCs.

# Chapter 3

#### **Veteran Treatment Courts**

Veteran treatment courts (VTCs) are the newest edition to the problem-solving court family. Drawing a direct lineage from these courts, they are an amalgamation of drug and mental health courts. The first VTCs formed in response to a noticeable increase in the number of veterans appearing in criminal court and the recognition that many of these veterans suffer from underlying mental health and substance abuse factors that led to criminal offending. The ability to treat the underlying causal mechanisms lies outside the realm of traditional court settings. Since their inception in 2004, their numbers have grown exponentially, with 461 VTC courts, dockets, or tracks across the nation as of 2016 (Flatley, Clark, Rosenthal, & Blue-Howells, 2017; and Hawkins, 2009).

But why are these courts becoming increasingly prevalent? There is no simple answer to this question. The concise answer is grounded in the cumulative effect of several interrelated individual- and organizational-level factors. VTCs address a need within the veteran community. Many veterans of Afghanistan and Iraq suffer from mental health and substance abuse problems which are not effectively treated within traditional courts.

A more thorough answer requires a discussion on advances in the prevention and treatment of injuries on the modern battlefield that lead to increased survivability among veterans. Although these advances result in more soldiers returning from the battlefield, many of these veterans suffer from mental and psychological injuries. Largely invisible, injuries such as post-traumatic stress disorder (PTSD), traumatic brain injury (TBI), and depression are more widely recognized and understood within the veteran community. The mental and psychological wounds alone lend sufficient gravity to the problems facing the veteran community.

These injuries often predispose veterans to behaviors that increase the potential for contact with the criminal justice system. These include not seeking professional care for their psychological injuries, maladaptive coping behaviors, and increased risk-taking. In addition, the stigmatization of mental health often reduces the likelihood of veterans seeking and receiving the care needed for their mental health problems. A military culture that embodies the strength of individual character may reduce a servicemember's willingness to admit to, and seek treatment for, mental health problems.

This study will provide a contextual overview of several interrelated factors that provide the foundation for the establishment and development of VTCs. This study does not presume the issues identified and examined are

exhaustive. The multidisciplinary research on current issues facing the veteran population following war or conflict informs this study in providing an accurate and thorough representation.

For purposes of this study, the term veteran draws from scholarly work to provide a purposefully broad and inclusive definition (Baldwin, 2015; and White, Mulvey, Fox, & Choate, 2012). Veteran is defined as anyone who has served for any amount of time, or is currently serving, in any branch of the United States armed forces. This includes the Reserves or National Guard. The term is inclusive of all veterans from all service eras, all methods of entry—drafted or volunteered, those with or without combat experience, and all discharge types and U.S Department of Veterans Affairs (VA) benefit eligibility categories. In addition, the term veteran is used synonymously and interchangeably with the terms servicemember and soldier.

## Increased Survivability

The first piece of the larger puzzle is the increased survivability rates from combat injuries. The mortality rate among World War II servicemembers was 30 percent and declined to an unprecedented 10 percent among Afghanistan and Iraq servicemembers (Gawande, 2004). The evolution in tactics and technology extends beyond the battlefield and into the arena of medical techniques and care. Although there are many related

factors that contribute to increased survivability among injured servicemembers, advances in the system of care have a significant impact (Gawande, 2004). Many of these advances exist along a continuum that range from practical techniques to progressive medical innovations.

Pragmatic applications include the use of various forms of protective equipment to reduce serious injuries. Several studies on the injuries sustained in Afghanistan and Iraq by U.S. and coalition soldiers, Afghan police, and non-combatants conclude that the use of body armor and Kevlar helmets reduces the incidence and severity of injuries (Breeze, Allanson-Bailey, Hepper, & Midwinter, 2015; and Patel et al., 2004). A systematic review of the literature on injuries sustained by soldiers in Afghanistan and Iraq finds that body armor increases survivability from explosive devices (Tong & Beirne, 2013). Other studies find that improvements in vehicle armor afford servicemembers in Afghanistan and Iraq better protection and subsequent decreases in mortality rates (Capehart & Bass, 2011; and Patel et al., 2004).

Technological advancements in the care of wounded soldiers represents another mode of increasing survivability rates among soldiers in Afghanistan and Iraq. Although tourniquets are not novel, the widespread and effective use of tourniquets by frontline soldiers marks an innovative

departure in their development and use in the care of soldiers (Schrager, Branson, & Johannigman, 2012). Tourniquets are no longer within the sole purview of medics—they are standard equipment for most soldiers who are trained in their use. Research by Dunn et al., (2016) supports the effectiveness of tourniquets, finding that their use significantly increases wounded soldiers' survivability.

Finally, the placement of highly trained medical personnel in proximity to the frontlines of the battlefield increases access to advanced medical care for critically wounded servicemembers. Forward surgical teams (FSTs) are mobile units consisting of highly trained medical personnel routinely placed on the front-lines to provide life-saving care to injured soldiers (Rush et al., 2005). Data from four FSTs deployed to Afghanistan suggests that the medical care provided by these specialized medical teams impacts the fatality rates among wounded soldiers receiving care (Shen-Gunther, Ellison, Kuhens, Roach, & Jarrad, 2011).

The outcome of these techniques and advancements in the protection and care of soldiers is increased survivability. In comparison to previous wars, more servicemembers are surviving injuries sustained in Afghanistan and Iraq. However, a cruel twist exists in this outcome. With more servicemembers surviving their physical injuries there is a corresponding

increase in mental and psychological injuries. These injuries, unlike physical injuries, do not typically present outward manifestations of harm.

## Mental Health Problems

Veterans suffer from numerous mental health disorders, but the primary focus of this study is PTSD, TBI, and depression. Contemporary research identifies these three, often co-occurring, psychological disorders as most prevalent among returning veterans from Afghanistan and Iraq (Tanielian & Jaycox, 2008, p. xx). However, research documents the prevalence and effects of these psychological injuries on other veteran populations, such as Vietnam veterans (Kulka et al., 1990). Research across numerous veteran populations serves several purposes. First, it gives context to contemporary policy issues facing the veteran population. Second, it provides insight into policy concerns associated with veterans of future conflicts or wars. To fully understand their effects on the current veteran population, PTSD, TBI, and depression will first be briefly discussed individually, then as co-occurring disorders.

PTSD

Without elaborating on the criterion for PTSD diagnoses, which is beyond the scope of this study, PTSD is a trauma- and stress-related disorder that occurs because of "exposure to a traumatic or stressful event" (American

Psychological Association (APA), 2013, p. 265). Service in the military, especially during times of war or conflict, lends itself to duties and tasks that expose servicemembers to increased levels of trauma and stress. The APA (2013) echoes this point in their finding that the "rates of PTSD are higher among veterans," and survivors of military combat constitute the "highest rates (ranging from one-third to more than one-half of those exposed)" (2013, p. 276).

Several studies explore the prevalence of PTSD among Afghanistan and Iraq veterans. The findings from these studies are illustrative of the mental health problems of returning veterans. Two studies use data from the VA to estimate the prevalence of PTSD within treatment seeking veterans from Afghanistan and Iraq. Seal, Bertenthal, Miner, Sen, and Marmar (2007) estimate PTSD to be prevalent within 13 percent of the total sample population and in 52 percent with a mental health problem diagnosis. Lew et al., (2009) estimate PTSD to be prevalent in 68 percent of the sample population. While the findings from these studies are informative, they could be limited by selection bias resulting from the treatment-seeking population.

To address this potential limitation, several studies use crosssectional research designs and representative samples to explore the prevalence of PTSD among Afghanistan and Iraq veterans. Hoge,

Terhakopian, Castro, and Engel (2007) use standardized screening instruments to estimate PTSD among 17 percent of the soldiers within four Army combat infantry brigades in the year following deployment to Iraq. Similarly, Hoge, Auchterlonie, and Milliken (2006) use data from the Post Deployment Health Assessment (PDHA) to estimate PTSD within Army soldiers and Marines following deployment to Afghanistan, Iraq, and other locations. They estimate PTSD to be prevalent within 10 percent of servicemembers from Iraq, within 5 percent of servicemembers from Afghanistan, and within 2 percent of those from other locations (Hoge et al., 2006). Both studies could be limited by a narrow survey population that focuses on Army and Marine veterans returning from Afghanistan and Iraq.

To address this potential limitation, two studies use nationally representative samples to explore the prevalence of PTSD among Afghanistan and Iraq veterans from all branches of the military. Schell and Marshall (2008) estimate the prevalence of PTSD within 14 percent of Air Force, Navy, Army, and Marine servicemembers. Eisen et al., (2012) include servicemembers from Reserve and National Guard units and estimate PTSD in 14 percent of the sample.

Hoge et al., (2004) use a longitudinal study design to explore the prevalence of PTSD among Army soldiers and Marines prior to, and

following, a one-year deployment to Afghanistan and Iraq. They gauge the mental health status of soldiers in an Army unit prior to deployment to Iraq as a baseline measurement for comparisons and estimate PTSD to be prevalent within 5 percent of the soldiers (Hoge et al., 2004). They estimate PTSD to be prevalent in 6 percent of the soldiers returning from Afghanistan and 13 percent of the soldiers returning from Iraq (Hoge et al., 2004). Among the Marine unit returning from Iraq they estimate PTSD to be prevalent in 12 percent of the population (Hoge et al., 2004). They also find a statistically significant association between deployment to Iraq and PTSD. Army soldiers and Marines are significantly associated with higher odds of PTSD following deployment to Iraq compared to the control group (Hoge et al., 2004).

The cumulative findings of these studies provide a foundation for the prevalence of PTSD among Afghanistan and Iraq veterans. These studies estimate PTSD to range between 5 and 68 percent. Seal et al., (2007) and Lew et al., (2009) account for higher PTSD prevalence estimates which is likely a result of their reliance on treatment seeking veteran populations. Removing the findings from these studies results in more consistent PTSD prevalence estimates across the remaining studies. The cross-sectional studies by Eisen et al., (2012) and Schell and Marshall (2008) both estimate PTSD to be prevalent within 14 percent of their sample, while Hoge et al., (2007)

estimate PTSD to prevalent in 17 percent of the sample. Hoge et al., (2006) estimate PTSD to be prevalent in 5 to 10 percent of their sample. Similarly, the longitudinal study by Hoge et al., (2004) estimates PTSD to prevalent within 6 to 13 percent of their sample.

However, the discussion on the impact of PTSD upon veterans does not stop here. Two additional characteristics of PTSD highlight its impact on the current veteran population and provide evidence for long-term public policy considerations. The first issue is 'delayed onset' or 'delayed expression' which refers to the onset of symptoms of PTSD occurring months or even years following the traumatic event (APA, 2013). Gray, Bolton, and Litz (2004) use longitudinal data from U.S. servicemembers deployed to Somalia to estimate the prevalence of PTSD at the 18-month mark in 7 percent of the sample. Horesh, Solomon, and Ein-Dor (2013) use longitudinal data to find evidence supporting the onset of PTSD symptoms well beyond the initial causal traumatic event. They estimate 9 percent of Israeli combat veterans have delayed-onset PTSD at the 2-year point and 8 percent of the soldiers have delayed-onset PTSD at the 20-year mark (Horesh et al., 2013).

The second characteristic of PTSD that has both immediate and longterm implications is the durational characteristics of PTSD symptoms. According to the APA (2013), PTSD symptoms can last "longer than 12

months and sometimes for more than 50 years" (p. 277). Perhaps one of the most comprehensive studies on the psychological impact of war on veterans is the National Vietnam Veterans Readjustment Study (NVVRS). The study uses a nationally representative sample to examine the prevalence of current and lifetime PTSD among veterans (Kulka et al., 1990). Current prevalence is a measure of PTSD diagnoses in the six months preceding the study and lifetime prevalence is a measure of all PTSD diagnoses (Kulka et al., 1990). Because the NVVRS is conducted 15 years after the conclusion of the war, the measure of current prevalence provides a durational indicator of PTSD and lifetime prevalence estimates provide an indicator of the total problem (Kulka et al., 1990).

The study estimates current diagnoses of PTSD in approximately 15 percent of all male veterans and 9 percent of all female veterans and estimates lifetime diagnoses of PTSD in 31 percent of male veterans and 27 percent of female veterans (Kulka et al., 1990). Schlenger et al., (1992) use the same data to lend support for these findings, estimating current PTSD in 15 percent of male veterans and 9 percent of female veterans. The magnitude of this finding is highlighted through comparisons with current standardized PTSD estimates in the civilian population—1.2 percent of men and .3 percent of women (Schlenger et al., 1992).

TBI is the second of the three primary mental health concerns facing Afghanistan and Iraq veterans. Like the discussion on PTSD, an in-depth exploration of the criterion and symptoms of TBI is beyond the scope of this paper. According to Wortzel and Arciniegas (2013), TBI is a "significant disruption of brain function, structure, or both, resulting from the application of an external physical force (including acceleration/deceleration and blastrelated forces) that causes immediate disturbances of cognitive or elementary neurologic function" (p. 275). Numerous studies attempt to accurately capture the prevalence of TBI among Afghanistan and Iraq veterans, a task that yields varying results. The variability across studies could be attributed to the numerous clinical classifications of TBI. TBI is classified as mild, moderate, severe, or penetrating which is determined at the time of the injury (Defense and Veterans Brain Injury Center (DVBIC), 2017). The classification and measurement of TBI can introduce uncertainty into research on the condition. Mild cases of TBI can go unreported or undetected at the time of injury (Elder & Cristian, 2009; and Schneiderman, Braver, & Kang, 2008). This could lead to problems with accurate incidence and prevalence estimates.

TBI

Two studies use survey-based self-assessment instruments to estimate the prevalence of mild TBI among Afghanistan and Iraq veterans. Both studies define mild TBI as a head injury involving a loss of consciousness or altered mental state (Hoge et al., 2008; and Schell & Marshall, 2008). Within a sample of Army combat soldiers with injuries sustained on deployment to Iraq, Hoge et al., (2008) estimates the prevalence of loss of consciousness in 5 percent of the soldiers and altered mental state in 10 percent of the soldiers. This yields an overall TBI prevalence in 15 percent of the sample population. Schell and Marshall (2008) estimate the prevalence of TBI within 20 percent of Afghanistan and Iraq veterans from all branches of the armed forces.

Terrio et al., (2009) include an additional measure of mild TBI in their study on Army soldiers returning from deployment to Iraq. Soldiers screening positive for mild TBI on the survey instrument are then interviewed by a trained clinician to confirm the self-assessment findings (Terrio et al., 2009). The study estimates the prevalence of mild TBI in 23 percent of the sample population (Terrio et al., 2009).

These studies estimate the prevalence of mild TBI in 15 to 23 percent of Afghanistan and Iraq veterans. Because mild TBI often goes unreported and is difficult to detect, these could be conservative estimates of the

disorder. However, these findings underscore the mental health problems facing the veteran population and provide an additional link in the development and growth of VTCs.

## Co-Occurrence of PTSD and TBI

While the prevalence estimates of PTSD and TBI are striking, the issue is further complicated by their co-occurrence. PTSD and TBI often occurs simultaneously in Afghanistan and Iraq veteran populations. The APA (2013) estimates the prevalence of PTSD and TBI co-occurring in 48 percent of combat veterans returning from deployment to Afghanistan and Iraq.

Two studies provide further detail on the relationship between PTSD and mild TBI, measured by the dichotomous indicators of loss of consciousness and altered mental state associated with an injury. Hoge et al., (2008) explore the prevalence of the co-occurrence of PTSD and mild TBI within their sample of Army soldiers returning from Iraq. Among the soldiers reporting an injury, they find PTSD is prevalent within 44 percent of those reporting a loss of consciousness and 27 percent of those reporting an altered mental status (Hoge et al., 2008). Compared to soldiers reporting an injury without the symptoms of mild TBI, both findings are statistically significant (Hoge et al., 2008). Another cross-sectional research design finds similar relationships between PTSD and mild TBI. Among a nationally representative sample of Afghanistan and Iraq veterans from all service branches, Schneiderman et al., (2008) estimates PTSD is prevalent in 47 percent of those reporting an injury with a loss of consciousness and 34 percent of those reporting an altered mental state.

Both studies estimate the co-occurrence of PTSD and mild TBI within Afghanistan and Iraq servicemembers to range between 27 and 47 percent. However, when observing the two indicators of mild TBI individually they provide similar co-occurrence estimates. PTSD and an injury with a loss of consciousness is estimated to range between 44 and 47 percent of servicemembers. PTSD and an injury with an altered mental state is estimated to range between 27 and 34 percent of servicemembers. This lends support for the assertion that PTSD and TBI are the "signature injuries" of the wars in Afghanistan and Iraq (National Council on Disability, 2009, p. 1; Department of Defense Task Force on Mental Health, 2007, p. ES-1). *Depression* 

Depression is the last of the three focused diagnoses within the Afghanistan and Iraq veteran population. Much like PTSD and TBI, depression must be observed within the context as a singularly occurring

disorder and as it occurs with PTSD and TBI. Depression is a disorder that significantly affects an individual's ability to function because of the "presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes" (APA, 2013, p. 155).

To place the current problem of depression in context, it is judicious to examine findings from the NVVRS to understand the historical impact of this disorder on veterans. Kulka et al., (1990) estimates the lifetime prevalence of depression in 5 percent of male Vietnam veterans and estimates the current prevalence of depression in 3 percent of male veterans. Among female theater veterans, they estimate a lifetime prevalence of depression in 12 percent of the population and a current prevalence of depression in 4 percent of the population (Kulka et al., 1990). Schell and Marshall (2008) estimates major depression to be prevalent within 14 percent of their sample population that includes veterans from all service branches.

Shen, Arkes, and Williams (2012) use data from a healthcare database and find similar rates of depression among Afghanistan and Iraq veterans from all service branches. They estimate the prevalence of depression in 5 percent of Army veterans, 4 percent of Air Force veterans, 4 percent of Marine veterans, and 6 percent of Navy veterans (Shen et al., 2012). They

also find statistically significant associations between deployment to Afghanistan and Iraq among all four veteran groups and depression (Shen et al., 2012). Following deployment to Afghanistan or Iraq, all four groups of veterans are significantly associated with increased odds of depression compared to those who did not deploy to these theaters of operation (Shen et al., 2012).

To address some of the potential limitations associated with selection bias resulting from a treatment-seeking population, two studies use longitudinal designs to explore depression among veterans. Hoge et al., (2004) estimate the prevalence of depression in 5 percent of an Army unit prior to deployment to Iraq. Among Army and Marine units returning from Iraq, they estimate the prevalence of depression in 8 percent and 7 percent of the units respectively (Hoge et al., 2004). They find a statistically significant association between soldiers returning from deployment to Iraq and depression. Compared to the control group, soldiers in the Army unit returning from Iraq are significantly associated with higher odds of depression (Hoge et al., 2004). For Army soldiers returning from Afghanistan, the study estimates the prevalence of depression in 7 percent of the sample (Hoge et al., 2004). They find a statistically significant association

the control group, veterans of Afghanistan are significantly associated with higher odds of depression (Hoge et al., 2004).

Wells et al., (2010) use data from the first panel of the Millennium Cohort study to explore the prevalence of major depression among veterans of Afghanistan and Iraq from all branches of the military. They estimate the prevalence of new cases of depression in 6 percent of males and 16 percent of females exposed to combat (Wells et al., 2010). They also find a statistically significant association between veterans exposed to combat and depression. Compared to non-deployed veterans, male and female veterans exposed to combat are significantly associated with new-onset depression (Wells et al., 2010).

These studies estimate depression to range between 3 and 16 percent among veterans from various service eras. Salient to this study, studies find significant relationships between Afghanistan and Iraq veterans and depression. Veterans have significantly higher odds of depression following deployment to Afghanistan and Iraq (Hoge et al., 2004; and Shen et al., 2012). Similarly, veterans exposed to combat in these theaters of operation have higher odds of new-onset depression (Wells et al., 2010).

## Co-Occurrence of PTSD, TBI, and Depression

Much like the relationship between PTSD and TBI, depression is shown to co-occur with these disorders. This relationship serves to further heighten the impact of these disorders on the veteran community.

Two cross-sectional studies examine the prevalence of depression cooccurring with other mental health disorders among Afghanistan and Iraq veterans. Hoge and associates (2008) explore the prevalence of depression and the two indicators of mild TBI within their sample. They estimate the prevalence of depression in 23 percent of soldiers reporting a loss of consciousness and 8 percent of soldiers reporting an altered mental status (Hoge et al., 2008). They find a statistically significant association between soldiers reporting the co-occurrence of depression and a loss of consciousness. Compared to soldiers reporting an injury without mild TBI symptoms, depression is significantly associated with an injury with a loss of consciousness (Hoge et al., 2008). Lew et al., (2007) explore the prevalence of all three disorders co-occurring within a sample of treatment seeking veterans. They estimate the prevalence of depression in 52 percent of the total sample. Within this group, PTSD is prevalent in 100 percent of the servicemembers and TBI is prevalent in 62 percent of the servicemembers (Lew et al., 2007).
Among male and female veterans with new onset depression, Wells et al., (2010) discover the highest percentage of co-occurring baseline diagnoses of PTSD is among those exposed to combat in Afghanistan or Iraq. They estimate the co-occurrence of new-onset depression and PTSD in 23 percent of male combat veterans and 25 percent of female combat veterans (Wells et al., 2010). They find a statistically significant association between male and female veterans with new onset depression and PTSD. Both male and female veterans with new onset depression are significantly associated with PTSD (Wells et al., 2010).

The cumulative findings on the prevalence and co-occurrence of PTSD, TBI, and depression provide insight into the immediate mental health issues within the veteran community. The diagnostic and symptomatic characteristics of PTSD and TBI underscore the long-term impact of these disorders. This point is echoed by a recent Institute of Medicine (IOM) (2010) report that states the impact of deployments to Afghanistan and Iraq by veterans on social support services may not be fully realized until 2040 or later.

These mental health disorders also provide the foundation for the development and growth of VTCs across the nation. The prevalence and characteristics of PTSD, TBI, depression, or any combination of these mental

health disorders among veterans provide a demonstrated need for VTCs. The strength of these problem-solving courts lies in their ability to recognize and treat the underlying problems within veteran offending populations. The prevalence of these mental health disorders also provides the initial step in the temporal logic linking this population of veterans with the potential for increased contact with the criminal justice system.

### Maladaptive Behaviors

In addition to the 'typical' clinical symptoms and behavioral outcomes that exact a steep psychological and emotional price, PTSD, TBI, and depression often cause veterans to engage in 'atypical' behaviors. Often referred to as coping mechanisms or maladaptive behaviors, licit and illicit substance use are typical behaviors. A substance use disorder (SUD) is defined as a "cluster of cognitive, behavioral, and physiological symptoms indicating that the individual continues using the substance despite significant substance-related problems" (APA, 2013, p. 483). It is a broad category that encompasses 10 separate classifications of drugs, including alcohol and tobacco (APA, 2013).

# Substance Use and Abuse

Considering the impact of substance use disorders individually is a significant concern. However, the co-occurrence of substance use disorders

and PTSD, TBI, and depression serves to heighten the impact on the veteran community. Findings from civilian populations provide an initial glimpse into the relationship between substance use disorders and mental health diagnoses. Compared to those without PTSD, those suffering from PTSD are 80 percent more likely to meet the criteria for at least one other mental disorder, such as substance use disorder (APA, 2013). For those with a cooccurring diagnosis of substance use disorder and TBI, the "neurocognitive effects of the substance contribute to or compound the TBI-associated neurocognitive change" (APA, 2013, p. 627). Finally, depression is known to frequently co-occur with other disorders, such as substance abuse disorder (APA, 2013).

Several studies focus on the incidence and prevalence of these disorders co-occurring within the veteran community. Johnson, Eick-Cost, Jeffries, Russell, and Otto (2015a) use a retrospective cohort design to explore the incidence of clinically diagnosed substance abuse disorders and TBI among veterans from all branches of the armed forces. They find a statistically significant relationship between veterans with TBI and alcohol use disorders. They estimate 4 percent of veterans develop an alcohol use disorder in the first year of a TBI diagnosis compared to 2 percent of those without a TBI diagnosis (Johnson et al., 2015a). This finding suggests that the

risk of developing an alcohol use disorder within the first year of a TBI diagnosis increases by 50 percent.

Grossbard et al., (2017) use VA healthcare utilization data to explore the prevalence of alcohol misuse and TBI among Afghanistan and Iraq veterans. They estimate the prevalence of these two disorders co-occurring in 7 percent of female veterans and 20 percent of male veterans (Grossbard et al., 2017). They find statistically significant relationships between the cooccurrence of alcohol misuse and TBI among both male and female veterans. Compared to veterans without TBI, male and female veterans with TBI are significantly associated with alcohol misuse (Grossbard et al., 2017).

Two cross-sectional studies examine the relationship between mental health disorders and substance abuse. Kulka et al., (1990) use current and lifetime estimates of substance abuse among veterans with PTSD to explore this relationship among Vietnam veterans. They estimate the prevalence of PTSD and a current alcohol disorder in 20 percent of the sample and PTSD and a lifetime diagnosis of alcohol abuse or dependence in 75 percent of the sample (Kulka et al., 1990). They find statistically significant relationships between PTSD and alcohol use estimates. Compared to male theater veterans without PTSD, male veterans with PTSD are significantly associated with current alcohol estimates and lifetime alcohol estimates (Kulka et al., 1990).

Shen et al., (2012) estimates the prevalence of depression between 4 and 6 percent among Afghanistan and Iraq veterans and they are significantly associated with increased odds of depression following deployment to these theaters of operation. Among this same sample, they estimate the prevalence of substance use disorders in 15 percent of Army veterans, 7 percent of Air Force veterans, 9 percent of Marine veterans, and 9 percent of Navy veterans (Shen et al., 2012). They also find statistically significant relationships between all groups of veterans and substance use disorders. Compared to servicemembers that did not deploy to Afghanistan or Iraq, veterans from all four branches of the military are significantly associated with increased odds of substance use disorders (Shen et al., 2012). They conclude that deployment to these theaters significantly increases the risks of both depression and substance use disorders.

#### Risk Propensity and Criminal Behavior

Extending from the relationship between mental health diagnoses and substance abuse disorders, studies examine the relationship between veterans with mental health disorders and a propensity to engage in risky behaviors. These behaviors are operationalized across a broad spectrum of behaviors, from general risk-taking to criminal or deviant behavior. Because of their mental health diagnoses, many veterans are more likely to engage in

risky and often criminal behavior. As a result, this population of veterans are at an increased potential for contact with the criminal justice system.

Several studies document a link between veterans suffering from mental health disorders and a wide range of risk-taking behaviors. The NVVRS not only finds that male veterans with PTSD are significantly associated with anger and hostile behaviors, these veterans also committed significantly more violent acts in the previous year (Kulka et al., 1990). Among a sample that includes 90 percent Afghanistan and Iraq veterans, Borders, McAndrew, Quigley, and Chandler (2012) find a statistical link between veterans suffering from PTSD or depression and increases in substance use, aggressive, dangerous, and illegal behaviors within the previous month. Other studies incorporate measures of weapon ownership and use into the risk-taking equation. Strom et al., (2012) finds statistically significant relationships between veterans with PTSD and thrill-seeking behaviors, aggressive behaviors, the number of combat-knives owned, and a measure of total risk frequency. Finally, another study finds a statistically significant link between Army soldiers with both PTSD and TBI and higher scores on aggression, risk-taking, thrill seeking, alcohol use, speeding, and drunk driving (Kelley et al., 2012).

Other studies tap into measures of interpersonal violence in exploring the relationship between mental health diagnoses and criminal behavior among veterans. Sullivan and Elbogen (2014) locate a statistically significant link between Afghanistan and Iraq veterans with PTSD and interpersonal violence, measured by family aggression, severe family aggression, stranger aggression, and severe stranger aggression. Elbogen et al., (2014) extends from this work by incorporating a measure of alcohol misuse and find a statistically significant relationship between Afghanistan and Iraq veterans with co-occurring PTSD and alcohol misuse diagnoses and severe physical violence. Freeman and Roca (2001) observe that veterans with PTSD are significantly more likely to score higher on levels of aggression and significantly more likely to report aiming a gun at a family member at least once, consider committing suicide with a gun at least once, have a loaded gun in their possession while considering suicide at least once, and have a mental health professional suggest getting rid of their firearms. Finally, United Kingdom (UK) military personnel screening positive for common mental disorders and PTSD have significantly higher odds of engaging in violence upon return from Iraq (MacManus et al., 2012).

This section identifies and discusses the relationship between mental health disorders, substance abuse disorders, and risk-propensity in the

veteran population. The cumulative impact of these factors yields another link in the development and growth of VTCs. The incidence and prevalence of substance abuse disorders among veterans with PTSD, TBI, and depression underscores a distinct need for the effective treatment of these disorders that traditional courts typically fail to resolve.

In addition, the use of licit and illicit substances is likely to increase the likelihood of criminal justice involvement. The possession and use of many substances are legally proscribed by the criminal justice system. This population of veterans are also shown to engage in a host of risky and criminal behaviors likely to increase their involvement with the criminal justice system, such as drunk driving and interpersonal violence.

### Military Culture

Another key factor of veteran involvement in the criminal justice system is the mental healthcare utilization characteristics of veterans suffering from mental health disorders. Veterans suffering from PTSD, TBI, or depression may be disinclined to admit to, and seek treatment for, their mental health disorders. This aspect of veteran mental health can be a direct result of two distinct aspects of military culture. First, a pervasive military ethos that embodies the strength of individual character may reduce the acknowledgement of a mental health problem. Second, the stigmatization of

mental health can negatively impact treatment seeking by veterans. Left untreated, the likelihood of criminal justice involvement by veterans with mental health disorders, and their attendant problems, is enhanced.

Although recent studies on the barriers to mental health care utilization primarily focus on Afghanistan and Iraq veterans, the findings can be generalized to the larger veteran community and future generations of veterans. This argument is grounded in the premise that all servicemembers, regardless of their branch of service or service era, share a unique and similar bond that derives from a steadfast military culture.

Key aspects of a distinct military culture are antithetical to receiving care for mental health disorders. Admitting to, and seeking professional assistance for, a mental health problem are often viewed as a sign of weakness in the military (Coll, Weiss, & Metal, 2013; and Exum, Coll, & Weiss, 2011). This aspect of mental health problems could be a direct result of a warrior mentality inculcated within the military. The warrior ethos is grounded in the core individual characteristics of "resilience, courage, independence, and a disavowal of vulnerabilities" (Morin, 2017). The warrior ethos results in a prevailing attitude among servicemembers that they do not need help for their mental health problems and any attempt to seek treatment is a sign of weakness. The Department of Defense (DOD) recently

implemented several policies and programs to address this aspect of military culture (Morin, 2017). These policies and programs are aimed at reducing the stigma of mental health problems to increase mental healthcare utilization.

The beliefs and values instilled through the military culture can prevail even as servicemembers readjust to civilian life upon retirement or separation from the military (Coll et al, 2013; and Exum et al., 2011). A distinct military culture that inculcates a warrior ethos among servicemembers does not cease when these individuals leave the military and enter the civilian population. A warrior mentality that remains ingrained within a veteran's identity can lead to a reluctance to seek professional treatment and a concomitant likelihood of criminal justice involvement.

At the core of this issue is the role and impact of stigmatization on mental health. Stigmatization of mental health problems is a construct often measured along individual and public levels. Public stigma is the widely endorsed negative and erroneous perception of individuals in society suffering from mental health disorders (Corrigan & Watson, 2002). Public stigma can directly impact individuals suffering from mental health disorders. Individual stigma is the acceptance of negative public endorsements on mental disorders that can result in the internalization and

acceptance of these portrayals (Corrigan & Watson, 2002). A servicemember with PTSD, TBI, or depression may be stigmatized, resulting in lower selfesteem and lower mental healthcare utilization.

## Mental Healthcare Utilization

The rates of professional mental healthcare utilization by veterans is the first step in illustrating the extent of the problem. Four cross-section studies identify the prevalence of mental health disorders and low rates of mental healthcare utilization within military populations. Three of the four studies are conducted on active-duty servicemembers and findings can be generalized to veterans following military service.

Hourani and Yuan (1999) explore the mental healthcare utilization rates among Navy and Marine Corps servicemembers. They estimate oneyear prevalence of mental health disorders in 21 percent of sample and lifetime mental health disorders in 40 percent of the sample (Hourani & Yuan, 1999). They find that 81 percent of servicemembers with a current diagnosis did not seek professional mental healthcare within the last year and 86 percent with a lifetime diagnosis did not seek professional mental healthcare (Hourani & Yuan, 1999). Among Army and Marine Corps veterans returning from Afghanistan and Iraq, 4 percent of Iraq veterans received mental health care referrals and 2 percent of Afghanistan veterans received referrals (Hoge et al., 2006). In the year following deployment, 44 percent of Iraq veterans did not seek mental health services and 52 percent of Afghanistan veterans did not seek mental health services (Hoge et al., 2006).

Hoge et al., (2004) use data from a cross-section phase of their longitudinal study to explore the mental healthcare utilization rates among Army and Marine Corps veterans after return from Afghanistan or Iraq. Among those who met the strict screening criteria for a mental health disorder, only 38 to 45 percent are interested in receiving help and only 23 to 40 percent report receiving professional help in the past year (Hoge et al., 2004).

The study by Schell and Marshall (2008) is particularly salient to this discussion because their sample is a nationally representative sample. It includes both active-duty and separated or retired servicemembers from all branches of the armed forces who deployed to Afghanistan or Iraq and screened positive for mental health disorders. They find that 47 percent of the sample report not visiting a mental health professional in the previous 12 months (Schell & Marshall, 2008).

# The Impact of Stigmatization

The role and impact of stigmatization on populations with mental health disorders is the next step in understanding why those with a mental health problem may not seek professional care. Three studies provide insight into how public and individual stigma may affect mental health care utilization rates within military populations. Although two studies are conducted on active duty military populations, they provide insight into the impact of stigmatization—a construct that is still influential within civilian settings.

Britt (2000) uses a cross-section design to explore the impact of stigmatization among Army soldiers returning from Bosnia by comparing psychological and medical screening processes. Stigmatization is explored along several constructs, which includes admitting to a problem, the screening process itself, the social context of the screening, and the impact on follow-up appointments (Britt, 2000). He finds statistically significant differences between psychological and medical screening processes across all four constructs. Soldiers are significantly more likely to indicate stigmatization with admitting to a psychological problem, completing psychological questionnaires, attending a psychological screening with peers, and attending psychological follow-up appointments (Britt, 2000).

One potential limitation with the study by Britt is the unrepresentativeness of the sample frame which focuses on Army soldiers returning from Bosnia. Hoge et al., (2004) expand the breadth of research on

stigmatization by including Army and Marine Corps veterans returning from Afghanistan and Iraq. Perceived barriers to receiving mental health care is measured along several stigmatizing constructs, which include not trusting mental health professionals, embarrassment in receiving care or services, detrimental to their career, a loss of confidence by peers, being blamed for the problem, differential treatment by leadership, and perceived weakness (Hoge et al., 2004). Compared to those who did not meet the screening criteria for a mental health disorder, servicemembers who screened positive for a mental health disorder are approximately twice as likely to report perceived barriers to receiving mental health care (Hoge et al., 2004).

Schell and Marshall (2008) observe that servicemembers screening positive for subthreshold PTSD or mild depression cite institutional and cultural barriers as the most prevalent reasons for not receiving mental health care. For example, 44 percent indicate that it could harm their career, 44 percent indicate that they could be denied a future security clearance, and 38 percent believe their coworkers would lose confidence in them (Schell & Marshall, 2008).

These studies provide insight into the relationship between stigmatization and healthcare utilization rates within military populations. They suggest that veterans suffering from mental health disorders are less

likely to seek and receive professional mental healthcare because of two powerful aspects of a military culture. A warrior ethos that embodies strength of character and stigmatization of mental health disorders are powerful socializing agents. More importantly, a warrior mentality that imbues a sense of personal weakness in treatment seeking can prevail into civilian life after a servicemember retires or separates from the military. Also, stigmatization of mental health is not unique to military settings and remains a significant barrier to seeking professional help within civilian settings.

Veterans diagnosed with PTSD, TBI, or depression may be less likely to admit that they have a problem which leads to lower rates of professional mental healthcare utilization. Left untreated, these veterans may engage in a host of maladaptive behaviors, such as substance abuse and physical aggression. These veterans could therefore be at an increased risk for criminal justice involvement. The totality of factors provides the foundation for the development and growth of VTCs. These courts address a demonstrated need within the veteran community. A distinct veteran population with untreated mental health and related disorders presents traditional courts with a challenge. Traditional courts are not typically structured to identify and treat the underlying causal mechanisms that led to

the criminal behavior. VTCs grew from this malaise, by providing a viable pathway for the identification and treatment of veterans suffering from untreated mental health disorders and their attendant problems who find their way into the criminal justice system.

### **Veteran Treatment Courts**

Veteran treatment courts (VTCs) are the latest iteration of problemsolving courts. Problem-solving courts have been introduced into the criminal justice system to address some of the shortcomings inherent within the current court system. Guided by therapeutic justice principles, problemsolving courts provide individualized treatment to unique subgroups of offenders. Since their inception, with the experimental drug court in 1989 in Dade County, Florida, problem-solving courts have increased exponentially. Problem-solving courts now include mental health courts, DWI courts, prostitution courts, and domestic violence courts. All of these are implemented with the overall aim of reducing reoffending through rehabilitation (American University, 1998; and Marlowe, Hardin, & Fox, 2016).

VTCs harness the central features of the therapeutic model by redirecting veterans facing criminal charges into a specialized court that focuses on addressing the underlying correlates of their criminal offending.

VTCs feature individually tailored treatment plans and appropriate measures and thresholds of success, with the possibility of avoiding incarceration upon successful completion (Clark, McGuire, & Blue-Howells, 2010; and Russell, 2009).

Although the first VTC was created in 2004 in Anchorage, Alaska, credit for their full-scale development and evolution lies with Judge Russell, who created a VTC in Buffalo, New York, in 2008 (Hawkins, 2009; Holbrook & Anderson, 2011; and Marlowe et al., 2016). The judges in both courts noticed an influx of repeat veteran offenders, many of whom were suffering from mental health and/or substance abuse problems (Russell, 2009; and Smith, 2012). This highlighted the need for a court dedicated to addressing the specialized needs of military offenders.

### Development and Proliferation of Veteran Treatment Courts

As of 2016, the VA identified a total of 461 VTCs across the nation (Flatley, Clark, Rosenthal, & Blue-Howells, 2017). This number includes VTCs that exist as stand-alone courts in local, county, regional, state, and federal jurisdictions, as well as specialized veteran dockets or tracks within other problem-solving courts (Flatley et al., 2017). For the purposes of this study, the term VTC will borrow from the VA definition and encompass any separate veteran court or any veteran dockets or tracks within other problem-solving or specialty courts at the local, county, regional, state, or federal level.

The explosive growth of VTCs can be linked to several factors. Their popularity could be a direct result of the highly politicized nature of the relationship between veterans suffering from mental health problems and their involvement with the criminal justice system. In 2011, then President Obama signed a directive that recognized several national priorities in response the problems facing veterans and their families following their service in support of the wars in Afghanistan and Iraq (Obama, 2011). One of the priorities was his mandate to make the court system more responsive to the "unique needs" of veterans suffering from PTSD, TBI, and substance abuse by further developing VTCs across the nation (Obama, 2011).

Beyond the political influence, the rapid expansion of VTCS can be tied to their predecessor's success in impacting criminal justice outcomes. Owing to research findings on the effectiveness of drug and mental health courts on outcomes, typically measured by recidivism, VTCs are established with the assumption that these outcomes could be replicated.

Two separate meta-analyses on drug courts, that includes quasiexperimental and experimental study designs, find statistical evidence to support their impact on lowering recidivism rates among participants in the

treatment program (Mitchell, Wilson, Eggers, & MacKenzie, 2012; and Wilson, Mitchell, & MacKenzie, 2006). Similarly, two meta-analyses on the effectiveness of mental health courts in reducing recidivism find statistical evidence supporting their impact on reducing recidivism among participants in the treatment program (Lowder, Rade, & Desmarais, 2018; and Sarteschi, Vaughn, & Kim, 2011).

The combination of several factors led to the development and proliferation of VTCs across the nation. The politicization of the of the diverse problems facing veterans and their families following their service in support of operations in Afghanistan and Iraq identified a need for VTCs. VTCs provide specialized treatment programs to combat the underlying problems facing veterans who become involved in the criminal justice system. In addition, research on the effectiveness of drug and mental health courts, which VTCs draw an administrative and structural parallel to, provided stakeholders in the criminal justice community with the expectation of replicating their effectiveness.

#### Funding Sources

The creation, design, and implementation of VTCs is accomplished through the nexus between federal and state legislation, local criminal justice professionals, and local communities and veteran's advocacy groups (Clark et

al., 2010). Funding of VTCs varies between jurisdictions and is derived from any one or combination of sources. These sources can include existing court budgets (Russell, 2015), federal and state legislation (White et al., 2012), local, county, or state funding (Baldwin, 2015; and Holbrook & Anderson, 2011), veteran non-profit and advocacy groups (Baldwin, 2015; and Holbrook & Anderson, 2011), or grant funding (Russell, 2015; and Stainbrook, Hartwell, & James, 2016).

Although the VA is directly involved with VTCs, they are neither operated nor funded by the VA. In addition, VTCs should not be confused with United States Court of Appeals for Veterans Claims, which presides over cases involving veteran's benefits (McGuire, Clark, Blue-Howells, & Coe, 2013; and Clark et al., 2010).

### Core Concepts

While there is substantial variation among VTCs, they share several key conceptual and theoretical features which make them unique from standard courts. The guiding theory in VTCs is therapeutic jurisprudence. Therapeutic jurisprudence uses the law as a social force to correct the underlying causes of social problems through the "integration of treatment services with judicial case processing, ongoing judicial intervention, close monitoring of and immediate response to behavior, multi-disciplinary involvement, and collaboration with community based, and government organizations," with the explicit goal of reducing the revolving door of reoffending (Task Force on Therapeutic Justice of the Conference of Chief Justices, 2000; Wexler, 2000; and Winick, 2003).

This differs drastically from the theoretical construct of deterrence and retribution within traditional courts, which narrowly focus on the use of sanctions to address behaviors without acknowledging the root causes of the criminal or deviant behavior. Thus, traditional courts are largely seen as failures in effectively addressing mental health and substance abuse problems (Winick, 2003).

Beyond the theoretical construct supporting VTCs, most courts adhere to standards set forth by the National Association of Drug Court Professionals (NADCP) and Justice for Vets, which is a subsidiary of the NADCP. The NADCP sets forth evidence-based standards for implementing and administering adult drug courts to improve outcomes for defendants in their two-volume published work, *Adult Drug Court Best Practice Standards* (National Association of Drug Court Personnel, 2017). The two volumes contain a total of 10 best practice standards based on evidence-based research which are published as a guideline for the successful implementation of drug courts to improve outcomes for this population of offenders. Although the best practice standards are directed at adult drug courts, VTCs are guided by these principles because of their direct lineage to adult drug courts and a relative lack of empirical research on best practice standards. A thorough review of the 10 standards is beyond the scope of this study. However, a brief synopsis of each principle provides further insight into the core principles guiding VTCs across the nation.

The 10 best practice standards are:

- Target Population: Eligibility and exclusion criteria for the Drug Court are predicated on empirical evidence indicating which types of offenders can be treated safely and effectively in Drug Courts. Candidates are evaluated for admission to the Drug Court using evidence-based assessment tools and procedures.
- 2) Historically Disadvantaged Groups: Citizens who have historically experienced sustained discrimination or reduced social opportunities because of their race, ethnicity, gender, sexual orientation, sexual identity, physical or mental disability, religion, or socioeconomic status receive the same opportunities as other citizens to participate and succeed in the Drug Court.

- 3) Roles and Responsibilities of the Judge: The Drug Court judge stays abreast of current law and research on best practices in Drug Courts, participates regularly in team meetings, interacts frequently and respectfully with participants, and gives due consideration to the input of other team members.
- 4) Incentives, Sanctions, and Therapeutic Adjustments:
  Consequences for participants' behavior are predictable, fair, consistent, and administered in accordance with evidence-based principles of effective behavior modification.
- 5) Substance Abuse Treatment: Participants receive substance abuse treatment based on a standardized assessment of their treatment needs. Substance abuse treatment is not provided to reward desired behaviors, punish infractions, or serve other non-clinically indicated goals. Treatment providers are trained and supervised to deliver a continuum of evidence-based interventions that are documented in treatment manuals. (National Association of Drug Court Professionals, 2013)
- Complementary Treatment and Social Services: Participants receive complementary treatment and social services for conditions that cooccur with substance abuse and are likely to

interfere with their compliance in Drug Court, increase criminal recidivism, or diminish treatment gains.

- 7) Drug and Alcohol Testing: Drug and alcohol testing provides an accurate, timely, and comprehensive assessment of unauthorized substance use throughout participants' enrollment in the Drug Court.
- 8) Multidisciplinary Team: A dedicated multidisciplinary team of professionals manages the day-to-day operations of the Drug Court, including reviewing participant progress during precourt staff meetings and status hearings, contributing observations and recommendations within team members' respective areas of expertise, and delivering or overseeing the delivery of legal, treatment and supervision services.
- Census and Caseloads: The Drug Court serves as many eligible individuals as practicable while maintaining continuous fidelity to best practice standards.
- 10)Monitoring and Evaluation: The Drug Court routinely monitors its adherence to best practice standards and employs scientifically valid and reliable procedures to evaluate its

effectiveness. (National Association of Drug Court Professionals, 2015)

In addition, Justice for Vets promotes the 10 key components of VTCs, which derive from recommendations set forth by the U.S. Department of Justice publication that outlines the 10 key components of drug courts (U.S. Department of Justice, 2004). The recommendations set forth by the 10 key components are an extension of, and in several instances closely mirror, the best practice standards. The recommendations set forth by Justice for Vets are not mandatory but are intended to provide a measure of consistency in process and outcomes in VTCs. Many VTCs across the nation adhere to the principles set forth in the key components.

The 10 key components of VTCs are:

- VTCs integrate alcohol, drug treatment, and mental health services with justice system case processing.
- Using a nonadversarial approach, prosecution and defense counsel promote public safety while protecting participants' due process rights.
- Eligible participants are identified early and promptly placed in the VTC program.

- Veteran Treatment Court provide access to a continuum of alcohol, drug, mental health and other related treatment and rehabilitation services.
- Abstinence in monitored by frequent alcohol and other drug testing.
- 6) A coordinated strategy governs Veteran Treatment Court responses to participant's compliance.
- 7) Ongoing judicial interaction with each veteran is essential.
- Monitoring and evaluation measure the achievement of program goals and gauge effectiveness.
- Continuing interdisciplinary education promotes effective VTC planning, implementation, and operations.

10)Forging partnerships among VTC, Veterans Administration,
 public agencies, and community-based organizations generates
 local support and enhances VTC effectiveness. (Justice for Vets,
 2016)

The best practices and components endorsed by the NADCP and Justice for Vets provide a general standard for the assessment and comparison of VTCs. With many VTCs across the nation adopting these concepts and principles, several concepts deserve closer examination. While standard courts are grounded in the adversarial process, VTCs are non-adversarial in nature and process. The non-adversarial approach is characterized by a collaborative orientation between members of the VTC staff (Russell, 2009; and Vaughan, Holleran, & Brooks, 2016). The VTC staff typically includes traditional courtroom personnel, such as judges, prosecuting attorneys, and defense attorneys, but can also include community supervision representatives, treatment representatives, the court coordinator, law enforcement representatives, and peer mentors (Marlowe et al., 2016). In this structure and environment, these key personnel work together in a non-hostile manner to provide support, encouragement, and decisions aimed at positively impacting the defendant (Hora, Schma, & Rosenthal, 1999; and Marlowe et al., 2016).

This group of individuals come together to make collaborative decisions on whether a justice-involved veteran (JIV) should enter the program, crafting the treatment plan, any necessary sanctions or incentives, and graduation from the program. The result is an individual treatment plan tailored to each JIV that not only addresses their mental health, substance abuse, or co-occurring diagnoses, but also empathizes with their military experiences (Department of Defense Task Force on Mental Health, 2007; and Russell, 2009, p. 365).

The collaborative decisions made by VTC personnel are a meld between rehabilitation and accountability (Russell, 2009). Rehabilitative decisions are grounded in the fundamental premise that, in lieu of typical retribution-based decisions, VTCs make flexible and individualized decisions designed to connect the JIV to evidence-based treatment for the underlying problems (Clark et al., 2010; and Marlowe et al., 2016). Many of the underlying problems facing JIVs are PTSD, TBI, depression, substance abuse, or a combination of any these mental health disorders.

Although outreach programs have been in place historically, the federal government recognizes the issues associated with veterans in the criminal justice system. In response, the VA initiated the nationwide Veterans Justice Programs (VJP) which contain two veteran-specific criminal justice programs. The Health Care for Reentry Veterans (HCRV) and the Veterans Justice Outreach (VJO) programs are both charged with the overriding goal of reducing the underlying correlations with crime commission and recidivism and increasing health care access and treatment for JIVs (Blue-Howells, Clark, van den Berk-Clark, & McGuire, 2013). A focus of this study is VJO specialists and their ability to link JIVs to VA benefits.

The wealth of VA benefits and health resources available to many JIVs presents a unique aspect of VTCs. Unlike most defendants in other problem-

solving courts who lack mental and physical healthcare resources and benefits, veterans in VTCs typically have access to an abundance of VA resources and benefits. Outreach services are provided by the VA, through its sub-administrations of the Veteran Benefit Administration (VBA) and Veterans Health Administration (VHA), state veterans commissions, county level veterans services, local veterans services, and non-profit veterans services (Clark et al., 2010; Russell, 2015; Stiner, 2012a; and Stiner, 2012c). Additional services and benefits provided by, or linked to, the VTC are housing, disability, education and training, and employment services (Clark et al., 2010; Slattery, Dugger, Lamb, & Williams, 2013; and Stiner, 2012b).

VJO specialists are key members of the VTC team. They are a central figure in the development of a treatment plan and linking JIVs with the appropriate VA benefits and resources. There are over 241 VJO specialists assigned to 170 VA medical centers nationwide (Flatley et al., 2017). Among their many roles within the VTC setting, one of their foremost duties is identifying non-incarcerated JIVs among the many intercept points within the criminal justice process, such as arrest, initial detention, jails, and court (Blue-Howells et al., 2013; Flatley et al., 2017; and Kussman, 2009; and United States Department of Veterans Affairs, 2017c). Second, they provide outreach services by linking JIVs, throughout numerous points in the

criminal justice system, to the wealth of available VA benefits and health resources (Blue-Howells et al., 2013; Flatley, et al., 2017; Kussman, 2009; and McGuire et al., 2013). Third, as a treatment representative in the VTC staff, they are vital to the formulation of a treatment plan for the JIV, drawing on, and applying, their knowledge of military culture (Blue-Howells et al., 2013; and McGuire et al., 2013). Finally, they establish partnerships with, and provide training to, law enforcement and courtroom personnel on VTCs and JIVs (McGuire et al., 2013).

Peer mentors are another unique resource within VTCs. The development and use of peer mentors within VTCs is unique from other problem-solving courts. Most courts use peer mentors, with 69 percent of courts indicating they have an operational mentor program (Flatley, et al., 2017). Peer mentors are volunteers who assist JIVs in navigating the VTC treatment program. They typically have a military background, which helps establish a connection with JIVs. A recent survey finds that 96 percent of peer mentors have prior military experience (American University, School of Public Affairs, Justice Programs Office, 2016). As veterans themselves, many peer mentors tap into the core tenets of the military culture. Peer mentors can uniquely understand and empathize with JIVs, affording them the ability to coach, facilitate, advise, sponsor, and support their assigned JIV through the treatment program (Russell, 2009, p. 370; and Russell, 2015).

## Variation Across Veteran Treatment Courts

The core structural and administrative components of VTCs illustrates their departure from traditional criminal justice courts. While many VTCs across the nation adhere to these fundamental values, research has identified inconsistencies across VTCs that could impact outputs and outcomes affecting JIVs.

One of the most salient findings on variation across VTCs is found within the personnel structure of these courts. More specifically, the characteristics of key personnel within VTCs measured by their veteran status, varies significantly across courts. An American University (2016) survey of all VTCs and veteran treatment tracks discovers that most of key personnel within these courts do not have a military background. The study finds that 64 percent of judges were not veterans, 68 percent of court coordinators were not veterans, and 61 percent of VJO specialists did not have a military background (American University, School of Public Affairs, Justice Programs Office, 2016). Similarly, Baldwin (2015) finds that among judges in the survey population, 55 percent did not have a military background.

While not one of the best practice standards or 10 key components, having staff members with prior military experience is an important concept within VTCs. Much like the rationale behind veteran peer mentors, having members on the VTC staff with a prior military background is essential to developing a camaraderie with JIVs (Baldwin, 2015). Having a shared military experience between key personnel within the VTC and veterans proceeding through the treatment program is likely to have an impact on processes and outcomes. Several studies find evidence to support this relationship. Baldwin and Rukus (2015) use data from qualitative interviews of veterans in a VTC treatment program and find evidence supporting the impact of a military camaraderie between these veterans and personnel with a military background. Most veterans in the treatment program indicate that a military background among key personnel, such as the judge and prosecuting attorney, impact their decision to participate in the treatment program and they believe these personnel understand and relate to their problems (Baldwin & Rukus, 2015). In a separate study on veteran's perceptions of services in a VA vocational rehabilitation program, a counselor with a military background is significantly associated with positive behaviors impacting quality of services received (Gade & Wilkins, 2013).

Although these studies are conducted from a demand-side perspective, they provide insight into the role and impact of a military background among key personnel on processes and outcomes. The findings from these studies provide evidence on how a veteran identity among key decision-makers positively impact veteran's perceptions of service delivery.

While all VTCs are post-booking programs that divert JIVs into VTCs at several points following an arrest, a substantial amount of variation exists between VTCs on several other vital aspects (Finlay et al., 2016). These important features include identification of veterans, eligibility requirements, plea processes to enter the court, carrot-and-stick approaches for behavior, and procedural processes for termination and graduation (Russell, 2015).

Perhaps one of the most often cited areas of disparity between VTCs is the lack of protocols for early identification of veterans (Baldwin, 2013; and Lucas & Hanrahan, 2016). Baldwin (2015) uses data from a national survey of VTCs to find that an overwhelming majority, 88 percent, do not have standardized identification protocols. This aspect is paramount for the effective administration of VTCs and for equitable outcomes for JIVs in the program (Russell, 2009). To address this issue, the Substance Abuse and Mental Health Services Administration (SAMHSA) created the Sequential Intercept Model (SIM) as a guideline for the early identification of veterans across several intercept points of the criminal justice system prior to incarceration (Blue-Howells et al., 2013; and Substance Abuse and Mental Health Services Administration (SAMHSA), 2015). The identified intercept points for intervention prior to incarceration are law enforcement and emergency services personnel, initial detention or court hearings, and jails and courts (Blue-Howells et al., 2013). However, the issue of early and consistent identification of veterans often lies outside the sole purview of the VTC and requires inter-agency support across multiple levels. These agencies include law enforcement, intake processing at detention centers and jails, prosecutors and defense attorneys, social service providers, and the VA (Baldwin, 2013; and Baldwin, 2015).

Eligibility requirements vary significantly across VTC jurisdictions. Eligibility criteria can range from inclusive to exclusive entrance requirements. Regarding military service, most courts have inclusive eligibility requirements. These courts allow both active duty and veterans, reserve and National Guard members, veterans without combat exposure, veterans of all service eras, veterans without an honorable discharge status, and those without VA benefits and healthcare due to an undesirable discharge status (Clark et al., 2010; and Flatley et al., 2017).

There is variation across courts regarding the type and level of offenses accepted. A recent survey finds that 20 percent of courts only accept misdemeanor offenses and 14 percent only accept felony offenses (Flatley et al., 2017). Approximately 66 percent of courts accept both misdemeanor and felony offenses and most will consider violent offenses based on the individual merits of the case (Flatley et al., 2017; Slattery et al., 2013).

An evolving development in the structure and administration of VTCs, and one that could have far-reaching consequences for this population of veterans, is recent state legislation that establishes eligibility requirements for offending veterans. The legislation aimed at VTCs is not surprising, owing to their rapid proliferation since their inception a little more than a decade ago. Current legislation exists in several states, with more possibly forthcoming, that requires JIVs to demonstrate that the underlying clinical issues, such as PTSD, TBI, or substance abuse, is tied to their military service (Clark et al., 2010). For example, Colorado requires a link between the veteran's military service and "mental health injuries" (Clark et al., 2010). By requiring a causal link between a veteran's military service and the concomitant mental health diagnoses, legislatures are potentially limiting access to VTCs for veterans who would otherwise be eligible and in need of specialized treatment programs (Clark et al., 2010).

However, recent legislation introduces more inclusive eligibility requirements to reconcile this potentially delimiting aspect. One example of legislative action aimed at addressing this shortcoming can be found in Texas. The State of Texas passed legislation in 2009 that sets forth eligibility guidelines requiring clinical mental health diagnoses be tied to a veteran's service history (Clark et al., 2010). In 2017 Texas amended the eligibility requirements for VTCs by adding an inclusionary definition that significantly expands eligibility. In addition to the eligibility requirements found in the original legislation, the recent legislation provides an additional pathway of inclusion by balancing individual veteran characteristics and offending circumstances with the overall goals of safety and rehabilitation. Current legislation expands eligibility by allowing veterans to enter a VTC program after weighing the totality of circumstances, such as nature of the offense, criminal history, and personal background circumstances with the goals of public safety (Texas 85<sup>th</sup> Legislature, 2017). The new legislation provides an additional pathway of entry into VTCs for JIVs that may have otherwise been ineligible for entry. Recent survey data places this issue in perspective. Flatley et al., (2017) finds that 20 percent of VTCs only accept JIVs with military related mental health conditions and a full 68 percent allow JIVs who are not eligible for VA healthcare benefits.
Once a prospective candidate meets all eligibility requirements for a VTC, the JIV is diverted out of the traditional court system and into the jurisdiction of the VTC. The JIV voluntarily chooses to participate in the treatment program and can, at any time, freely opt-out of the program (Baldwin & Rukus, 2015; and Cartwright, 2011). However, the voluntariness of the decision to participate comes with a caveat that has long-lasting implications. The plea arrangement of courts are incentivizing factors to increase participation and have a direct impact on the original criminal charges if the JIV successfully completes the program (Clark et al., 2010; and Russell, 2015).

Pre-plea arrangements allow JIVs to enter the program without entering any plea on their criminal charges. Conversely, in post-plea arrangements JIVs enter the program only after entering a guilty plea to the criminal charges (Clark et al., 2010). If a JIV violates, or fails to comply with the treatment contract, pre- and post-plea arrangements afford varying levels of leverage. In a pre-plea structures, the judge would typically remove the JIV from the program, return the case back to the original docket, and the case would proceed through the traditional system with the possibility of incarceration as the result (Clark et al., 2010; and Johnson et al., 2016a). In post-plea structures, the judge could either find the JIV guilty based on the

original plea or return the case back to the original docket after the JIV withdraws their guilty plea (Clark et al., 2010). The latest inventory data on pre- and post-plea courts demonstrates that 17 percent of courts are preplea only, 31 percent are post-plea only, and 52 percent are a combination of both pre- and post-plea arrangements (Flatley et al., 2017).

Each treatment program is structured to address the underlying causes of criminal behavior and meet the individualized needs of each JIV. Veterans entering and proceeding through the treatment program often suffer from mental health disorders and may be unemployed or homeless. Regardless of the variation specific to each JIV, each program has basic requirements for successful completion. These requirements can include regular status hearings, alcohol and drug testing, social services, and employment requirements. Each JIV is held strictly accountable to their individualized treatment program using positive and negative reinforcements (Marlowe et al., 2016; Russell, 2009; Russell, 2015).

Incentives are used progressively to reward achievements (Marlowe et al., 2016). Achievements and program compliance are incentivized. These include but are not limited to: verbal praise; reduced supervision; token gifts of accomplishment; commemoration of accomplishment; positive modification to the treatment plan, such as reductions in court appearances

or drug testing; advancement to the next program phase; probation termination; and reinstatement of certain privileges, such as driving (Baldwin & Rukus, 2015; and Marlowe et al., 2016).

Sanctions are progressively imposed for infractions (Marlowe et al., 2016). Infractions or violations of the treatment contract, such as a failed drug test, can result in an array of sanctions. Sanctions can include, but are not limited to: verbal reprimands; written assignments; modification to the treatment plan, such as an increase in court appearances or drug testing; community service; phase adjustment resulting in a demotion to previous program phase; placement in a treatment facility; revocation of probation resulting in jail time; and termination from the program (Baldwin & Rukus, 2015; and Johnson, Graham, Sikes, Nelson, & Stolar, 2015b).

VTC treatment programs, from initiation to graduation, typically last between 12 and 18 months (Russell, 2015, p. 394). The variation in treatment duration is a result of two factors. First, the tailored treatment plan for each JIV affords variation in the requirements for success (Baldwin & Rukus, 2015). Second, successfully treating the underlying causal mechanisms of criminal offending can result in longer stays under court supervision. The effective treatment of PTSD, TBI, or depression and conditional requirements, such as employment, can extend treatment

durations. This highlights one of the central differences between problemsolving courts and traditional courts.

Criteria for successful completion of the treatment plan also varies across VTCs (Baldwin & Rukus, 2015). This is often a feature of individualized treatment plans that varies across the specific needs of each JIV. Graduation is based on requirements set forth in the initial treatment plan which is developed by the VTC staff and agreed to by the JIV. Graduation criteria often includes compliance to clinical treatment, compliance to terms of probation, compliance to all court obligations, and sustaining a positive attitude (Baldwin & Rukus, 2015).

Upon successful completion of the VTC treatment plan, the JIV graduates from the program and the disposition of their original charges is largely dependent upon the pre- or post-plea arrangements. In a pre-plea setting, the pending charges are often dismissed (Clark et al., 2010). In a post-plea arrangement, the pending charges are typically reduced or dismissed after the original guilty plea is withdrawn by the JIV (Clark et al., 2010; and Russell, 2009). However, some post-plea courts do not afford JIVs the opportunity to have their charges reduced or dismissed, the original charge remains unaltered upon graduation (Clark et al., 2010).

#### Bureaucratic Nature

Legally, VTCs are structured and administered so that the proper legal authority within each jurisdiction makes the final decision on policy processes and outcomes. The prosecuting attorney and judge are the ultimate arbitrators in decisions within the VTC (S. Clark, personal communication, April 2017). Although it may vary across jurisdictions, the prosecuting attorney and judge are typically the final authority on entry decisions. The judge is typically the ultimate authority on decisions related to sanctions, incentives, and graduation (S. Clark, personal communication, April 2017).

However, the decision processes and policy outputs and outcomes within VTCs behave much like other administrative courts that serve a bureaucratic function. VTCs maintain many of the structural properties inherent within 'typical' Weberian bureaucracies, such as a hierarchy based on fixed rules, laws, and administrative regulations (Weber, 1946, p. 956). However, the decision-making processes are unique from this ideal. The decision-making processes within VTCs are characterized by collaboration and discretion among key members. VTC personnel share power on discretionary decision-making on the administration of individualized treatment programs. Policy outputs and outcomes, such as entrance, incentives, sanction, terminations, and graduations, highlights the bureaucratic nature of VTCs. (Baldwin & Rukus, 2015, p. 200; and Lipsky, 2010).

#### Effectiveness of Veteran Treatment Courts

The overall success of drug and mental health courts in reducing recidivism is one of the primary reasons VTCs are initiated and modeled after these courts (Clark et al., 2010; and Russell, 2015). However, findings on the effectiveness of VTCs, measured by recidivism, are still relatively mixed. Comparisons between studies on the effectiveness of VTCs are often limited due to the amount of variation across courts on measures such as eligibility requirements. The result is often anecdotal and inconsistent evidence (Hartley & Baldwin, 2016; and Marlowe et al., 2016).

Several single-site evaluations of VTCs provide evidence of their effectiveness, reporting zero-percent recidivism rates among graduates of the treatment program (Derrick et al., 2017; Russell, 2015; and Slattery et al., 2013). Other single-site evaluations find evidence of re-offending within the population of graduates, ranging from 9 percent to 45 percent (Commaroto, Jewell, & Wilder, 2011; Knudsen & Wingenfeld, 2016; and Smith, 2012). Hartley and Baldwin (2016) discover that VTC graduates have significantly

lower average re-arrests compared to a control group of VTC-eligible probationers.

The variability across VTCs limit findings on their effectiveness. For example, recidivism is broadly defined across these studies. This leads to definitional inconsistencies and problems comparing outcomes. In the report on the Buffalo VTC recidivism is not defined and the San Diego study applies a strict interpretation of recidivism—only considering convictions as a measure of re-offending. Second, there is substantial variation across courts in the level of offense accepted. Some courts may only accept non-violent misdemeanors, while others may accept felonies. Third, many of these reports suffer from the lack of comparison groups. Finally, the findings from single-site studies may suffer from a lack of generalizability. Together, these factors limit the ability to apply the findings to VTCs in general.

While there are various measures of effectiveness, such as recidivism and cost-effectiveness, this study will focus on graduation rates. The use of graduation rates as a measure of VTC success is used for several reasons. First, graduation rates provide a more uniform measure of successful outcomes for veterans in the treatment program. Recidivism often suffers from definitional inconsistencies and is often measured after a veteran graduates from the program. Second, graduation rates are more succinctly

tied to the relationship between veterans and the services provided by the VTCs. To graduate, veterans must adhere to the conditions of the treatment program. Finally, the relationship between the personnel structure and successful policy outcomes within VTCs can be more effectively measured by graduation rates. These aspects of VTCs directly impact the success of veterans within the treatment program. While there are no known studies that explicitly explore the relationship between the personnel structure and policy outcomes, several studies measure the success of courts by graduation rates (Commaroto et al., 2011; Derrick et al., 2017; McGuire et al., 2013; Russell, 2015; Slattery et al., 2013; and Smith, 2012)

## Critique of Veteran Treatment Courts

Considering the potential positive impact on veterans in the criminal justice system, VTCs are not without their share of criticisms. Perhaps one of the most important criticisms of VTCs is the lack of scholarly research on these courts (Baldwin, 2015; and Lucas & Hanrahan, 2016). Although there are several legal briefs and descriptive studies that provide an overview of the structural characteristics of VTCs, there are relatively few academic studies on their processes and outcomes.

In addition, some believe VTCs afford veteran offenders with preferential treatment based solely on their status as military veterans and thus are not held accountable for their behavior (Clark et al., 2010; and Russell, 2015). Others raise concerns that VTCs confer privileges to veteran offenders not afforded to other populations (Clark et al., 2010). At the heart of both these concerns is the issue of equity. The establishment and implementation of VTCs can give the appearance of entitlement for veterans. However, studies cite VTC personnel emphatically discounting this idea, finding instead that VTC programs are lengthier and more demanding than traditional courts (Cavanaugh, 2011; and Lucas & Hanrahan, 2016). *Conclusion* 

# Military veterans are beneficiaries of advancements in the treatment and management of injuries sustained on the modern battlefield, resulting in higher survival rates compared to veterans from previous wars. However, many of these same veterans are the subject of a cruel twist in fate. While they are surviving their physical injuries, many of these same veterans suffer from mental health disorders, such as PTSD, TBI, and depression. Further compounding their already tenuous condition, these veterans often engage in a host of maladaptive behaviors. Licit substance abuse, illicit substance use, risk propensity, and criminal behaviors are some of the more recognized attendant behaviors of those suffering from PTSD, TBI, and depression. Left untreated, this population of veterans are at an increased risk of further

negative outcomes. A military culture that inculcates a warrior identity and stigmatization of mental health disorders can often lead to a veteran's refusal to admit to, or seek assistance for, mental health problems—a characteristic that can follow them even as they transition into civilian life. The problematic stage is now set for this population of veterans to have the potential for increased contact with the criminal justice system.

As a direct result of a demonstrated need within the veteran community, VTCs have expanded exponentially across the nation since the first court was created over a decade ago. This is largely the result of two key factors. First, veterans suffering from untreated mental health disorders who engage in a wide range of risk-taking behaviors are likely to have increased contact with the criminal justice system. Second, this population of veterans present traditional courts with a challenge they are typically unable to effectively handle. VTCs fill this void in criminal justice system by identifying and addressing the underlying mechanisms that led to the criminal offending by veterans.

The novelty of these courts produces inconsistencies that provides cause for concern on the part of policymakers regarding their proper form and function. To date there is a dearth of scholarly research addressing these issues, with several studies regularly citing the need for additional research

on these courts across structural and administrative factors that impact policy outputs and outcomes (Baldwin, 2015; Johnson et al., 2016b; and Lucas & Hanrahan, 2016).

Veteran Treatment Courts in the Context of Representative Bureaucracy

VTCs are the latest edition to the problem-solving court family, and although they import wisdom from their drug and mental health court predecessors, their novelty yields a great deal of variance between them. The personnel structure highlights the amount of disparity across these courts. VTCs can range from courts that are completely staffed by personnel with a military background, to courts that have no members on their staff with a military background. These key personnel routinely engage in discretionarydecision making that directly impact policy outputs and outcomes affecting JIVs entering and proceeding through the treatment program.

The rapid expansion of VTCs has resulted in a relative shortage of scholarly research on VTC processes and outcomes. This study attempts to fill the void in the scholarly research on VTCs by applying representative bureaucracy theory to understand the role and impact of veteran identity among key courtroom personnel on policy processes and outcomes. To date, there is no known research that examines whether the personnel structure of VTCs have a direct impact on policy processes and outcomes. Whether a

veteran identity among key personnel affects entries, sanctions, incentives, and graduations within VTCs is the primary focus of this study. It is hypothesized that a veteran identity among treatment team members will result in favorable policy outputs and outcomes for JIVs. The intersection of a veteran identity and policy preferences among VTC court members will likely result in more entry decisions, fewer sanctions, more incentives, and higher graduation rates.

#### Democratic Ideals

The theory of representative bureaucracy in a VTC setting is appropriate for several reasons. Overall, the theory is applied as a measure of responsiveness and accountability within our representative form of government (Keiser, 2010). As a measure of responsiveness to public policy concerns, representative bureaucracy can guide our understanding of the role and impact of the personnel structure on policy processes and outcomes within VTCs. The decision processes and outcomes within these courts are bureaucratic in nature based on the collaborative and non-adversarial decision-making among the VTC staff on administrative matters pertaining to entry into the program and the management of treatment plans.

Owing to the unique structure and administration of VTCs, traditional external and internal accountability mechanisms may be of limited effectiveness in these courts. The majority of VTC personnel are traditional bureaucratic actors. These individuals include program managers, court coordinators, community supervision representatives, social services outreach personnel, and peer mentor coordinators. These personnel embody Lipsky's (2010) definition of street-level bureaucrats who routinely interact with the public and exercise discretion in providing access to programs and services. These personnel are typically appointed or hired through traditional employment processes and are thus immune from electoral incentives.

While judges and prosecuting attorneys meet Lipskey's (2010) definition of street-level bureaucrats in their discretionary decision-making on policies and programs impacting the community, they are not immune from being influenced by the ballot box. Most judges are either appointed or elected. Although prosecuting attorneys assigned to these courts are not elected, their decisions are directly influenced by district attorneys who are often appointed or elected officials. District attorneys have direct input on the processes and outcomes in VTCs that guide the decisions of prosecuting attorneys. However, these key actors are not immune from the influence of extra-legal factors on their decision-making. Research identifies the impact of race, gender, and ethnicity on judge's and prosecuting attorney's decisions

that impact policy outcomes affecting individuals in the criminal justice system (Bradbury & Kellough, 2011; Clemons, 2014; Holmes et al., 1993; and Spohn & Fornango, 2009).

A bureaucracy that is representative of the population it serves, along demographic and socioeconomic identities, is cited as a measure of responsiveness and accountability. While the theory is traditionally applied to non-elected bureaucrats who lack standardized accountability mechanisms, the logic of representative bureaucracy can be applied to officials even in the presence of an electoral incentive. Several studies apply representative bureaucracy theory to elected officials in local government and educational settings (Meier & Funk, 2017; Meier & O'Toole, 2006; Meier & Rutherford, 2017; and Meier & Stewart, 1991). Explicit within these studies is the role and impact of a bureaucracy that is representative of the population it serves in instilling the democratic values of responsiveness and accountability.

Another reason for applying the theory of representative bureaucracy to VTCs can be found in the impact of their policies. Drawing on the work by Wilson (1989) and Lipsky (2010) on policy processes and outcomes in government settings, representation within VTCs is crucial to understanding whether the sociodemographic characteristics of key personnel impacts the

distribution of costs and benefits to society (Keiser, 2010). Beyond the direct impact on veterans entering and proceeding through the treatment program, the policy processes and outcomes of VTCs directly impact the public. Successful completion of the treatment program by JIVs, measured by graduation for the purposes of this study, has a direct impact on society. Veterans who successfully graduate from the treatment program are likely to reduce costs to society that would have been incurred if the veteran did not receive services to address the underlying issues leading to their criminal behavior.

# Void in Current Research

Research on representative bureaucracy cites several areas for future research. First, there is an identified need to expand the scope of demographic and socioeconomic characteristics under study to further develop the theory (Mosher, 1968; Meier & Stewart, 1991; and Keiser, 2010). Race, gender, and ethnicity garner most of the attention in bureaucratic representation studies. There are relatively few studies that explore the impact of a veteran identity within a bureaucratic representation setting. The personnel structure of VTCs directly impact policy processes and outcomes that affect veterans as they enter and proceed through the treatment program. The focus on a veteran identity among key personnel in VTCs serves to expand our understanding of the impact of multiple identities on policy processes and outcomes.

There is also a need for expanding the types of bureaucracies under study (Keiser, 2010). To date there are no known studies that apply representative bureaucracy theory to a VTC setting. The inclusion of VTCs to the representative bureaucracy framework increases the number and types of settings under study. This increases our understanding of the determinants of active representation. This also affords the ability to generalize the findings to the larger population, such as problem-solving courts.

Conditions for Active Representation in a VTC Setting *Veteran Identity* 

There are two prerequisite conditions that must be met for the passive to active representation linkage. The first condition requires that a bureaucrat's demographic characteristic or social identity be linked to politically relevant attitudes and values (Keiser, 2010; Meier, 1993; and Thompson, 1976). For the passive and active linkage to occur, the policy issue must be salient to the attitudes and values held by the bureaucrat.

Key to this study is the development of a veteran identity. The VA estimates there are 20.3 million veterans in the United States (United States

Department of Veterans Affairs, 2016c). This underscores the size of the veteran population within society. This premise is further extended with the existence of a distinct military culture (Coll et al, 2013; and Exum et al., 2011). The beliefs and values inherent within a distinct military culture can continue as veterans transition into civilian life when their military commitment ends (Coll et al, 2013; and Exum et al., 2011). Several studies operationalize and explore a distinct veteran identity in the context of policy processes and outcomes within healthcare settings (Di Leone, Wang, Kressin, & Vogt, 2016; Gade & Wilkins, 2013; Harada et al., 2002; and Harada, Villa, Reifel, & Bayhylle, 2005).

Researchers posit that political attitudes and behavior are appropriate measures of policy relevancy (Meier & Nigro, 1976). This study focuses on the relationship between a veteran identity and political attitudes and values among key personnel with the court. Veteran's concerns and issues are highly politicized (Gade & Wilkins, 2013). Owing to a substantial veteran population and a unique culture, numerous politically active veteran organizations exist. These organizations lobby on behalf of their constituents on topics that include healthcare, homelessness, suicide prevention, and disability rights (Paralyzed Veterans of America (PVA), 2017; Veterans of Foreign Wars (VFW), 2017; and Vietnam Veterans of America (VVA), 2017). Issues relating to veterans and the criminal justice system are no exception to this premise. Veterans within the criminal justice system is a highly politicized issue that receives attention from numerous national agencies. For example, the VFW (2017) recently lobbied for the establishment of a national VTC advocate within the VA. Both the VA and the Substance Abuse and Mental Health Services Administration (SAMHSA) have national programs aimed at preventing criminal justice involvement by veterans and assist those who are in the criminal justice system (Substance Abuse and Mental Health Services Administration, 2017; and U.S. Department of Veterans Affairs, 2017).

The establishment and growth of VTCs is partly a result of the highly politicized needs of Afghanistan and Iraq veterans. The issues and needs of veterans in the criminal justice system taps into the policy salience requirement that facilitates a link between passive and active representation. Among VTC personnel with a military background, a veteran identity is likely to be linked to political attitudes and values on criminal justice issues facing veterans.

## Discretion Among VTC Personnel

The second requirement for the passive and active representation linkage is discretion. This condition maintains that bureaucrats have discretion over policies that are relevant to their key demographic characteristics or social identities (Keiser, 2010; Meier, 1993; Selden, 1997; and Thompson, 1967). Not only must a bureaucrat have discretion, but the policies must be politically relevant to the bureaucrat's demographic characteristics or social identities.

Key personnel within VTCs routinely engage in discretionary decision-making on policy outputs and outcomes. The nature of decisionmaking among key personnel within VTCs is characterized by a nonadversarial and collaborative process. The non-adversarial and collaborative nature of decision-making is apparent throughout various stages of the VTC. As a group, key personnel routinely confer on significant topics relating to entries into the program and the administration of treatment plans. If a IIV violates the directives set forth in a treatment plan, the VTC team collaboratively determine whether to administer sanctions. If they decide to sanction a veteran, they engage in the same decision processes to determine what type or level are appropriate. This feature of decision-making occurs on matters pertaining to entries, incentives, and graduations. Even though judges and prosecuting attorneys are legally held as the ultimate authority on decisions, they facilitate the collaborative decision-making processes among the treatment team. Research on a single VTC documents the collaborative

and conciliatory decision-making processes by the judge of the court (Baldwin & Rukus, 2015).

The primary identity under examination in this study is a veteran identity. Key personnel within VTCs with a military background exercise discretion over policies that are likely to be politically relevant to their veteran identity. Overall, veteran involvement in the criminal justice system is highly politicized and policy processes and outcomes affecting this population of veterans are likely to impact a veteran identity. VTC policy processes and outcomes directly impact the success of veterans as they enter and proceed through the treatment program. For key personnel within VTCs with a military background, these policy processes and outcomes are likely to be politically relevant to their veteran identity.

Determinants of Active Representation within a VTC Context Socialization

The shared socialization experiences among veterans is posited to result in similar attitudes and values. Within the context of a VTC, court personnel with a military background and JIVs share similar socialization experiences. These shared socialization experiences can lead to shared attitudes and values on policy preferences. However, socialization is a moderating influence that may inhibit the linkage between passive and active representation. Because of the linear nature of socialization and learning that occurs throughout life, there are numerous sources of socialization. Formal education and post-employment training are often viewed as impactful socializing agents. Age is often viewed as sharing a linear relationship with a bureaucrat's representative role, as age increases there is likely a decrease in favorable policy preferences.

Perhaps the most influential socializing agent on an administrator's values and attitudes is the organization itself (Keiser, 2010; Meier, 1993; and Thompson, 1976). Key personnel within a VTC often hold other positions and perform other duties outside of their roles within the VTC. For example, judges often sit on the bench of other courts, prosecuting attorneys may be assigned other cases, and community supervision representatives may have other non-veteran clients. These non-VTC socializing experiences may to impact the attitudes and values of members with a military background.

The mere establishment of a VTC in a jurisdiction could, at the very least, be considered a form of active representation. Notwithstanding the existence of VTCs, their explicit mission of assisting and advocating for veterans in the criminal justice system can be considered a form of active representation. Although agency socialization is typically viewed as

inhibiting the link between passive and active representation, agencies with an explicit mission of advocating for a group is the caveat to this premise. Research on the EEOC, an organization with an explicit minority advocacy role, discovers evidence to support active representation among supervisors within the organization (Hindera, 1993a; and Hindera, 1993b). The explicit mission of advocating on behalf of veterans establishes a foundation for active representation. It is therefore likely that active representation will be strong within VTCs.

### Attitudes & Values

The final step in the bureaucratic representation logic is the role of attitudes and values on behavior (Meier & Stewart, 1992; and Meier & Nigro, 1976). Crucial to this study is the premise that identities are an extension of an individual's values (Meier & Funk, 2017). A veteran identity is likely to impact policy processes and outcomes that directly affect the success of veterans entering and proceeding through the treatment program.

However, the attitudes and values of bureaucrats are often influenced by numerous sources. Active representation on behalf of certain segments of the population is cited as running counter to the fundamental tenets of administrative neutrality and democratic government (Mosher, 1968; and Weber, 1946). Certain administrators actively representing for segments of the population with similar characteristics could be viewed as hostile to the core principles of administrative neutrality, equity and legitimacy. In the context of VTCs, these tenets could impact the value system of VTC personnel.

Closely aligned with core bureaucratic values, the criminal justice system is grounded in the core values of efficiency, deterrence, and punishment. The effect of these values on a veteran representative role among VTC personnel follows the same logic for traditional bureaucratic values. The time intensive process of developing and administering individual treatment plans could impact the value of efficiency. Contrary to traditional court processes, the administration of individual treatment plans for veteran offenders are more time consuming, lasting upwards of 18 months (Russell, 2015). This underscores the characteristic of a tailored treatment plan for the individualized needs of each veteran and the timeintensive nature of treating substance abuse and mental health disorders. The therapeutic justice principle of treating the underlying causes of criminal offending could impact a court member's values of deterrence and punishment.

The influence of key stakeholders can impact a bureaucrat's attitudes on policy preferences (Selden, 1997). These stakeholders can include a wide

range of actors with interest in the policy processes and outcomes of the agency. Key personnel within VTCs are not immune from the influence of stakeholders on policy preferences. Key stakeholders in VTC settings can include local political officials, funding sources, the public, and veteran organizations. These stakeholders often have policy preferences that differ from those held by members of the treatment team. Local political officials may value traditional criminal justice goals, such as efficiency or punishment, which could impact the attitudes and values of VTC personnel.

# Multiple identities

Individual bureaucrats have multiple, and often competing identities (Keiser, 2010). Identities can be derived from a wide range of politically relevant individual characteristics and group membership (Keiser, 2010; and Meier & Funk, 2017). The personnel structure of VTCs encompasses a diversity of identities. These key personnel are not immune from the impact of multiple identities on decision-making processes and outcomes. A veteran identity could be influenced by the intersection of multiple and often competing identities, eroding the linkage between passive and active representation.

#### **Research Setting**

Several key features of VTCs provide for the optimal level of analysis for representative bureaucracy. First, the key variable under study is clearly identified among both parties in the representation equation (Hindera & Young, 1998). The veteran status of both the key personnel within VTCs and individuals entering and proceeding through the treatment program is clearly identified. All individuals entering and proceeding through the treatment program are veterans and those members of the court with a military background will self-identify their veteran status. Second, the mere establishment of VTCs and their processes and outcomes are a de facto form of active representation on behalf of JIVs. This minimizes any potential conflict between organizational priorities and active representation (Hindera & Young, 1998). Third, there is a significant amount of variation across VTC personnel structures. The personnel structure of VTCs can range from a full complement of personnel to courts that are minimally staffed. However, even within those VTCs that are minimally staffed there is a collective of personnel that engage in discretionary decision-making, a key component of representative bureaucracy. Also, there is significant variation across VTCs in the number personnel with a military background. Some courts are completely staffed with personnel that have a military background, while

others have no personnel with a military background. This allows for comparisons across courts on the impact of a veteran identity on policy outputs and outcomes. Finally, the collective decisions of the individuals within the court reflect the processes and outcomes of the VTC. Drawing on the work of Meier and Bohte (2001), representation that occurs because of a collective of individuals exercising influence in the discretionary decisionmaking processes can be viewed as an organizational process. The organizational structure and decision-making processes of VTCs could be observed within the context of an organizational process. This makes the individual VTC the appropriate unit of measurement.

# Chapter 4

#### Methodology

Research on bureaucratic representation finds that passively representative organizations, along various demographic characteristics and social identities, are associated with substantive policy outcomes for members of the population with shared characteristics and identities. Numerous identities exist, such as race, ethnicity, and ideology, each one of which is an extension of individual's values. If a bureaucrat's identity is politically relevant and the bureaucrat has discretion over policies that directly impact these identities, then favorable policy outcomes are possible (Meier, 1993a). Perceptions of legitimacy and responsiveness in policy processes and outcomes is likely increased through a representative bureaucracy.

From a policy evaluation perspective, it is important to understand whether public policies are implemented in accordance with stated guidelines and whether those policies have the intended outcome (Nachmias, 1979). Both process and impact evaluation within a VTC setting will be incorporated within this study. The focus is the relationship between a veteran identity and decision-making processes affecting policy outputs and outcomes.

For the purposes of this paper, the term VTC borrows from the definition used by the VA and encompasses any veteran court or any veteran dockets or tracks within other problem-solving or specialty courts at the local, county, regional, state, or federal level (Flatley, Clark, Rosenthal, & Blue-Howells, 2017).

The research question is guided by understanding the relationship between a veteran identity and policy outcomes for veterans entering and proceeding through the treatment program. It is hypothesized that the intersection of a veteran identity and policy preferences will result in favorable policy outputs and outcomes for JIVs. Key personnel within the court with a military background are expected to permit more veterans to enter the program, apply fewer sanctions, use more incentives, and graduate more veterans from the program, compared to court members without a military background. Whether veteran identity impacts policy implementation in accordance with guidelines and the impact of identity upon policy outputs and outcomes provides the foundation for process and impact evaluation.

#### Study Design

There are seven models that test the impact of representative bureaucracy within a VTC setting. Policy outputs and outcomes are

measured by seven dependent variables: entries; exclusions; percent African American admitted; percent Hispanic admitted; sanctions; incentives; and graduations. The primary independent variable is veteran identity within the court. Veteran identity is operationalized as the court's personnel structure consisting of 51 percent or more veteran status. Six control variables are included in the model. The identification and inclusion of control variables is informed by representative bureaucracy and interdisciplinary research. Their inclusion is intended to limit the impact of confounding variables on the overall model. The seven equations are estimated in which the percentage of entry decisions, exclusions, sanctions, incentives, and graduations are regressed upon the court's veteran identity and the six control variables.

A quantitative research design is implemented based on its appropriateness to this setting. The quantitative approach objectively tests the theory of representative bureaucracy by examining the relationship between key variables (Creswell, 2014). This study's central question—does veteran identity affect policy outputs and outcomes within a VTC setting can be deductively tested. Finally, it provides measures to protect against bias while affording generalizability and replicability for future studies (Creswell, 2014). Overall, the use of quantitative methods is guided by the

research problem and question, which attempts to identify the factors affecting outputs and outcomes within VTCs.

The methodological approach is a cross-sectional design because it gathers data from individuals within VTCs at one point in time. The level of analysis for this study is at the court-level. Therefore, all individual-level data will be aggregated to the court-level. The cross-sectional design allows for comparisons between groups on the impact of several independent variables on the four outcome variables.

The cross-sectional design does not afford the ability to manipulate the independent variables, which generally limits the ability to test for causal relationships (Frankfort-Nachmias & Nachmias, 2008). However, to approximate an experimental design, several statistical analyses are applied. First, descriptive statistical techniques provide a summary of sociodemographic and socioeconomic data within the sample population. Also, binomial logistic regression is used to predict the probability that veteran identity and the six control variables falls into one of the categories of the outcome variables.

# Sample Frame

The purposive sample consists of all VTCs in three contiguous states in the Southern region of the United States. The sample frame consists of all stand-alone VTCs and veteran dockets or tracks in existing problem-solving courts in Texas, New Mexico, and Louisiana. The sample frame accounts for 33 courts, dockets, or tracks in the region out of a total of 461 nationwide (Flatley, Clark, Rosenthal, & Blue-Howells, 2017). This represents 7 percent of the total nationwide courts. The number of VTCs within this sample provides a measure of representativeness that allows for comparison between courts and generalizability to VTCs across the nation.

The respondents within the sample frame include all key decisionmaking members assigned or dedicated to each VTC. This can include the judge, prosecuting attorney, defense attorney, VJO specialist, social service outreach provider, court coordinator, adult supervision officer, law enforcement representative, peer mentor coordinator, and peer mentor. Every professional staff member assigned or dedicated to a VTC in the sample frame is afforded the opportunity to be selected.

The VTCs and their court coordinators are identified through several resources. Justice for Vets, which is a subsidiary of the National Association of Drug Court Professionals (NADCP), publishes a list of all VTCs and contact information for state-level court coordinators nationwide. While each VTC has a court coordinator, not all states have coordinators. State-level problemsolving court coordinators or program managers provided additional

information on the existence of VTCs and contact information for court coordinators. This initial list was cross-referenced with findings from a general internet search. A search using the Google Chrome web browser and the key words and phrases "veteran treatment courts" and "veteran courts" in the search format yielded additional courts and coordinators. Many of the courts maintaining jurisdiction over VTCs and the VTCs themselves have dedicated websites. Specific searches of these dedicated links confirmed their existence and identified the assigned court coordinator.

The court-coordinator is the central point of contact for this study. Most courts do not publish contact information for all key personnel, such as the judge, prosecuting attorney, or peer mentors. The court coordinator has access to all members of the team. Telephone contact was made with all individual court coordinators within the sample frame. Court coordinators confirmed both the existence of their court and any other VTC in the state or region not already identified through previous search techniques. This communication also provided information for the elimination of two courts from the final sample. One court no longer has a dedicated VTC and another is considered a 'hard refusal.'

New Mexico, Louisiana, and Texas do not have state-level coordinators. Every coordinator from each individual court offered their

assistance by completing the survey and forwarding it to each member of the treatment team. They also provided a personal email and mailing address for their court for future communication.

## Survey Instrument

An original survey instrument is used by this study. The inclusion of key variables within the study is guided by prior research on representative bureaucracy and relevant interdisciplinary research. Closed questions are used to gather objective data from key decision-making members within each VTC. The closed question format is preferable because its ease of use increases response rates among respondents and it produces quantifiable data (Fowler, Jr., 2009).

The objective data captures sociodemographic indicators, position within the treatment team, VTC employment characteristics, court eligibility characteristics, and policy outputs and outcomes. The policy outputs and outcomes are measured by the percentage of entries, sanctions, incentives, and graduations. Several sociodemographic indicators are captured on individual veterans in the treatment program. However, this data is captured by individual courts and precludes any need for direct contact with individual JIVs. All individual-level data will be aggregated to the court-level. The data in this study is considered non-sensitive.

#### Survey Implementation

The survey utilizes a modified mixed-mode design based on methods established by Dillman, Smyth, and Christian (2014). A mixed-mode design is shown to increase response rates and decrease non-response errors (Dillman et al., 2014). The survey consists of objective questions and the overall length is purposefully concise to reduce costs to respondents.

The survey is hosted by Qualtrics. Qualtrics provides several measures of survey implementation. This includes survey development, survey design testing, a dedicated URL, and secure data collection and storage.

Multiple modes of communication with court coordinators have been used prior to survey implementation. Telephone and email contact have been made with all individual court coordinators in the sample frame. Several techniques shown to increase response rates are implemented in the modes of communication. To increase interest in the research problem coordinators were provided with an overview of the research question and study design, the importance of their contributions, contact information for the principal investigator (PI), and an opportunity to provide input or ask questions (Fowler, Jr., 2009). The methods and features of data collection, storage, and reporting to ensure anonymity and confidentiality were also emphasized (Nulty, 2008).

Shortly before survey initiation, introductory letters were mailed to court coordinators. The introductory letter serves several purposes. It reminds respondents of the upcoming survey and provides an additional method of communicating the key aspects of the study to establish trust.

There are two modes of response to the survey. The primary mode is through email. Each individual court coordinator in the sample frame is sent an email that contains an embedded link to the survey URL. Providing survey respondents with a link to the survey URL in an email is shown to increase response rates (Nulty, 2008). Each court coordinator is requested to complete the survey and forward the survey link to all treatment team members for completion. A single reusable link for the survey is used because of the inability to directly email all members of the treatment team. This allows the survey to be forwarded without damaging the properties of the link. The front matter of the survey contains information that mirrors the introductory letter on matters pertaining to research overview, data collection, storage, and reporting, and assurances on anonymity and confidentiality. Contact information for the PI, dissertation chair, and UTA Institutional Review Board (IRB) is included. The front matter also contains the informed consent form with an opt-out link for those who do not wish to participate.

Because a single reusable link is used based on the characteristics of the sample population, no unique identification number is used to identify and track survey completion by individuals within the courts. The survey includes three variables that are proxies for indicators of completion progress and tracking. Respondents are asked to identify the state and jurisdictional designator of their court and their position within the court. The variable for state and position have predetermined categories based on unique characteristics of the sample frame. The variable for jurisdictional designator is open-ended, allowing respondents to write in the court designation. This is the only open-ended question within the survey.

Although the research team has an internal completion deadline of mid-August, survey respondents are not provided with this specific information. Knowledge of a specific deadline could result in a delay in survey completion. Instead, the sample frame is provided with frequent reminders which are shown to increase response rates (Nulty, 2008). Email reminders are sent at two specific time periods. Three weeks and one week prior to the deadline, electronic reminders are sent to all court coordinators that have less than a 100 percent participation rate for their court. Because
this study implements a purposive sample, which is a non-probability sample, response rates are not methodologically appropriate (American Association for Public Opinion Research (AAPOR), 2016, p. 49). Participation rates are used in lieu of response rates. Following survey guidelines established by the AAPOR (2016), participation rates are the "number of respondents who have provided a usable response divided by the total number of initial personal invitations requesting participation" (p. 49). Direct contact with court coordinators through multiple modes and a known personnel structure of each VTC in the sample frame facilitates the use of participation rates.

The second mode of survey response is a paper survey. The sequential order of a web survey followed by a mail survey is shown to decrease nonresponse rates and reduce non-response error (Dillman et al., 2014). Two weeks prior to the internal deadline, court coordinators with less than a 100 percent participation rate for their court are mailed a survey with a selfaddressed and pre-paid return envelope. Extending the availability of the survey can produce higher response rates (Nulty, 2008). Courts with less than a full participation rate are contacted and given the opportunity for a moderate extension if needed.

### Pilot Survey

A VTC in the north Texas region provided the opportunity to conduct a pilot survey prior to full implementation across the sample frame. Based on the pilot survey, several changes are incorporated into the final electronic and paper survey. First, the addition of skip logic is intended to prevent the provision of administrative data by those not charged with capturing this data. Also, the estimated time to complete the survey reduced to 10 to 15 minutes to lessen the perceived costs to respondents.

## Data Storage, Analysis Protocols, & Confidentiality

All identifiable data are stored on the university's secure J drive. The data are analyzed using Statistical Package for the Social Sciences (SPSS), version 25. Password protected computers on the University of Texas at Arlington (UTA) campus are used to access and analyze data from the secure drive. Off campus data analysis on a personal computer by the P.I. implements security protocols using two separate and dedicated flash drives. One flash drive is a dedicated master file and the second is a dedicated working file. Each flash drive is encrypted and password protected and will never be used simultaneously in order to maintain data security. All data is deidentified through recoding and recording procedures prior to final reporting of results. The study implements a paper version of the survey in addition to the online version. Completed paper surveys are returned by the postal service to the office of the dissertation chair. The paper version is stored and managed in this office. All data from the paper surveys are transcribed, deidentified, and stored on UTA's secure J drive. Analysis and reporting of data from the paper survey follows the same confidentiality and data security steps afforded the online survey instrument. The study protocol meets exempt status and has been approved by the UT Arlington Office of Research Administration; Regulatory Services under protocol #2018-0547.

# Reliability & Validity

Several measures are implemented to ensure reliability and validity within the research design. The measures aimed at increasing reliability and validity begin with the survey design based on prior research and extend through statistical analyses to test the strength of these constructs. To increase measurement consistency across similar situations, the design of the questions within the survey implement several features. First, every respondent in the sampling frame is asked the same questions within the survey, which allows variances in answers to be attributed to the respondents (Fowler, Jr., 2009). There is no variation in the structure of questions, therefore any response variance is less likely to be attributed to the survey instrument. Second, survey questions are constructed to ensure standardization in meaning across all respondents (Fowler, Jr., 2009). Incomplete sentence structure and poorly defined terminology is avoided to ensure proper sentence structure (Fowler, Jr., 2009). Finally, answers are structured to provide respondents with clarity on acceptable responses (Fowler, Jr., 2009). The closed question format provides set parameters for respondent's answers.

The model implements three measures of validity. Construct validity and content validity is incorporated into the survey instrument and measures of empirical validity are applied to the results of the survey. The first measure of validity is construct validity, which uses theory to guide the inclusion of key variables during construction of the survey instrument (Frankfort-Nachmias & Nachmias, 2008). Representative bureaucracy theory guides the identification and inclusion of key variables into the survey. Content validity centers on the concern that the survey instrument captures all the attributes of the concept under study (Frankfort-Nachmias & Nachmias, 2008). The survey implements steps to ensure that the characteristics of a veteran identity and its relationship with substantive policy outcomes are measured. Content validity is based on two components—face validity and sampling validity (Frankfort-Nachmias &

Nachmias, 2008). The survey incorporates a measure of face validity in constructing questions based on research that measures the concept. In addition, all personnel within the VTCs in the three-state sample frame are afforded the opportunity to complete the survey. The adequate representation of VTC personnel by the survey instrument ensures sampling validity.

Another measure of the content of the survey is ensuring the questions "will be perceived positively and will make sense to the respondents" (Dillman et al., 2014). To achieve this measure, experts in the survey field provide feedback on the concepts, language, and questions within the survey. Expert feedback from the pilot survey provided information and guidance on terminology and the structure of questions within the survey.

Finally, the study implements a measure of empirical validity which is a display of the relationship between the survey and its measured outcomes (Frankfort-Nachmias & Nachmias, 2008). The model uses logistic regression to test the relationship between a veteran identity and policy outcomes, measured by entries, sanctions, incentives, and graduations. To provide measures of empirical validity, several tests are conducted within logistic regression. First, overall model fit is assessed through observing the amount

of explained variance in individual variables and the model. Second, the overall percentage of correct classifications are compared between the null and full model. Second, category prediction is compared between the null and full model to observe the correct classification of cases. In addition, specificity, sensitivity, positive predictive value, and negative predictive value provide additional measures of validity.

#### Data Analysis

The primary statistical technique used is binomial logistic regression. SPSS version 25 is used to conduct the descriptive and inferential tests. First, overall participation rates for the survey are reported. Based on the characteristics of the sample, participation rates are reported as proxies for response rates. Percentages of participation and non-participation provide an overview of the population frame in the analysis.

Non-response can introduce a substantial amount of bias into the overall study (Frankfort-Nachmias & Nachmias, 2008). Non-response can be in the form of refusal to answer certain questions and complete refusals to complete the entire survey instrument. Statistical analyses are conducted to determine the rate of both forms of non-response. If participation rates are relatively low, estimates on the missing data will be made from callbacks to non-respondents (Frankfort-Nachmias & Nachmias, 2008).

The reliance on self-report data within the survey instrument could introduce confounding variables that impact the overall model. Retrospective assessment on subjective questions can introduce recall bias and distortion (Stone & Shiffman, 2002). The inability of respondents to accurately remember details or the intentional fabrication of information introduces a measure of imprecision into the survey instrument. Another mode for the introduction of confounding variables is through the design of the study. Failing to incorporate key variables in the model could introduce spurious variables. The first method for reducing this form of error is through the study design. Informed by prior research, a robust survey instrument is provided through the inclusion of a primary independent variable and numerous control variables.

Following from the study design, several statistical measures within logistic regression are used to identify both modes of spurious data. First, tests for multicollinearity are conducted to identify and address any variables that are highly correlated with one another. Second, testing for outliers identifies variables that do not fit the overall model. Finally, confounding variables within the model's design are identified and addressed by measuring the amount of variance explained by the variables within the model, which provides a general measure of goodness of fit.

Finally, from a policy evaluation perspective, regression techniques offer several benefits. Linear regression is considered a primary technique for policy evaluation research where the focal concerns are not only understanding variation, prediction, and causality among the identified explanatory and outcome variables, but also other key policy variables (Nachmias, 1979). More specific to this research, linear regression is posited as the most appropriate statistical measure of active representation (Meier, 1993a). Conceptually, the most appropriate measure of active representation is policy congruence between representatives and those represented, defined as similarity between hypothesized beneficial outputs and actual outputs (Meier, 1993a).

Binomial logistic regression maintains all the qualities afforded linear regression. It is unique based on the level of measurement of the outcome variable. Beyond this difference, logistic regression largely follows the same logic and principles of linear regression (Hosmer, Lemeshow, & Sturdivant, 2013). The benefit is found in logistic regression's ability to predict the likelihood of the independent variable being in one of the categories of the dependent variable, while controlling from the effects of covariates. Logistic regression can examine and specify the relationship between key variables within the model, such as veteran identity and demographic characteristics,

while controlling for other influential variables, such as demographic characteristics or agency socialization.

The basic structure of the variables and model lend themselves to the application of binomial logistic regression. The court-level outcome variables in this study are captured at the ordinal level. They are incorporated into the model by collapsing and recoding them into dichotomous variables. The individual-level explanatory variables in the model are captured at the nominal and ordinal level. Varying statistical techniques are used to transform them into dichotomous variables to satisfy their inclusion in the logistic regression framework. They are then aggregated to provide a courtlevel predictor variable.

### **Dependent Variables**

The primary focus of this study is the relationship between the personnel structure of VTCs and successful outcomes. The dependent variables in the model are the number of entries, sanctions, incentives, and graduations. The model determines the probability of extensive entries, sanctions, incentives, and graduations based on the primary independent variable and while controlling the effects of potential confounding variables.

Each dependent variable is represented by one equation and is tested independently of the other outcome variables. For entries, several models

are in the study to approximate the relationship between various identities and policy outcomes. This results in a total of seven models testing the relationship between veteran identity and substantive policy outcomes. *Entries* 

The intersection between a veteran identity among key personnel within VTCs and policy preferences is hypothesized to result in favorable outcomes for veterans entering the treatment program. Members of the treatment team make discretionary decisions on whether to allow a veteran to enter the treatment program. Notwithstanding eligibility requirements that may exclude some veterans from entry into the treatment program, a veteran identity is posited to result in more favorable entry decisions for similarly situated veterans. As a veteran identity increases, it is expected that the number of entries into the court will also increase.

The variable for entries is measured by several questions. The first is a measure of the average number of JIVs allowed into the treatment program. The second question is a measure of the average number of eligible JIVs that were not allowed into the program. The remaining questions measure the average number entries based on the racial, ethnic, gendered characteristics of veterans. Respondents are requested to estimate the average number of veterans that entered the program or the average number of eligible

veterans not admitted to the program for the previous three years. If the court has been in existence for fewer than three years, respondents are requested to provide an average based on available data. Respondents are provided predetermined ordinal ranges for each variable, resulting in categorical-level variables. Entry and exclusion decisions are measured as a dichotomous outcome for each court, coded as 'minimal' and 'extensive.' Responses for each variable are collapsed and recoded to fit the binomial logistic framework.

### Sanctions

The intersection between a veteran identity among key personnel within VTCs and policy preferences is hypothesized to result in favorable outcomes for veterans proceeding through the treatment program. Members of the treatment team make discretionary decisions on whether to sanction a veteran for violations of the treatment contract. Sanctions may include: fees/fines; community service; increased alcohol/drug testing; phase adjustment (increased); probation revocation; reprimands; incarceration; or discharge from court. A veteran identity is hypothesized to result in fewer sanctions for veterans who violate contractual obligations. As a veteran identity increases, the number of sanctions will decrease. Sanctions are measured by one question. Respondents are provided predetermined ordinal responses, resulting in a categorical-level variable. The variable is a measure of the average number of sanctions administered to veterans for infractions. Respondents are requested to estimate the average number of sanctions administered for the previous three years. If the court has been in existence for fewer than three years, respondents are requested to provide an average based on available data. Sanction decisions are measured as a dichotomous outcome for each court, coded as 'minimal' and 'extensive.' Responses are collapsed and recoded to fit the binomial logistic framework.

## Incentives

Incentives are also a measure of the relationship between a veteran identity and policy preferences. It is hypothesized that a veteran identity among key personnel within the court will result in favorable outcomes for veterans proceeding through the treatment program. Like sanctions, members of the treatment team make discretionary decisions on whether to incentivize compliance and good behavior. Incentives may include: applause or recognition by the court; reduced fees; reduced court appearances; reduction of probation; reduction of charges; reduction of program requirements; phase adjustment (reduction); commendations; or gift

certificates. A veteran identity is hypothesized to result in more incentives for veterans who exhibit good behavior and adhere to contractual obligations. As a veteran identity increases, the number of incentives will increase.

The variable for incentives is measured by one question. Respondents are provided predetermined ordinal responses, resulting in a categoricallevel variable. The variable is a measure of the average number of incentives administered to veterans for compliance to the treatment plan or good behavior. Respondents are requested to estimate the average number of incentives administered for the previous three years. If the court has been in existence for fewer than three years, respondents are requested to provide an average based on available data. Incentives are measured as a dichotomous outcome for each court, coded as 'minimal' and 'extensive.' Responses are collapsed and recoded to fit the binomial logistic framework. *Graduations* 

The final measure of the relationship between the personnel structure of VTCs and successful outcomes is graduation rates. Key members of the treatment team make discretionary decisions on veteran graduations. A veteran representative role among members of the court is hypothesized to result in higher graduation rates for veterans proceeding through the court.

As a veteran identity increases there will be a corresponding increase in graduations.

The variable for graduations is measured by one question. Respondents are provided predetermined ordinal responses, resulting in a categorical-level variable. The variable for graduations is a measure of the average number of veterans that have graduated the treatment program. Respondents are requested to estimate the average number of graduations for the previous three years. If the court has been in existence for fewer than three years, respondents are requested to provide an average based on available data. Graduation decisions are measured as a dichotomous outcome for each court, coded as 'minimal' and 'extensive.' Responses are collapsed and recoded to fit the binomial logistic framework.

## Independent Variables

The primary explanatory variable is veteran identity. Social identities are inexorably linked to a bureaucrat's politically relevant attitudes and values (Keiser, 2010; Meier, 1993a; and Thompson, 1976). Research finds evidence of the relationship between a veteran identity and substantive policy outcomes within healthcare settings and provides scales for measuring the strength of a veteran identity (Di Leone et al., 2016; Gade & Wilkins, 2013; Harada et al., 2002; and Harada et al., 2005). Decision-making members of the court with a military background exercise discretion on whether to allow a veteran to enter the program, whether to sanction a veteran for contractual violations, whether to incentivize good behavior, and whether a veteran should graduate from the program. The intersection between a veteran identity among these personnel and policy preferences is hypothesized to result in successful outcomes for veterans. A veteran identity among key members is likely to result in more entries, fewer sanctions, more incentives, and more graduations.

## Veteran Identity

A veteran identity among key members of the treatment team is likely to be linked to political attitudes and values. Criminal justice issues facing veterans are highly politicized and provides the initial step in this link. Veterans who have criminally offended and are entering or proceeding through the treatment program are likely to tap directly into a veteran identity among the key personnel within these courts. Veterans share a unique culture that can extend well beyond their military service and into civilian life upon separation from the military or retirement. Merely having a military background sets members on the court apart from one another. Gade and Wilkins (2013) use a binary variable of veteran identity, measured by whether the counselor is a veteran or not, in their study on the impact of a veteran identity on outcomes in a healthcare setting. A veteran identity among decision-making members of the court will likely impact policy preferences resulting in favorable outcomes for veterans in the treatment program.

The variable for veteran identity is operationalized by whether the respondent is a veteran of the armed forces. Respondents are provided a definition of veteran for purposes of this study. The definition includes any person who served in any branch of the U.S. military for any period and in any service era. It includes those who served in the Reserves or National Guard. It is purposefully inclusive and does not exclude any veteran status or category, regardless of combat exposure, discharge status, or VA benefit eligibility category. Respondents are provided a predetermined binary choice, resulting in a nominal variable. Responses are aggregated and recoded to produce a court-level veteran identity variable. Veteran identity is measured as a dichotomous outcome for each court.

### **Control Variables**

Several control variables are included in the study. These variables capture data from treatment team members at the individual- and organizational-level. Representative bureaucracy and interdisciplinary research inform the inclusion of these variables into the study. Various

individual and organizational factors are shown to impact a bureaucrat's attitudes and values that could impact policy preferences. Within the context of VTCs, factors such as politically relevant demographic identities or agency socialization could serve to moderate a veteran representative role among treatment team members. Like all other variables within the model, all individual-level control variables are aggregated to the court level. *Race, Ethnicity, and Gender* 

Social science research finds evidence of the impact of sociodemographic characteristics on decision-making among key policy actors in various levels of the criminal justice system (Bradbury & Kellough, 2011; Clemons, 2014; and Holmes et al., 1993). Representative bureaucracy research finds evidence supporting the relationship between social identities and substantive outcomes for those with shared characteristics in educational settings, local government settings, and the EEOC (Hindera, 1993a; Hindera, 1993b; Keiser et al., 2002; Meier & Funk, 2017; Meier & O'Toole, 2006; Meier & Stewart, 1991; Meier & Stewart, 1992; and Meier et al., 1989).

This research informs the inclusion of race, ethnicity, and gender into the model. Individuals have multiple identities such as race, ethnicity, and gender, that often compete for relevancy on an individual's political attitudes

and values (Keiser, 2010; and Meier & Funk, 2017). The intersection of a bureaucrat's innate identities and a veteran identity among VTC personnel could attenuate a veteran representative role. Race, gender, or ethnicity could impact a court member's political attitudes and values beyond that of a veteran identity. Members of the treatment team may assume a minority or gender representative role, resulting in favorable policy outcomes for veterans in the treatment program with shared characteristics.

The variables for race, ethnicity, and gender provide treatment team members with predetermined choices which are self-selected, resulting in nominal variables. The inclusion of race categories is guided by census guidelines (Humes, Jones, & Ramirez, 2011). The responses for race and ethnicity are combined and recoded to produce a dichotomous court-level minority race and ethnicity identity variable. The responses for gender are aggregated and recoded to produce a minority gender identity variable. Both variables are measured as dichotomous outcomes for each court.

To capture the effects of shared characteristics between representatives and those represented, the race, ethnicity, and gender of veterans admitted to treatment programs are captured. The variables representing a JIV's race, ethnicity, and gender are treated as separate dependent variables dedicated to capture the relationship between the

sociodemographic characteristics of treatment team members and JIVs entering and proceeding through the treatment program. Respondents are requested to estimate the average number of veterans with selected sociodemographic characteristics for the previous three years. If the court has been in existence for fewer than three years, respondents are requested to provide an average based on available data. Court coordinators are provided predetermined ordinal ranges for each variable, resulting in categorical-level variables. Responses are collapsed and recoded to produce court-level variables representing racial, ethnic, and gender categories of veterans in the treatment program. The variables are measured as dichotomous outcomes for each court.

#### Age

An administrator's age is identified as an important factor in bureaucratic representation (Meier & Nigro, 1976). Much like agency socialization, age is linear in nature and underscores the features of continuous learning over the lifetime of a bureaucrat. Age can be a significant socializing force on an administrator's attitudes and values over a lifetime. Social science research finds evidence supporting the linear relationship between age and behavior among judges. Among appellate judges, as the age of the judge increases their voting behavior becomes significantly more

conservative (Goldman, 1975). Older U.S. Supreme Court justices at the time of appointment are significantly associated with more conservative judicial decisions (Ulmer, 1973).

The logic of bureaucratic representation holds that as an administrator ages, representative behavior is likely to decrease. A younger administrator is exposed to less agency socialization and has stronger social origin ties and is therefore more likely to engage in a representative role (Selden, 1997). However, bureaucratic representation studies find mixed results on the role of age on minority advocacy. Some studies find a negative correlation between age and a minority representative role—as age increases, bureaucrats have a less favorable attitude toward minority policies (Meier & Nigro, 1976). Others find a positive association between age and a minority representative role (Selden, 1997).

The results of these studies indicate that the interaction between age and representation is complex. Within the context of VTCs, the relationship between age and representation is equally complex. On one hand, as the age of court members increases there could be a corresponding increase in conservative values which can be hostile toward the therapeutic goal of rehabilitation. However, the continual nature of human learning dictates

there is a positive association between age and experience that could sensitize court members to veteran's problems and issues.

The variable for age provides respondents with predetermined ranges, resulting in a categorical-level variable. Responses are collapsed, recoded, and aggregated to produce a dichotomous court-level age variable. *Education* 

Education is considered a key variable in shaping an individual's politically relevant attitudes and values (Mosher, 1982). Much like agency and age, education and a bureaucrat's attitudes and values share a linear relationship. As educational attainment increases, there is a corresponding impact on political attitudes and values. Education is generally measured by three indicators—higher education, professional education, and post-employment education (Meier, 1993a). Consistent between higher and professional education is their influence in socializing bureaucrat's politically relevant attitudes and values which can impact policy preferences. Research across several domains finds evidence supporting the impact of these forms of education on attitudes and values. For example, studies find evidence supporting the relationship between higher education and advocacy attitudes among federal executives and professional education and advocacy attitudes among law school students (Meier & Nigro, 1976; and Rathien, 1976).

Post-employment professional education shares the same relationship with other forms of education on socializing attitudes and values. However, the impact of post-employment education or training is dependent upon the nature of the training. If it is explicit in advocating for, or sensitive to, a segment of the population then the linkage between passive and active representation is likely be strengthened (Meier, 1993a). Because VTCs have an explicit veteran advocacy mission, members of the treatment team are likely to receive training that inculcates a veteran advocacy role.

Within the context of VTCs, all three forms of education are likely to positively impact the attitudes and values of members of the treatment team. Education and training are likely to socialize and sensitize court members to the unique problems facing veterans. These attitudes and values are likely to impact court member's policy preferences. As education increases there is likely a corresponding increase in favorable outcomes for veterans in the treatment program.

The variable for formal and professional education is operationalized by the highest level of formal education attained. Respondents are provided predetermined responses, resulting in a categorical-level variable. Responses are collapsed, recoded, and aggregated to produce a court-level formal

education variable. Formal education is measured as a dichotomous outcome for each court.

The variable for post-employment training is operationalized by the total days of formalized VTC training received. Respondents are provided predetermined response categories, resulting in an ordinal-level variable. To satisfy binomial logistic regression requirements, responses are collapsed, recoded, and aggregated to produce a court-level formal training variable. Formal training is measured as a dichotomous outcome for each court. *Agency Socialization* 

Agency socialization is a moderating factor in the passive to active representation linkage. This is a direct result of the continuous nature of adult learning and the implicit and explicit organizational features that seek to limit bureaucratic policy-making. One noted limitation to the moderating impact of agency socialization is within agencies with an explicit advocacy role (Meier, 1993a). In these agencies, bureaucrats are likely to assume a representative role (Meier, 1993a). Research on agency socialization finds mixed evidence on its relationship with bureaucratic attitudes and values and policy preferences. Several studies find evidence that supports the role and impact of agency socialization on bureaucrat's attitudes and values (Hindera, 1993a; Hindera, 1993b; Meier & Nigro, 1976; Meier & Stewart,

1992; and Selden, 1997). However, other studies find contradictory evidence on the role and impact of agency socialization on substantive outcomes within the EEOC (Hindera, 1993a; and Hindera, 1993b).

Features unique to the organizational structure of VTCs could provide additional factors in the overall impact of agency socialization. It is not uncommon for members of the treatment team to have additional duties or assignments outside of the VTC. Judges may sit on the bench of other courts, prosecuting attorneys may be assigned other non-veteran cases, and probation officers may supervise other probationers.

Within the context of VTCs, agency socialization is likely to share a tenuous relationship with the attitudes and values of treatment team members. The explicit veteran advocacy role of VTCs is likely to strengthen the passive to active representation linkage among court members. However, outside duties and assignments could expose court members to non-veteran specific values. These external influences could attenuate the passive to active representation linkage.

The variable for agency socialization is operationalized by the total amount of time respondents have been employed in, or dedicated services to, the VTC. The variable attempts to capture a measure of total length of employment among respondents with a wide range of commitments, duties,

or jobs. Respondents are given instructions to round up to the nearest whole year. Respondents are provided predetermined response categories, resulting in an ordinal-level variable. Responses are collapsed, recoded, and aggregated to produce a court-level length of current employment variable. Length of current VTC employment is measured as a dichotomous outcome for each court.

## **Potential Limitations**

Across VTCs throughout the nation there is significant variation on key structural and administrative aspects. This also applies to the VTCs in the sample frame which could impact the findings from the study. First, courts vary in eligibility requirements on indicators such as offense levels or types, veteran status, and plea agreements. For reference, an overview of the laws governing eligibility for VTCs from the five states in the sample frame are provided in the appendix. Inconsistency in the administration of sanctions, incentives, and graduations also exists across courts. There is also significant variation in the personnel structure of VTCs. While some courts include a full complement of dedicated personnel, other courts are only minimally staffed with essential personnel. The variation across courts on structural and administrative components could impact comparisons between courts in the sample and the generalizability in findings. The sample frame includes all

stand-alone VTCs and veteran tracks or dockets in existing problem-solving courts in three contiguous states in the southern region of the U.S. The purposefully inclusive sample frame attempts to address these concerns to provide comparisons across courts and generalizability to the larger community.

Despite the collaborative and non-adversarial nature of decisionmaking within VTCs, prosecutors and judges are legally bound as the ultimate authorities on key aspects of the treatment plan. This includes decisions on entries, sanctions, incentives, and graduations. The court-level analysis precludes focus on the individual significance and impact of prosecutors and judges on policy outcomes. However, single-site research on VTCs highlights the non-authoritarian decision-making of judges within the treatment team (Baldwin & Rukus, 2015).

This study includes several sociodemographic control variables identified by research, such as race, gender, and ethnicity. However, there are numerous demographic characteristics or social identities that are linked to a bureaucrat's politically relevant attitudes and values. The intersection of multiple, and often competing, identities could impact the policy preferences of treatment team members. The theoretical and empirical measurement of

the intersection of multiple identities poses a problem for representative bureaucracy research.

The remaining control variables in the model represent a robust account of key variables that could interact with the dependent variables in the model. However, there are other variables not captured by the model that could have an impact on the attitudes and values of treatment team members. Goal conflict can arise from traditional role expectations and perceived stakeholder expectations, such as deterrence, punishment, and efficiency. These socializing agents could impact the linkage between passive and active representation among treatment team members.

In addition, there are numerous factors outside the realm of VTCs that can affect the key policy outputs and outcomes of entries, sanctions, incentives, and graduations. Graduation from the treatment program could be influenced by various factors external to the court. A veteran in the treatment program could either opt-out or fail to comply with the contractual obligations for numerous reasons. Financial, employment, or family obligations are only a handful of potential issues that could interfere with the successful completion of the treatment program.

An additional challenge to the study centers on the administrative characteristics of VTCs. Because the contact information for some members of the court is unavailable, identifying and directly communicating with all treatment team members is problematic. For example, the email addresses for judges and prosecuting attorneys are often not disclosed. The variation across courts also limits the amount of available information on the personnel structure of individual courts and the ability to directly identify and contact members of the treatment team. These features of VTCs can have an impact on the effective implementation of the survey.

The study implements several measures intended to address these limitations in the structure of VTCs. Court coordinators are identified and their contact information is made publicly available through various national, state, and local sources. Court coordinators are the central point of contact for this research and all coordinators in the final sample frame have been contacted and pledged their assistance with the study. In addition to completing the survey, court coordinators are requested to forward the email with the embedded survey URL to all members of the treatment team for completion. To allow the survey link to be forwarded, the study uses a single reusable link. This design precludes the use of a unique identification number for survey completion tracking and safeguarding access to the survey instrument. However, the survey captures several indicators that are used to identify respondents and track completion rates. The survey requests

respondents to identify the state in which their court is located, the jurisdictional designation of their court, and their position within the court.

# Significance and Implications of Findings

This research contributes to the body of work on bureaucratic representation in several ways. First, there are no known studies that examine the impact of the personnel structure within VTCs on policy processes and outcomes. This study will bridge that gap in the literature by examining the impact of key personnel with a military background within a VTC on measures of successful outputs and outcomes. Second, it increases the number of demographic and socioeconomic characteristics under consideration. A veteran identity is a relatively underexplored construct and its inclusion in this study expands our knowledge of the impact of multiple identities on policy outputs and outcomes. Third, educational systems dominate the settings under study within the theory of representative bureaucracy. By expanding the number and type of organizations under study, the generalizability of findings can increase knowledge and understanding of the determinants of active representation. Fourth, VTCs are a relatively under-studied organization and academic researchers have called for more studies to increase knowledge on their processes and outcomes.

Finally, applying representative bureaucracy to a VTC setting allows the theory to be generalized to the larger problem-solving court context. The number and type of problem-solving courts have increased exponentially across the nation since the first drug court in Florida. With research pointing to their effectiveness in impacting the revolving door within the criminal justice system and reducing costs, their popularity is likely to continue to increase. Applying representative bureaucracy to a VTC setting increases our understanding on the relationship between the personnel structure of problem-solving courts and successful outcomes for individuals entering and proceeding through the treatment programs.

## Chapter 5

### Data Development and Findings

Several amendments were made to the proposed methodology to increase the likelihood of valid and reliable data. First, the final sample frame of VTCs was narrowed based on observed participation rates. Second, a handful of predictor and outcome variables were removed from the final statistical model. Most variables were removed due to a lack of variation which produced poor or failed model fitting. These variables were removed for the objective reason to produce reliable and valid findings. Where appropriate, the variables removed and the reason for their removal is briefly discussed.

### **Data Cleaning Procedures**

Following the conclusion of both the internet and mail survey modes, the sample frame consisted of 108 individuals within 33 stand-alone veteran courts, or veteran dockets or tracks in existing problem-solving courts within three states in the Southern region of the United States.

Prior to conducting any data analyses, analytical and statistical procedures were conducted on the preliminary data set to identify any potential errors. These errors can include missing data, unusable data, coding errors, or duplicate data. The raw data set was subjected to various

analytical, cleaning, and management procedures to produce a final data set. Where possible, errors are corrected or adjusted to allow for inclusion in the final data set.

### Variable Range Parameters

One of the primary data cleaning procedures involves identifying values that fall outside the range of preset parameters for each variable (Pallant, 2013). All variables were included in the analysis. Where appropriate based on each variable's level of measurement, frequencies, minimum and maximum ranges, and valid and missing cases were examined. *Missing and Duplicate Data* 

Surveys with missing data were incorporated into the data set using IP addresses, geolocation data, postmarks, shared data among respondents, and personal knowledge of the sample frame. The removal of duplicate data was facilitated by follow-up communication with respondents and personal knowledge of the sample frame. Any unusable or unserviceable data removed from the raw data set are maintained on the master data file.

#### Completed Survey Disposition

Returned questionnaires from both survey modes required classification that defined and regulated their implementation and use in the final data frame. According to survey standards established by the AAPOR (2016), all surveys should have "an a priori explicit definition of what constitutes a complete vs. a partial interview and what distinguishes a partial interview from a break-off (i.e., a refusal sometime after the interview has commenced)" (p. 15). This research adopted one of the AAPOR suggested standards for defining complete, partial, and break-off interviews. The adopted standard for survey completion is "less than 50% of all applicable questions asked equals break-off, 50-80% equals partial, and more than 80% equals complete" (AAPOR, 2016, p. 15). This survey completion standard was applied to returned internet and mail questionnaires and provides the basis for descriptive statistical analyses.

## **Descriptive Analysis**

The level of analysis for this research is at the court-level. The individual usable cases were aggregated to form a court-level data set. The specific methods and procedures used to transform the individual-level data will be discussed later in the research. A total of 22 out of the original 33 courts in the sample provided useable responses. However, two courts submitted surveys that did not include administrative data. The lack of administrative data on the outcome variables is likely to limit the ability to test the relationship between a veteran identity and substantive policy outcomes. As a result, these two courts were removed from the final data set. The final data set consists of 20 courts. This represents 61 percent of the total courts in the sample and 4 percent of the total nationwide veteran courts.

## **Participation Rates**

Because this study uses a non-probability sample, a response rate is not deemed an appropriate statistical measure. Participation rates were used in lieu of response rates. Participation rates are defined as the total number of useable responses divided by the total requests for participation in the study (AAPOR, 2016). This study applied this standard to arrive at a total participation rate, state-level participation rate, and a court-level participation rate.

The total number of requests for participation is known for all but two courts in the sample frame. In these two courts the requests for participation are liberally estimated at 10 per court assuming they have a full complement of treatment team members. This results in an estimated 334 total number of requests for participation in the study. The participation rate for the entire sample was 27 percent. The participation rate for New Mexico courts was 33 percent, Louisiana courts was 59 percent, and Texas courts was 23 percent.

The participation rates for all 20 courts in the final data set range from 8 percent to 100 percent. The participation rates for all courts in the

data set are illustrated in Table 5.1. Of these courts, 6 had a participation rate ranging between 50 percent and 75 percent; 2 had a participation rate ranging between 76 percent and 99 percent; and a one court had a 100 percent participation rate.

| Court #19 = 64%  | Court #126 = 56% | Court #94 = 17%  | Court #136 = 76% |
|------------------|------------------|------------------|------------------|
| Court #116 = 13% | Court #138 = 10% | Court #10 = 9%   | Court #11 = 71%  |
| Court #118 = 9%  | Court #28 = 23%  | Court #105 = 8%  | Court #17 = 11%  |
| Court #104 = 44% | Court #38 = 71%  | Court #33 = 100% | Court #87 = 10%  |
| Court #68 = 46%  | Court #143 = 75% | Court #39 = 92%  | Court #120 = 64% |

Table 5-1: Participation Rates

## Data Transformation

Based on the characteristics of the court-level data, binomial logistic regression analysis was determined to be the most appropriate. Individualand court-level variables in the data set were subjected to several statistical techniques to satisfy the requirements of binomial logistic regression. Transforming variables allows their inclusion into the binary logistic regression framework. Coding schemes were guided by representative bureaucracy theory based on the presence or absence of characteristics hypothesized to have a relationship with policy outcomes.

## Individual-Level Independent Variables

The individual-level variables in the raw data set were captured at both the nominal and ordinal level of measurement. For both levels of variables, descriptive analyses provide an overview of the dispersion of data and guides the transformation processes. The mean and mode provide a reliable and consistent indicator of the distribution of the data and provide an unbiased statistical reference for the creation of new variables. Individuallevel variables were subjected to collapse or transform functions depending on their level of measurement. The new variables were coded specific to the requirements of binary logistic regression. Reference categories were coded '0' and target categories were coded '1.' Following their creation, descriptive analyses and assumption testing identified distributional inequities and poor overall model fit for some variables.

## Nominal Variables

Individual-level variables captured at the nominal level of measurement were aggregated to create court-level variables. The presence or absence of the characteristic is used for the creation of court-level variables. The distribution within each court was used to ensure variation within the newly created variables.
The racial distribution of courts in the sample presented distributional problems with the creation of a court-level minority race variable. The relationship between the minority race of treatment team members and veterans with shared characteristics is the focus of this research. However, most courts in the sample are racial majority approximately 90 percent. This presented a lack of variation in the distribution of the data which can negatively impact subsequent statistical analyses. To resolve this issue, minority race and minority ethnicity were combined. The new variable represents the combined minority racial and ethnic characteristics of the court and increased the variation within the variable.

# Ordinal Variables

The transformation of individual-level variables measured at the ordinal-level of measurement posed additional concerns and required additional processes. Descriptive analyses, using the median and mode, provided consistent and reliable measures of the dispersion of the data. The median and mode were also used to identify appropriate demarcation points to collapse the ordinal categories into dichotomous categories.

The demarcation for the new court-level variable was either above or below the mode. The distribution of the data in the newly created variable

was a primary motivating factor in the data transformation process. The intent was to avoid creating a new variable with excessively weighted cases in the modal category. The result would have been a significantly unequally weighted variable. However, several variables have the mode within the lowest response category which prohibited any attempt at creating an evenly distributed variable. Frequency distributions for each court were used to ensure variation within the newly created variables. The new court-level variable was coded specific to the requirements of binary logistic regression.

## **Court-Level Dependent Variables**

All court-level dependent variables in the model were measured at the ordinal-level. Data transformation followed that implemented for ordinallevel independent variables. This included the descriptive analyses, the use of the median and mode to provide consistent and reliable outcomes, collapsing of ordinal response categories, and the creation of new dichotomous variables that meet logistic regression requirements. Also, coding schemes for the new dependent variables were guided by representative bureaucracy theory based on the hypothesized relationship between predictor variables and policy outcomes. Descriptive analyses and assumption testing were conducted on the new variables to identify a lack of variation and overall model fit.

#### Model Fitting

Descriptive analyses and model fitting were conducted following the creation of the new court-level predictor and outcome variables. Descriptive analyses identify disproportionate categories in any of the variables which could impact statistical analyses. Assumption testing ensured the variables fit the overall binomial logistic regression model. These tests revealed several variables with an overwhelming lack of variation in the dichotomous categories. As a result, the variables had a poor overall model fit.

An explanation for the observed problems can be found in one of the assumptions of logistic regression. The statistical test requires a proportionate ratio of cases to variables (Tabachnick & Fidell, 2018). Within the logistic regression framework, a disproportionate ratio of cases to variables can create several significant problems. These problems can include extremely large parameter estimates, extremely large standard errors, and complete separation (Tabachnick & Fidell, 2018). A disproportionate ratio of cases to variables was likely one of the primary causes of the poor model fit early in the research. The recommended solution for this issue is to eliminate unnecessary or unneeded predictor variables (Tabachnick & Fidell, 2018). Variables with a lack of variation across dichotomous outcome categories were eliminated from the study. Variables that failed to properly fit the model included the number of female veterans admitted, the number of other, not specified race, admitted, and the number of infractions committed by veterans. The removal of these variables increased the overall model fit within the logistic regression framework.

#### **Final Research Model and Descriptives**

The research includes seven separate models. Each model represents a unique dependent variable designed to test the relationship between a veteran identity and substantive policy outcomes. The primary independent variable is veteran identity. There are six control variables measured at the court-level, which include: minority race and ethnicity; female gender; age; formal education; formal training; and length of current VTC employment. The seven outcome variables representing policy outcomes are: entries; exclusions; number of African American veterans admitted to treatment programs; number of Hispanic veterans admitted to treatment programs; sanctions; incentives; and graduations.

A visual representation of the characteristics of the variables in the model are provided in the following tables. The descriptive analyses of the

predictor variables are grounded in Table 5.2 and the descriptive analyses of the outcome variables are based on Table 5.3.

|             |                        | Сс        | ourt         |                           |                  |           |           |               |         |           |         |         |                  |                            |                        |
|-------------|------------------------|-----------|--------------|---------------------------|------------------|-----------|-----------|---------------|---------|-----------|---------|---------|------------------|----------------------------|------------------------|
|             |                        | Vet       | eran         |                           |                  | Court N   | Minority  |               |         | С         | ourt    |         |                  |                            |                        |
|             |                        | Sta       | atus         |                           |                  | Race/E    | Ethnicity |               |         | Ge        | nder    |         |                  | Cou                        | rt Age                 |
| N           | Valid                  |           | 20           | Va                        | lid              |           | 20        |               | Valid   |           | 20      | \       | /alid            |                            | 20                     |
|             | Missing                |           | 0            | Missi                     | ng               |           | 0         | Mis           | ssing   |           | 0       | Mis     | sing             |                            | 0                      |
|             | Mode                   |           | 0            | Мо                        | de               |           | 0         | ľ             | Node    |           | 1       | M       | lode             |                            | 1                      |
|             |                        | Frequency | Percent      |                           |                  | Frequency | Percent   |               |         | Frequency | Percent |         |                  | Frequency                  | Percent                |
| Non-<br>50% | -Veteran-<br>6 or Less | 15        | 75           | No<br>Minori<br>50%<br>Le | on-<br>ty-<br>or | 13        | 65        |               | Male    | 7         | 35      | You     | nger             | 9                          | 45                     |
| Vete        | eran-51%<br>or More    | 5         | 25           | Minori<br>51%<br>Mc       | ty-<br>or<br>ore | 7         | 35        | Fe            | male    | 13        | 65      | C       | lder             | 11                         | 55                     |
|             | Total                  | 20        | 100          | То                        | tal              | 20        | 100       |               | Total   | 20        | 100     | Т       | otal             | 20                         | 100                    |
|             |                        |           | Court<br>Edu | Formal                    |                  |           |           | Court<br>Trai | Forma   | al        |         |         | Co<br>of C<br>Er | urt Lo<br>Curren<br>nployi | ength<br>t VTC<br>ment |
| N           | ١                      | /alid     |              | 20                        |                  |           | Valid     |               |         | 20        |         | Valid   |                  |                            | 20                     |
|             | Mis                    | sina      |              | 0                         |                  | M         | lissina   |               |         | 0         |         | Missina |                  |                            | 0                      |
|             | N                      | lode      |              | 0                         |                  |           | Mode      |               |         | 1         |         | Mode    |                  |                            | 0                      |
|             |                        |           | Frequency    | Percent                   |                  |           |           | Frequency     | reicent | Dopport   |         |         |                  | Frequency                  | Percent                |
| Gra         | aduate or l            | _ess      | 16           | 80                        |                  | М         | linimal   | 6             | :       | 30        |         | Minimal |                  | 14                         | 70                     |

Table 5-2: Descriptive Statistics of Independent Variables in the Model

| Table 5-2 <i>—Con</i> | tinued |
|-----------------------|--------|
|-----------------------|--------|

| Professional | 4  | 20  | Extensive | 14 | 70  | Extensive | 6  | 30  |
|--------------|----|-----|-----------|----|-----|-----------|----|-----|
| Total        | 20 | 100 | Total     | 20 | 100 | Total     | 20 | 100 |

# Independent Variable Descriptives

The personnel structure and characteristics of the courts in the sample are considered. Courts are more likely to be non-veteran, defined as having a personnel structure of 50 percent or less veterans. Courts are more likely to be racial and ethnic majority and female gender. They are also more likely to be older in age, have a graduate degree or less formal education, have extensive levels of formal training, and minimal length of current VTC employment.

Table 5-3: Descriptive Statistics of Outcome Variables in the Model

|        |      |           |         |        |      |           |         |       |       | African   | America | an      |          |    | Hisp      | anic    |
|--------|------|-----------|---------|--------|------|-----------|---------|-------|-------|-----------|---------|---------|----------|----|-----------|---------|
|        |      | En        | tries   |        |      | Exclu     | usions  |       |       | Er        | ntries  |         |          |    | Ent       | ries    |
| N      | alid |           | 20      | Va     | alid |           | 20      | ١     | √alid |           |         | 20      | Vali     | d  |           | 20      |
| Miss   | sing |           | 0       | Miss   | ing  |           | 0       | Mis   | sing  |           |         | 0       | Missin   | g  |           | 0       |
| M      | ode  |           | 0       | Mc     | de   |           | 0       | N     | lode  |           |         | 0       | Mod      | е  |           | 1       |
|        |      | Frequency | Percent |        |      | Frequency | Percent |       |       | Frequency |         | Percent |          |    | Frequency | Percent |
| Mini   | mal  | 14        | 70      | Minir  | nal  | 15        | 75      | Min   | nimal | 13        |         | 65      | Minima   | al | 6         | 30      |
| Extens | sive | 6         | 30      | Extens | ive  | 5         | 25      | Exter | nsive | 7         |         | 35      | Extensiv | e  | 14        | 70      |
| Т      | otal | 20        | 100     | Тс     | otal | 20        | 100     | -     | Total | 20        |         | 100     | Tota     | al | 20        | 100     |
|        |      |           | Sand    | ctions |      |           |         |       | Inc   | centives  |         |         |          |    | Gradua    | tions   |
| Ν      | Va   | lid       |         | 20     |      |           |         | Valid |       | 19        |         |         | Valid    |    |           | 20      |

Table 5-3—Continued

| Missing   | Missing 0 |         | Missing        |           | 1       |               | Missing   |           | 0       |
|-----------|-----------|---------|----------------|-----------|---------|---------------|-----------|-----------|---------|
| Mode      | e 0       |         | Mode           |           | 0       |               | Mode      |           | 0       |
|           | Frequency | Percent |                | Frequency | Percent | Valid Percent |           | Frequency | Percent |
| Minimal   | 15        | 75      | Minimal        | 15        | 75      | 79            | Minimal   | 16        | 80      |
| Extensive | 5         | 25      | Extensive      | 4         | 20      | 21            | Extensive | 4         | 20      |
| Total     | 20        | 100     | Total          | 19        | 95      | 100           | Total     | 20        | 100     |
|           |           |         | Missing System | 1         | 5       |               |           |           |         |
|           |           |         | Total          | 20        | 100     |               |           |           |         |

#### *Outcome Variable Descriptives*

For policy outcomes, courts are more likely to admit minimal numbers of veterans into treatment programs and exclude minimal numbers of veterans from treatment programs. Courts have a higher likelihood of admitting minimal numbers of African American veterans and extensive numbers of Hispanic veterans. Also, courts are more likely to apply minimal sanctions, minimal incentives, and graduate minimal veterans from treatment programs.

# Assumptions of Binary Logistic Regression

Logistic regression maintains several requirements for a proper model fit. The first set of requirements is generally concerned with the level of measurement of the variables within the study and the overall study design. The second set of requirements focus on the variables and their fit in the overall logistic regression framework.

The primary focus here is on the relationship between variables and model fit not previously discussed. The first requirement is an absence of multicollinearity between predictor variables (Tabachnick & Fidell, 2018). Although there are seven models representing seven unique dependent variables, multicollinearity tests are concerned with the interaction between independent variables. The linear regression function was used to conduct one test for multicollinearity between all independent variables. All 'Tolerance' values in the collinearity statistics table are above .1. The lowest value is .488. This indicates an absence of multicollinearity between predictor variables for the variables in the model.

The final requirement for binary logistic regression is the necessity of a lack of outliers in the solution (Tabachnick & Fidell, 2018). Residuals are interpreted to determine if any case has a high probability of being in multiple outcome categories (Tabachnick & Fidell, 2018). The assumption testing for outliers is presented for each dependent variable in the following section.

#### Logistic Regression Equation

The logistic regression equation is more complex than ordinary linear regression. This is a direct result of the non-linear models produced by logistic regression (Tabachnick & Fidell, 2018). The logistic regression equation is twofold. First, the dependent variable,  $\hat{Y}$ , is the "probability of having one outcome or another based on a nonlinear function of the best linear combination of predictors, with two outcomes" (Tabachnick & Fidell, 2018, p. 484). This is represented by the logit probability function:

$$Pro\widehat{b(Y_l} = 1) = \frac{e^u}{1 + e^u}$$

The variable  $\hat{Y}_i$  represents the "estimated probability that the *i*th case is in one of the categories" (Tabachnick & Fidell, 2018, p. 484). The function of *u* is represented by the traditional linear equation (Tabachnick & Fidell, 2018). This is represented by the following equation:

$$u = A + B_1 X_1 + B_2 X_2 + B_3 X_3 + \dots \epsilon$$

Where A is the constant, B is a vector of the coefficients, and X are the predictors. From the linear regression equation, the second equation is created (Tabachnick & Fidell, 2018). The log of the odds or *logit* is represented by the equation:

$$\ln\left(\frac{\hat{Y}}{1-\hat{Y}}\right) = A + \sum B_j X_j$$

# Linear Regression Equations for Logit of Variables in the Model

Logit regression estimates linear relationships between the log odds of the dependent variable and independent and control variables. The equation used to create the logit for each dependent variable is presented. Each equation illustrates the algebraic relationship between the dependent variable, independent variable, and control variables in each model. The independent variable and all control variables enter the equation at the court-level.

Entries

$$log(\frac{Prob of \ extensive \ entries}{1-Prob \ of \ extensive \ entries}) = \beta_0 + \beta_1 X_1 \ (Veteran \ Status)$$
$$+ \beta_2 X_2 \ (Race/Ethnicity) + \beta_3 X_3 \ (Gender) + \beta_4 X_4 \ (Age) + \beta_5 X_5$$
$$(Formal \ Education) + \beta_6 X_6 \ (Formal \ Training) + \beta_7 X_7 \ (Length \ of \ Current \ Employment)$$

Exclusions

 $log(\frac{Prob \ of \ extensive \ exclusions}{1-Prob \ of \ extensive \ exclusions}) = \beta_0 + \beta_1 X_1 (Veteran \ Status)$  $+ \beta_2 X_2 (Race/Ethnicity) + \beta_3 X_3 (Gender) + \beta_4 X_4 (Age) + \beta_5 X_5$  $(Formal \ Education) + \beta_6 X_6 (Formal \ Training) + \beta_7 X_7 (Length \ of \ Current \ Employment)$ 

#### Percent of Minority Admitted

 $log(\frac{Prob \ of \ extensive \ minority \ entries}{1-Prob \ of \ extensive \ minority \ entries}) = \beta_0 + \beta_1 X_1 \ (Veteran \ Status)$  $+ \beta_2 X_2 \ (Race/Ethnicity) + \beta_3 X_3 \ (Gender) + \beta_4 X_4 \ (Age) + \beta_5 X_5 \ (Formal \ Education) + \beta_6 X_6 \ (Formal \ Training) + \beta_7 X_7 \ (Length \ of \ Current \ Employment)$ Sanctions $<math display="block">log(\frac{Prob \ of \ extensive \ sanctions}{1-Prob \ of \ extensive \ sanctions}) = \beta_0 + \beta_1 X_1 \ (Veteran \ Status)$  $+ \beta_2 X_2 \ (Race/Ethnicity) + \beta_3 X_3 \ (Gender) + \beta_4 X_4 \ (Age) + \beta_5 X_5 \ (Formal \ Status) \ (Formal \ Status) + \beta_2 X_2 \ (Race/Ethnicity) + \beta_3 X_3 \ (Gender) + \beta_4 X_4 \ (Age) + \beta_5 X_5 \ (Formal \ Status) \$ 

(Formal Education) +  $\beta_6 X_6$  (Formal Training) +  $\beta_7 X_7$  (Length of

**Current Employment)** 

Incentives

 $log(\frac{Prob \ of \ extensive \ incentives}{1-Prob \ of \ extensive \ incentives}) = \beta_0 + \beta_1 X_1 \ (Veteran \ Status)$ 

+  $\beta_2 X_2$  (Race/Ethnicity) +  $\beta_3 X_3$  (Gender) +  $\beta_4 X_4$  (Age) +  $\beta_5 X_5$ 

(Formal Education) +  $\beta_6 X_6$  (Formal Training) +  $\beta_7 X_7$  (Length of

**Current Employment)** 

Graduations

 $log(\frac{Prob \ of \ extensive \ graduations}{1-Prob \ of \ extensive \ graduations}) = \beta_0 + \beta_1 X_1 \ (Veteran \ Status)$ 

+  $\beta_2 X_2$  (Race/Ethnicity) +  $\beta_3 X_3$  (Gender) +  $\beta_4 X_4$  (Age) +  $\beta_5 X_5$ 

(Formal Education) +  $\beta_6 X_6$  (Formal Training) +  $\beta_7 X_7$  (Length of Current Employment)

# Findings

Binomial logistic regression was conducted on all seven models. Model specification for each dependent variable is provided in this analysis. The output from the statistical analysis yields several results which are interpreted. First, the results of outlier assumption testing are provided. Residuals at or above 2.5 and actions taken are reported for each model. Second, the overall predictive power of the model on the outcome variable is reported. Third, the contribution of each independent variable and their statistical significance is reported.

Finally, output from the binomial logistic regression can be used to provide point estimates of probability of categories of outcome variables for courts with specific characteristics. For each model, three different point estimates of probability are provided. First, the point estimates of probability of target categories for the specific characteristics of courts in the sample are provided. The reported probability function is a measure of the unique characteristics of the courts in this sample. Courts in the sample are more likely to be non-veteran (50% or less veteran status), non-minority race, female gender (51% or more), older age, graduate or less education, extensive formal training, and minimal length of current VTC employment. This provides a factual account above that provided by hypothetical probabilities.

Second, the point estimates of probability of outcome variables are provided with only a change in the primary explanatory variable. The reported probability function reflects the influence of veteran identity within the sample. This model illustrates the influence of veteran identity while all other categories remain unchanged.

Finally, the point estimates of probability of outcome variables are provided based on representative bureaucracy theory. The characteristics of the court reflect the influence of hypothesized characteristics that are likely to impact policy preferences. In this model the personnel structure and characteristics are veteran, minority race and ethnicity, minority gender, younger age, more formal education and formal training, and longer length of current employment.

## Model Specification

Each individual model representing the seven dependent variables have unique predictor variable conditions. Model specification encompasses distinct combinations of independent variables to produce viable output. The results from initial binary logistic regression testing identified the specific

combination of independent variables for each outcome variable to fit the model.

#### Entries

The model for admitted veterans contains the full complement of independent variables. There is one case with a standardized residual of 2.748 standard deviations. This case was kept in the analysis. The logistic regression model is not statistically significant. The model explains 30 percent of the variance in entries (Nagelkerke R<sup>2</sup>) and correctly classifies 75 percent of the cases (See Table 5.4). Sensitivity is 33 percent, specificity is 93 percent, positive predictive value is 66 percent, and negative predictive value is 76 percent.

Of the seven predictor variables, none are statistically significant (See Table 5.4). However, veteran identity approaches statistical significance at the p < .1 level and deserves a closer examination as the primary explanatory variable. Veteran courts, defined as having a personnel structure of 51 percent or more of veterans, represents the construct veteran identity. The study finds that veteran courts have 12.79 times higher odds of extensive entries into treatment programs than non-veteran courts, which have a personnel structure of 50 percent or less veterans. Also, the study finds that

younger court-level age is associated with an increase in extensive entries into treatment programs by a factor of 5.15.

For variables with an odds ratio of less than one, indicated in the Exp(B) column, the odds are decreased (Tabachnick & Fidell, 2018).To provide a measure of clarity and consistency within and across the models for odds ratio reporting, variables with decreased odds ratios are inverted to indicate positive odds ratio factors. Each odds ratio less than one is converted by dividing one by the odds ratio (Laerd Statistics, 2015). In this model, court-level age has an odds ratio of .194 (Exp(B)). To convert this to a positive odds ratio, the following formula is applied: 1/.194 = 5.15.

Table 5-4: Logistic Regression Predicting Likelihood of Extensive Entries

|                       | В      | S.E.  | Wald  | р    | Exp(B) |
|-----------------------|--------|-------|-------|------|--------|
| Court Veteran Status  | 2.549  | 1.690 | 2.275 | .131 | 12.797 |
| Court Race/Ethnicity  | 004    | 1.374 | .000  | .998 | .996   |
| Court Gender          | .809   | 1.674 | .234  | .629 | 2.246  |
| Court Age             | -1.641 | 1.588 | 1.069 | .301 | .194   |
| Court Formal          | .952   | 1.785 | .284  | .594 | 2.590  |
| Education             |        |       |       |      |        |
| Court Formal Training | -1.031 | 1.912 | .291  | .590 | .357   |
| Court Length of       | .415   | 1.591 | .068  | .794 | 1.514  |
| Current VTC           |        |       |       |      |        |
| Employment            |        |       |       |      |        |
| Constant              | 863    | 2.798 | .095  | .758 | .422   |
| Nagelkerke R Square   | .296   |       |       |      |        |

#### Point Estimates for Extensive Entries

#### Predominant Sample Characteristics Model

The point estimate of probability of extensive entries for courts is provided based on the logit probability function, which is:

Prob(ExtensiveEntries) = 
$$\frac{1}{1+e^{-Z}}$$

Where *e* = Eulers constant (2.71872) and *Z* is completed using estimate coefficients from Table 5.2 to complete the logit regression form of: Z = -.863 + 2.549(VetStatus) - .004(Race/Eth) + .809(Gender) – 1.641(Age)

+ .952(Edu) – 1.031(Ftrng) + .415(LengthCurrEmp).

The specific sample characteristics are used to compute *Z*, which is:

Z = -.863 + 2.549(0) - .004(0) + .809(1) - 1.641(1) + .952(0) - 1.031(1)

+.415(0).

Z = -2.726.

This value is inserted into the logit probability function for extensive entries, which computes a probability of .06. Courts with the predominant characteristics in the sample have less than .25 probability of extensive entries into treatment programs.

## Veteran Status Model

The veteran status model uses the same estimate coefficients to complete the logit regression formula as in the previous equation. Except for

veteran status, all other predominant characteristics in the sample remain unchanged. The influence of the primary explanatory variable in the research is observed through the increase of veteran status. This change is reflected in the computation of *Z*, which is:

$$Z = -.863 + 2.549(1) - .004(0) + .809(1) - 1.641(1) + .952(0) - 1.031(1)$$
$$+ .415(0).$$

Z = -.177.

This value is inserted into the logit probability function for extensive entries, which computes a probability of 0.45. With all other predominant characteristics in the sample unchanged, hypothetical courts in the sample with a veteran personnel structure have less than .50 probability of extensive entries into treatment programs.

#### Representative Bureaucracy Model

The representative bureaucracy model uses the same estimate coefficients to complete the logit regression formula. Except for age, an increase in the presence of the characteristics in the model are expected to influence an administrator's representative role. Representative bureaucracy theory posits that as an administrator's age increases, they are less likely to assume a representative role. These characteristics are used to compute *Z*, which is: Z = -.863 + 2.549(1) - .004(1) + .809(1) - 1.641(0) + .952(1) - 1.031(1)

+.415(1).

Z = 2.827.

This value is inserted into the logit probability function for extensive entries, which computes a probability of 0.94. Conjectural courts structured along representative bureaucracy approaches have a greater than .90 probability of extensive entries into treatment programs.

#### Not Admitted

The model for not admitted veterans contains all independent variables, except for court-level minority race and ethnicity. One case has a standardized residual of 2.350 standard deviations which approaches the 2.5 residual value statistic requiring closer inspection. The case was kept in the analysis. The logistic regression model is not statistically significant. The model explains 27 percent of the variance in veterans not admitted (Nagelkerke R<sup>2</sup>) and correctly classifies 75 percent of the cases (See Table 5.5). Sensitivity is 20 percent, specificity is 93 percent, positive predictive value is 50 percent, and negative predictive value is 78 percent.

Of the six predictor variables, none are statistically significant (See Table 5.5). However, veteran identity and formal education approach statistical significance at the p < .1 level, p = .183 and p = .132 respectively.

Veteran courts have 8.57 times higher odds of extensive exclusions of eligible veterans from treatment programs than non-veteran courts. Courts with a professional formal education have 14.98 times higher odds of extensive exclusions of eligible veterans into treatment programs than courts with a graduate or less formal education.

Table 5-5: Logistic Regression Predicting Likelihood of Extensive Exclusions

|               |          | В      | S.E.  | Wald  | р    | Exp(B) |
|---------------|----------|--------|-------|-------|------|--------|
| Court Veteran | Status   | 2.148  | 1.614 | 1.773 | .183 | 8.571  |
| Court Gender  |          | .420   | 1.515 | .077  | .782 | 1.522  |
| Court Age     |          | .487   | 1.416 | .118  | .731 | 1.627  |
| Court Formal  |          | 2.707  | 1.798 | 2.267 | .132 | 14.981 |
| Education     |          |        |       |       |      |        |
| Court Formal  | Training | .452   | 1.926 | .055  | .815 | 1.571  |
| Court Length  | of       | 658    | 1.787 | .135  | .713 | .518   |
| Current VTC   |          |        |       |       |      |        |
| Employment    |          |        |       |       |      |        |
| Constant      |          | -3.130 | 2.459 | 1.620 | .203 | .044   |
| Nagelkerke R  | Square   | .267   |       |       |      |        |

#### Point Estimates for Extensive Exclusions

### Predominant Sample Characteristics Model

The point estimate of probability of extensive exclusions uses the same formula and follows the same logic provided in extensive entries. Z is completed using estimate coefficients from Table 5.3 to complete the logit regression form of:

Z = -3.13 + 2.148(VetStatus) + .42(Gender) + .487(Age) + 2.707(Edu)

+ .452(Ftrng) - .658(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

$$Z = -3.13 + 2.148(0) + .42(1) + .487(1) + 2.707(0) + .452(1) - .658(0).$$

Using the obtained value for Z, the P(ExtensiveExclusions) = .15. A typical court in the sample has less than .25 probability of extensive exclusions from treatment programs.

## Veteran Status Model

The veteran status model uses the same estimate coefficients to complete the logit regression formula as in the previous equation. Except for veteran status, all other predominant characteristics in the sample remain unchanged. The influence of the primary explanatory variable in the research is observed through the increase of veteran status. This change is reflected in the computation of *Z*, which is:

Z = -3.13 + 2.148(1) + .42(1) + .487(1) + 2.707(0) + .452(1) - .658(0).Z = .377.

This value is inserted into the logit probability function for extensive exclusions, which computes a probability of .59. Veteran courts, *ceteris* 

*paribus*, have a greater than .50 probability of extensive exclusions from treatment programs.

#### Representative Bureaucracy Model

The representative bureaucracy model uses the same estimate coefficients to complete the logit regression formula. Except for age, the presence of the characteristics in the model are expected to influence an administrator's representative role. These characteristics are used to compute *Z*, which is:

Z = -3.13 + 2.148(1) + .42(1) + .487(0) + 2.707(1) + .452(1) - .658(1).Z = 1.939.

This value is inserted into the logit probability function for extensive exclusions, which computes a probability of .87. Courts structured along representative bureaucracy lines have a greater than .75 probability of extensive exclusions from treatment programs.

Number of African American Veterans Admitted

The model for percent African American veterans admitted contains the full complement of independent variables. One case has a standardized residual of 2.362 standard deviations which approaches the 2.5 residual value cutoff. It was kept in the analysis. The logistic regression model is not statistically significant. The model explains 9 percent of the variance in the percentage of African American veterans admitted (Nagelkerke R<sup>2</sup>) and correctly classifies 65 percent of the cases (See Table 5.6). Sensitivity is 29 percent, specificity is 85 percent, positive predictive value is 50 percent, and negative predictive value is 69 percent.

None of the seven predictor variables are statistically significant (See Table 5.6). Veteran identity and minority race and ethnicity warrant a closer examination due to their unique relationship with the dependent variable. A reduction in veteran identity is associated with the odds of extensive number of African American veterans admitted to the treatment program by a factor of 2.39. Also, a reduction in the minority race and ethnicity of the court is associated with the odds of extensive number of African American veterans admitted to the treatment program by a factor associated with the odds of extensive number of African American veterans admitted to the treatment program by a factor of 2.39. Also, a reduction in the minority race and ethnicity of the court is associated with the odds of extensive number of African American veterans admitted to the treatment program by a factor of 1.32.

|                       | В    | S.E.  | Wald | p    | Exp(B) |
|-----------------------|------|-------|------|------|--------|
| Court Veteran Status  | 874  | 1.486 | .346 | .556 | .417   |
| Court Race/Ethnicity  | 280  | 1.181 | .056 | .813 | .756   |
| Court Gender          | .205 | 1.275 | .026 | .872 | 1.227  |
| Court Age             | .374 | 1.358 | .076 | .783 | 1.453  |
| Court Formal          | .668 | 1.591 | .176 | .675 | 1.951  |
| Education             |      |       |      |      |        |
| Court Formal Training | .699 | 1.505 | .216 | .642 | 2.012  |
| Court Length of       | 568  | 1.537 | .137 | .712 | .567   |
| Current VTC           |      |       |      |      |        |
| Employment            |      |       |      |      |        |

Table 5-6: Logistic Regression Predicting Likelihood of Extensive African Americans Entries

#### Table 5-6—*Continued*

| Constant            | -1.150 | 2.088 | .303 | .582 | .317 |
|---------------------|--------|-------|------|------|------|
| Nagelkerke R Square | .092   |       |      |      |      |

Point Estimates for Extensive Number of African American Veterans

#### Admitted

## Predominant Sample Characteristics Model

*Z* is completed using estimate coefficients from Table 5.4 to complete the logit regression form of:

$$Z = -1.15 - .874$$
(VetStatus) - .28(Race/Eth) + .205(Gender) + .374(Age)

+ .668(Edu) + .699(Ftrng) - .568(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

Z = -1.15 - .874(0) - .28(0) + .205(1) + .374(1) + .668(0) + .699(1) - .568(0).

*Z* = .128.

Using the obtained value for Z, the logit probability function for number of African American veterans admitted is computed as .53. Courts that reflect the prevailing characteristics in the sample have a greater than .50 probability of extensive numbers of African American veterans admitted to treatment programs.

## Veteran Status Model

The veteran status model follows the logic applied to previous probability estimates. As in previous models, veteran status is the only characteristic that deviates from the prevailing sample characteristics. The increase in veteran status is reflected in the computation of *Z*, which is: Z = -1.15 - .874(1) - .28(0) + .205(1) + .374(1) + .668(0) + .699(1) - .568(0).Z = -.746.

This value is inserted into the logit probability function for extensive number of African American veterans admitted, which is computes a probability of .32. Courts with veteran personnel structures have less than .50 probability of extensive number of African American veterans admitted to treatment programs.

# Representative Bureaucracy Model

The representative bureaucracy model also follows the same logic used in previous probability estimates. Age is the only characteristic entering the point estimate formula with an absence of the target characteristic. The characteristics are used to compute *Z*, which is:

Z = -1.15 - .874(1) - .28(1) + .205(1) + .374(0) + .668(1) + .699(1) - .568(1).Z = -1.3.

This value is inserted into the logit probability function for extensive number of African American veterans admitted, which computes a probability of .21. Bureaucratically representative courts have less than .25 probability of extensive admissions of African American veterans.

# Number of Hispanic Veterans Admitted

The model for percent Hispanic ethnicity veterans admitted contains the full complement of independent variables. There are two cases with standardized residuals above the 2.5 residual value cutoff. One case has a standardized residual of -2.543 standard deviations and another with a standardized residual of 2.592 standard deviations. Both cases were kept in the analysis. The logistic regression model is not statistically significant. The model explains 37 percent of the variance in the percentage of Hispanic veterans admitted (Nagelkerke R<sup>2</sup>) and correctly classifies 80 percent of the cases (See Table 5.7). Sensitivity is 86 percent, specificity is 67 percent, positive predictive value is 86 percent, and negative predictive value is 66 percent.

Of the seven independent variables, veteran identity is statistically significant (p = .056) (See Table 5.7). A reduction in veteran identity is associated with the odds of extensive number of Hispanic veterans admitted to the treatment program by a factor of 41.66.

In addition to veteran status, minority race and ethnicity and gender warrant a closer examination due to their distinct relationship with the outcome variable. A reduction in the minority race and ethnicity of the court is associated with the odds of extensive number of Hispanic veterans

admitted to the treatment program by a factor of 2.21. A reduction in the number of females in the court is associated with the odds of extensive number of Hispanic veterans admitted to treatment programs by a factor of 8.85.

|                     |                       | В      | S.E.  | Wald  | р    | Exp(B) |
|---------------------|-----------------------|--------|-------|-------|------|--------|
| Step 1 <sup>a</sup> | Court Veteran Status  | -3.748 | 1.962 | 3.648 | .056 | .024   |
|                     | Court Race/Ethnicity  | 795    | 1.554 | .262  | .609 | .452   |
|                     | Court Gender          | -2.180 | 1.995 | 1.195 | .274 | .113   |
|                     | Court Age             | -1.710 | 1.802 | .900  | .343 | .181   |
|                     | Court Formal          | 665    | 1.796 | .137  | .711 | .514   |
|                     | Education             |        |       |       |      |        |
|                     | Court Formal Training | .850   | 1.724 | .243  | .622 | 2.339  |
|                     | Court Length of       | 493    | 1.434 | .118  | .731 | .611   |
|                     | Current VTC           |        |       |       |      |        |
|                     | Employment            |        |       |       |      |        |
|                     | Constant              | 4.553  | 3.498 | 1.694 | .193 | 94.932 |
|                     | Nagelkerke R Square   | .369   |       |       |      |        |

Table 5-7: Logistic Regression Predicting Likelihood of Extensive Hispanic Entries

Point Estimates for Extensive Number of Hispanic Veterans Admitted

Predominant Sample Characteristics Model

 $Z\,$  is completed using estimate coefficients from Table 5.5 to complete

the logit regression form of:

- .665(Edu) + .85(Ftrng) - .493(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

Z = 4.553 - 3.748(0) - .795(0) - 2.18(1) - 1.71(1) - .665(0) + .85(1) - .493(0).Z = 1.513.

Using the obtained value for Z, the logit probability function for extensive number of Hispanic veterans admitted is computed as .82. A typical court in the sample has a greater than .75 probability of extensive numbers of Hispanic veterans admitted to treatment programs.

#### Veteran Status Model

In this model, like those prior, veteran status is the only characteristic that deviates from the prevailing sample characteristics. The increase in veteran status is reflected in the computation of *Z*, which is: Z = 4.553 - 3.748(1) - .795(0) - 2.18(1) - 1.71(1) - .665(0) + .85(1) - .493(0).Z = -2.235.

This value is inserted into the logit probability function for extensive number of Hispanic veterans admitted, which computes a probability of .10. Veteran courts, *ceteris paribus*, have less than .25 probability of extensive number of Hispanic veterans admitted to treatment programs.

## Representative Bureaucracy Model

In this model, like those prior, age is the only characteristic entering the point estimate formula with an absence of the target characteristic. The characteristics are used to compute *Z*, which is:

Z = 4.553 - 3.748(1) - .795(1) - 2.18(1) - 1.71(0) - .665(1) + .85(1) - .493(1).Z = -2.478.

This value is inserted into the logit probability function for extensive number of Hispanic veterans admitted, which computes a probability of .08. Courts centered on representative bureaucracy theory have less than .25 probability of extensive admissions of Hispanic veterans.

# Sanctions

The model for sanctions does not contain the independent variable representing formal training. There are no outliers in the model. The logistic regression model is not statistically significant. The model explains 18 percent of the variance in the number of sanctions administered (Nagelkerke R<sup>2</sup>) and correctly classifies 75 percent of the cases (See Table 5.8). Sensitivity is 20 percent, specificity is 93 percent, positive predictive value is 50 percent, and negative predictive value is 78 percent.

None of the six predictor variables are statistically significant (See Table 5.8). Veteran courts have 1.81 times higher odds of extensive sanctions

than non-veteran courts. Also, a reduction in court-level age is linked to the odds of extensive sanctions for contractual violations by a factor of 3.01.

Table 5-8: Logistic Regression Predicting Likelihood of Extensive Sanctions

| _                   |                      | В      | S.E.  | Wald | р    | Exp(B) |
|---------------------|----------------------|--------|-------|------|------|--------|
| Step 1 <sup>a</sup> | Court Veteran Status | .593   | 1.431 | .171 | .679 | 1.809  |
|                     | Court Race/Ethnicity | -1.392 | 1.455 | .916 | .339 | .248   |
|                     | Court Gender         | 431    | 1.525 | .080 | .778 | .650   |
|                     | Court Age            | -1.102 | 1.235 | .795 | .373 | .332   |
|                     | Court Formal         | 447    | 1.889 | .056 | .813 | .639   |
|                     | Education            |        |       |      |      |        |
|                     | Court Length of      | .514   | 1.581 | .106 | .745 | 1.672  |
|                     | Current VTC          |        |       |      |      |        |
|                     | Employment           |        |       |      |      |        |
|                     | Constant             | 128    | 1.977 | .004 | .948 | .880   |
|                     | Nagelkerke R Square  | .176   |       |      |      |        |

# Point Estimates for Extensive Sanctions

# Predominant Sample Characteristics Model

*Z* is completed using estimate coefficients from Table 5.6 to complete the logit regression form of:

*Z* = -.128 + .593(VetStatus) - 1.392(Race/Eth) - .431(Gender) - 1.102(Age)

- .447(Edu) + .514(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

$$Z = -.128 + .593(0) - 1.392(0) - .431(1) - 1.102(1) - .447(0) + .514(0).$$

Z = -1.661.

Using the obtained value for Z, the logit probability function for P(ExtensiveSanctions) is computed as .16. Courts with the predominant characteristics in the sample have a less than .25 probability of extensive sanctions for contractual infractions.

# Veteran Status Model

Holding all other characteristics constant, the increase in veteran status is used to compute *Z*, which is:

Z = -.128 + .593(1) - 1.392(0) - .431(1) - 1.102(1) - .447(0) + .514(0).

Z = -1.068.

Using the obtained value for Z, the logit probability function for P(ExtensiveSanctions) is computed as .25. Courts with veteran personnel structures have less than .50 probability of extensive sanctions for contractual violations of treatment plans.

#### Representative Bureaucracy Model

Age is the only characteristic entering the point estimate formula with an absence of the target characteristic. The characteristics are used to compute *Z*, which is:

Z = -.128 + .593(1) - 1.392(1) - .431(1) - 1.102(0) - .447(1) + .514(1).Z = -1.291.

This value is inserted into the logit probability function for extensive sanctions, which is computed as .21. Bureaucratically representative courts have less than .25 probability of extensive sanctions for contractual violations.

#### Incentives

The model for incentives does not contain the independent variables representing age and formal training. There are no outliers in the model. There is one missing case which represents five percent of the equation. The logistic regression model is not statistically significant. The model explains 16 percent of the variance in the number of incentives administered (Nagelkerke R<sup>2</sup>) and correctly classifies 84 percent of the cases (See Table 5.9). Sensitivity is 25 percent, specificity is 100 percent, positive predictive value is 100 percent, and negative predictive value is 83 percent.

None of the five predictor variables are statistically significant (See Table 5.9). Reducing veteran identity is associated with the odds of extensive incentives for good behavior by a factor of 2.32. The study also finds that courts with extensive lengths of current VTC employment have 3.25 times higher odds of extensive incentives than courts with minimal lengths of employment.

Table 5-9: Logistic Regression Predicting Likelihood of Extensive Incentives

|                     |                      | В      | S.E.  | Wald | р    | Exp(B) |
|---------------------|----------------------|--------|-------|------|------|--------|
| Step 1 <sup>a</sup> | Court Veteran Status | 845    | 1.740 | .236 | .627 | .430   |
|                     | Court Race/Ethnicity | 653    | 1.451 | .203 | .653 | .520   |
|                     | Court Gender         | -1.062 | 1.398 | .577 | .448 | .346   |
|                     | Court Formal         | 342    | 1.874 | .033 | .855 | .711   |
|                     | Education            |        |       |      |      |        |
|                     | Court Length of      | 1.181  | 1.544 | .585 | .444 | 3.258  |
|                     | Current VTC          |        |       |      |      |        |
|                     | Employment           |        |       |      |      |        |
|                     | Constant             | 571    | 1.536 | .138 | .710 | .565   |
|                     | Nagelkerke R Squared | .162   |       |      |      |        |

### Point Estimates for Extensive Incentives

# Predominant Sample Characteristics Model

Z is completed using estimate coefficients from Table 5.7 to complete

the logit regression form of:

*Z* = -.571 - .845(VetStatus) - .653(Race/Eth) – 1.062(Gender) - .342(Edu)

+ 1.181(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

Z = -.571 - .845(0) - .653(0) - 1.062(1) - .342(0) + 1.181(0).

Z = -1.633.

Using the obtained value for Z, the logit probability function for

P(ExtensiveIncentives) is computed as .16. Courts with the prevailing

characteristics in the sample have a less than .25 probability of extensive

incentives for good behavior or adhering to treatment contracts.

# Veteran Status Model

Holding all other characteristics constant, the increase in veteran status is used to compute *Z*, which is:

$$Z = -.571 - .845(1) - .653(0) - 1.062(1) - .342(0) + 1.181(0).$$

*Z* = -2.478.

Using the obtained value for *Z*, the logit probability function for P(ExtensiveIncentives) is computed as .08. Courts with veteran personnel structures have less than .25 probability of extensive incentives for adherence to contractual terms or good behavior.

# Representative Bureaucracy Model

Age is the only characteristic entering the point estimate formula with an absence of the target characteristic. The characteristics are used to compute *Z*, which is:

Z = -.571 - .845(1) - .653(1) - 1.062(1) - .342(1) + 1.181(1).

Z = -2.292.

Using the obtained value for *Z*, the logit probability function for P(ExtensiveIncentives) is computed as .09. Bureaucratically representative courts have less than .25 probability of extensive incentives.

# Graduations

The model for graduation does not contain the independent variable representing formal training. There are two cases with standardized residuals above the 2.5 residual value boundary. One case has a standardized residual of 2.707 standard deviations and another has a standardized residual of 2.646 standard deviations. Both cases were kept in the analysis. The logistic regression model is not statistically significant. The model explains 25 percent of the variance in graduations (Nagelkerke R<sup>2</sup>) and correctly classifies 80 percent of the cases (See Table 5.10). Sensitivity is zero percent, specificity is 100 percent, positive predictive value is zero percent, and negative predictive value is 80 percent.

None of the six predictor variables are statistically significant (See Table 5.10). Veteran courts have 2.08 times higher odds of extensive graduations than non-veteran courts. For each unit reduction in court-level age, the odds of extensive graduations increase by a factor of 6.41. Courts with a professional formal education have 15.53 times higher odds of extensive graduations than courts with a graduate or less formal education.

Table 5-10: Logistic Regression Predicting Likelihood of Extensive Graduations

|                     |                      | В     | S.E.  | Wald | р    | Exp(B) |
|---------------------|----------------------|-------|-------|------|------|--------|
| Step 1 <sup>a</sup> | Court Veteran Status | .732  | 1.773 | .171 | .680 | 2.080  |
|                     | Court Race/Ethnicity | 1.515 | 1.680 | .814 | .367 | 4.551  |

## Table 5-10—*Continued*

| Court Gender        | .743   | 2.082 | .127  | .721 | 2.102  |
|---------------------|--------|-------|-------|------|--------|
| Court Age           | -1.857 | 1.552 | 1.432 | .231 | .156   |
| Court Formal        | 2.743  | 2.724 | 1.014 | .314 | 15.536 |
| Education           |        |       |       |      |        |
| Court Length of     | 751    | 2.348 | .102  | .749 | .472   |
| Current VTC         |        |       |       |      |        |
| Employment          |        |       |       |      |        |
| Constant            | -2.384 | 2.792 | .729  | .393 | .092   |
| Nagelkerke R Square | .247   |       |       |      |        |

# Point Estimates for Extensive Graduations

# Predominant Sample Characteristics Model

Z is completed using estimate coefficients from Table 5.8 to complete the logit regression form of:

*Z* = -2.384 + .732(VetStatus) + 1.515(Race/Eth) + .743(Gender)

- 1.857(Age) + 2.743(Edu) - .751(LengthCurrEmp).

The specific sample characteristics are used to compute Z, which is:

$$Z = -2.384 + .732(0) + 1.515(0) + .743(1) - 1.857(1) + 2.743(0) - .751(0).$$

Z = -3.498.

Using the obtained value for Z, the logit probability function for

P(ExtensiveGraduations) is computed as .03. A court that is characteristically representative of the sample have a less than .10 probability of extensive graduations.

## Veteran Status Model

Holding all other characteristics constant, the increase in veteran status is used to compute *Z*, which is:

Z = -2.384 + .732(1) + 1.515(0) + .743(1) - 1.857(1) + 2.743(0) - .751(0).Z = -2.766.

Using the obtained value for *Z*, the logit probability function for P(ExtensiveGraduations) is computed as .06. Courts with veteran personnel structures have less than .10 probability of extensive graduations from treatment programs.

# Representative Bureaucracy Model

Age is the only characteristic entering the point estimate formula with an absence of the target characteristic. The characteristics are used to compute *Z*, which is:

Z = -2.384 + .732(1) + 1.515(1) + .743(1) - 1.857(0) + 2.743(1) - .751(1).Z = 2.598.

Using the obtained value for *Z*, the logit probability function for P(ExtensiveGraduations) is computed as .93. Bureaucratically representative courts have more than .90 probability of extensive graduations.

What follows from this descriptive overview and baseline analyses of variables in the model is a more detailed evaluation. The process is guided by
representative bureaucracy theory to interpret the observed relationships between predictor and outcome variables. The primary focus of this discussion is the impact of veteran identity.

# Chapter 6

## Interpretation and Conclusion

This research tests the relationship between veteran identity and policy outcomes in veteran treatment courts. This relationship is viewed through the lens of representative bureaucracy theory. Active representation maintains that a politically relevant identity among policy-wielding bureaucrats is likely to yield favorable outcomes for those in the public with shared characteristics.

Two conditions exist for active representation which are met within veteran treatment court setting. First, veteran identity is linked to politically relevant attitudes and values. Second, the treatment team members who comprise VTCs exercise discretion over policies relevant to a veteran identity.

It is hypothesized that courts assuming a veteran representative role are more likely to yield favorable policy outcomes for veterans entering and proceeding through the treatment program. The policy outcomes are measured by entries, sanctions, incentives, and graduations. Grounded in relevant representative bureaucracy research, the study provides a measure of control for shared minority racial, ethnic, and gender identities. Additional control variables in each model which will be discussed based on their impact on the outcome variables.

# Entries

For entries, it is hypothesized that as veteran identity among treatment team members increases, there will be a corresponding increase in favorable entry decisions for justice-involved veterans (JIVs). Although it does not reach statistical significance, veteran identity contributes to the model in explaining the relationship between social identities and policy outcomes. The study finds that as veteran identity increases, there is an increased likelihood of extensive entries into treatment programs. This is consistent with the tenets of representative bureaucracy, which argues that favorable policy outcomes are more likely for those with shared identities.

The study's findings on the relationship between age and entries into the treatment program are also consistent with the logic of representative bureaucracy. A reduction in court-level age is associated with increased odds of extensive entries into treatment programs. The logic of bureaucratic representation suggests that younger administrators have been exposed to less agency socialization and are therefore more likely to assume a representative role.

The point estimates of probability of extensive entries for courts of varying hypothetical characteristics support these findings. The expectation was one of a positive relationship between shared identities and policy preferences. Although not statistically significant, the findings provide substantive evidence of the relationship between extensive entries and veteran identity and representative characteristics. On its own, the veteran identity model approached the .50 probability benchmark with a .45 probability of extensive entries. The representative bureaucracy model surpassed the .50 probability benchmark with a .94 probability of extensive entries. Compared to the predominant sample characteristics model, both the veteran identity and representative bureaucracy models demonstrated higher probabilities of extensive entries.

# Exclusions

The construct for entries is measured by a second variable which captures the number of eligible veterans denied entry into treatment programs. Intuitively, the relationship between veteran identity and exclusions should be highlighted by a negative statistical association. As veteran identity increases there should be a corresponding decrease in the number of exclusionary entry decisions. Although it does not reach statistical significance, veteran identity contributes to the overall model in explaining

policy outcomes. The study finds that as veteran identity increases, there is an increased likelihood of extensive exclusions of eligible veterans from the treatment program.

The point estimate of probability of extensive exclusions for courts with hypothetical veteran identity provides substantive support for the unexpected finding. Intuitively, there was an expectation of a lower probability of extensive exclusions within this model. However, the veteran identity model exceeded the .50 probability benchmark for extensive exclusions, with a .59 probability. When compared to the predominant sample characteristics model, the veteran identity model demonstrated a higher probability of extensive exclusions. The inclusion of veteran identity, *ceteris paribus*, increased the probability of extensive exclusions.

These findings are perplexing for several reasons. First, the theory of representative bureaucracy posits that agencies with an explicit advocacy role are likely to strengthen the passive to active representation linkage. In this model, veteran identity is associated with unfavorable policy outcomes. This finding is interesting since VTCs are likely to be sensitive to the needs of JIVs. This may imply that veteran identity has a stronger influence on policy preferences when compared to agency socialization.

While not a focus of this research, the finding on veteran identity and policy preferences in this model could be a result of one of the nuances of veteran identity. While many veterans share a unique bond borne from hardships and shared experiences, these very same hardships may prejudice their views towards other veterans. How an individual veteran copes with a hardship may be used as a barometer by which he or she judges other veterans during challenging or difficult situations. To put it simply, veterans may be less sympathetic and harsher towards other struggling veterans based on their own experiences during difficult situations. Furthermore, military training may serve to form an identity that is characterized by the desensitization towards the difficulties facing other veterans (Gade, 2011). These unique features and their product are documented by Gade (2011) in his work on veterans and representative bureaucracy in the Department of Veterans Affairs.

Even though it did not reach statistical significance, formal education also contributes to the model. The relationship between formal education and exclusions from treatment programs did not perform to *a priori* expectations. Representative bureaucracy theory maintains that formal education is likely to impact political attitudes and values that affect advocacy roles. It is hypothesized that formal education and exclusions

should share a negative statistical association—as formal education increases there should be a corresponding decrease in exclusions from treatment programs. However, this study finds that an increase in formal education is linked to an increased likelihood of extensive exclusions of eligible veterans from the treatment program.

The point estimates of probability of extensive exclusions for courts with hypothetical representative characteristics also provides support for these findings. The representative bureaucracy model clearly surpassed the .50 probability benchmark with a .87 probability of extensive exclusions. Compared to the predominant sample characteristics model and veteran identity model, the representative bureaucracy model demonstrated a higher probability of extensive exclusions.

# African American Veterans Admitted

The intersection of a treatment team member's innate characteristics and a veteran identity could moderate the passive to active linkage. This model tests the relationship between a bureaucrat's innate identity and JIVs with shared characteristics. This model is unique because it tests the relationship between the outcome variable and veteran and minority identities. Because all members of the treatment program are veterans, it is probable that veteran identity is associated substantive policy outcomes.

Equally credible, treatment team members may assume a minority representative role resulting in more entries for African American veterans. Although none of the variables reach statistical significance, which defies expectations, their relationship with the outcome variable warrants a discussion.

The study finds that a reduction in veteran identity is linked to increased odds of extensive African American JIV entries into treatment programs. This relationship defies expectations based on the logic of representative bureaucracy. It is presumed that increasing veteran identity is associated with increased entries of African American veterans.

Also inconsistent with representative bureaucracy theory is the finding on the relationship between minority race and ethnicity among treatment team members and policy outcomes. Evidence from representative bureaucracy research supports a statistically positive relationship between a court member's innate identities and those with shared characteristics. However, this study finds that a reduction of court-level minority race and ethnicity is associated with increased odds of extensive African American veterans admitted to treatment programs.

The point estimates of probability of extensive entries for African American veterans for courts with hypothetical veteran identity and

representative bureaucracy characteristics provide additional support for these findings. Contrary to expected findings, both models had lower than .50 probabilities of extensive entries for this class of veterans. Also, compared to the sample characteristics model, both models had lower probabilities of extensive entries for African American veterans. The inclusion of veteran identity to the sample characteristics model once again resulted in substantive differences between the two models.

The inconsistent findings for both veteran identity and minority race and ethnicity could be the result of several factors. First, the unexpected finding on the relationship between veteran identity and the number of African American entries could further serve to affirm the hardship principle. Veterans may be less sympathetic and harsher towards struggling veterans. Second, the unanticipated findings on both veteran identity and minority race and ethnicity could be the result of the intersection of multiple, and often competing, identities (Keiser, 2010). Bureaucrats have multiple identities, such as race, gender, ethnicity, and veteran status, that can compete for precedence on politically relevant attitudes and values. Unfortunately, representative bureaucracy theory and research has yet to effectively address this phenomenon (Keiser, 2010).

# Hispanic Veterans Admitted

This is the second model in the study to explore the intersection of shared innate identities between team members and JIVs. Like the model representing African American veterans admitted, this model tests both veteran and minority identities. Because of the shared veteran status among individuals entering treatment programs, veteran identity is expected to be associated with policy outcomes. Equally probable, courts may assume a minority representative role resulting in more entries for Hispanic veterans.

The relationship between veteran identity and the number of Hispanic JIVs admitted to treatment programs reaches statistical significance, p = .056. However, the direction of the relationship is not consistent with the predicted outcome informed by bureaucratic representation. One might expect to see a positive relationship—as veteran identity increases, so does the number of Hispanic JIV entries. Instead, the study finds that a reduction in veteran identity is associated with increased odds of extensive Hispanic veteran entries into treatment programs by a factor of 41.66.

The study's finding on minority race and ethnicity defy conventional wisdom on active representation. The theory holds that as minority race and ethnicity increases there is likely to be an increase in favorable outcomes for those with shared minority identities. However, this study finds that a

reduction in the minority race and ethnicity of the court is linked with increased odds of extensive Hispanic veteran entries.

Much like the models representing African American veterans, the point estimates of probability of extensive entries for Hispanic veterans are insightful for two reasons. First, the probability estimates from the individual models representing veteran identity and representative bureaucracy are both lower than .50 probability for extensive entries. Also, in comparison to the sample characteristics model, the probability estimates for both models have lower probabilities of extensive entries for Hispanic veterans. The substantive difference between the veteran identity and sample characteristics model is notable. The point estimate of probability of extensive entries for the sample characteristics model is well above the .50 probability benchmark while the veteran identity model is well below it—a finding that could point to the impact of veteran identity.

The findings on the relationship between Hispanic veteran entries and veteran identity and minority race and ethnicity are not only unexpected but revealing for two primary reasons. First, the direction of the relationship for both variables is unexpected. An increase in both veteran identity and minority race and ethnicity is associated with a decreased likelihood of extensive numbers of Hispanic veteran entries into treatment programs.

Second, and perhaps more enlightening, is the differential impact between veteran identity and minority race and ethnicity on extensive Hispanic entries. The relationship between veteran identity and Hispanic entries reaches statistical significance, while the relationship between minority race and ethnicity and the outcome variable is not. This difference could imply that veteran identity has a stronger impact on extensive Hispanic entries than that of the innate characteristics of veteran treatment team members comprising the court.

Following from the discussion on the results from the number of African American veterans admitted, the inconsistent findings in Hispanic veterans admitted could be the result of similar factors. Both the hardship principle and the intersection of multiple identities are possible explanations for the findings. First, the lens through which veterans view struggling veterans could provide an explanation for why veteran identity was statistically significantly linked to a decreased likelihood of Hispanic entries. Second, veteran treatment team members are likely to have multiple identities which vie for relevancy on political attitudes and values.

For minority gender, the findings align with the doctrines of bureaucratic representation. Reducing the number females in the court is associated with increased odds of extensive Hispanic veterans admitted to

treatment programs by a factor of 8.85. At first glance this outcome may not intuitively support the principle of active representation. However, active representation is a product of shared identities and the overwhelming majority of JIVs in the sample are males. The nuances of shared identities and sample characteristics make the findings clearer. As minority gender courts decrease, there is an increased likelihood they will assume a majority representative role.

### Sanctions

Inconsistent with the expected relationship with policy outcomes, the study finds that increasing veteran identity is associated with an increased likelihood of extensive sanctions for contractual infractions. This finding may support the hardship premise in which veterans use their own personal experiences with adversity to judge other veterans.

The point estimate of probability of extensive sanctions for courts with hypothetical veteran identity tends to support this finding. Although the veteran identity model has a less than .50 probability of sanctions, when compared to the sample characteristics model, it has an increased probability of extensive sanctions. The addition of veteran identity to the existing sample characteristics model resulted in an increased probability of sanctions for veterans who violate contractual obligations.

Worth noting is the unanticipated relationship between the outcome variable and age. The study finds that a reduction in court-level age is associated with increased odds of extensive sanctions. This generally stands in opposition to the logic of representative bureaucracy theory which surmises that age increases, representative behavior is likely to decrease as a result of agency socialization. Younger administrators are less likely to have been exposed to agency socialization which has a negative impact on representative roles. However, previous studies find mixed results on the relationship between age and active representation.

### Incentives

It is hypothesized that veteran identity and incentives share a positive statistical relationship. That is, as veteran identity within the court increases there will be a corresponding increase in the number of incentives issued for adhering to contractual obligations. Results from the study indicate that veteran identity does not behave in accordance with the hypothesis. A reduction in veteran identity is linked with increased odds of extensive incentives for good behavior. The point estimate of probability of extensive incentives for courts with hypothetical veteran identity likely supports this finding. First, the point estimate of probability of extensive incentives in this model is well below the .50 probability benchmark—a finding that

substantively supports the finding from logistic regression. Furthermore, the addition of veteran identity to the predominant sample characteristics resulted in a lower point estimate of probability of extensive incentives—a finding that substantively supports the impact of veteran identity on policy outcomes in this setting. These findings, once again, may provide further support for the intricacies of veteran identity.

Worth noting is the finding on the relationship between length of current employment in VTCs and incentives. The study finds that as courtlevel length of current employment is increased there is an increased likelihood of extensive incentives. This finding meets *a priori* expectations. Agency socialization is generally viewed as a moderating factor in the passive to active linkage. However, in agencies with an explicit advocacy role, like VTCs, this moderating influence could be diminished.

#### Graduations

Several variables in the study produce outcomes that are consistent with the tenets of representative bureaucracy. The relationship between graduations and veteran identity, age, and formal education all act according to expectations. Increasing veteran identity and education are linked to increased odd of extensive graduations. In contrast, a reduction in court-level age is associated with increased odds of extensive graduations by a factor of

6.41. The point estimate of probability of extensive graduations for courts with hypothetical representative characteristics substantively support the findings from the logistic regression analyses. The representative bureaucracy model far exceeds the .50 probability standard with a .93 probability of extensive graduations. In addition, compared to both the predominant characteristics model and veteran identity model, the representative model produced higher probabilities of extensive graduations—a finding that supports the representative bureaucracy hypothesis.

### **Policy Implications**

The primary purpose of this research is to provide a better understanding of the processes and outcomes within VTCs. Policy evaluation demands that public policies behave in a manner consistent with stated objectives and intended consequences. The number of VTCs have grown exponentially across the nation. This is in large part a result of the success seen in other problem-solving courts in reducing the revolving door of criminal offending. The anticipated success of VTCs is tied to effectively treating the underlying corelates of criminal offending to reduce veterans from reoffending.

Unique to this research is the focus on the personnel structure within VTCs. The explicit focus is on the relationship between a veteran identity and policy outputs and outcomes. The expectation leading into the research was that the intersection between a veteran identity and policy preferences would result in favorable policy outcomes for veterans entering and proceeding through treatment programs.

The findings from the study tell an impactful story on the relationship between veteran identity and policy outcomes. Although not statistically significant and in the expected direction in most models, the findings on the relationship between veteran identity and policy outcomes are not any less important.

In two of the seven models, veteran identity behaved consistent with representative bureaucracy theory. The intersection between veteran identity and policy preferences resulted in favorable outcomes for veterans in treatment programs. In these two models, an increase in veteran identity is linked to increased odds of more entries and more graduations. In addition, the substantive findings from point estimates of probability of favorable outcomes support these findings. In one model, the inclusion of a hypothetical veteran identity resulted in an increased point estimate of probability of policy outcomes for veteran entering treatment programs.

In five out of the seven models, or 71 percent, an increase in veteran identity is associated with decreased odds of favorable policy outcomes. In two models, increasing veteran identity is linked with increased odds of more exclusions from treatment programs and more sanctions for contractual violations. For extensive exclusions, the addition of a hypothetical veteran identity to predominant sample characteristics yielded a substantive difference. Not only did this model exhibit a higher probability of extensive exclusions, but its inclusion into the predominant sample characteristics had a markedly different impact on the outcome.

In the remaining three models, decreasing veteran identity is associated with increased odds of more African American and Hispanic veterans admitted to treatment programs and more incentives for good behavior. Much like the model representing exclusions, the inclusion of a hypothetical veteran identity, *ceteris paribus*, had a substantive and unexpected effect on the probability of extensive entries for African American and Hispanic veterans. For each model the addition of a hypothetical veteran identity yielded lower probabilities of entries for these two classes of veterans. In addition, when compared to the typical sample characteristics veteran identity had a decidedly differential impact.

The resulting policy implications are equally impactful. Contemporary policies and budgets are often driven by limited or scarce resources. Understanding the substantive impact of social identities on policy outputs and outcomes has both immediate and far reaching budgetary implications.

The ineffectiveness of traditional courts in preventing criminal reoffending gave rise to specialty courts, of which VTCs draw a direct lineage. Specialty courts attempt to reduce both the monetary and human costs associated with criminal reoffending by treating the underlying factors of criminal behavior. Veterans who successfully graduate from the treatment program are more likely to reduce incurred societal costs had they not received individualized and specialized services in VTCs.

The knowledge produced here could help VTCs and the larger specialty court community better serve their practical and political masters. For VTCs, understanding the relationship between veteran identity and policy preferences could better serve veterans as enter and proceed through treatment programs. With this enhanced knowledge comes the increased likelihood of successful outcomes within VTCs—outcomes that are likely to reduce the human and monetary costs associated with reoffending that is experienced by veterans, their families, and society.

For the larger specialty court community, treatment team members are not immune from the impact of social identities on policy preferences. A better understanding of the relationship between social identities and policy outcomes is likely to provide specialty courts with a more efficient and effective way of accomplishing the unique task they were created to accomplish—stop the revolving door of reoffending that is plaguing the criminal justice system. This too is likely to reduce the tremendous societal costs that all too often accompany criminal offending and incarceration.

# Limitations

While the findings produced by this research are impactful, they are not without some limitations. The primary limitation of this research is the size of the sample. A sample containing 20 VTCs can result in statistical limitations. The sample size in this research approaches the acceptable minimum prescribed number of cases, which can range between 15 and 50 cases (Laerd Statistics, 2015). Too few cases can result in diminished reliability of estimates for probability combinations (Laerd Statistics, 2015). This is likely what caused some of the models to fail to converge, resulting in the removal of some predictor variables.

Closely related to this deficiency is the need for more variables in the model to control for confounders. Several control variables were identified

by relevant representative bureaucracy and interdisciplinary research. However, because of the limited number of cases, their inclusion in the model resulted in failed assumption tests and overall poor model fit. Variables removed from initial testing include measures of the strength of veteran identity, political ideology, and additional agency socialization measures. The overall quality of the findings could be better improved with the inclusion of additional control variables.

### Future Research

Following from the previous discussion on limitations, future research on the relationship between veteran identity and policy outcomes would benefit from a larger sample size and more control variables. Additionally, the current research was conducted on VTCs from three states in the southern region of the United States. To strengthen generalizability of the results to the larger population frame, future research should increase the scope of the sample frame.

An unexpected finding was the relationship between veteran identity and policy preferences among treatment team members. In five out of seven models, veteran identity was associated with increased odds of unfavorable outcomes for veterans entering and proceeding through treatment programs. Prior research points to the hardship principle as a possible explanation for

this relationship. This research did not explore the facets of hardship on veteran identity. Ironically, early models contained variables that measured the strength of veteran identity among veterans in the court. The variables were ultimately removed due to poor model fit. These variables could have provided insight into the determinants of a veteran representative role. Future research should include measures to help identify and understand the facets and impact of hardship on veteran identity.

#### Conclusion

This research sought to answer the question of whether a veteran identity among treatment team members results in favorable outcomes for veterans entering and proceeding through treatment programs.

The research conducted is unique for several reasons. To date no other research on veteran identity in VTCs exists. It is the only research which seeks to better understand the relationship between VTC personnel structures and policy outputs and outcomes through the lens of representative bureaucracy theory. It increases the type of identities and number of organizations under study. More specifically, it explores the relationship between veteran identity and policy outcomes for veterans as they enter and proceed through treatment programs. To facilitate this research an original survey instrument captured a unique data set. In

answering the research question, veteran identity does have an impact on policy outcomes. However, the findings are that this relationship breaks from expectations and point to one that is highlighted by unfavorable outcomes.

These factors come together to guide future discussion on representative bureaucracy theory and VTCs. Future discussions on how to effectively and efficiently implement personnel structures in current or future VTCs are likely to benefit from this research. From VTCs the discussion on effective and efficient personnel structures can be broadened to include current or future specialty courts. The larger specialty court family includes family violence courts, drug courts, mental health courts, drunk driving courts, gambling courts, and prostitution courts. If history is any indication, more specialized courts will likely be created to address the needs of a unique sub-group of offenders. Budgetary concerns will likely dominate these discussions. Taken from this research is the ability to provide policymakers with an understanding of how to implement personnel structures in current and future courts. Appendix A

VTC Eligibility Laws of States in Sample Frame

The VTCs selected for this study are in a three-state contiguous region. Disparity exists across courts on eligibility requirements. Some states in the survey frame have laws that provide minimum guidelines on the structure and administration of VTCs, while other states do not have any VTC-specific legislation. To provide a measure of comparison, a brief overview of each state's laws and legislation are provided.

# Louisiana

The state of Louisiana does not have legislation outlining the structure and administration of VTCs. Each VTC establishes their own respective eligibility requirements for program participation. There are currently four VTCs in the state that comprise both misdemeanor and felony level courts. The state of Louisiana does not currently have a state-level VTC coordinator.

#### New Mexico

The state of New Mexico does not have legislation governing VTCs, such as eligibility requirements. The administration of VTCs falls under the hierarchy of problem-solving courts in New Mexico and follows the best practice standards established by the National Association of Drug Court Professionals (NADCP) and Justice for Vets. Specific court structure and administration varies between the courts. There is a state-level coordinator that manages the two courts within the state. One court is a misdemeanorlevel court and the other is a felony-level court.

### Texas

The current eligibility requirements for VTCs in Texas are established by the 85<sup>th</sup> Legislature (2017), in the Government Code, Title 2. Judicial Branch, Subtitle K. Specialty Courts, Chapter 124, Veterans Treatment Court Program. The 85<sup>th</sup> Legislature amended previous legislation on VTCs by expanding eligibility requirements. The statute enumerates eligibility requirements for VTCs by first defining a veteran as any person who served, or is currently serving, in any branch of the armed forces, reserves, national guard, or state guard (Texas 85<sup>th</sup> Legislature, H.B. 3069, Regular Session, 2017). VTCs accept veterans charged with any misdemeanor or felony offense, but it must be established that the veteran:

> (1) suffers from a brain injury, mental illness, or mental disorder, including post-traumatic stress disorder, or was a victim of military sexual trauma that: (A)occurred during or resulted from the defendant's military service; and (B) affected the defendant's criminal conduct at issue in the case; or

(2) is a defendant whose participation in a veterans treatment court program, considering the circumstances of the defendant's conduct, personal and social background, and criminal history, is likely to achieve the objective of ensuring public safety through rehabilitation of the veteran in the manner provided by Section 1.02(1), Penal Code. (Texas 85<sup>th</sup> Legislature, H.B. 3069, Regular Session, 2017).

The second provision for eligibility is the key distinction from previous legislation. The second pathway for eligibility allows more veterans to be considered for entry into VTCs regardless of a mental health diagnosis. In addition, the Texas statute does not limit veteran entry into VTCs based on discharge status nor does it set forth pre- or post-plea structure. Beyond the basic legislation for VTCs, each individual court has latitude in structuring and administering the court. There are currently 29 VTCs across the state of Texas that comprise both misdemeanor and felony level courts and there is no state-level coordinator.

Appendix B

Non-Paragraph Form of Dependent Variables in the Model

#### Equation 1—Entries

This variable is a measure of JIVs admitted to VTCs (measured as a dichotomous outcome).

 $H_0$  (Null): There is no relationship between veteran identity and the number of entries into VTCs; that is, the slope coefficient is zero and there is no veteran identity— entry relationship.  $H_0$ :  $\beta=0$ 

H<sub>1</sub> (Alternative): There is a relationship between veteran identity and the number of entries into VTCs; that is, the slope coefficient is not zero and there is a positive veteran identity—entry relationship, as veteran identity increases the number of entries increase. H<sub>1</sub>:  $\beta \neq 0$ 

## Equation 2—Exclusions

This variable is a measure of eligible JIVs not admitted to VTCs (measured as a dichotomous outcome).

H<sub>0</sub> (Null): There is no relationship between veteran identity and the number of exclusions from VTCs; that is, the slope coefficient is zero and there is no veteran identity—exclusion relationship. H<sub>0</sub>:  $\beta$ =0

H<sub>1</sub> (Alternative): There is a relationship between veteran identity and the number of exclusions of eligible veterans from VTCs; that is, the slope coefficient is not zero and there is a negative veteran identity—exclusion relationship, as veteran identity increases the number of exclusions decrease. H<sub>1</sub>:  $\beta \neq 0$ 

# **Equation 3—Sanctions**

This variable is a measure of the number of court-ordered sanctions for violations of the treatment program (measured as a dichotomous outcome).

H<sub>0</sub> (Null): There is no relationship between veteran identity and the number of sanctions within a VTC; that is, the slope coefficient is zero and there is no veteran identity—sanction relationship. H<sub>0</sub>:  $\beta$ =0

H<sub>1</sub>: (Alternative): There is a relationship between veteran identity and the number of sanctions within a VTC; that is, the slope coefficient is not zero and there is a negative veteran identity—sanction relationship, as veteran identity increases the number of sanctions decrease. H<sub>1</sub>:  $\beta \neq 0$ 

#### Equation 4—Incentives

This variable will be a measure of the number of court-issued incentives to reward behavior in VTCs (measured as a dichotomous outcome).

H<sub>0</sub> (Null): There is no relationship between veteran identity and the number of incentives within a VTC; that is, the slope coefficient is zero and there is no veteran identity—incentive relationship. H<sub>0</sub>:  $\beta$ =0

H<sub>1</sub> (Alternative): There is a relationship between veteran identity and the number of incentives within a VTC; that is, the slope coefficient is not zero and there is a positive veteran identity—incentive relationship, as veteran identity increases the number of incentives increase. H<sub>1</sub>:  $\beta \neq 0$ 

### Equation 5—Graduations

This variable will be a measure of JIVs who graduate VTCs (measured as a dichotomous outcome).

 $H_0$  (Null): There is no relationship between veteran identity and the number of graduations within a VTC; that is, the slope coefficient is zero and there is no veteran identity—graduation relationship.  $H_0$ :  $\beta$ =0

H<sub>1</sub> (Alternative): There is a relationship between veteran identity and the number of graduations within a VTC; that is, the slope coefficient is not zero and there is a positive veteran identity—graduation relationship, as veteran identity increases the number of graduations increase. H<sub>1</sub>:  $\beta \neq 0$  Appendix C

Survey Questions

# **Veteran Treatment Courts**

#### WELCOME TO THE VETERAN IDENTITY SURVEY!

My name is Jason Flake, and I am requesting your participation in a UT Arlington research study titled, "The Impact of a Veteran Identity Among Key Personnel on Successful Outcomes in Veteran Treatment Courts." The purpose of this study is to explore the relationship between a veteran identity among key personnel within veteran treatment courts and policy outputs and outcomes. This study will explore whether a veteran identity has an impact on successful outcomes for veterans entering and proceeding through the treatment program, measured by entries, sanctions, incentives, and graduations. A veteran identity among key personnel could help explain the decision-making processes and outcomes that affect veterans as they enter and proceed through the program. The findings from this study can directly benefit the veteran community and the larger problem-solving court population.

Once the survey is complete and the data is analyzed I will provide all the courts in the survey population with a copy of the results.

Informed Consent: The procedures that you will follow as a research subject are to complete an online survey, and it should take about ten to fifteen minutes. There are no perceived risks or direct benefits for

participating in this study. There are no alternatives to this research project, you may either choose to participate in this study by completing the survey or you can decline to participate. You may also guit participating in the study at any time. You must be at least 18 years old to participate. The survey will be hosted by Qualtrics. Any identifiable information will be kept confidential with access limited to the research team. The research team will store identifiable data on a secure drive at the University of Texas at Arlington. The research team will use password protected computers on the UTA campus to access and analyze identifiable data from the secure drive. Off campus data analysis of identifiable data by the research team will be conducted through a VPN that allows remote access to the secure drive. All individual-level data will be aggregated to the court-level. We may publish, present, or share the results, but your name will not be used. If you have questions about the study, you can contact me at my personal cell number: 817-614-7028 or my email: Jason.flake@mavs.uta.edu. In addition, my dissertation chair, Dr. R. Hissong, may be contacted at his office: 817-272-3350 or email: hissong@exchange.uta.edu. You may also contact the UTA Research Office for any additional questions or concerns at 817-272-3723 or regulatoryservices@uta.edu. By clicking on the button below, you indicate your voluntary agreement to participate in this online survey.

- o I Agree
- o I do NOT Agree

# Skip To: End of Survey If Informed Consent: = I do NOT Agree

Q1 Are you a veteran of the U.S. armed forces? (Veteran for the purposes of this survey is broadly defined as anyone who has served, or is currently serving, in any branch of the U.S. armed forces, to include the Coast Guard, for any amount of time. Veteran includes anyone regardless of their discharge status, e.g. dishonorable or bad conduct, and regardless of their VA benefit eligibility category. It includes Reserves or National Guard components and all service eras and methods of entry, e.g. drafted or volunteer, and includes those with or without combat experience).

- o Yes
- o No

### Skip To: Q7 If Are you a veteran of the U.S. armed forces = No

Q2 Did you serve during any recognized war era? (These eras include: World War II-1941 to 1946; Korean Conflict-1950 to 1955; Vietnam Era-1961 to 1975; Persian Gulf-1990 to 1991; or Afghanistan/Iraq-2001 to current).

- o Yes
- o No

Q3 Have you ever been exposed to combat or war situations? (Combat or war situations is defined as the following experiences NOT within a training environment: Ever fired a weapon, received fire, witnessed injury and/or death, or performed missions that involved these experiences).

- o Yes
- o No

Q4 Are you a current member of an organization that provides services to veterans? (Some examples of these organizations include, but are not limited to: the VFW, American Legion, AMVETS, or DAV).

- o Yes
- o No
|                                                                       | Disagree<br>Strongly | Somewhat<br>Disagree | Neither<br>Agree or<br>Disagree | Somewhat<br>Agree | Agree<br>Strongly |
|-----------------------------------------------------------------------|----------------------|----------------------|---------------------------------|-------------------|-------------------|
| Being a<br>veteran is a<br>central part<br>of who I am.               | 0                    | 0                    | 0                               | 0                 | 0                 |
| My status as<br>a veteran is<br>rarely on my<br>mind                  | 0                    | $\bigcirc$           | $\bigcirc$                      | $\bigcirc$        | $\bigcirc$        |
| l relate best<br>to other<br>veterans                                 | 0                    | $\bigcirc$           | $\bigcirc$                      | $\bigcirc$        | $\bigcirc$        |
| I feel more<br>connected to<br>civilians<br>than to other<br>veterans | 0                    | $\bigcirc$           | $\bigcirc$                      | $\bigcirc$        | 0                 |
| I spend most<br>of my time<br>with other<br>veterans                  | 0                    | $\bigcirc$           | $\bigcirc$                      | 0                 | $\bigcirc$        |

Q5 For the following statements, select ONE response that best captures your beliefs on being a veteran

Q6 For the following statements, select ONE response that best captures your beliefs on being a veteran

|                                                                                               | Disagree<br>Strongly | Somewhat<br>disagree | Neither<br>agree nor<br>disagree | Somewhat<br>agree | Agree<br>Strongly |
|-----------------------------------------------------------------------------------------------|----------------------|----------------------|----------------------------------|-------------------|-------------------|
| I am proud<br>to be a<br>veteran                                                              | $\bigcirc$           | 0                    | $\bigcirc$                       | $\bigcirc$        | 0                 |
| When I<br>meet other<br>veterans, I<br>prefer to<br>keep my<br>veteran<br>status to<br>myself | $\bigcirc$           | $\bigcirc$           | $\bigcirc$                       | $\bigcirc$        | $\bigcirc$        |
| I like it<br>when<br>people<br>know I'm a<br>veteran                                          | $\bigcirc$           | 0                    | $\bigcirc$                       | $\bigcirc$        | 0                 |

Q7 Of the following choices, which ONE best describes your position within

the veteran treatment court?

- o Judge
- o Prosecuting Attorney
- o Defense Attorney
- o Court Coordinator
- o Program Manager
- o Social Service Provider or Outreach Service Provider
- o Veterans Justice Outreach (VJO) Specialist
- o Community Supervision or Adult Probation Officer

- o Law Enforcement Officer
- o Peer Mentor Coordinator
- o Peer Mentor

Q8 What state is your court in?

- o Arkansas
- o Louisiana
- o New Mexico
- o Oklahoma
- o Texas

Q9 Please provide your court's jurisdictional designation: (For example, 1st Judicial District Court, Adams County; This is for progress tracking purposes only and WILL NOT be identified in the research)

Q10 What is your race? (Choose ONE of the following responses)

- o White
- o Black or African American
- o American Indian or Alaska Native
- o Asian
- o Native Hawaiian or Pacific Islander
- o Other

Q11 What is your ethnicity?

- o Hispanic or Latino origin
- o Not Hispanic or Latino

Q12 What is your gender?

- o Male
- o Female

Q13 What is your age?

- o 18 24
  o 25 34
  o 35 44
- o 45 54
- o 55 64
- o 65 74
- o 75 84
- o 85 or older

Q14 What is the highest level of formal or professional education you have

attained?

- o High school graduate
- o Some college
- o 2-year degree

- o 4-year degree
- o Masters Degree
- o Doctorate
- o Professional degree (For example, J.D. or M.D.)

Q15 What is the TOTAL number of days of formalized veteran treatment

court training you have received?

- o 5 days or less
- o 6 to 10 days
- o 11 to 15 days
- o 16 to 20 days
- o 21 to 25 days
- o 26 to 30 days
- o Over 30 days

Q16 What political ideology do you most strongly associate with?

- o Strong Liberal
- o Moderate Liberal
- o Independent
- o Moderate Conservative
- o Strong Conservative

Q17 What is the TOTAL amount of time you have been employed in, or how long have you dedicated your services to, THIS veteran treatment court program? (Please round to the nearest whole year). (Current VTC Employment)

- o One year or less
- o 2 to 4 years
- o 5 to 7 years
- o 8 to 10 years
- o 11 to 13 years
- o 14 or more

Q18 What is the TOTAL amount of time you have been employed in, or how long have you dedicated your services to, veteran treatment court programs OUTSIDE of your current commitment to this VTC program? (Please round to the nearest whole year). (All VTC Employment)

o Not applicable, I have ONLY been employed in, or dedicated

services to, this veteran treatment court

- o One year or less
- o 2 to 4 years
- o 5 to 7 years
- o 8 to 10 years

o 11 to 13 years

o 14 or more

Q19 Not considering veteran treatment courts, how long have you been employed in, or dedicated your services to, the government? (Please round to the nearest whole year).

o Not applicable, I have ONLY been employed in, or dedicated

time to, veteran treatment courts

- o One year or less
- o 2 to 4 years
- o 5 to 7 years
- o 8 to 10 years
- o 11 to 13 years
- o 14 to 16 years
- o 17 to 19 years
- o 20 years or more

Q20 Do you maintain or perform any professional duties or jobs outside of the veteran treatment court? (For example, judges may sit on other benches, prosecuting attorneys may be assigned cases outside the VTC setting, or social workers may have other cases outside the VTC setting).

o Yes

o No

Q21 Do you have or maintain any affiliation or membership in external professional organizations directly related to your position or job title? (Some examples of these associations include but are not limited to: the American Bar Association, American Judges Association, the Association of Prosecuting Attorneys, the National Association of Social Workers, and the American Probation and Parole Association).

- o Yes
- o No

Q22 Are you a Court Coordinator, Program Manager, Program Coordinator, or individual designated to capture and track administrative data on the court and the veterans entering and proceeding through the treatment program? (The focus of administrative and veteran data is on: entries; sanctions; incentives; infractions; graduations; and sociodemographic indicators of veterans in the treatment program, such as race, gender, and ethnicity).

- o Yes
- o No

Skip To: End of Survey If Are you a Court Coordinator, Program Manager, Program Coordinator, or individual designated to ca... = No Q23 What level or type of offense does your court allow?

- o Misdemeanor Only
- o Felony Only
- o Both Misdemeanor and Felony

Q24 If your court accepts BOTH misdemeanor and felony level offenses, what is the AVERAGE percentage of FELONY offenses allowed for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 50 percent or less
- o 51 percent or more

Q25 What is the AVERAGE number of justice-involved veterans (JIVs) ADMITTED to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 0
- o 1 to 70
- o 71 to 140
- o 141 to 210
- o 211 to 280
- o 281 to 350

## o Over 350

Q26 What is the AVERAGE number of ELIGIBLE justice-involved veterans (JIVs) NOT ADMITTED to the treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data. Eligible JIVs are defined as veterans who meet all statutorily mandated and court-specific eligibility requirements).

- o 0
- o 1 to 70
- o 71 to 140
- o 141 to 210
- o 211 to 280
- o 281 to 350
- o Over 350

Q27 What is the AVERAGE number of White, non-Latino, justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent

## o 76 percent or greater

Q28 What is the AVERAGE number of black or African-American justiceinvolved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q29 What is the AVERAGE number of Hispanic or Latino justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q30 What is the AVERAGE number of Asian justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the

court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q31 What is the AVERAGE number of American Indian or Alaska Native justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q32 What is the AVERAGE number of Native Hawaiian or Pacific Islander justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent

o 51 percent to 75 percent

o 76 percent or greater

Q33 What is the AVERAGE number of Other, not-specified, races of justiceinvolved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q34 What is the AVERAGE number of Male justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q35 What is the AVERAGE number of Female justice-involved veterans (JIVs) admitted to your treatment program for the previous THREE years? (If the

court has been in existence for fewer than three years provide an average based on available data).

- o fewer than 25 percent
- o 25 percent to 50 percent
- o 51 percent to 75 percent
- o 76 percent or greater

Q36 What is the AVERAGE number of SANCTIONS administered to justiceinvolved veterans (JIVs) for contract violations for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data. Sanctions can include but are not limited to: verbal reprimands; fees/fines; community service; increased alcohol/drug testing; phase adjustment (increased); probation revocation; incarceration; or discharge/termination from the court).

- o 0
- o 1 to 150
- o 151 to 300
- o 301 to 450
- o 451 to 600
- o 601 to 750
- o Over 750

Q37 What is the AVERAGE number of justice-involved veterans (JIVs) that have received sanctions for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 0
- o 1 to 70
- o 71 to 140
- o 141 to 210
- o 211 to 280
- o 281 to 350
- o Over 350

Q38 What is the AVERAGE number of INCENTIVES administered to justiceinvolved veterans (JIVs) for compliance or good behavior for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data. Incentives can include but are not limited to: verbal praise or recognition by the court; commendations; reduced fees; reduced court appearances; reduction of probation; reduction of charges; reduction of program requirements; phase adjustment (reduction); or gift certificates).

o 0

- o 1 to 450
- o 451 to 900
- o 901 to 1350
- o 1351 to 1800
- o 1801 to 2250
- o Over 2250

Q39 What is the AVERAGE number of justice-involved veterans (JIVs) that have received incentives for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 0
- o 1 to 70
- o 71 to 140
- o 141 to 210
- o 211 to 280
- o 281 to 350
- o Over 350

Q40 What is the AVERAGE number of INFRACTIONS issued by the court for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data. Infractions can include but are not limited to: unexcused absence from court; failure to complete assigned tasks; being late or missed probation appointments; not attending mental health or substance abuse treatment; failed alcohol or drug test; and law enforcement contact or arrest).

- o 0
- o 1 to 150
- o 151 to 300
- o 301 to 450
- o 451 to 600
- o 601 to 750
- o Over 750

Q41 What is the AVERAGE number of justice-involved veterans (JIVs) that have GRADUATED the program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 0 o 1 to 70
- o 71 to 140
- o 141 to 210
- o 211 to 280

- o 281 to 350
- o Over 350

Q42 What is the AVERAGE number of justice-involved veterans (JIVs) that have opted out, quit, or been terminated after starting the program for the previous THREE years? (If the court has been in existence for fewer than three years provide an average based on available data).

- o 0
- o 1 to 150
- o 151 to 300
- o 301 to 450
- o 451 to 600
- o 601 to 750
- o Over 750

## References

American Association of Public Opinion Research. (2016). Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys. 9th Ed. AAPOR.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5<sup>th</sup> Ed.), (DSM-5). Arlington, VA: American Psychiatric Association.

American University (Washington, D.C.). (1998). Looking at a decade of drug courts. Office of Justice Programs Drug Court Clearinghouse and Technical Assistance Project & Drug Courts Program Office.
 Washington, DC. Retrieved from:

http://hdl.handle.net/2027/pur1.32754068903396

American University, School of Public Affairs, Justice Programs Office. (2016). *Veterans treatment courts: 2015 survey results*. Retrieved from: <u>https://www.american.edu/spa/jpo/initiatives/drug-court/veterans-court.cfm</u>

Arroyo, J., & Peek, C. W. (2015). Child welfare caseworkers' characteristics and their attitudes toward non-custodial fathers. *Child Abuse & Neglect*, 47, 140–152. doi: 10.1016/j.chiabu.2015.06.007

- Baldwin, J. M. (2013). Executive summary: National survey of veterans treatment courts. Prepared for Participating Veterans Treatment Courts. Retrieved from: <u>http://dx.doi.org/10.2139/ssrn.2274138</u>
- Baldwin, J. M. (2015). Investigating the programmatic attack: A national survey of veterans treatment courts. *Journal of Criminal Law & Criminology*, *105*, 1- 39.
- Baldwin, J. M., & Rukus, J. (2015). Healing the wounds: An examination of veterans treatment courts in the context of restorative justice. *Criminal Justice Review*, 26 (2), 183-207. doi: 10.1177/0887403413520002
- Blue-Howells, J. H., Clark, S. C., van den Berk-Clark, C., & McGuire, J. F. (2013).
  The U.S. department of veterans affairs veterans justice programs and the sequential intercept model: Case examples in national dissemination of intervention for justice involved veterans. *Psychological Services*, 10(1), 48-53. doi:10.1037/a0029652
- Borders, A., McAndrew, L. M., Quigley, K. S., & Chandler, H. K. (2012). Rumination moderates the associations between PTSD and depressive symptoms and risky behaviors in U.S. veterans. *Journal of Traumatic Stress*, 25(5), 583–586. doi: 10.1002/jts.21733

Bradbury, M., & Kellough, J. E. (2011). Representative bureaucracy: Assessing the evidence on active representation. *The American Review of Public Administration*, 41(2), 157-167. doi:10.1177/0275074010367823

Breeze, J., Allanson-Bailey, L. S., Hepper, A. E., & Midwinter, M. J. (2015).
Demonstrating the effectiveness of body armour: A pilot prospective computerised surface wound mapping trial performed at the role 3 hospital in afghanistan. *Journal of the Royal Army Medical Corps*, 161(1), 36-41. doi:10.1136/jramc-2014-000249

- Britt, T. W. (2000). The stigma of psychological problems in a work environment: Evidence from the screening of service members returning from bosnia. *Journal of Applied Social Psychology*, 30(8), 1599-1618. doi:10.1111/j.1559-1816.2000.tb02457.x
- Capehart, B., & Bass, D. (2011). Traumatic brain injury among veterans returning from afghanistan and iraq. *Psychiatric Times*, 28 (7), 30-33.
- Cartwright, T. (2011). "To care for him who shall have borne the battle": The recent development of veterans treatment courts in america. *Stanford Law & Policy Review*, 22(1), 295.
- Cavanaugh, J. M. (2011). Helping those who serve: Veterans treatment courts foster rehabilitation and reduce recidivism for offending combat veterans. *New England Law Review*, 45(2), 463.

- Cayer, N. J., & Sigelman, L. (1980). Minorities and women in state and local government: 1973-1975. *Public Administration Review*, 40(5), 443-450.
- Clark, S., McGuire, J., & Blue-Howells, J. (2010). Development of veterans treatment courts: Local and legislative initiatives. In D.B. Marlowe (Ed.), *Drug court review* (Vol. VII, Issue 1, pp. 171-208). Alexandria, VA: National Drug Court Institute.
- Clemons, J. T. (2014). Blind injustice: The supreme court, implicit racial bias, and the racial disparity in the criminal justice system. *American Criminal Law Review*, 51(3), 689.
- Coll, J. E., Weiss, E. L., & Metal, M. (2013). Military culture and diversity. In A.
  Rubin, E.L. Weiss, & J.E. Coll (Eds.), *Handbook of military social work*(pp. 21-36). Hoboken, NJ: John Wiley & Sons, Inc.
- Commaroto, L, Jewell, T., & Wilder, A. (2011). *Rochester veterans court: An expanded service of the rochester drug court.* Evaluation Summary Report, August 2011, 2-16.
- Corrigan, P. W., & Watson, A. C. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice*, 9(1), 35-53. doi:10.1093/clipsy.9.1.35

- Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches. Thousand Oaks, CA: SAGE Publications, Inc.
- Defense and Veterans Brain Injury Center (DVBIC). (2017). *DoD worldwide numbers for TBI*. Retrieved from: <u>http://dvbic.dcoe.mil/dod-</u>

worldwide-numbers-tbi

- Department of Defense Task Force on Mental Health. (2007). *An achievable vision: Report of the department of defense task force on mental health.* Falls Church, VA: Defense Health Board. Retrieved from: <u>https://www.hsdl.org/?view&did=474880</u>
- Derrick, R. M., Callahan, L., Vesselinov, R., Krauel, R. W., Litzenberger, J. A., & Camp, L. R. (2017). Serving those who served: Outcomes from the san diego veterans treatment review calendar (SDVTRC) pilot program. *Psychological Injury and Law*, 1-13.
- Di Leone, B. A. L., Wang, J. M., Kressin, N., & Vogt, D. (2016). Women's veteran identity and utilization of VA health services. *Psychological Services*, 13(1), 60-68.
- Dillman, D. A., Smyth, J. D., and Christian, L. M. (2014). Internet, phone, mail, and mixed mode surveys: The tailored design method (4<sup>th</sup> ed.).
   Hoboken, NJ: John Wiley & Sons, Inc.

- Dolan, J., & Rosenbloom, D. H. (2003a). Theoretical underpinnings. In J. Dolan
  & D.H. Rosenbloom (Eds.), *Representative bureaucracy: Classic readings and continuing controversies.* (pp. 3-7). Armonk, NY: M.E.
  Sharpe, Inc.
- Dolan, J., & Rosenbloom, D. H. (2003b). Preface. In J. Dolan & D.H. Rosenbloom (Eds.), *Representative bureaucracy: Classic readings and continuing controversies.* (pp. xi-xii). Armonk, NY: M.E. Sharpe, Inc.
- Dolan, J., & Rosenbloom, D. H. (2003c). Social background, life experience, and policy advocacy: Why do civil servants act on policy preferences derived from their social backgrounds and life experiences? In J. Dolan & D.H. Rosenbloom (Eds.), *Representative bureaucracy: Classic readings and continuing controversies.* (pp. 114-116). Armonk, NY: M.E. Sharpe, Inc.
- Dresang, D. L. (1974). Ethnic politics, representative bureaucracy and development administration: The zambian case. *The American Political Science Review*, 68(4), 1605-1617. doi:10.2307/1959945
- Dunn, J. C., Fares, A., Kusnezov, N., Chandler, P., Cordoval, C., Orr, J., ...Pallis, M. (2016). US service member tourniquet use on the battlefield: Iraq and afghanistan 2003–2011. *Trauma*, 18 (3), 216-220. doi: 10.1177/1460408616632026

Eisen, S. V., Schultz, M. R., Vogt, D., Glickman, M. E., Elwy, A. R., Drainoni, M. L., ... Martin, J. (2012). Mental and physical health status and alcohol and drug use following return from deployment to iraq or afghanistan. *American Journal of Public Health*, 102 (S1), S66-S73.

doi:10.2105/AJPH.2011.300609

- Elbogen, E. B., Johnson, S. C., Wagner, H. R., Sullivan, C., Taft, C. T., & Beckham,
  J. C. (2014). Violent behaviour and post-traumatic stress disorder in
  US iraq and afghanistan veterans. *The British Journal of Psychiatry: The Journal of Mental Science*, 204(5), 368-375.
  doi:10.1192/bjp.bp.113.134627
- Elder, G. A., & Cristian, A. (2009). Blast-related mild traumatic brain injury: Mechanisms of injury and impact on clinical care. *The Mount Sinai Journal of Medicine, New York*, 76(2), 111-118. doi:10.1002/msj.20098
- Exum, H. A., Coll, J. E., & Weiss, E. L. (2011). A civilian counselor's primer for counseling veterans (2<sup>nd</sup> Ed.). Deer Park, NY: Linus Publications, Inc.
- Finlay, A. K., Smelson, D., Sawh, L., McGuire, J., Rosenthal, J., Blue-Howells, J., . .
  . Harris, A. H. S. (2016). U.S. department of veterans affairs veterans justice outreach program: Connecting justice-involved veterans with

mental health and substance use disorder treatment. *Criminal Justice Policy Review*, 27(2), 203-222. doi:10.1177/0887403414562601

Flatley, B., Clark, S., Rosenthal, J., & Blue-Howells, J. (2017). Veterans court inventory 2016 update: Characteristics of and VA involvement in veterans treatment courts and other veteran-focused court programs from the veterans justice outreach specialist perspective. Washington, DC, US Department of Veterans Affairs, Veterans Health Administration, March 2017. Retrieved from: <u>https://www.va.gov/HOMELESS/VJO.asp</u>

- Fowler, Jr., F. J. (2009). *Survey research methods* (4<sup>th</sup> Ed.). Thousand Oaks, CA: Sage Publications, Inc.
- Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences.* (7<sup>th</sup> ed.). New York, NY: Worth Publishers.

Freeman, P. K., & Houston, D. J. (2010). Belonging, believing, behaving: The religious character of public servants. *Administration & Society*, 42(6), 694-719. doi:10.1177/0095399710377981

Freeman, T. W., & Roca, V. (2001). Gun use, attitudes toward violence, and aggression among combat veterans with chronic posttraumatic stress disorder. *The Journal of Nervous and Mental Disease*, 189(5), 317-320.

- Frederickson, H. G., Smith, K. B., Larimer, C. W., & Licari, M. J. (2016). The public administration theory primer (3<sup>rd</sup> ed.). Boulder, CO: Westview Press.
- Gade, D. M. (2011). Veterans and service-connected disability status in the Department of Veterans Affairs: Representative bureaucracy at work?
  (Doctoral dissertation). Retrieved from the University of Georgia Electronic Theses and Dissertations Record.
  (gade\_daniel\_m\_201105\_phd.pdf)

Gade, D. M., & Wilkins, V. M. (2013). Where did you serve? veteran identity, representative bureaucracy, and vocational rehabilitation. *Journal of Public Administration Research and Theory*, 23(2), 267-288.

doi:10.1093/jopart/mus030

Gawande, A. (2004). Casualties of war—military care for the wounded from iraq and afghanistan. *The New England Journal of Medicine*, 351(24), 2471–2475. doi: 10.1056/NEJMp048317

Gay, C., & Tate, K. (1998). Doubly bound: The impact of gender and race on the politics of black women. *Political Psychology*, 19(1), 169-184. doi:10.1111/0162-895X.00098

- Goldman, S. (1975). Voting behavior on the united states courts of appeals revisited. *The American Political Science Review*, 69(2), 491-506. doi:10.2307/1959082
- Grabosky, P. N., & Rosenbloom, D. H. (1975). Racial and ethnic integration in the federal service. *Social Science Quarterly*, 56(1), 71-84.
- Gray, M. J., Bolton, E. E., & Litz, B. T. (2004). A longitudinal analysis of PTSD symptom course: Delayed-onset PTSD in somalia peacekeepers. *Journal of Consulting and Clinical Psychology*, 72(5), 909-913. doi: 10.1037/0022-006X.72.5.909
- Grossbard, J., Malte, C. A., Lapham, G., Pagulayan, K., Turner, A. P., Rubinsky, A. D., ... Hawkins, E. J. (2017). Prevalence of alcohol misuse and followup care in a national sample of OEF/OIF VA patients with and without TBI. *Psychiatric Services*, 68(1), 48-55. doi:

10.1176/appi.ps.201500290

- Hall, G., & Saltzstein, A. (1977). Equal employment opportunity for minorities in municipal government. *Social Science Quarterly*, 57(4), 864-872.
- Harada, N. D., Damron-Rodriguez, J., Villa, V. M., Washington, D. L., Dhanani,
  S., Shon, H., ... Andersen, R. (2002). Veteran identity and
  race/ethnicity: Influences on VA outpatient care utilization. *Medical Care*, 40(1), I117-I128.

- Harada, N. D., Villa, V. M., Reifel, N., & Bayhylle, R. (2005). Exploring veteran identity and health services use among native american veterans.
   *Military Medicine*, 170(9), 782-786.
- Hartley, R. D., & Baldwin, J. M. (2016). Waging war on recidivism among justice involved veterans: An impact evaluation of a large urban veterans treatment court. *Criminal Justice Policy Review*, 1-27. doi: 10.1177/0887403416650490
- Hawkins, M. D. (2009). Coming home: Accommodating the special needs of military veterans to the criminal justice system. *Ohio State Journal of Criminal Law*, 7(2), 563-573.
- Hindera, J. J. (1993a). Representative bureaucracy: Imprimis evidence of active representation in the EEOC district offices. *Social Science Quarterly*, 74(1), 95-108.
- Hindera, J. J. (1993b). Representative bureaucracy: Further evidence of active representation in the EEOC district offices. *Journal of Public Administration Research and Theory: J-PART*, 3(4), 415-429. doi: 10.1093/oxfordjournals.jpart.a037179
- Hindera, J. J., & Young, C. D. (1998). Representative bureaucracy: The theoretical implications of statistical interaction. *Political Research Quarterly*, 51(3), 655-671.

- Hoge, C. W., Auchterlonie, J. L., & Milliken, C. S. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to iraq or afghanistan. *JAMA*, 295(9), 1023-1032. doi: 10.1001/jama.295.9.1023
- Hoge, C. W., Castro, C. A., Messer, S. C., McGurk, D., Cotting, D. I., & Koffman, R.
  L. (2004). Combat duty in iraq and afghanistan, mental health
  problems, and barriers to care. *The New England Journal of Medicine*,
  351(1), 13-22. doi: 10.1056/NEJMoa040603
- Hoge, C. W., McGurk, D., Thomas, J. L., Cox, A. L., Engel, C. C., & Castro, C. A.
  (2008). Mild traumatic brain injury in U.S. soldiers returning from iraq. *The New England Journal of Medicine*, 358(5), 453-463. doi:10.1056/NEJMoa072972
- Hoge, C. W., Terhakopian, A., Castro, C. A., Messer, S. C., & Engel, C. C. (2007).
  Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among iraq war veterans. *The American Journal of Psychiatry*, 164(1), 150-153. doi: 10.1176/ajp.2007.164.1.150
- Holbrook, J. G., & Anderson, S. (2011). Veterans courts: Early outcomes and key indicators for success. Widener Law School Legal Studies Research Paper No. 11-25. Retrieved from: <u>https://ssrn.com/abstract=1912655</u>

Holmes, M. D., Hosch, H. M., Daudistel, H. C., Perez, D. A., & Graves, J. B.

(1993). Judges' ethnicity and minority sentencing: Evidence concerning hispanics. *Social Science Quarterly*, 74(3), 496-506.

- Hood, C. (1991). A public management for all seasons? *Public Administration*, 69(1), 3-19. doi:10.1111/j.1467-9299.1991.tb00779.x
- Hora, P. F., Schma, W. G., & Rosenthal, J. T. A. (1999). Therapeutic jurisprudence and the drug treatment court movement:
  Revolutionizing the criminal justice system's response to drug abuse and crime in america. *Notre Dame Law Review*, 74(2), 439.
- Horesh, D., Solomon, Z., & Ein-Dor, T. (2013). Delayed-onset PTSD after combat: The role of social resources. *Journal of Community Psychology*, 41(5), 532-548. doi: 10.1002/jcop.21555
- Hosmer, Jr., D. W., Lemeshow, S., & Sturdivant, R. X. (2013). *Applied logistic regression* (3<sup>rd</sup> ed). Hoboken, NJ: John Wiley & Sons, Inc.
- Hourani, L. L., & Yuan, H. (1999). The mental health status of women in the navy and marine corps: Preliminary findings from the perceptions of wellness and readiness assessment. *Military Medicine*, 164(3), 174-181.
- Humes, K. R., Jones, N. A., & Ramirez, R. R. (2011). *Overview of race and Hispanic origin: 2010*. United States Census Bureau, C2010BR-02.

Retrieved from:

https://www.census.gov/prod/cen2010/briefs/c2010br-02.pdf

- Institute of Medicine. (2010). *Returning home from iraq and afghanistan: Preliminary assessment of readjustment needs of veterans, service members, and their families.* Washington, DC: The National Academies Press.
- Johnson, L. A., Eick-Cost, A., Jeffries, V., Russell, K., & Otto, J. L. (2015a). Risk of alcohol use disorder or other drug use disorder among U.S. service members following traumatic brain injury, 2008-2011. *Military Medicine*, 180(2), 208-215. doi: 10.7205/MILMED-D-14-00268
- Johnson, R. S., Graham, D. P., Sikes, K., Nelsen, A., & Stolar, A. (2015b). An analysis of sanctions and respective psychiatric diagnoses in veterans' court. *The Journal of the American Academy of Psychiatry and the Law*, 43(2), 171-176.
- Johnson, R. S., Stolar, A. G., McGuire, J. F., Clark, S., Coonan, L. A., Hausknecht, P., & Graham, D. P. (2016a). US veterans' court programs: An inventory and analysis of national survey data. *Community Mental Health Journal*, 52(2), 180-186. doi:10.1007/s10597-015-9972-3
- Johnson, R. S., Stolar, A. G., McGuire, J. F., Mittakanti, K., Clark, S., Coonan, L. A., & Graham, D. P. (2016b). Predictors of incarceration of veterans

participating in U.S. veterans' courts. *Psychiatric Services*, 68(2), 144-150. doi: 10.1176/appi.ps.201500266

- Justice for Vets. (2015). *Veterans treatment court locations.* Retrieved from: https://justiceforvets.org/veterans-treatment-court-locations/
- Justice for Vets. (2016). *The ten key components of veteran treatment courts.* Retrieved from: <u>https://justiceforvets.org/resources/resource-library/</u>
- Kamensky, J. M. (1996). Role of the "reinventing government" movement in federal management reform. *Public Administration Review*, 56(3), 247-255.
- Keiser, L. R. (2010). Representative bureaucracy. In R.F. Durant (Ed.), *The Oxford handbook of American bureaucracy* (pp. 714-737). Oxford, UK:
   Oxford University Press.
- Keiser, L. R., Wilkins, V. M., Meier, K. J., & Holland, C. A. (2002). Lipstick and logarithms: Gender, institutional context, and representative bureaucracy. *American Political Science Review*, 96(3), 553-564. doi:10.1017/S0003055402000321
- Kelley, A. M., Athy, J. R., Cho, T. H., Erickson, B., King, M., & Cruz, P. (2012). Risk propensity and health risk behaviors in U.S. army soldiers with and without psychological disturbances across the deployment cycle.

*Journal of Psychiatric Research*, 46(5), 582-589. doi:

10.1016/j.jpsychires.2012.01.017

- Kellough, J. E. (1990). Integration in the public workplace: Determinants of minority and female employment in federal agencies. *Public Administration Review*, 50(5), 557-566.
- Kennedy, B. (2014). Unraveling representative bureaucracy: A systematic analysis of the literature. *Administration & Society*, 46(4), 395-421.
  doi: 10.1177/0095399712459724
- Kingsley, J. D. (1944). Representative bureaucracy, an interpretation of the British civil service. Yellow Springs, OH: The Antioch Press. Retrieved from: <u>http://hdl.handle.net/2027/mdp.39015016903059</u>
- Knudsen, K. J., & Wingenfeld, S. (2016). A specialized treatment court for veterans with trauma exposure: Implications for the field. *Community Mental Health Journal*, 52(2), 127–135. doi: <u>10.1007/s10597-015-9845-9</u>
- Kranz, H. (1975). Thoughts on group representativeness: A reply from mr. kranz. *Public Administration Review*, 35(1), 123-125.

doi:10.2307/975220

Krislov, S. (1974/2012). *Representative bureaucracy*. New Orleans, LA: Quid Pro, LLC.

Krislov, S., & Rosenbloom, D. H. (1981). *Representative bureaucracy and the american political system*. New York, NY: Praeger Publishers.

Kropf, M., Vercellotti, T., & Kimball, D. C. (2013). Representative bureaucracy and partisanship: The implementation of election law. *Public Administration Review*, 73(2), 242-252. doi:10.1111/j.1540-6210.2012.02654.x

Kulka, R. A., Schlenger, W. E., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., ...Grady, D. A. (1990). *Trauma and the vietnam war generation: Report of findings from the national vietnam veterans readjustment study*. New York, NY: Brunner/Mazel, Inc.

Kussman, M. J. (2009). Under secretary for health's information letter:
Information and recommendations for services provided by VHA
facilities to veterans in the criminal justice system. (IL 10-2009-005).
United States Department of Veterans Affairs, Veterans Health
Administration. Washington, DC.

Laerd Statistics. (2015). Binomial logistic regression using SPSS Statistics. *Statistical tutorials and software guides.* Retrieved from: <u>https://statistics.laerd.com</u> Levitan, D. M. (1946). The responsibility of administrative officials in a democratic society. *Political Science Quarterly*, 61(4), 562-598.
 Retrieved from: <u>http://www.jstor.org/stable/2144373</u>

 Lew, H. L., Otis, J. D., Tun, C., Kerns, R. D., Clark, M. E., & Cifu, D. X. (2009).
 Prevalence of chronic pain, posttraumatic stress disorder, and persistent post-concussive symptoms in OIF/OEF veterans:
 Polytrauma clinical triad. *Journal of Rehabilitation Research & Development*, 46(6), 697-702.

Lew, H. L., Poole, J. H., Vanderploeg, R. D., Goodrich, G. L., Dekelboum, S., Guillory, S. B., . . . Cifu, D. X. (2007). Program development and defining characteristics of returning military in a VA polytrauma network site. *Journal of Rehabilitation Research and Development*, 44(7), 1027-1034.

- Lipsky, M. (1980/2010). *Street-level bureaucracy: Dilemmas of the individual in public services*. New York, NY: Russell Sage Foundation.
- Long, N. E. (1952). Bureaucracy and constitutionalism. *The American Political Science Review*, 46(3), 808-818. Retrieved from:

http://www.jstor.org/stable/1952286
- Lowder, E. M., Rade, C. B., & Desmarais, S. L. (2018). Effectiveness of mental health courts in reducing recidivism: A meta-analysis. *Psychiatric Services*, 69(1), 15-22. doi: 10.1176/appi.ps.201700107
- Lucas, P. A., & Hanrahan, K. J. (2016). No soldier left behind: The veterans court solution. *International Journal of Law and Psychiatry*, 45(2016), 52-59. doi: 10.1016/j.ijlp.2016.02.010
- MacManus, D., Dean, K., Al Bakir, M., Iversen, A. C., Hull, L., Fahy, T., . . . Fear, N.
  T. (2012). Violent behaviour in UK military personnel returning home after deployment. *Psychological Medicine*, 42(8), 1-11.
  doi:10.1017/S0033291711002327
- Marlowe, D. B., Hardin, C. D., & Fox, C. L. (2016). Painting the current picture:
   A national report on drug courts and other problem-solving courts in
   the united states. National Drug Court Institute. Alexandria, VA.
   Retrieved from: <a href="https://www.ndci.org/resource/publications/">https://www.ndci.org/resource/publications/</a>
- McGuire, J., Clark, S., Blue-Howells, J., & Coe, C. (2013). *An inventory of VA involvement in veterans courts, dockets and tracks*. VA Veterans Justice Programs, Justice for Vets. 1-14.
- Meier, K. J. (1975). Representative bureaucracy: An empirical analysis. *American Political Science Review*, 69(2), 526-542.

- Meier, K. J. (1993a). Representative bureaucracy: A theoretical and empirical exposition. In J.L. Perry (Ed.), *Research in public administration* (Vol. 2, pp. 1-35). New Greenwich, CT: JAI Press Inc.
- Meier, K. J. (1993b). Latinos and representative bureaucracy testing the thompson and henderson hypotheses. *Journal of Public Administration Research and Theory: J PART*, 3(4), 393-414.
- Meier, K. J. (2000). *Politics and the bureaucracy: Policymaking in the fourth branch of government (4th ed.).* Fort Worth: Harcourt College Publishers.
- Meier, K. J., & Bohte, J. (2001). Structure and discretion: Missing links in representative bureaucracy. *Journal of Public Administration Research and Theory: J-PART*, 11(4), 455-470. doi:

10.1093/oxfordjournals.jpart.a003511

- Meier, K. J., & Funk, K. D. (2017). Women and public administration in a comparative perspective: The case of representation in brazilian local governments. *Administration & Society*, 49(1), 121-142. doi: 10.1177/0095399715626201
- Meier, K. J., & Nigro, L. G. (1976). Representative bureaucracy and policy preferences: A study in the attitudes of federal executives. *Public Administration Review*, 36(4), 458-469.

- Meier, K. J., & O'Toole, L. J. (2006). Political control versus bureaucratic values: Reframing the debate. *Public Administration Review*, 66(2), 177-192. doi: 10.1111/j.1540-6210.2006.00571.x
- Meier, K. J., & Rutherford, A. (2017). The politics of african-american education: Representation, partisanship, and educational equity. New York, NY: Cambridge University Press.
- Meier, K. J., & Stewart, J. (1991). *The politics of hispanic education: Un paso pa'lante y dos pa'tras.* Albany: State University of New York Press.

Meier, K. J., & Stewart, Jr., J. (1992). The impact of representative bureaucracies: Educational systems and public policies. *American Review of Public Administration*, 22(3), 157-171. doi: 10.1177/027507409202200301

- Meier, K. J., Stewart, Jr., J., & England, R. E. (1989). *Race, class, and education: The politics of second-generation discrimination.* Madison, WI: The University of Wisconsin Press.
- Meier, K. J., Wrinkle, R. D., & Polinard, J. L. (1999). Representative
   bureaucracy and distributional equity: Addressing the hard question.
   *The Journal of Politics*, 61(4), 1025-1039. doi:10.2307/2647552
- Mitchell, O., Wilson, D. B., Eggers, A., & MacKenzie, D. L. (2012). Assessing the effectiveness of drug courts on recidivism: A meta-analytic review of

traditional and non-traditional drug courts. *Journal of Criminal Justice*, 40(1), 60-71. doi: 10.1016/j.jcrimjus.2011.11.009

Morin, M. A. (2017). Department of Defense institutional responses to increase engagement in mental health services among active-duty men. *Psychology of Men & Masculinity*, 18(3), 251-255.
doi:10.1037/men0000124

- Mosher, F. C. (1968/1982). *Democracy and the public service* (2<sup>nd</sup> ed.). New York, NY: Oxford University Press, Inc.
- Nachmias, D. (1979). *Public policy evaluation: Approaches and methods*. New York, NY: St. Martin's Press, Inc.

Nachmias, D., & Rosenbloom, D. H. (1973). Measuring bureaucratic representation and integration. *Public Administration Review*, 33(6), 590-597. doi: 10.2307/974575

National Association of Drug Court Professionals. (2013). *Adult drug court best practice standards: Volume I.* Alexandria, VA: National Association of Drug Court Professionals. Retrieved from:

https://www.nadcp.org/standards/

National Association of Drug Court Professionals. (2015). *Adult drug court best practice standards: Volume II.* Alexandria, VA: National Association of Drug Court Professionals. Retrieved from:

https://www.nadcp.org/standards/

- National Council on Disability. (2009). *Invisible wounds: Serving service members and veterans with PTSD and TBI*. Retrieved from: <u>https://www.ncd.gov/rawmedia repository/veterans.pdf</u>
- Ng, E. S., & Sears, G. J. (2014). Toward representative bureaucracy: Predicting public service attraction among underrepresented groups in canada. *Review of Public Personnel Administration*, 35(4), 367-385. doi:10.1177/0734371X14544546
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: What can be done? *Assessment & Evaluation in Higher Education*, 33(3), 301-314. doi:10.1080/02602930701293231
- Obama, President B. H. (2011). *Strengthening our military families: Meeting america's commitment*. Washington, DC.
- Pallant, J. (2013). SPSS survival manual: A step by step guide to data analysis using IBM SPSS (5<sup>th</sup> ed.). Berkshire, England: Open University Press.
- Paralyzed Veterans of America. (2017). *Disability rights & advocacy.* Retrieved from: <u>http://www.pva.org/research-resources/disability-</u> <u>rights-advocacy</u>

- Patel, T. H., Wenner, K. A., Price, S. A., Weber, M. A., Leveridge, A., & McAtee, S.
  J. (2004). A U.S. army forward surgical team's experience in operation iraqi freedom. *The Journal of Trauma*, 57(2), 201-207. doi: 10.1097/01.TA.0000133638.30269.38
- Pitkin, H. F. (1967). *The concept of representation*. Berkeley, CA: University of California Press.

Publication Manual of the American Psychological Association (5<sup>th</sup> ed.).

(2001).Washington, DC: American Psychological Association.

- Rathjen, G. J. (1976). The impact of legal education on the beliefs, attitudes and values of law students. Tennessee Law Review, 44(1), 85.
- Rush, R. M., Stockmaster, N. R., Stinger, H. K., Arrington, E. D., Devine, J. G.,
  Atteberry, L., ... Place, R. J. (2005). Supporting the global war on
  terror: A tale of two campaigns featuring the 250th forward surgical
  team (airborne). *The American Journal of Surgery*, 189(5), 564–570.
  doi: 10.1016/j.amjsurg.2005.01.035
- Russell, R. T. (2009). Veterans treatment court: A proactive approach. *New England Journal on Criminal & Civil Confinement*, 35(2), 357-372.
- Russell, R. T. (2015). Veterans treatment courts. *Touro Law Review*, 31(3), Article 8, 385-401.

Sarteschi, C. M., Vaughn, M. G., & Kim, K. (2011). Assessing the effectiveness of mental health courts: A quantitative review. *Journal of Criminal Justice*, 39(1), 12-20. doi: 10.1016/j.jcrimjus.2010.11.003

Schell, T. L., & Marshall, G. N. (2008). Survey of individuals previously deployed for OEF/OIF. In T. Tanielian & L. Jaycox (Eds.), *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery* (pp. 87-115). Santa Monica, CA: RAND Corporation.

Schlenger, W. E., Kulka, R. A., Fairbank, J. A., Hough, R. L., Jordan, B. K., Marmar, C. R., & Weiss, D. S. (1992). The prevalence of post-traumatic stress disorder in the vietnam generation: A multimethod, multisource assessment of psychiatric disorder. *Journal of Traumatic Stress*, 5(3), 333–363. doi:10.1007/BF00977233

Schneiderman, A. I., Braver, E. R., & Kang, H. K. (2008). Understanding sequelae of injury mechanisms and mild traumatic brain injury incurred during the conflicts in iraq and afghanistan: Persistent postconcussive symptoms and posttraumatic stress disorder. *American Journal of Epidemiology*, 167(12), 1446-1452.
doi:10.1093/aje/kwn068

Schrager, J. J., Branson, R. D., & Johannigman, J. A. (2012). Lessons from the tip of the spear: Medical advancements from iraq and afghanistan. *Respiratory Care*, 57(8), 1305-1313. doi: 10.4187/respcare.01881

Seal, K. H., Bertenthal, D., Miner, C. R., Saunak, S., & Marmar, C. (2007).
Bringing the war back home: Mental health disorders among 103 788
US veterans returning from iraq and afghanistan seen at department of veterans affairs facilities. *Arch Intern Med.*, 167(5), 476–482.
doi:10.1001/archinte.167.5.476

- Selden, S. C. (1997). The promise of representative bureaucracy: Diversity and responsiveness in a government agency. Armonk, NY: M.E. Sharpe, Inc.
- Shen, Y., Arkes, J., & Williams, T. V. (2012). Effects of iraq/afghanistan deployments on major depression and substance use disorder:
  Analysis of active duty personnel in the US military. *American Journal of Public Health*, 102 Suppl 1(S1), S80-S87.

doi:10.2105/AJPH.2011.300425

Shen-Gunther, J., Ellison, R., Kuhens, C., Roach, C. J., & Jarrard, S. (2011). Operation enduring freedom: Trends in combat casualty care by forward surgical teams deployed to afghanistan. *Military Medicine*, 176(1), 67-78. doi:10.7205/MILMED-D-10-00109

- Simon, H. A. (1945/1997). Administrative behavior: A study of decisionmaking processes in administrative organizations (4<sup>th</sup> ed.). New York, NY: The Free Press.
- Slattery, M., Dugger, M. T., Lamb, T. A., & Williams, L. (2013). Catch, treat, and release: Veteran treatment courts address the challenges of returning home. *Substance Use & Misuse*, 48(10), 922-932. doi:

<u>10.3109/10826084.2013.797468</u>

- Smith, J. W. (2012). The anchorage, alaska veterans court and recidivism: July 6, 2004—December 31, 2010. *Alaska Law Review*, *29*(1), 93-111.
- Sowa, J. E., & Selden, S. C. (2003). Administrative discretion and active representation: An expansion of the theory of representative bureaucracy. *Public Administration Review*, 63(6), 700-710. doi:10.1111/1540-6210.00333
- Spohn, C., & Fornango, R. (2009). U.S. attorneys and substantial assistance departures: Testing for interprosecutor disparity. *Criminology*, 47(3), 813-846. doi:10.1111/j.1745-9125.2009.00163.x
- Stainbrook, K., Hartwell, S., & James, A. (2016). Female veterans in jail diversion programs: Differences from and similarities to their male peers. *Psychiatric Services*, 67(1), 133-136. doi:

10.1176/appi.ps.201400442

- State of New Mexico, Second Judicial District Court. (2011). *Veterans court program.* Retrieved from: <u>https://www.nmlegis.gov/</u>
- Stiner, M. (2012a). The VBA in veterans treatment courts: Accessing the full range of support. Justice for Vets, National Association of Drug Court Professionals. Alexandria, VA. Retrieved from:

https://justiceforvets.org/resources/resource-library/

Stiner, M. (2012b). Veterans treatment courts send veterans back to school. Justice for Vets, National Association of Drug Court Professionals. Alexandria, VA. Retrieved from:

https://justiceforvets.org/resources/resource-library/

Stiner, M. (2012c). *State departments/commissions of veterans affairs states providing invaluable assistance to veterans treatment courts.* Justice for Vets, National Association of Drug Court Professionals. Alexandria, VA. Retrieved from:

https://justiceforvets.org/resources/resource-library/

Stone, A. A., & Shiffman, S. (2002). Capturing momentary, self-report data: A proposal for reporting guidelines. *Annals of Behavioral Medicine*, 24(3), 236-243. doi:10.1207/S15324796ABM2403\_09

Strom, T. Q., Leskela, J., James, L. M., Thuras, P. D., Voller, E., Weigel, R., ... Holz,K. B. (2012). An exploratory examination of risk-taking behavior and

PTSD symptom severity in a veteran sample. Military medicine,

177(4), 390-396. doi: 10.7205/MILMED-D-11-00133

Subramaniam, V. (1967). Representative bureaucracy: A reassessment. *The American Political Science Review*, 61(4), 1010-1019.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2015). *Screening and assessment of co-occurring disorders in the justice system.* HHS Publication No. (SMA)-15-4930. Rockville, MD: Substance Abuse and Mental Health Services Administration.

Substance Abuse and Mental Health Services Administration (SAMHSA).

(2017). Veterans and military families. Retrieved from:

https://www.samhsa.gov/veterans-military-families

- Sullivan, C. P., & Elbogen, E. B. (2014). PTSD symptoms and family versus stranger violence in iraq and afghanistan veterans. *Law and Human Behavior*, 38(1), 1-9. doi:10.1037/lhb0000035
- Tabachnick, B. G., & Fidell, L. S. (2013/2018). Logistic regression. In B. G.
  Tabachnick, & L. S. Fidell (Eds.), *Using multivariate statistics* (6<sup>th</sup> ed., pp. 483-554). Uttar Pradesh, India: Pearson India Education Services Pvt. Ltd.
- Tanielian, T., & Jaycox, L. H. (2008). Summary. In T. Tanielian & L. Jaycox (Eds.), *Invisible Wounds of War: Psychological and Cognitive Injuries,*

Their Consequences, and Services to Assist Recovery (pp. 87-115).

Santa Monica, CA: RAND Corporation.

Task Force on Therapeutic Justice of the Conference of Chief Justices. (2000). *CCJ resolution 22, COSCA resolution IV: In support of problem-solving courts.* Retrieved from:

http://cosca.ncsc.org/~/media/microsites/files/cosca/policy%20pa pers/resolution-psc-aug-00.ashx

Terrio, H., Brenner, L. A., Ivins, B. J., Cho, J. M., Helmick, K., Schwab, K., ...Warden, D. (2009). Traumatic brain injury screening: Preliminary findings in a US army brigade combat team. *J Head Trauma Rehabilitation*, 24(1), 14–23. doi: 10.1097/HTR.0b013e31819581d8

Texas 85<sup>th</sup> Legislature, H.B. 3069, Regular Session. (2017). Government code. Title 2. Judicial branch. Subtitle k. Specialty courts. Chapter 124. Veterans treatment court program. Sec. 124.002. Authority to establish program; Eligibility. Retrieved from:

http://www.statutes.legis.state.tx.us/Docs/GV/pdf/GV.124.pdf

Thielemann, G. S., & Stewart, J. (1996). A demand-side perspective on the importance of representative bureaucracy: AIDS, ethnicity, gender, and sexual orientation. *Public Administration Review*, 56(2), 168-173.

- Thompson, F. J. (1976). Minority groups in public bureaucracies: Are passive and active representation linked? *Administration and Society*, 8(2), 201-226. doi: 10.1177/009539977600800206
- Tong, D., & Beirne, R. (2013). Combat body armor and injuries to the head,
  face, and neck region: A systematic review. *Military Medicine*, 178(4),
  421-426. 10.7205/MILMED-D-12-00522
- Ulmer, S. S. (1973). Social background as an indicator to the votes of supreme court justices in criminal cases: 1947-1956 terms. *American Journal of Political Science*, 17(3), 622-630.
- United States Department of Veterans Affairs. (2016). *The Veteran Population Projection Model 2016 (VetPop2016*). Retrieved from:

https://www.va.gov/vetdata/veteran population.asp

United States Department of Veterans Affairs. (2017). Veterans justice

*outreach program.* Retrieved from:

https://www.va.gov/HOMELESS/VJO.asp

- Van Riper, P. P. (1958). *History of the United States Civil Service*. Evanston, IL: Row, Peterson, and Company.
- Vaughan, T. J., Holleran, L. B., & Brooks, R. (2016). Exploring therapeutic and militaristic contexts in a veteran treatment court. *Criminal Justice Policy Review*, 1-23. doi: 10.1177/0887403416640585

Veterans of Foreign Wars. (2017). *Legislative priorities*. Retrieved from: <u>https://www.vfw.org/advocacy/national-legislative-service</u>

- Vietnam Veterans of America. (2017). *Legislative action.* Retrieved from: <a href="http://capwiz.com/vva/home/">http://capwiz.com/vva/home/</a>
- Waldo, D. (1948/2007). The administrative state: A study of the political theory of American public administration. New Brunswick, NJ: Transaction Publishers.
- Weber, M. (1946). *From Max Weber: Essays in sociology*. Edited and translated by H. H. Gerth & C. W. Mills. New York, NY: Oxford University Press.
- Wells, T. S., LeardMann, C. A., Fortuna, S. O., Smith, B., Smith, T. C. Ryan, M. A.
  K., ... Blazer, D. (2010). A prospective study of depression following combat deployment in support of the wars in iraq and afghanistan. *American Journal of Public Health*, (100)1, 90-99. doi:

10.2105/AJPH.2008.155432

- Wexler, D. B. (2000). Therapeutic jurisprudence: An overview. *Thomas M. Cooley Law Review*, 17(1), 125-134.
- White, M. D., Mulvey, P., Fox, A. M., & Choate, D. (2012). A hero's welcome? exploring the prevalence and problems of military veterans in the

arrestee population. *Justice Quarterly*, 29(2), 258-286.

doi:10.1080/07418825.2011.560890

- Wilson, J. Q. (1989). *Bureaucracy: What government agencies do and why they do it.* New York, NY: Basic Books, Inc.
- Wilson, W. (1887). The study of administration. *Political Science Quarterly*, 2
  (2), 197-222. Retrieved from: <u>http://www.jstor.org/stable/2139277</u>
- Wilson, D. B., Mitchell, O., & MacKenzie, D. L. (2006). A systematic review of drug court effects on recidivism. *Journal of Experimental Criminology*, 2(4), 459-487. doi:10.1007/s11292-006-9019-4
- Winick, B. J. (2003). Therapeutic jurisprudence and problem solving courts. *Fordham Urban Law Journal*, 30(3), 1-36.
- Wortzel, H. S. & Arciniegas, D. B. (2013). A forensic neuropsychiatric approach to traumatic brain injury, aggression, and suicide. *Journal of the American Academy of Psychiatry and the Law Online*, 41(2), 274-286.

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Jason received his Masters in Criminology and Criminal Justice and PhD in Public Administration and Public Policy from the University of Texas at Arlington. He served four years in the armed forces and retired from law enforcement. His research interests are focused on combining his military and law enforcement experience to better serve justice-involved veterans and the military community.