Article

Waging War on Recidivism Among Justice-Involved Veterans: An Impact Evaluation of a Large Urban Veterans Treatment Court

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Abstract

Problem solving courts have increasingly been adopted by jurisdictions around the country as an alternative to traditional criminal court models of justice. Veterans treatment courts (VTCs) are a type of problem-solving court being established all over the country in response to an increased number of justice-involved veterans with the return of military personnel from the Wars in the Middle East. Despite their rapid expansion, there is a dearth of research evaluating the impact of VTCs on recidivism. The current study conducted an impact evaluation regarding recidivism among participants of a large urban VTC program. Findings from descriptive and multivariate analysis reveal positive results for VTC participants, especially graduates, in comparison with the control group. Implications are discussed in context of three areas: (a) current criminal justice policy and practice implications for VTCs, (b) findings from research on other more established problem-solving courts (i.e., drug courts), and (c) research–practitioner partnerships.

Keywords

specialty courts, problem-solving courts, justice-involved veterans, veterans treatment courts, recidivism

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Introduction

Veterans treatment courts (VTCs) are one of the newest waves of specialty courts to hit the landscape of the American Criminal Justice System. VTCs are an amalgamation of drug courts and mental health courts (Pratt, 2010) and operate in a similar fashion to other specialized courts. The VTC mission is to divert eligible offenders from the traditional criminal court system to non-traditional paths to justice that mandate treatment and services (e.g., mental health and substance abuse treatment, employment and housing services), thereby addressing the underlying causes of crime in an effort to eliminate or reduce recidivism and repeat contact with the system. VTCs strive to connect veterans—or in some cases, currently enlisted military personnel—who are in contact with the criminal justice system to the treatments/services they need but to which they may not have ease of access or want to readily accept (Baldwin, 2013b, 2016; Russell, 2009).

VTC programs emerged from the colliding wakes of the returning population of veterans, the increased awareness of challenges facing these individuals, and the continuation of the specialized court movement (Baldwin, 2013b, 2016).[1] As Operation Enduring Freedom (OEF) in Afghanistan and Operation Iraqi Freedom (OIF) have officially terminated, the number of veterans and current military personnel returning home have increased through Operation New Dawn (OND) in Iraq and Operation Freedom's Sentinel (OFS) in Afghanistan (Baldwin, 2013b, 2015; White, Mulvey, Fox, & Choate, 2012). In addition, research indicates a higher prevalence of specific issues (e.g., mental health, reintegration, substance abuse)[2] related to military service/training that (a) may put veterans at a higher risk for incarceration than the general population (e.g., Greenberg & Rosenheck, 2009; Knudsen & Wingenfeld, 2016; Saxon et al., 2001) and (b) have been shown to be related to illegal, violent, and/or hostile behavior (Elbogen et al., 2012; Greenberg & Rosenheck, 2009).[3]

In response, many states have passed legislation or administrative orders creating VTCs and many jurisdictions have implemented these specific treatment court programs to handle cases involving veterans. The result is that VTCs are currently the fastest growing specialty court across the country, rapidly expanding from approximately one in 2004 to more than 260 in 2016 and functioning at the municipal, state, and federal levels with funding from all levels of government and public and private donations (Baldwin, 2013a, 2013b, 2016).[4] The naming of mentor courts and organization of conferences devoted to VTCs is evidence of their popularity, which also simultaneously furthers their expansion (Baldwin, 2016).

This exponential growth is troubling from a scientific vantage point because the full breadth of problems facing veterans from this most recent era is unknown. Historical statistics reveal veteran requests for disability from previous wars peaked more than 30 years after their service ended, which makes the interpretation of the current numbers alarming. History foretells a probable increase in the number of justice-involved veterans in future years that could have tremendous impacts on the already over-burdened U.S. correctional facilities. As of 2007, veterans represented, approximately, 10% of the incarcerated population, some 200,000 inmates (Elbogen

et al., 2012), and this statistic is considered an underestimate by some (see Baldwin, 2015).

Despite the acknowledgment of current and anticipated issues facing veterans and the expanding implementation of VTCs, extensive research on VTCs' effects on their participants does not exist. Contributing to the emergence of research in this area, this study is an empirical examination focusing on whether VTC participation is related to decreased re-arrest. Because experimental design cannot be employed, the current study compares VTC participants of a large urban VTC with a VTC-eligible group of probationers in the same jurisdiction on various factors including re-arrest. First, the extant research on VTCs is reviewed. Next, an explanation of the study's VTC and the study itself and its results are presented. Finally, a discussion of the results and their implications is presented, culminating in recommendations for future research.

Limited Available Research on VTCs

The mass operation and rapid implementation of VTCs is further problematic for another scientific reason. While this phenomenon of VTC expansion is anticipated to strengthen as the United States will continue to undergo an influx of returning veterans from this country's most recent military engagements and endeavors and organizations work toward the creation of new VTCs (Baldwin, 2013b, 2016; White et al., 2012), little is known about VTCs in general, and even less regarding their impact on participant recidivism. To date, there has been a lack of available data on VTCs regarding court outcomes (Holbrook, 2010) and little research on the predictors of recidivism for justice-involved veterans (Blonigen et al., 2014). Although there are a few reports that include data, major methodological limitations handicap any ability to gauge the reliability or generalizability of the results.

Recently, survey research has been conducted and the results are beginning to emerge. First, Holbrook and Anderson (2011) sent an online survey to 53 VTCs and only 14 responded; of those, only 11 answered the questions on graduation and recidivism. These 11 courts reported a total of 59 graduated participants (only two of these courts had more than 10 graduates) and only one who recidivated. Second, Baldwin's 2012 national survey obtained participation from 79 VTCs (a 69% response rate of the 114-VTC population at the time) and all 79 respondents answered the item regarding the types of case statuses in their VTCs to date (i.e., graduation, termination, drop-out). The 79 VTCs reported a total of 3,649 veterans in contact with their VTCs across the country. Active participant cases (51%) and graduates (34%) were higher in comparison with terminated cases (12%) and participants who drop out (3%). While no more than 2% of veterans returned to VTC after any type of participation, recidivism was not directly measured as it does not include any subsequent contact with the criminal justice system or any other form of re-offending after initial VTC contact. The statistic only indicates veterans who have returned to the VTC after initial contact or participation (i.e., graduation, termination, drop-out, opt-out; Baldwin, 2013a, 2013b, 2015). Third, in a telephone survey of 168 VTCs across the country, Veterans Justice Outreach Officers (VJOs) reported that, collectively, roughly 70% of

participants exit the VTC via graduation and the other 30% are terminated from the program (McGuire, Clark, Blue-Howells, & Coe, 2013). Results from this survey also revealed that 58% (99) of the 168 VJOs contacted responded to questions about evaluation. Of these 99, only half reported that their VTC had some sort of database, and only approximately 20% of the VTCs had an approved evaluation. Only 10 of the 99 VJOs could confirm that the VTC actually used those data for program improvement or modification purposes.

Other single-site studies have directly explored recidivism but have limitations that must be considered in the report and interpretation of their results. For example, a report from the Buffalo VTC reported a 0% recidivism rate (Russell, 2009), but the court only began operation in 2008 and the scientific method was not applied. In addition, in a report on its first 3 years in operation, the San Diego VTC cited a 4% recidivism rate for the 74 participants and zero recidivism for its 27 graduates (Krauel, 2014); the Orange County VTC reported that only four of its 43 participants were terminated from the program (McCormick-Goodhart, 2013). None of these studies, however, included much information on how recidivism was defined and what the criteria for termination from the program were, nor did they utilize comparison groups to gauge differences between participation in the program and the counterfactual.

Finally, Smith (2012) utilized the records of 133 Alaska VTC who attended hearings between July 1994 and December 2010, and Slattery, Dugger, Lamb, and Williams (2013) conducted an early impact evaluation of 83 participants over 3 years in a VTC in Colorado. Smith found that 17 of the 38 participants who graduated from the Alaska VTC from 2004 to 2006 had re-offended within 3 years, a 45% recidivism rate. Both of the study's comparison groups had lower rates of recidivism at 31% for the terminated (those who entered but did not complete the VTC program and 41% for opt-outs (those who were eligible but chose not to participate in the VTC). However, the analysis did not control for other important predictors of re-arrest such as the type of offense, but the author acknowledged that the control group consisted of offenders charged with relatively minor offenses (Smith, 2012). Conversely, zero graduates acquired charges 1 year post-graduation in Slattery et al.'s study, but the authors caution that "it may be premature to report recidivism" as only 10 veterans had graduated 1 year or more ago at the time of their study (p. 928). In regard to extralegal outcomes, homelessness and unemployment did not significantly improve for VTC participants, but participants did experience significant improvements in mental health and substance abuse from baseline to 6-month and 12-month interviews. The authors note that these improvements should continue to be examined for long-term effects.

The Substance Abuse and Mental Health Services Administration (SAMHSA) has provided grants for VTCs to establish and/or train VTC practitioners, and these grants require some form of evaluation. Although the evaluation component is a requirement of these grants, they have been limited in scope, often focusing on merely providing follow-up information from Government Performance and Results Act (GPRA) surveys and ignoring implementation and impact. Furthermore, in some instances, the VTC grant awardees did not allocate funding for the evaluation component, causing the evaluation to become an afterthought to be later included merely for compliance.

To date, very little is known about the effect of VTC programs on substance abuse and addiction, mental health (e.g., post-traumatic stress disorder [PTSD]) issues, and reduction of criminal activity for justice-involved veterans. Although some of the lack of research on VTCs is due to their relative newness and the unavailability of data (Holbrook, 2010), a few VTCs across the country have reported mixed results. Most of these reports, however, utilized self-reported court data and/or anecdotal evidence, did not control for other important factors related to recidivism, and/or included only a small number of participants (Holbrook & Anderson, 2011).

As the military operations in Iraq and Afghanistan continue to wind down, the number of military personnel returning home with PTSD- and traumatic brain injury (TBI)-related injuries is increasing, and many jurisdictions across the country have noted an upsurge in the number of justice-involved veterans. Because the response to the above phenomena has been a rapid expansion of VTCs across the country, it has become critical to both identify the similarities and differences among VTCs nationally, as well as to understand the operation and impact of this rapidly spreading alternative to traditional court. National studies have been and continue to be able to produce a national portrait of variation and similarity between VTCs, and allow for single-site participant populations and program requirements to be compared with national portraits of both VTC program participants (Baldwin, 2013a, 2013b, 2015) and types of VTCs (Baldwin, 2013a, 2013b, 2016). However, comprehensive evaluations of these specialty courts employing scientific rigor are still needed.

Furthermore, when evaluation results are available, they must be considered in tandem with the definitions of recidivism utilized by the study and by the courts themselves, as well as within the context of the eligibility requirements respective to their VTCs. Not all veterans are eligible for participation in all VTCs because many VTCs limit eligibility on the basis of various military, VA, criminal history, charge, or sentence statuses (Baldwin, 2013a, 2013b, 2015). For example, the Alaska VTC in Smith's (2012) study accepted veterans as defined by federal law who were charged with misdemeanors in the Municipality of Anchorage and its prosecutor had "the right to refuse . . . otherwise eligible individuals entry . . . due to their current offense, criminal history, or history with the VA" (Smith, 2012, p. 97).

These requirements not only indicate differences in programming, so all VTCs and their evaluation results are not directly comparable, but they also affect the type of veterans who participate in VTC program treatment, also making VTC participant populations—and, again, results—not directly comparable. While the majority of participants in both Slattery et al.'s (2013) and Smith's (2012) studies were male and White, which are consistent with the overall demographics of the military, important differences between the two VTC participant populations existed. The majority of Slattery et al.'s (2013) sample served in the Army, were OIF/OEF-era veterans (no longer enlisted), averaged two tours of combat duty, and averaged below 30 years of age, whereas Smith's sample was older and served in eras prior to OIF/OEF/OND. The majority of the Alaska VTC participants had assault charges. All Colorado participants screened positive for PTSD, 25% to 50% screened positive for TBI (depending on the instrument), one third screened positive for both PTSD and TBI,

and half tested positive for a "strong potential" for substance abuse or dependence (Slattery et al., 2013).

Current Study

In light of the need for VTC evaluation research and the recommendation for comprehensive evaluations to become standard practice (e.g., Slattery et al., 2013), the current study provides an empirical examination of a relatively large VTC in an urban county. Specifically, this recidivism study examines re-arrest in a treatment group of VTC participants and a comparison group of veteran probationers. In addition, the VTC and this study's results are examined within the national context of VTCs and VTC participant populations. The current study's VTC was implemented in 2011 at the county level and takes approximately 1 year to complete. The impact goal of this VTC is to have participants regain control of their lives. This VTC's objectives are to (a) get veterans treatment they deserve, quickly and without barriers, and (b) keep participants engaged in treatment.

This VTC is both similar to, and different from, the majority of VTCs. Similar to all VTCs nationally, this VTC had several eligibility requirements. This VTC limits participation to veterans charged with non-violent misdemeanors. While a typology of VTCs does not exist,[5] in line with the vast majority of VTCs nationally (Baldwin, 2013a, 2013b, 2016), this VTC offers mental health, substance abuse (i.e., outpatient, inpatient, detox), housing, vocational, and transportation services and treatments, and the docket and team meetings occur at least twice a month. Akin to the majority of VTCs across the country, a new arrest does not automatically result in termination. Termination is a team discussion, and a relapse with alcohol and other drugs is not unexpected. This VTC utilizes all forms of supervision employed by the majority and minority of VTCs across the country with the exception of a mentor program.[6] However, only one VTC utilized its mentor program as a form of supervision. Outside of supervision, the VTC studied here does not have a mentor program, which is consistent with approximately half of the VTCs across the country.

Differing from most VTCs nationally, this VTC excludes *all* types of felonies, whereas 89% of VTCs nationally will accept certain types of felony charges on a case-by-case basis. Whereas 53% of VTCs exclude some type of military status (i.e., discharge status, VA eligibility, combat/hazard zone), this VTC does not have any eligibility requirements related to military status. While a common issue in VTCs and research on justice-involved veterans is the identification of criminal offenders as military veterans (Baldwin, 2013a, 2013b, 2016), this VTC and the criminal justice agencies affiliated with it have a set identification and referral process in place (described below). Also unique, this VTC requires a participant to have an offense related to a mental health or substance abuse issue, and this connection must be supported by an evaluation.

The central magistrate screens arrestees and via a series of questions flags anyone who is a veteran during booking as a potential candidate. The VTC coordinator then determines eligibility and meets with the judge and defense to have the veteran fill out application if interested. Those applications then go to the district attorney who further

reviews the case to ensure eligibility requirements are met and that no exclusionary conditions exist. The district attorney has final say with regard to which veterans are allowed to enter into the VTC program.

The main VTC requirements are adherence to the tailored treatment component of the program, as well as continued monthly appearance at the VTC docket and interaction with the VTC judge, which are designed to monitor progress. In addition, the VTC participant is also required to adhere to conditions of probation and have contact with a probation officer. To successfully graduate, the veteran must complete all phases of the VTC program via maintaining treatment compliance and meeting the conditions of his or her probation.

Method

The effects of specialty courts are most often measured by the outcome of recidivism that is often defined as a new arrest after participation in the program begins. The purpose of this recidivism evaluation is to determine whether VTC participation decreases the likelihood of recidivism in comparison with probation (traditional criminal case processing). To assess the effectiveness of a treatment such as the VTC program, the VTC participants must be compared with an analogous group of offenders, or a control group. Because random assignment to the VTC is not possible, an equivalent comparison group must be utilized to provide an adequate assessment of whether participation in the VTC program results in lower recidivism rates than processing cases via traditional criminal justice processes.

Treatment and Control Groups

General treatment. The general treatment group is comprised of 144 VTC program participants who entered the VTC program in late 2010 through May of 2014 and either successfully graduated or were terminated (i.e., absconded, were administratively discharged, or voluntarily withdrew). This general treatment group contains all individuals during the study period who received VTC program treatment for at least 6 months to ensure a suitable treatment dose with which to gauge effects. The VTC follows a model of therapeutic jurisprudence: prosecution and defense work together in a non-adversarial approach, a defendant pleads into the court or is granted pretrial diversion, and he or she receives treatment and services while still being held accountable to both probation and court conditions.

This general treatment group was then split into two groups: (a) graduates (n = 128) and (b) terminated (n = 16). The graduate group consists of veterans who completed the VTC program, while the terminated group is comprised of participants who were terminated from the VTC program after at least 6 months of participation. Tables 1 and 2 list the descriptive statistics for the general treatment group and both its graduate and terminated groups in comparison with the control group.

However, due to the small size of the terminated group, further analyses comparing the terminated group with the graduate and control groups could not be conducted.

Table 1. Frequencies and Means of Characteristics for the VTC Participant and Comparison Groups.

	General treatment group[a] (*n* = 144) Frequency (%) or *M* (*SD*)			Comparison group (*n* = 157) Frequency (%) or *M* (*SD*)
	General treatment group[a] (*n* = 144)	Graduates[a] (*n* = 128)	Terminated[a] (*n* = 16)	
Age (*M*)	35 (9.6)	35.2 (9.5)	32 (10.4)	37 (13.2)
Missing	1	0	1	3
Gender				
Male	126 (88.0%)	114 (89.0%)	12 (75.0%)	143 (91.0%)
Female	17 (12.0%)	14 (11.0%)	3 (19.0%)	14 (9.0%)
Missing	1	0	1	0
Race/ethnicity				
White	45 (31.5%)	42 (32.8%)	3 (18.8%)	57 (36.5%)
Black	21 (14.7%)	21 (16.4%)	0	29 (18.6%)
Hispanic	75 (52.4%)	65 (50.8%)	10 (62.5%)	67 (42.9%)
Native American	1 (0.7%)	0	1 (6.3%)	2 (1.3%)
Missing	2	0	2	2
Prior misdemeanors (yes)	40 (27.8%)	36 (28.1%)	4 (25.0%)	49 (31.2%)
Mean prior misdemeanors	0.38	0.38 (0.66)	0.38 (.80)	0.54 (1.1)
Missing	1	1	0	0
Prior felonies (yes)	6 (4.2%)	5 (3.9%)	1 (6.3%)	8 (5.1%)
Mean prior felonies	0.05	0.05 (0.25)	0.06 (0.25)	0.06 (0.26)
Missing	1	1	0	0
Risk score (*M*)	8.78 (5.5)	8.11 (4.5)	15.6 (9.3)	8.37 (5.6)
Needs score (*M*)	12.79 (7.9)	11.99 (7.0)	20.9 (11.6)	11.44 (7.7)
Missing	32	26	6	28
Supervision level				
Minimum	31 (29.2%)	30 (23.4%)	1 (6.3%)	36 (27.9%)
Medium	65 (61.3%)	62 (48.4%)	3 (18.8%)	71 (55.0%)
Maximum	10 (9.4%)	6 (4.7%)	4 (25.0%)	22 (17.1%)
Missing	38	30	8	28
Time at risk (mean months)	28.35 (9.8)	27.4 (9.4)	35.9 (10.3)	28.69 (11.3)
Missing	0	0	0	0

Note. Due to missing values on some variables, the *N* for each variable may be less than the overall group *N*s. Number of missing are noted for each variable. VTC = veterans treatment court.
[a]The general treatment group contains both graduates and terminated categories. This group is not mutually exclusive of the graduate and terminated categories but combines them.

Comparisons between the control and general treatment groups, as well as the control and graduate groups, however, are made. For the multivariate logistic regressions, VTC participation was coded as "1" for yes participated in VTC program for at least 6 months and "0" for never participated in VTC treatment.

Comparison. The comparison (control) group includes 157 veteran offenders who were eligible for and accepted into the VTC program but declined to participate

Table 2. Total Number of Re-Arrests, Type of Re-Arrest, and Recidivism Rate for VTC Treatment Groups and Control.

		VTC general treatment group[a] (*n* = 143)		
	Comparison group (*n* = 157)	VTC general treatment group[a] (*n* = 143)	VTC graduates[a] (*n* = 127)	VTC terminated[a] (*n* = 16)
Total number of re-arrests[b]	44	34	18	16
Re-arrest offenses[c]				
DWI	13 (30%)	15 (43%)	7 (39%)	8 (50%)
Person (assault)	5 (11%)	5 (15%)	4 (22%)	1 (6.3%)
Public order	10 (23%)	6 (18%)	5 (28%)	1 (6.3%)
Property	11 (25%)	0	0	0
Drug	5 (11%)	8 (24%)	2 (11%)	6 (37.5%)
Mean number of re-arrests	0.30 (0.79)	0.24 (0.74)	0.14 (0.55)[d]	1.06 (1.39)
Individuals re-arrested				
1 re-arrest	13 (8.3%)	13 (9.1%)	7 (5.5%)	6 (37.5%)
2 re-arrests	8 (5.1%)	2 (1.4%)	2 (1.6%)	0
3 re-arrests	2 (1.3%)	2 (1.4%)	1 (0.8%)	1 (6.3%)
4 re-arrests	3 (1.9%)	3 (2.1%)	1 (0.8%)	2 (12.5%)
Total recidivism rate[e]	26 (16.6%)	20 (14%)	11 (8.7%)	9 (56.3%)

Note. VTC = veterans treatment court; DWI = driving while intoxicated.

[a]The general treatment, graduate, and terminated groups are not mutually exclusive as the general treatment group is comprised of both graduates and terminated participants who participated in the program for at least 6 months.

[b]This is not a measure of the number of people re-arrested but reflects the total number of re-arrests. The number of individuals re-arrested is also displayed at the bottom of the table.

[c]Percentages are out of the total number of re-arrests (row above). DWI offenses include DWI first, DWI > 0.15, DWI second, and obstruction of highway; person offenses include assault with bodily injury and assault with a deadly weapon; public order offenses include unlawful carrying of a weapon, violation of a protection order, public intoxication, and failure to ID or providing false information; property offenses include theft and criminal mischief; Drug offenses include possession of marijuana, possession of a controlled substance.

[d]The difference in the mean number of re-arrests between VTC graduates and the comparison group is statistically significantly at the $p \leq .05$ level.

[e]This is the actual number of individuals re-arrested versus the total number of re-arrests.

(opt-outs), opting to have their cases resolved in traditional court. These veterans were sentenced to probation during a similar time period from 2010 to 2014. Note, similar to the general treatment group, only veterans who were on probation for at least 6 months were included in the control group. For this comparison group, traditional case processing is characterized by an adversarial process: The defendant is charged by a prosecutor, represented by a defense attorney, and either found (or pleads) guilty or innocent of an offense; if guilty, a sanction is assigned. If that sanction is probation, the offender must adhere to certain conditions, the main condition being to abstain from re-offending. The control group's characteristics are listed in Tables 1 and 2.

The Data

Data for the current study were gathered from various sources including VTC program and County Community Supervision and Corrections Department (CSCD) databases.

Recidivism (re-arrest). Similar to other studies, this study defined *recidivism* as any new arrest subsequent to entering the VTC program for the treatment group and as any new arrest subsequent to the start date of their probation period for the control group. Data on re-arrests (recidivism), or arrests occurring after entering the program for VTC participants or subsequent to their probation start date for the control group, were also obtained from the state's Department of Public Safety.[7] The re-arrest dependent variable was created using 1 for re-arrest occurred and 0 for no re-arrest.

Arrest history. Arrest history data for both the VTC participants and the control group were obtained from the state's Department of Public Safety, including any misdemeanor or felony arrests occurring in the 5 years prior to entering the VTC or starting probation. The current arrest offense that resulted in referral to the VTC or placement on probation is not included in the count for prior arrest history.[8]

Risk and needs assessment scores. For both general treatment and control groups, levels of risk and need were calculated using the Wisconsin Risk/Needs Scales (WRN), which consists of an 11-item risk scale and a 12-item needs scale with scores on each facilitating placement of offenders into three categories of re-offending risk: minimum, medium, and maximum (Henderson, Daniel, Rembert, & Adams, 2007).

Supervision level. For both groups, a series of dummy variables measured minimum, medium, and maximum supervision levels based on the above risk and needs assessment scores. The intensity of supervision increases as the level of supervision increases from minimum to medium to maximum. Although supervision intensity varies by offense type, substance abuse issues, and other factors such as no contact orders, generally those on minimum supervision would have less frequent reporting requirements, probation officers meetings, and urine analysis testing than those on medium or maximum supervision.

Time at risk. For the general treatment group, time at risk refers to number of months since entering the VTC program for the general treatment group. Time at risk for the control group is the number of months since being placed on probation. For all groups, only those with at least 6 months time at risk are included in the analyses.[9] For analytic purposes, categories for time at risk for the groups are 12, 24, and 36 months, ranging from 6 to 65 months.

Additional variables. For both the treatment and control groups, additional variables include the following demographics: age (continuous), gender (dichotomous: *male* = 1 and *female* = 0), and race/ethnicity (dummy variables measuring White, Black, Hispanic, and Native American).

Analytic Plan and Results

Descriptive Analysis

Because participants could not be randomly assigned to the VTC program and comparison groups, analyses were conducted to assess any differences between the groups on key variables. Variables of focus included age, gender, race/ethnicity, prior arrests (both misdemeanor and felony), average number of prior arrests (both misdemeanor and felony), average risk and needs scores, supervision level, and average time at risk (in months). Table 1 displays the frequencies or means of these variables for the comparison group and the VTC general participant group, as well as for the smaller graduate and terminated groups that comprise the general treatment group. These comparisons indicate some descriptive differences.

The mean age of the general treatment group was approximately 2 years younger than that of the comparison group (terminated participants were slightly younger than graduates and controls on average). The general treatment group had a slightly higher percentage of females (3% more) and Hispanics (nearly 10% more) than the comparison; the comparison group contained larger percentages of White (5% more) and Black (approximately 4% more) veterans than the general treatment group. There were no Black veterans in the terminated group.

Regarding prior arrests, the general treatment and comparison groups were fairly similar. While the control group had slightly higher percentages of misdemeanor arrests (less than 4% higher), prior felonies were nearly identical with percentages differing less than 1% across the general treatment and control groups (prior felony arrest means were nearly identical at .05 and .06, respectively).

Average risk and needs assessment scores were negligibly higher for the VTC general treatment group (8.78 vs. 8.37 and 12.79 vs. 11.44, respectively). However, reducing the general treatment group down to the graduated and terminated groups reveals some descriptive differences. While both the risk and needs scores for the terminated group were the highest, the scores were nearly identical for the graduated (8.78 risk, 12.79 needs) and control (8.37 risk, 11.44 needs) groups.

Finally, medium was the most prevalent supervision level for the general treatment (61.3%) and control (55.0%) groups, followed by minimum supervision level for both groups. A higher percentage of the control group was maximum supervision level (17%) compared with the general treatment group (9%). Dividing the general treatment group into the graduate and terminated groups produced some additional differences. While the graduates were similarly comprised of mostly medium supervision level offenders (48.4%) followed by minimum level 23.4%), the terminated group was primarily maximum supervision level (25.0%) followed by medium (18.8%).

Mean time at risk was very similar for both the general treatment (28.35 months) and control groups (28.69 months), as well as for the graduates (27.4 months) and the control (28.69 months). The terminated group was at risk for the most time on average at 35.9 months.

The results of independent sample *t* tests and chi-square analyses show that despite some descriptive differences between the treatment and control groups, no statistically

significant differences exist between the VTC general treatment and the comparison group of probationers on any of these key variables.[10] However, a limitation of not being able to randomly assign participants to treatment and control groups is that they may be different with regard to unobserved variables that may be related to re-arrest. Because the only available comparison group in this study consisted of program opt-outs, important differences between groups, such as motivations to behavioral change, may exist. Therefore, the outcomes studied here could be confounded by motivation to improve or other unobserved variables, and if that is the case, the effects of motivation to improve or those other variables cannot be separated out from VTC participation effects on re-arrest. Therefore, evaluation studies that do not use random assignment to treatment and control groups are limited by potential selection bias.

It should also be noted, however, that opting out of a treatment-based court program may not always have to do with motivation to improve. Oftentimes, a defendant and/or the defense attorney will opt to have the case heard in traditional criminal court out of the belief that the defendant can get a better deal, reduced time on probation, or acquittal of charges. In addition, research has indicated that defendants and/or defense attorneys have chosen the less rigorous option of regular probation over the more time-intensive treatment-oriented specialty court program. Furthermore, there are practical reasons an offender cannot participate in an intensive treatment program such as lack of transportation, responsibility for dependent children, and inflexible employment or fear of losing that employment if participation that requires weekly treatment sessions and bi-monthly dockets will mean missing hours at work.

We do not know the reason those in the current study's control group opted out (e.g., lack of motivation to change, seeking a better deal or proclaiming innocence, or simply choosing the easier sanction), but future VTC research should endeavor to assess motivation to change as part of the VTC application and eligibility process and solicit and record reasons defendants opt out. Researchers should seek to include these measures in evaluation studies of treatment program influence on outcomes of interest. With the above caveats, the control group for this study (veterans who were eligible to participate in the VTC but refused and had their case heard in the regular court docket) is an appropriate comparison group for our study.

Recidivism Analysis

Table 2 displays the total number of re-arrests and the type of re-arrest for all groups. Following the earlier depiction, the general treatment group has been shown in its totality as well as split down to its two smaller groups (i.e., graduates and terminated). While the terminated group is too small to serve as an adequate comparison alone, the graduate group is included as a separate column in the table to assess the benefits, if any, from successful completion of the VTC program above and beyond general participation in the program for a minimum of 6 months (general treatment group).

As shown in Table 2, the comparison group had a larger total raw number of re-arrests than the VTC general treatment group. In total, the comparison group had 10 more re-arrests than the VTC participant group (44 re-arrests vs. 34 re-arrests). However, VTC

graduates, as an individual group, had considerably less overall re-arrests (18 re-arrests), resulting in 26 fewer re-arrests than the control group. Nearly half of the re-arrests for the VTC general treatment group came from terminated participants.[11]

Regarding the type of re-arrest offense, similarities and differences emerged between the groups. Driving while intoxicated (DWI) was the most prevalent for both the control (30%) and general treatment (43%) groups, as well as the graduate (39%) and terminated (50%) groups. By contrast, a larger percentage of the comparison group subjects (25%) were re-arrested for a property offense than participants and graduates (each 0%). The second most prominent offense type for the control group was property (25%), but was drug for the general treatment group (24%) and public order for the graduates (28%). The third most prominent offense types for both the control and general treatment groups was public order (23% control, 18% general treatment) but was assault for the graduate group (22%).

The overall mean number of re-arrests for the three groups is also displayed in Table 2. The VTC general treatment group had a lower mean of re-arrest than the comparison group (0.24 vs. 0.30, respectively), and the mean number of re-arrests for VTC graduates was half that of the comparison group (0.14 vs. 0.30, respectively) and statistically significant at $p \leq .05$.

Table 2 also displays the overall recidivism rate, as well as the counts and percentages of individuals re-arrested one time and multiple times. One re-arrest was the most prevalent re-arrest frequency across all groups. Specifically, the control and general treatment groups each had 13 individuals re-arrested once (8.3% and 9.1%, respectively). Two general treatment participants (1.4%) had two re-arrests versus eight of the comparison group individuals (5.1%).

For the total recidivism rate (number of individuals re-arrested), 20 general participants and 26 individuals from the comparison group were re-arrested. The total recidivism rate for general treatment is 14%, and for the comparison group is 16.6%. The recidivism rate for the general treatment group (14%) is only slightly lower than that of the comparison group (16.6%). The VTC graduates, however, had an overall recidivism rate that was roughly half that of the comparison group (8.7% graduates vs. 16.6% control).

Because Table 2 displays the *overall* recidivism rate, the total number of re-arrests and the percentage of individuals who had more than one re-arrest for each of the groups, additional analyses were conducted to take into account the individual's time at risk. Figure 1 illustrates the percentage of re-arrests for individuals in the control, general treatment, and graduate groups for three different time-at-risk categories (i.e., 12, 24, and 36 months).[12]

As shown in Figure 1, the likelihood of re-arrest increases for all groups as time at risk increases from 12 to 24 to 36 months. Results in Figure 1 illustrate that, across all three time-at-risk periods, the VTC graduate and VTC general treatment groups (not mutually exclusive of each other) have lower recidivism rates than the comparison probation group and that VTC graduates have the lowest recidivism rates.

For individuals who have at least 12 months at risk, the recidivism rate for the comparison group is nearly 2.5 times that of the graduate group: 8.7% for graduates, 14.2%

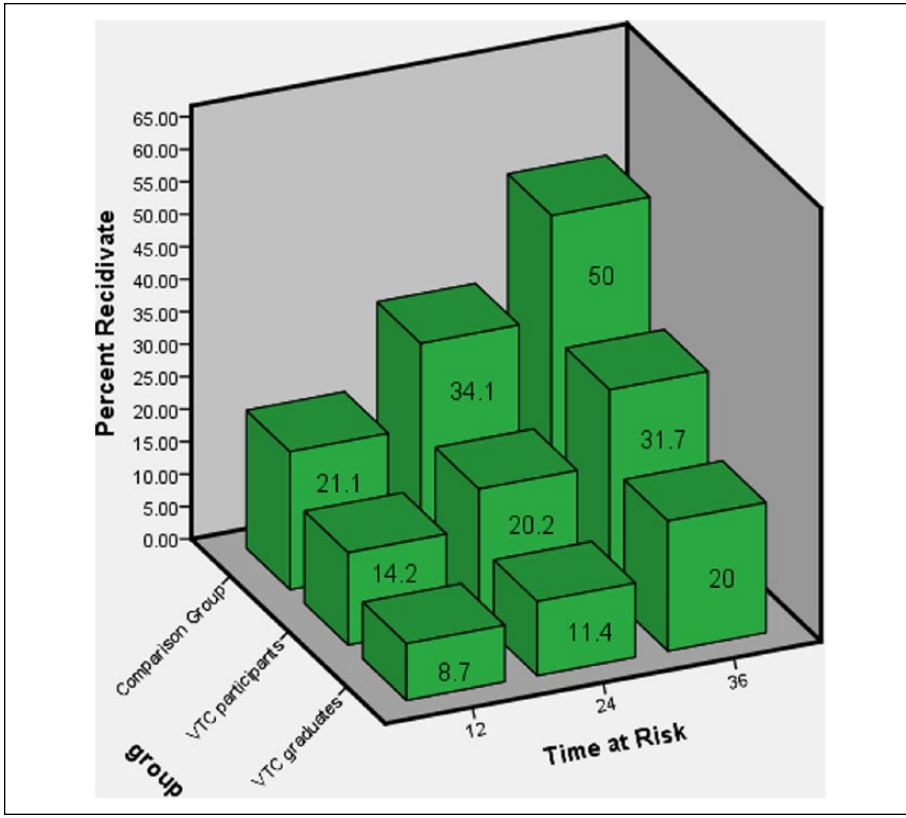

Figure 1. Percentage of VTC graduates, VTC participants, and comparison group who were re-arrested by time at risk.

Note. For the 12-month time-at-risk period, the n = 126 for VTC graduates, n = 140 for VTC participants, and n = 109 for the comparison group. For the 24-month time-at-risk period, n = 70 for VTC graduates, n = 84 for VTC participants, and n = 44 for the comparison group. For the 36-month time-at-risk period, n = 30 for VTC graduates, 41 for VTC participants, and 12 for the comparison group. VTC = veterans treatment court.

for general treatment, and 21.1% for the comparison group. This difference in recidivism rates between the general treatment group and the control group is not statistically significant, but the difference in recidivism rates between graduates and the control group is statistically significant at the $p \leq .05$ level. At the 24-month mark, recidivism rates increase to 11.4% for graduates, 20.2% for VTC general participants, and 34.1% for the comparison group. The comparison group recidivism rate is now 1.5 times that of the general treatment group and 3 times that of the graduate group. Again, the difference between the graduate and control groups is statistically significant at $p \leq .05$.

Finally, at 36 months time at risk (3 years from entering the VTC program or probation), recidivism rates are 20% for VTC graduates, 31.7% for general treatment, and

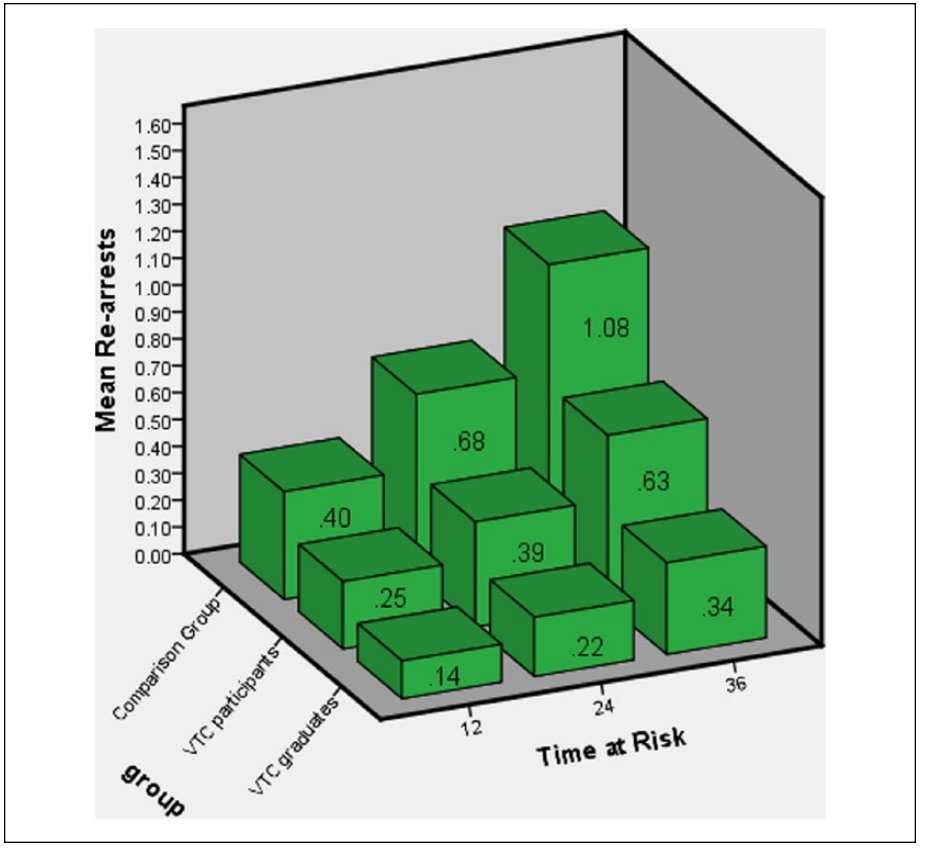

Figure 2. Average number of re-arrests for VTC graduates, VTC participants, and the comparison group by time at risk.
Note. The number of individuals (*n*) included in these analyses across the three time-at-risk periods is the same as in Figure 1. VTC = veterans treatment court.

50.0% for the control groups. The recidivism rates for the comparison group are, again, more than 1.5 times higher than the general treatment group and 2.5 times higher than the VTC graduates. In addition, the difference between comparison group and VTC graduates remains statistically significant at $p \leq .05$. In summary, 3 years after the imposition of probation or entrance into the VTC, veterans who participated in general in the VTC program had lower recidivism rates than comparable veterans on probation, and VTC participants who graduated from the program have the lowest recidivism rates of all groups. VTC graduates had statistically significantly lower recidivism rates than the comparison group of probationers across all three time at risk periods. While the control group's lowest recidivism rate was at the 12-month mark with 21.1%, VTC graduate recidivism rates peaked at the 36-month mark with 20%.[13]

As depicted in Table 2, some of the individuals in the study had multiple re-arrests; Figure 2 illustrates the mean number of re-arrests for each of the three groups controlling for time at risk.

Similar to Figure 1, the results of the analyses displayed in Figure 2 reveal that across all time-at-risk periods, VTC graduates have the lowest mean number of re-arrests. At 12 months time at risk, VTC graduates had 0.14 average re-arrests, VTC general participants had 0.25 average re-arrests, and the comparison group had 0.40 average re-arrests. Although mean re-arrests between the VTC general participant and control group were not statistically significant, VTC graduates had almost 3 times fewer average re-arrests than the comparison group, which was statistically significant at $p \leq .05$. At 24 months, VTC graduates still had the fewest average re-arrests. Again, the comparison group had over 3 times as many average re-arrests than the VTC graduates (statistically significant at $p \leq .05$), and the VTC participant group had one third less average re-arrests than the comparison group, with 0.68 for the comparison group and 0.39 for the VTC participant group (not significantly different at $p \leq .05$).

Mean arrests 3 years subsequent to program entry or start of probation were 0.34 for the VTC graduates, 0.63 for the general treatment group, and 1.08 for the comparison group. While mean re-arrests increased for all groups at 36 months time at risk, VTC graduates, again, had more than 3 times fewer average re-arrests than the comparison group (almost reached statistical significance, $p = .06$). The VTC general participant group had roughly one third less average re-arrests than the comparison group (this difference was not statistically significant). Therefore, at 3 years time at risk, average re-arrests reach more than one for the comparison group, whereas VTC graduates only average roughly a third and general treatment group averages approximately two thirds of an arrest.

Finally, to explore whether the recidivism reduction effects of VTC participation or graduation discovered in the above analyses are confounded by other important factors, logistic regression was used to determine whether participation in the VTC program is significantly related to re-arrest while holding other variables constant. Two logistic regression models were run, and the results are located in Tables 3 and 4. Odds ratios (*OR*) are listed in the Exp(*B*) column of both tables.[14]

Table 3 depicts results from the first model and reveals that three variables were statistically significant in their relationship to re-arrest (a) VTC participation, (b) time at risk (months), and (c) history of prior misdemeanor(s). Note, this model excludes risk and needs scores and supervision level because logistic regression analysis excludes any variables with missing data and some cases from both the general treatment and control groups had missing values for those variables.

As displayed in Table 3, VTC participation, months at risk, and prior misdemeanors were statistically significant. VTC participation was significant net of other variables in the model and had an *OR* of .435. This is promising news for the VTC program studied because the ratio is less than 1.0, meaning that treatment exposure (while controlling for the variables in the model) is related to a decreased odds/risk of being re-arrested in comparison with the control group.

Table 3. Multivariate Logistic Regression Model Analyzing Predictors of Re-Arrest (n = 297).

	b (*SE*)	Exp(*B*)
VTC participation	−0.843* (0.40)	0.435
Months at risk	0.075*** (0.02)	1.078
Age	−0.029 (0.02)	0.971
Gender = male	0.352 (0.53)	1.422
Prior misdemeanors	0.793* (0.36)	2.290
Prior felonies	1.087 (0.67)	2.964
Race/ethnicity		
Black	0.349 (0.54)	1.418
Hispanic	0.457 (0.41)	1.579
Constant	−2.997 (0.78)	0.050
Nagelkerke R^2	.222	

Note. VTC = veterans treatment court.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

Table 4. Multivariate Logistic Regression Model Including Risk and Needs Scores (n = 238).

	b (*SE*)	Exp(*B*)
VTC participation	−0.892* (0.45)	0.410
Months at risk	0.053** (0.02)	1.055
Risk score	0.131* (0.06)	1.140
Needs score	0.020 (0.03)	1.020
Supervision level		
Medium	0.210 (0.72)	1.234
Minimum	−0.442 (1.08)	0.643
Age	−0.028 (0.02)	0.973
Gender = male	0.511 (0.58)	1.668
Prior misdemeanors	0.376 (0.43)	1.457
Prior felonies	0.873 (0.78)	2.395
Race/ethnicity		
Black	−0.263 (0.63)	0.769
Hispanic	−0.114 (0.47)	0.892
Constant	−3.460 (1.43)	0.031
Nagelkerke R^2	.317	

Note. VTC = veterans treatment court.
*$p \leq .05$. **$p \leq .01$. ***$p \leq .001$.

The number of months at risk was also significant, which indicates that as time since entering the VTC program or being placed on probation increases so do the odds of re-arrest. Finally, veterans with prior misdemeanor arrests have greater odds of re-arrest than those without prior misdemeanors. Conversely, having prior felony arrests

was not significant, but the number of offenders from all groups with prior felonies was very small. None of the demographic variables (i.e., age, gender, race/ethnicity) reached statistical significance in its relationship to re-arrest. In summary, the comparison group had greater odds of re-arrest in comparison with the general treatment group regardless of age, gender, and race/ethnicity, time at risk, and prior misdemeanors or felonies.

To examine all variables of interest, this logistic regression excluded the cases with missing values for the three previously excluded variables (i.e., risk and needs scores and supervision level), reducing the sample to 238 veterans.[15] Results from this latter model are displayed in Table 4. Regarding the newly included variables, only the risk scores were significantly associated with re-arrest; as risk scores increase, the odds of re-arrest also increase. Two of the variables significantly related to re-arrest (i.e., general VTC participation and months at risk) remained statistically significant in this model; however, the variable for prior misdemeanors failed to reach significance when risk and need scores and supervision level were included.

Scholars have recommended calculating relative risk (RR) to aid in the correct interpretation of the effects of *x* on *y* in lieu of utilizing odds ratios, which have been described as non-intuitive (Osborne, 2006) and inconvenient (Roncek, 1991) in the interpretation of effects. To obtain the RR of re-arrest for VTC participants versus the comparison group of probationers, we used the following formula in which RR = relative risk, OR = odds ratio, and P0 = the proportion of non-exposed individuals (Holcomb, Chaiworapongsa, Luke, & Burgdorf, 2001; Zhang & Yu, 1998):

$$RR = OR / \left[\left(1 - P0\right) + \left(P0 \times OR\right)\right].$$

Using the data from Table 3, RR was calculated for treatment and for prior misdemeanors (the two statistically significant dichotomous variables). For general treatment, the RR estimate is 0.49, meaning that VTC participants are half as likely as the comparison group to be re-arrested. The RR for prior misdemeanors is 1.45, meaning that veterans with at least one prior misdemeanor arrest are nearly 1.5 times more likely to be re-arrested than veterans without a prior misdemeanor arrest(s). Using data from Table 4 that included risk and needs scores and supervision levels, the RR calculation concerning general VTC participation was 0.48, which is similar to that of Table 3 (0.49). Therefore, even when controlling for risk and needs assessment scores and supervision levels, VTC participants are nearly half as likely as the comparison group to be re-arrested.

Overall, the findings from this study's recidivism evaluation indicate that participation in the VTC studied was related to the likelihood of being re-arrested. Regardless of time at risk (up to 36 months), a lower percentage of VTC participants were re-arrested in comparison with the probation group. Examining the VTC participants who successfully completed the VTC program (graduates) separately from those who were terminated revealed that graduates had the lowest re-arrest rates of all mutually exclusive groups (i.e., graduates, terminated, and control). Furthermore, the reduced recidivism rates for VTC graduates in comparison with the control group were

statistically significant even when controlling for the amount of time at risk. Both recidivism rates and mean number of re-arrests are more than 2 times, and in some cases more than 3 times, lower for VTC graduates than for the control group of probationers across all three different periods of time at risk with most of these differences being statistically significant.

Furthermore, the multivariate logistic regression results indicated that these relationships held while controlling for other important variables. In this study, the VTC participants were significantly less likely to be re-arrested than their probation counterparts while controlling for various factors. Time at risk (both models) and prior misdemeanor arrests (first model) were significantly, and positively, related to being re-arrested (regardless of group membership). In summary, the study discovered that participation in this VTC program is associated with reduced recidivism rates, as well as lower mean numbers of re-arrests, and that participants who complete the program (graduate) have recidivism rates that are significantly lower than the comparison group of probationers.

Discussion

Although this study provided some evidence that participation in this particular VTC program was beneficial in reducing re-arrest up to 36 months after program entry, these results must be interpreted in light of specific limitations. Similar to most evaluations of justice-related programs and their participants, a true experimental design was not possible. While selection bias on the part of the program was not an issue as both the general treatment and control groups were program eligible, selection bias on the part of the individual remained a limitation as the veterans chose whether to initially participate in or opt out of the program. Thus, our finding that participation in the VTC was related to reduced recidivism could be confounded by unobserved differences between those who chose to participate and those who did not.

Prior research has discovered motivating factors for program opt-out, such as transportation issues, the want to avoid the time and effort required of specialized court programs, and the fear of more severe sanctions being imposed if terminated from the program. Specific national-level VTC research has revealed that the most prevalent reasons for both opt-out and drop-out reported by VTCs were that offenders perceived programs as too rigorous, they did not want treatment, or they believed they can get a "better deal" in traditional court.[16] Non-VTC research has discovered that offenders have chosen prison over an intensive supervision program one third of the time (Petersilia, 1990), have preferred prison to probation because probation was considered stricter (Crouch, 1993), and believed intermediate sanctions to be just as punitive as prison (Petersilia & Deschenes, 1994). Although we believe our control group is an adequate comparison for the purposes of the recidivism analyses presented here, the findings must be weighed appropriately with the recognition that lack of random assignment to treatment may hinder equivalence of control group comparability and that unobserved variables on which the treatment and control groups could differ may exist. Likewise, matching as a method to minimize differences between groups was

not employed in this study as our intent was to compare the VTC treatment group with a similar group of justice-involved veterans who also met the eligibility requirements and were accepted into the VTC program but opted to have their case processed via traditional court processes and were placed on probation. Matching would not have been appropriate for our purposes and could not be employed due to the limited sample sizes of the groups. We instead employed chi-square and *t* tests to assess equivalence of the groups on the covariates of interest.

The most common goals and objectives of VTCs across the country are related to crime and safety, specifically, reducing recidivism/creating law-abiding citizens and promoting/maintaining public safety (Baldwin, 2013a, 2013b, 2016), and the present study's results indicate that the VTC examined is achieving this primary goal. Whether the VTC participant group's reduced re-arrest rates are actually related to motivation to change, receipt of treatment for underlying issues related to criminality, the experience of increased supervision and accountability via continued contact with the VTC team (constellation of probation officers, judges, Veteran Justice Outreach officers, prosecution and defense attorneys, and treatment providers), or the camaraderie experienced in the VTC setting,[17] VTCs—and specialty courts in general—are the vehicles through which many of those potential influences are delivered. In addition, if the desired outcomes of reduced criminal and justice system involvement are being achieved, then they may be an appropriate sanction for certain types of offenders.

Recently, questions have been raised regarding whether the success for specialty courts is due to their therapeutic jurisprudence approach or use of procedural justice components where participant offenders are treated with more respect and less as a criminal (Kaiser & Holtfreter, 2015). Specialty court dockets operate very differently from traditional criminal court processes also in that the courtroom workgroup acts as a team in front of the offender (i.e., prosecution and defense work in concert instead of as adversaries). The majority of VTC respondents have reported believing that participants did change via completion of the VTC program and witnessing veterans reintegrating into communities, acquiring steady employment, decreasing or ceasing substance abuse, and achieving a better understanding of themselves and/or the causes of their behavior (Baldwin, 2013a, 2013b, 2014). They also reported increases in pride, self-esteem, integrity, responsibility, and a sense of hope in the veteran participants as well as improvements in familial relationships and mental health (Baldwin, 2013a, 2013b, 2014).

Although this study did suffer from limitations previously discussed, the combination of this VTC's similarity to other VTCs across the country, this study's findings being in line with those of previous research on problem solving, and the results of our chi-square analyses and *t* tests provide some confidence of the generalizability of the results. First, the present study's VTC is not only similar in operation, types of treatment and services provided, and eligibility requirements (all previously discussed) to the majority of VTCs nationally, but it is also similar in its experience of opt-outs. While some may be concerned that VTC-eligible veterans opted out of participation in this court, the majority (87%) of VTCs in the survey's national sample reported eligible participants had declined program participation (Baldwin, 2013a, 2013b). In addition,

the recidivism rates of our control group of veteran probationers reached 50% for the 3-year time-at-risk category, which is similar to general research findings regarding the effectiveness of probation on re-arrest. The results of the analyses in the current study, albeit confined to only one VTC program, are therefore promising for the influence of VTCs on treatment provision and recidivism reduction for justice-involved veterans.

Despite the lack of data regarding outcomes for most VTCs across the country, VTCs are modeled after drug treatment courts for which 15 to 20 years of research has found lower recidivism rates for drug court participants (D. Wilson, Mitchell, & MacKenzie, 2006), and this study's findings are similar to those of drug court research. For example, in a national study of more than 2,000 drug court graduates, Roman, Townsend, and Singh Bhati (2003) reported a 27% recidivism rate 2 years after graduation. The recidivism rates resultant from this study are similar to the drug court recidivism rates with 11.4% for VTC graduates and 20.2% for VTC participants recidivating at 2 years time at risk. At 36 months time at risk, recidivism rate for the VTC graduates was 20% and for VTC participants was 31.7%. These drug court and this study's results are very positive in comparison with recent nationwide recidivism statistics where recidivism rates were roughly 68% after 3 years from being released from state prison and 77% 5 years from release (Durose, Cooper & Snyder, 2014). The current study's comparison group recidivism rate is also similar to these national rates with 50% of the comparison group recidivating at 3 years time at risk.

Conclusion

Although previous statistics reveal that criminal histories of veteran and non-veteran inmates are similar (Mumola, 2000), there are no existing data on the recidivism rates of justice-involved veterans specifically (Blonigen et al., 2014). However, research has revealed that various risk factors such as combat exposure, PTSD, TBI, and chronic homelessness may be more prevalent in veteran populations and potential correlates of offending and likelihood of arrest (Blonigen et al., 2014). In addition, regardless of criminogenic needs, having a previous history of arrest strongly predicts future justice involvement for justice-involved veterans (Elbogen et al., 2012), which is similar to non-veterans.

This study is one of the first to assess recidivism and its risk factors for VTC participants in comparison with veteran non-participants. With recidivism rates for those processed via traditional criminal court processes hovering around 66%, similar to previously adopted specialty court programs, such as drug courts, this study indicates that VTCs may be a viable tool in slowing the revolving door of the criminal justice system while getting justice-involved veterans the treatment and services they need. Indeed, VTCs appear to be a feasible intervention for the assessment and evaluation of criminogenic needs of justice-involved veterans, as well as an appropriate program of treatment and supervision to decrease recidivism rates in terms of re-arrest of veterans. The results of the current study reveal that VTC participants have lower recidivism rates and lower mean numbers of re-arrests than a similar group of veteran probationers, and these results are even more pronounced for VTC participants who graduated from the program.

These positive results regarding VTC participation aside, the second logistic regression analysis revealed that risk scores were positively and significantly associated with re-arrest, but there were no significant differences in re-arrest by supervision level. Individuals on a medium or minimum supervision level were no less likely to recidivate than those on a maximum supervision level. The risk need responsivity (RNR) model of recidivism reduction (Andrews & Bonta, 2010) stresses that intensive treatment interventions should be targeted at high-risk individuals. Previous research has shown that the use of intensive treatment programs for low-risk individuals may actually have adverse effects on the achievement of intended outcomes (Blonigen et al., 2014); however, this was not supported by the current study. This initial study indicates that VTCs should include medium- and high-risk veterans charged with misdemeanors in their participant pools, not exclude them. Regardless, VTC teams need to ensure that they are using reliable and valid risk assessment instruments in determinations of the risk and need of veterans admitted into their programs for the application of appropriate treatment and for future research to determine whether risk level may be related to recidivism. In addition, due to exclusion of participants with current felony offenses in this study's sample, future recidivism research should include a diverse group of offenders.

Similar to the early rise of drug courts, VTCs are quickly spreading and rapidly gaining support across the country without any systematic assessment. Although this recidivism evaluation produced positive results for participants and especially graduates, single- and multisite evaluations must be conducted to determine whether certain VTC programs and/or program components affect different types of veteran offenders differently. Future studies should also include additional measures including, but not limited to, motivation to treatment and reasons for participant opt-out and termination. This research may allow for the development of evidence-based best practices for these specialized courts. However, this development should not only occur, but must also be accurate. To increase the merit of future outcome evaluations, and thus the potential best practices, program creators and administrators must carefully conceptualize their program components and focus on effective implementation, and researchers and practitioners must effectively collaborate with these ultimate goals in mind. This research appears to be beginning with this study addressing the issue of recidivism and the impact of a VTC program on it through research–practitioner partnerships.

Authors' Note

The viewpoints and conclusions are strictly those of the authors and do not necessarily represent the positions of the Substance Abuse and Mental Health Services Administration (SAMHSA) or the study site agencies.

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Notes

1. For a detailed explanation of the conceptual foundation of veterans treatment courts (VTCs) and the climate that fostered their emergence, see Baldwin (2016).
2. Veterans have higher incidents of post-traumatic stress disorder (PTSD) than the general population (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995) and are therefore at an increased risk of criminal justice involvement (Knudsen & Wingenfeld, 2016). Estimates are that 25% to 40% of current returning veterans have psychological and neurological injuries related to PTSD or traumatic brain injury (TBI) (National Council on Disability, 2009). Specifically, approximately 17% of Operation Iraqi Freedom (OIF) veterans returning stateside were diagnosed with a serious mental disorder, a twofold increase over predeployment levels (Hoge, Castro, Messer, McGurk, Cotting & Koffman, 2004). Overall, estimates are that of the 1.64 million Operation Enduring Freedom (OEF)/OIF veterans exposed to combat stress (Knudsen & Wingenfeld, 2016), 20% have PTSD (Tanielian & Jaycox, 2008). Reports show that upward of 75% of veterans with PTSD are also dealing with substance abuse issues compared with the 15% to 40% of persons with mental health issues in the general population who also have substance abuse issues (Tanielian & Jaycox, 2008).
3. In a review of studies, Blonigen et al. (2014) report that substance abuse is a consistent link to criminal justice involvement for veterans. Higher levels of alcohol abuse also lead to higher levels of violent offending, especially increased incidences of spousal abuse (Gondolf & Foster, 1991).
4. For national reviews of VTCs and the participants they serve, please see Baldwin (2016) and Baldwin (2015), respectively
5. Baldwin (2013b) is the only attempt to create a typology of VTCs that is in print. The effort was unable to determine a clear typology, but the research is continuing.
6. Specifically, drug testing, reporting to agency, treatment attendance verification, housing checks, medication, level testing, employment checks, curfew checks, electronic monitoring, Global Positioning System (GPS) monitoring, scram, and ignition interlock.
7. These data were obtained from the Department of Public Safety in October of 2014 and, therefore, only include arrest information up to that date.
8. The current offense charge was driving while intoxicated (DWI) for 82% of the VTC participants and 71% of the comparison group.
9. Only those with 6 months time at risk were included in the analyses as we wanted to ensure enough treatment dosage of the VTC program to make conclusions about its effectiveness in reducing recidivism compared with the control group. For this study's analyses, time at risk begins at the 6-month mark in program or on probation.

10. Levene's test for equality of variances was included in *t* tests; for two of the variables (age and average number of prior misdemeanors), there were differences in variances between the groups. For these two variables, *t* tests were interpreted using the output results where the assumption of equal variances is not assumed; the results from that output similarly showed no significant differences in means for the treatment and comparison groups on these variables.
11. Re-arrests could have resulted in termination from the program or occurred after the individual had already been terminated from the program for other reasons (e.g., non-compliance with treatment conditions).
12. Time at risk still varies across these three categories but the months denote the minimum amount of time at risk for individuals to be included in the sub-analysis. For example, the 12-month bars represent re-arrest rates for individuals that had at least 1 year of time elapse since entering the VTC program or beginning probation, the 24-month bars only include individuals who had at least 2 years since entering the VTC program or starting probation, and, similarly, the 36-month bars represent individuals with at least 3 years since entering the VTC program or starting probation.
13. For individuals with less than 12 months time at risk, recidivism rates were zero for both VTC graduates and participants (although the *N* was only 2) and 5.7% for the comparison group ($n = 35$). There were no VTC graduates or participants who had more than 48 months time at risk but for the comparison group, recidivism rates reached 60% at 4 years from the start of probation.
14. Odds ratios were interpreted following the guidelines provided by Osborne (2006).
15. For this analysis with the new $N = 238$, there are no significant differences between the treatment and control groups on the covariates or the dependent variable except for the variable measuring time at risk. The VTC participant group has significantly longer average months at risk (27.9 vs. 21.2) than the control group ($p \leq .01$). Despite this, results from this regression model reveal that participation in the VTC results in reduced likelihood of recidivism.
16. According to Baldwin (2013a, 2013b, 2015, 2016), common conversation between attorneys and veterans centered on what the actual time spent incarcerated would be if the veteran chose not to participate because serving half of a sentence, at most, due to jail overcrowding and being released without probation may be more attractive than the lengthy and rigorous VTC program.
17. Baldwin and Rukus (2015) discovered the importance of military camaraderie in qualitative VTC study.

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