

Correlates of Program Success and Recidivism among Participants in an Adult Pre-Arrest

Diversion Program

Albert M. Kopak<sup>1</sup>

Gregory A. Frost<sup>2</sup>

<sup>1</sup>Corresponding author; Department of Criminology & Criminal Justice, Western Carolina University, Belk 410, 1 University Drive, Cullowhee, NC, 28723; email: amkopak@wcu.edu; tel: 828-227-2328; fax:828-227-7065

<sup>2</sup>Adult Civil Citation Network, 3333 West Pensacola Street, Tallahassee, FL, 32304

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## Abstract

Adult pre-arrest diversion, also known as "deflection," programs have great potential to change the way the criminal justice system currently operates. One defining feature of these programs is that they offer eligible adults the opportunity to avoid a formal criminal arrest record and all of the negative consequences that are associated with an arrest. The current study provides an assessment of factors related to successful program completion and post-program recidivism for participants in the Pre-Arrest Diversion/Adult Civil Citation (PAD/ACC) program in Leon County, Florida. Behavioral assessment and formal arrest data were drawn from 854 adults who participated in the program between March 2013 and June 2016. Adults undergo a comprehensive behavioral health assessment which utilizes the Global Assessment of Individual Needs (GAIN-SS). Several behavioral health indicators were associated with program outcome measures, which included successful program completion and post-program arrest. Participants with greater propensity for crime or violence, elevated levels of behavioral problems, and symptoms of a substance use disorder, including a positive drug screen, were more likely to fail to complete the program. Greater indications of behavioral problems and positive drug screen results were also significantly associated with a higher probability of post-program arrest. These results contribute to the lean knowledge related to the performance of these expanding programs, and they also have direct implications for the refinement of the PAD/ACC program.

Keywords: civil citation, pre-arrest diversion, deflection, adult, recidivism

## Introduction

Low-level offenses comprise the vast majority of criminal justice cases and are widely distributed through the adult population. It has been estimated that there were more than 10 million misdemeanor cases nationwide in 2006 and more recent statistics show these low-level offenses comprise more than two thirds of all arrests (Boruchowitz et al., 2009; Harris, 2015). This is a clear indication of the immense volume of cases that are processed in any given year. Such a large number of cases also serves as a direct indication of the substantial proportion of the population who has been arrested. In fact, research has shown that approximately 30% of the general population has been arrested by age 23, with male and racial minority group members having the highest prevalence rates (Brame, Turner, Paternoster, & Bushway, 2012; Brame, Bushway, Paternoster, & Turner, 2014).

Being arrested, even only one time, can serve as a turning point and carry significant and permanent consequences across many life domains (Laub & Sampson, 1993). Employment is one of the most important areas in life and also one that may be affected the most by an arrest. If given a choice, the majority (60%) of employers have indicated they would avoid hiring someone with a criminal record, even if the record involved an arrest that did not result in a conviction (Stuckey, 2008). A criminal record is associated with a significant amount of social stigma, making employers reluctant to pass potential employees with an arrest through the screening process, especially if competitive applicants do not have similar disqualifying characteristics (Pager, 2003). These effects are also long lasting based on the evidence demonstrating that it can take someone with an arrest and conviction up to 20 years to reach the same level of employability as someone without a similar criminal record (Blumstein & Nakamura, 2009).

In addition to the employment-related hardships arrestees are likely to encounter, research has also shown that being arrested without a conviction can increase the likelihood of future criminality, limit educational attainment, exacerbate family problems, and reduce job stability through the sometimes permanent disqualification for an array of professional licensures (Berson, 2013; Fagan & Freeman, 1999; The Council of State Governments, 2017; Sweeten, 2006; Uggen et al., 2014). Florida Supreme Court Chief Justice Gerald Kogan accurately captured the gravity of these circumstances when he wrote: “The future consequences of even a minor criminal conviction can change the course of a defendant’s life” (Smith & Madden, 2011, p. 8).

Given the large number of adults who are impacted by the long-term consequences of arrests for minor offenses, there is a desperate need to develop and implement successful alternatives to arrest and prosecution-as-usual. Many jurisdictions are moving in this general direction to mitigate adults’ involvement in the criminal justice system, but nearly all of these efforts still result in a criminal arrest record. The most popular may be the citation-in-lieu of arrest, which is also commonly referred to as a notice-to-appear or a court summons. This process commences with a formal charge for prosecution, which is issued by a police officer, and involves documentation of the case leading up to and following the court appearance. Even though the person is not physically arrested and taken to jail for booking, the dispositions of these cases are formally recorded in state criminal arrest records repositories. This process is gaining popularity for its ability to alleviate jail overcrowding (Subramanian et al., 2015), but it fails to address several important issues.

One of these is that adults who receive a citation-in-lieu of arrest are still subject to the often permanent negative consequences associated with a criminal record. The second is that a

traditional citation-in-lieu of arrest does not address any of the potential underlying causes of the behavior that likely resulted in the arrest. Adults who receive citations-in-lieu of arrest make an appearance in court, typically enter a guilty plea, and pay a fine. There is no attention devoted to the underlying behavioral or mental health issues which may have contributed to the offense in the first place.

Pre-arrest diversion is not a new criminal justice concept (e.g. Palmer, 1975), but it is used sparingly and is typically reserved for specific types of offenses. As the term suggests, this is a law enforcement driven approach delivered as an alternative to issuance of a citation-in-lieu of arrest or custodial arrest. Officers have the discretion to make a determination of whether someone meets eligibility criteria for participation in the specialty program. This generally involves probable cause for a certain types of low-level misdemeanor offenses, someone who is deemed a minimal risk to public safety because of limited or no prior criminal arrests, and compliant behavior. These programs are aptly labeled diversion programs because participants are directed toward behavioral intervention services and community supervision as opposed to being prosecuted and fined after being booked into a jail. The strengths of pre-arrest diversion programs are found in their provision of evidence-based behavioral health intervention services and the avoidance of a formal arrest record for successful participants. Acceptance of this strategy has led to the term "deflection" being used instead of "diversion" as it applies in this context (Charlier, 2015).

#### Law Enforcement Diversion and Deflection Programs

There are currently only a few law enforcement direct diversion or deflection programs in operation, but this concept is growing in popularity. This trend is likely to continue given recent

federal guidelines indicating, “Law enforcement agencies should consider adopting preferences for seeking “least harm” resolutions, such as diversion programs or warnings and citations in lieu of arrest for minor infractions” (President’s Task Force on 21<sup>st</sup> Century Policing, 2015, p. 92). The programs that are currently on the leading edge of this initiative vary widely in their target populations and established protocols for determining eligibility for participation. Although they can be categorized as law enforcement-directed diversion or deflection programs, it is important to note that most are initiated after an arrest has been made.

A prime example of one of the fastest growing diversion model programs in the country is the Law Enforcement Assisted Diversion (LEAD) program, which has been in operation in King County, Washington since 2011. LEAD was developed by the Seattle Police Department for low-level drug offenses and prostitution. Rather than continually taking repeat offenders into custody, police officers have been given the authority to refer them to a community behavioral health provider. LEAD participants are assigned a case manager, undergo a comprehensive series of behavioral and mental health assessments, and receive individualized attention for their needs. This can include treatment services, housing assistance, and legal advocacy. The ultimate goals of the program are to address the underlying reasons for recurring contact with the criminal justice system among a group of repeat drug or prostitution offenders who require a significant amount of law enforcement resources.

The initial evaluation of the LEAD program has garnered a lot of support for the program. An experimental group ( $n = 203$ ) of LEAD participants experienced 60% lower odds of rearrest within six months compared to a control group ( $n = 115$ ), which was prosecuted through the criminal justice system as usual (Collins et al., 2015). Adults who participated in the LEAD program were also less likely to be subsequently charged with a felony compared to the

group that was not diverted. This evidence has contributed to LEAD's endorsement as one of the National Institute of Justice's promising programs, as well as the rapid expansion of this type of diversion program, especially for drug offenders.

The Intervention Program for Substance Abusers (IPSA) in Montgomery County, Maryland is another law enforcement diversion program focused on drug-involved offenders. It is a cooperative effort between corrections, law enforcement agencies, the state attorney's office, and behavioral healthcare providers. Similar to LEAD, the IPSA program is designed explicitly to reduce recidivism among low-level drug offenders. Adults are eligible to participate in the IPSA program only if they have been charged with a minor drug offense, have had no prior felony convictions in the past 10 years, have not served more than 30 days in jail in the past 10 years, and cannot have any pending criminal charges. In order to successfully complete the program, participants must complete 24 hours of community service, four drug education classes, submit to drug testing for the duration of their time in the program, and pay a program fee, all within a two-month time limit.

Participation in the IPSA program has many benefits. Some of these include diversion from prosecution and the corresponding traditional criminal justice process in favor of appropriate drug-related education. Successful completers will also receive the opportunity to have their criminal record expunged by the state attorney's office.

Momentum behind these types of diversion programs for low-level offenders is growing (e.g. Bernstein, 2015; Clifford, 2016; Florida TaxWatch Research Institute, 2016; Wood, 2015), but the diversion process in these two cases takes place after an arrest has been made. The issues related to the long lasting consequences of formal criminal charges may not be as important for the repeat offenders in the LEAD program or those who have a prior criminal history in the IPSA

program, making post-arrest diversion a viable alternative to prosecution-as-usual. Additionally, the beneficial components (e.g. behavioral health treatment, housing, and employment) of the LEAD, IPSA, and other direct diversion programs are noteworthy, but these programs are focused on special groups of repeat offenders.

Another category of diversion, those conceived as deflection programs, is aimed at adults accused of non-violent misdemeanor offenses who have no prior criminal record. This population of first-time offenders stands to gain the most from a pre-arrest deflection program, one which avoids the formal prosecution of a minor offense and the potentially life-altering criminal record associated with this process. A prime example of this type of program has been operating in Eau Claire County, Wisconsin since 2012. The Eau Claire County Pre-Charge Diversion Program (ECCPDP) is designed for first-time offenders and those considered low-risk based on an assessment of individuals' criminal history. Adults who enter the program are primarily charged with disorderly conduct, drug possession, possession of drug paraphernalia, or theft, but some adults who receive different charges may be considered, on a case-by-case basis. Eligible adults are required to meet with the program coordinator, enroll in an educational course, pay program and restitution fees, as well as remain offense-free for the supervision period. Participants who successfully complete these requirements will not be formally charged and prosecuted, which results in the avoidance of a formal criminal record.

An initial evaluation of the ECCPDP program generated promising results. Among the sample of 247 adults who completed the program, 46 were charged with a subsequent offense, which is equivalent to a recidivism rate of 19% (Callister & Braaten, 2016). This was compared to a 34% recidivism rate in a group of 223 adults who may have been eligible for the Pre-Charge Diversion Program, but were prosecuted before the inception of the program or were not offered

the program. These rates varied according to offense type, with participants who were in the program for drug-related offenses having the highest (39%) recidivism rates.

The ECCPDP represents a progressive of law enforcement driven program aimed at low-level, first-time adult arrestees. This type of program has the potential to not only deflect low-level offenders from the criminal justice process and reduce the number of adults who are processed through local jails and courts, it also offers the opportunity to avoid the stigma associated with a formal criminal record. The ECCPDP is one of only a few such initiatives.

#### The Pre-Arrest Diversion/Adult Civil Citation program

The Pre-Arrest Diversion/Adult Civil Citation (PAD/ACC) program in Leon County, Florida is significantly different from the vast majority of all other law enforcement diversion programs which are currently operating. Similar to the ECCPDP, the most important distinction is that the PAD/ACC involves pre-arrest and pre-charge diversion where many other programs are initiated *after* arrestees are officially booked into the criminal justice system or issued a citation-in-lieu of arrest. This seems like a minor technicality, but it is what sets the PAD/ACC and other pre-charge programs apart from those that provide services for adults after being booked into the system.

The process for issuing a pre-arrest diversion citation in the PAD/ACC program is initiated at the time of law enforcement contact. Officers have the discretion to issue a citation assuming certain eligibility criteria are met. First, there must be probable cause that the person committed a misdemeanor offense. The list of eligible offenses includes disorderly conduct, trespass, criminal mischief, petit theft, underage possession of alcohol, possession of marijuana under 20 grams, possession of drug paraphernalia, non-domestic simple battery, and non-

domestic simple assault. Second, adults must have no prior history of arrest, which is based on a criminal arrest check that is conducted by the officer immediately after contact. Third, offenders must agree to participate in the pre-arrest diversion program and victim approval is also necessary. Although they meet all the criteria, offenders can decline participation in the program. In these cases, they may receive a notice-to-appear (NTA) or be placed under physical arrest, transported to the local jail for booking, and processed-as-usual through the criminal justice system.

A key feature of the PAD/ACC program is that adults are required to participate in an intervention program delivered by a local non-profit behavioral health provider. Participants are guided through an intake process, which includes a formal behavioral health assessment and a drug screen. An individualized intervention plan is developed, and participants have 90 days to complete the program. Participants are also required to complete 25 hours of community service and pay a \$350 fee for the intervention services (which approximates the fines and court-costs of a NTA or physical arrest). Assuming participants remain drug free, avoid subsequent arrest, attend the agreed upon counseling sessions, pass assigned online educational courses, and complete community service hours, they successfully complete the program. In these cases, the behavioral health provider contacts the law enforcement agency who issued the citation with a notice of successful completion. The agency records the outcome and closes the case without an arrest record, and does not file the original charge with the state attorney's office. The behavioral health provider also notifies the law enforcement agency if adults fail to complete the terms of the program. In these cases, the issuing agency arrests the person and processes the original charge for prosecution. Unsuccessful termination from the program results in formal charging for the original offense and processing-as-usual through the criminal justice system.

Since its inception in March 2013, more than 1,000 adults have participated in the ACC program and this number continues to rise. The program's successful completion rate is slightly greater than 80% (Kopak, Cowart, Frost, & Ballard, 2015). The majority of adults enter the program for petit theft (51%), followed in sequence by possession of marijuana (27%), and underage possession of alcohol (12%).

There is a scarcity of empirical information related to the performance of adult pre-charge diversion and deflection programs in the United States, which is due in large part to the limited number of programs, as well as the limited amount of time the few have been in existence. The evaluation work which has been conducted has largely examined success rates, paying special attention to recidivism. The current study was designed to contribute to our knowledge of these programs through an assessment of similar outcomes, but also to provide a more detailed examination of the factors associated with the success of PAD/ACC program participants. There were two main objectives, one of which was to identify important indicators of successful program completion. The second main objective was to examine correlates of post-program arrest. Once these indicators of successful program completion and post-program arrest have been identified, the PAD/ACC program, as well as other pre-arrest diversion programs can be further refined.

## Methods

Data for the current study were collected from adults who participated in the Leon County PAD/ACC program beginning in March 2013 through August 2016. After issuance of a citation, program participation requires that adults report to a case manager within seven days to complete an intake assessment. This assessment is based on a comprehensive interview designed

to gather information on a number of factors related to behavioral and mental health. The comprehensive intake process, utilizing a Global Appraisal of Individual Needs (GAIN) instrument, includes screening for signs of mental health problems, behavioral health problems, substance use disorder, and involvement in various criminal activities.

The intake process also includes compulsory drug testing for all incoming participants. Those who submit a positive drug test, indicative of illegal drug use, receive requisite intervention programming. Participants who test positive during this initial drug screen are also required to conduct regular drug screens for the duration of their time under the supervision of the program.

Following the intake assessment and oral drug screen swab collection, the behavioral health provider constructs an individualized intervention plan. Based on the information provided, participants engage in private sessions with a behavioral health counsellor. These sessions include cognitive behavioral therapy and motivational interviewing approaches. Participants are also required to complete relevant educational modules, which can include drug education, anger management, and decision making skills. In order to successfully complete program requirements, participants must attend counseling sessions, complete assigned educational modules, and also record a predetermined number of community service hours.

All of the information gathered from the time of the intake assessment through program exit is contained in participants' case files. Successful program completion was documented with a letter addressed to the citation issuing agency stating that the participant successfully completed all conditions of the program. These paper files were scanned to create digital copies that would facilitate the data entry process. Data were then entered and coded in STATA 14 (StataCorp, 2015) in preparation for analyses.

Data were also collected from official arrest records. The Florida Department of Law Enforcement's (FDLE) Statistical Analysis Center provided information related to subsequent contact with the criminal justice system for adults who participated in the PAD/ACC program. FDLE analysts queried the state arrest database to determine whether or not a participant was arrested at any point after initiation of the program. This included any arrest which took place after the participant received the original citation leading to their referral to the program.

At the time of collection of post-program arrest data, a total of 1,107 adults had been issued civil citations. There were 74 active cases, which were excluded from the current analysis because this group of participants had not yet completed (or failed to complete) the program. An additional 88 cases were excluded because the participants failed to contact the behavioral health provider and conduct an initial intake assessment after receiving the citation, resulting in missing data on all of the key measures. Behavioral health assessment data or drug test results were also missing from 91 participants, which led to their exclusion from the current study. The final sample was comprised of 854 participants with complete case file and comprehensive post-program arrest data.

## Measures

*Behavioral and mental health.* The Global Appraisal of Individual Needs – Short Screener (GAIN-SS) was designed to measure several domains of behavioral and mental health and has been widely used in many contexts (Dennis, Chan, & Funk, 2006; Dennis, Feeney, Stevens, & Bedoya, 2008). The questions contained in the GAIN were posed to assess the participant's behavior in the past 12 months, which is consistent with many formal diagnostic criteria. The items were created to gather information relative to the most recent experience

(reported in a “yes/no” format) of any symptom that may be related to an underlying health problem. Internal consistency for the GAIN-SS in the current sample was satisfactory (Cronbach’s alpha = .86). This instrument has also been utilized in other research with adults in the criminal justice system (Sacks et al, 2007).

The Internalizing Disorder subscale contained five items that were created to assess the somatic and depressive symptoms participants had experienced in the past 12 months. The items included in this scale began with, “During the past 12 months, have you had significant problems with...” followed by a) feeling trapped, lonely, sad, blue, depressed, or hopeless about the future?, b) with sleep trouble, such as bad dreams, sleeping restlessly, or falling asleep during the day?, c) feeling very anxious, nervous, tense, scared, panicked, or like something bad was going to happen to you?, d) becoming very distressed and upset when something reminded you of the past? and e) thinking about ending your life or committing suicide? Responses were recorded as “0” for participants who reported not having experienced a given problem and “1” for participants who endorsed an item. These responses were summed to create an assessment of internalizing behavior which ranged from 0 – 3 with “0 Low” representative of a participant who was unlikely to need services, “1 to 2 Moderate” which represented a possible diagnosis where the participant would benefit from outpatient intervention, to “3 High” which indicated a high probability the participant would meet criteria for a formal diagnosis and likely requires formal intervention, possibly a referral to highly qualified providers.

The Externalizing Disorder subscale contained five items designed to measure behavioral problems, ranging from inattention to physical fighting, in the past 12 months. The scale was prefaced with the statement, “During the past 12 months, have you done the following things two or more times?” and was followed with a) Lied or conned to get things you wanted or to avoid

having to do something?, b) Had a hard time paying attention at school work, or home?, c) Had a hard time listening to instructions at school, work, or home?, d) Were a bully or threatened other people?, e) Started physical fights with other people? Responses included “0 No” for participants who reported not having a specific experience and “1 Yes” for participants who had a given experience. These responses were summed to create a general externalizing behavior scale ranging from “0 Low” to “3 High.” Moderate to high scores suggest the need to pursue mental health treatment related to attention deficits, hyperactivity, impulsivity, and conduct disorder (Dennis et al., 2008).

The Substance Use Disorder subscale contained five items which assessed several indicators of potentially problematic substance use. The scale began with, “During the past 12 months...” and was followed by, a) have you used alcohol or other drugs weekly or more often?, b) have you spent a lot of time either getting alcohol or other drugs, using alcohol or other drugs, or feeling the effects of alcohol or other drugs?, c) have you kept using alcohol or other drugs even though it was causing social problems, leading to fights, or getting you into trouble with other people?, d) your use of alcohol or other drugs caused you to give up, reduce or have problems at important activities at work, school, home or social events?, e) you had withdrawal problems from alcohol or other drugs like shaky hands, throwing up, having trouble sitting still or sleeping, or that you used any alcohol or other drugs to stop being sick or avoid withdrawal problems? Responses included “0 No,” and “1 Yes.” These items were summed to create a general substance use scale ranging from “0 Low” to “3 High.” Moderate to high scores suggest the need for participants to obtain further evaluation and possibly intervention for a moderate to severe substance use disorder.

The Crime and Violence subscale also contained five items. This scale began with the prompt, “During the past 12 months, have you...” followed by, “a) hit someone or gotten into a physical fight?, b) other than from a store, taken money or property that didn’t belong to you?, c) sold, distributed, or helped to make illegal drugs?, d) used alcohol, marijuana, or other drugs where it made the situation unsafe or dangerous for you, such as when you were driving a car, using a machine, or where you might have been forced into sex or hurt?, e) purposely damaged or destroyed property that did not belong to you?” Responses included “0 No,” and “1 Yes.” These items were summed to create a general crime and violence scale ranging from “0 Low” to “3 High.” Moderate to high scores suggest the need for participants to obtain further evaluation and possibly intervention for conduct disorder which could contribute to further criminal activity.

*Drug test results.* All participants were required to complete a drug screen at the time they entered the program. Tests were conducted to determine the use of amphetamines/methamphetamine, cocaine, methadone, opiates, PCP and THC (marijuana). Negative results received a “0” and positive results were scored “1”.

*Offense type.* Participants were categorized according to the type of misdemeanor offense for which the original citation was issued. The first group received a citation for petit theft, which comprised slightly more than half (52%) of the sample. The second group received a drug-related violation, which included possession of drug paraphernalia or possession of less than 20 grams of marijuana. This group was nearly one-third (29%) of the sample. The third and smallest (18%) group, classified as having been cited for other offenses, included those who received a citation for simple assault, simple battery, criminal mischief, trespassing, disorderly

conduct, house party, possession of alcohol under 21 years of age, or providing alcohol to a minor.

*Demographics.* Several variables were included to assess participants' demographic background characteristics. A continuous measure of age at the time of issuance of the citation was created to account for the wide range (18 – 69 years) among participants. A binary indicator of gender (“0” for male and “1” for female) was also included. Racial and ethnic background was assessed with a tripartite coding scheme which included White, Black, and Other categories. Participants of Hispanic or Latino, Asian, and mixed racial or ethnic backgrounds were included in the “Other” category due to the small numbers ( $N = 30$ ,  $N = 9$ ,  $N = 8$ , respectively) in these specific racial and ethnic groups.

*Program completion status.* One of the primary outcomes of interest for the current study was program completion status. Participants who successfully completed the program were coded “0.” Participants who did not successfully complete the program were coded “1.”

*Post-program arrest.* Formal arrest records were used to create the second outcome of interest which consisted of a measure of post-program arrest. This information was assessed with a binary indicator. Participants were coded “0” if they had not been rearrested and “1” if they had been rearrested.

*Time.* The PAD/ACC program was initiated in March 2013 with the first participants completing 90 days later, in June of the same year. Some participants in the current study completed the program as recently as August 2016. Participants who more recently completed the program had a significantly shorter period of time available to become arrested compared to participants who completed in 2013. Given prior research on the importance of capturing the proportion of time available for criminal activity among criminal justice populations (Mauricio et

al., 2009), a measure of the amount of time which lapsed between initiation of the PAD/ACC program and collection of the post-program arrest data was created for the current study. This continuous measure was computed in months and ranged from a minimum of 4.8, for participants who initiated the program just under 5 months prior to the current study, to a maximum of 43.6 ( $M = 25.1$ ,  $SD = 11.1$ ) for participants who initiated the program in March 2013.

## Results

*Descriptive statistics.* The mean age of participants in the PAD/ACC sample was almost 24 years ( $M=23.9$ ,  $SD=8.7$ ). The sample was equally split according to gender with half comprised of female (50%,  $N = 429$ ) participants and the other half (50%,  $N = 425$ ) comprised of male participants. Black or African American participants represented the largest (50%) racial category, followed by White (45%) participants, and participants (5%) who identified as Hispanic or Latino, Asian, or other racial or ethnic background.

In terms of the potential indicators of successful program completion, about one out of every four (23%) participants tested positive for illicit drugs. Among those that did test positive, the vast majority (86%) tested positive for THC (marijuana). Small proportions of participants tested positive for amphetamines (6%) followed by cocaine, methadone, other opiates, and alcohol (all at approximately 2%).

The mean GAIN scores were generally in the low-to-moderate (i.e. 1–2) range in the aggregate sample. On average, participants fell into the moderate ( $M=1.3$ ,  $SD=1.3$ ) range according to reported indicators of somatic and depressive symptoms on the Internalizing Disorder subscale. Participants reported fewer items related to behavior and conduct ( $M=0.9$ ,

$SD=1.2$ ) problems on the Externalizing Disorder subscale, and fewer yet ( $M=0.7$ ,  $SD=0.9$ ) on the Substance Use Disorder subscale. Scores were lowest ( $M=0.6$ ,  $SD=0.8$ ) on the Crime and Violence subscale, falling within the *low risk* segment of the continuum.

*Bivariate analyses.* First, it is important to note participants' rates of successful completion and the lack of arrest after participation in the program. The overwhelming majority (91%) of participants successfully completed the program requirements and a similar proportion (87%) was not arrested after program completion. Further analysis determined 7% ( $N = 58$ ) of participants who successfully completed the program were arrested at a later date compared to 69% ( $N = 51$ ) of participants who failed to complete the program and were rearrested ( $\chi^2 (1, N = 854) = 229.46, p < .001$ ).

In order to address the primary objective of the study, correlates of successful completion and post-program arrest were initially analyzed with appropriate bivariate statistics. These correlates are presented according to program completion (Table 1) and post-program arrest (Table 2). Participants who successfully completed the program were two years older, on average, than those who did not complete the program, but this difference was not significant ( $t(852)=1.94, p = .06, d=0.23, 95\% \text{ CI } [-0.01, 0.47]$ ). The lack of significant results indicated participants who were arrested after participation in the program were no different in terms of age compared to those who were not arrested ( $t(852)=1.03, p = .30, d = 0.11, 95\% \text{ CI } [-0.10, 0.31]$ ). In comparison, female participants were more likely than male participants to successfully complete the program ( $\chi^2 (1) = 15.48, p < .001$ ) and were also less likely to be arrested after exiting the program ( $\chi^2 (1) = 7.96, p = .005$ ). Participants were no more or less likely to successfully complete the program or to experience arrest after the program according to racial or ethnic background.

Table 1 about here

Program completion rates were also similar across offense categories. These success rates ranged from 89% among participants who received a citation for offenses in the *other* category (including minor in possession of alcohol, criminal mischief, simple battery, and trespass) to 93% among participants who were issued a citation for petit theft. The same pattern was observed in terms of post-program arrest. Participants were no more likely to be arrested after participation in the program based on the offense for which they originally received a citation. Only a slightly larger proportion of the group which was issued a citation for an offense in the *other* category was rearrested compared to the petit theft group and the group issued citations for drug-related offenses, but these differences were not statistically significant ( $\chi^2 (2) = 0.57, p = .751$ ).

Table 2 about here

Drug test results were associated with both outcomes of interest. A significantly larger proportion of participants who tested positive for drugs at the time they entered the program were unsuccessful ( $\chi^2 (1) = 16.70, p < .001$ ) in their attempt to complete the requirements. The group that experienced post-program arrest was also more likely to have submitted a positive drug screen at the time they initiated the program compared to participants who were not arrested after program participation ( $\chi^2 (1) = 21.80, p < .001$ ).

Scores on the GAIN subscales were systematically higher in the group which failed to complete the program requirements compared to successful completers, but not all of these differences were statistically significant. Unsuccessful participants reported significantly higher mean levels on the Externalizing Disorder subscale ( $t(852)=-2.59, p = .009, d = -0.31, 95\% \text{ CI} [-0.55 - -0.08]$ ) as well as the Substance Use Disorder subscale ( $t(852) = -3.14, p = .002, d = -0.38, 95\% \text{ CI} [-0.62, -0.14]$ ). Participants who failed to complete the program also reported higher mean scores on the Crime and Violence subscale compared to participants who successfully completed the program ( $t(852) = -2.86, p = .004, d = -0.35, 95\% \text{ CI} [-0.59, -0.11]$ ). The exception to this trend was found with the Internalizing Disorders subscale. Although unsuccessful completers reported higher mean scores on this scale relative to successful participants, this difference was not significant ( $t(852) = -1.60, p = .110, d = -0.20, 95\% \text{ CI} [-0.43, 0.04]$ ).

A similar pattern was observed between participants who were arrested after participation in the program relative to participants who were not arrested. Participants who were arrested after participation in the program reported significantly higher mean scores on the Internalizing Disorder subscale ( $t(852) = -2.31, p = .021, d = -0.24, 95\% \text{ CI} [-0.44, -0.04]$ ), as well as on Externalizing Disorder subscale ( $t(852) = -2.66, p = .008, d = -0.27, 95\% \text{ CI} [-0.47, -0.07]$ ), and the Substance Use Disorder subscale ( $t(852) = -2.73, p = .007, d = -0.28, 95\% \text{ CI} [-0.48, -0.08]$ ). The group which was arrested also reported significantly higher mean scores on the Crime and Violence subscale ( $t(852) = -4.04, p < .001, d = -0.41, 95\% \text{ CI} [-0.62, -0.21]$ ) relative to participants who were not arrested after participation in the program.

Participants who successfully completed the program, but were subsequently arrested ( $N = 58$ ) were similar to the other participants in most observed domains. The successful completer

group which was later arrested was equally comprised of male and female participants ( $\chi^2 (1) = 1.27, p = .261$ ), distributed across racial groups ( $\chi^2 (1) = 0.08, p = .962$ ), was similar in age ( $t(852) = -0.45, p = .65, d = -0.06, 95\% \text{ CI } [-0.33, 0.21]$ ), reported comparable Internalizing Disorder scores ( $t(852) = -0.49, p = .63, d = -0.07, 95\% \text{ CI } [-0.33, 0.20]$ ), equivalent Externalizing Disorder scores ( $t(852) = -1.11, p = .26, d = -0.15, 95\% \text{ CI } [-0.42, 0.11]$ ), and similar Substance use Disorder scores ( $t(852) = -1.06, p = .29, d = -0.14, 95\% \text{ CI } [-0.41, 0.12]$ ) as all other participants. One difference was observed with regard to the Crime and Violence scale. Participants who successfully completed the program but were arrested scored significantly higher ( $M = 0.95, SD = 0.87$ ) on the Crime and Violence scale compared to other participants ( $M = 0.60, SD = 0.83; t(852) = -3.04, p < .01, d = -0.41, 95\% \text{ CI } [-0.68, 0.15]$ ). The successful completer group which was later arrested was comparable to other participants with regard to offense type ( $\chi^2 (1) = 0.285, p = .867$ ), but this group did consist of a larger number of participants with positive drug test results compared to other participants ( $\chi^2 (1) = 6.32, p = .012$ ).

*Multivariate binary logistic regression results.* Based on the significant associations observed between several behavioral health factors and program outcomes (i.e. elevated externalizing behavior scores, substance use scores, and crime/violence scores, and larger proportions of positive drug test results among unsuccessful participants), a pair of logistic regression models was estimated to examine the relationships between these factors and the likelihood of unsuccessful program completion and post-program arrest. As can be seen in Table 3, there were two significant predictors of unsuccessful program completion. Female participants were significantly less likely than their male counterparts to be unsuccessfully terminated from the program ( $OR = 0.40, 95\% \text{ CI } [0.23, 0.71]$ ). In addition, participants who tested positive on the initial drug screen, at the start of the program, were more than two times as

likely to fail to complete the program compared to participants who submitted a test which did not contain evidence of recent drug use ( $OR = 2.32$ , 95% CI [1.36, 3.95]).

Table 3 about here

Similar results were observed with respect to the indicators of post-program arrest. The logistic regression results presented in Table 4 indicate female participants were significantly less likely to be arrested after participation in the program compared to male participants ( $OR = 0.52$ , 95% CI [0.33, 0.83]). In addition to experiencing an increased probability of failing to complete the program, participants who tested positive for recent drug use were more than two times as likely ( $OR = 2.16$ , 95% CI [1.35, 3.46]) as participants who did not test positive to be arrested after participation in the program.

Table 4 about here

It is also important to note this regression model included the measurement of the amount of time, in months, between participants' initiation of the program and the point at which the post-program arrest data were collected. The number of months since program initiation was a significant indicator of post-program arrest. For those who were rearrested, each additional month which lapsed since last program contact was associated with a 6% increase in the likelihood of rearrest ( $OR = 1.06$ , 95% CI [1.03, 1.08]).

Discussion

The current study was conducted to increase our limited knowledge of the performance of adult pre-arrest diversion and deflection programs through an assessment of the PAD/ACC program. One of the key objectives was to identify the correlates of successful program participation and repeat criminal justice contact. The initial results indicated participants who failed to complete the program and participants who were subsequently arrested following participation in the program reported higher mean levels of behavioral health issues, across all four domains. This finding is important given recent research which has confirmed similar indicators of emotional health can be associated with increased risk for negative outcomes among adults in the criminal justice system, including recidivism (Scott, Grella, Dennis, & Funk, 2016). Following a risk-need model, adults who participate in the adult civil citation program who demonstrate evidence of behavioral health problems may require additional intervention services in order to maximize the benefits of the program. It is possible that some adults may benefit from an outside referral to psychological or psychiatric services to fully address these factors, especially given the higher scores within the groups who experience program failure and post-program arrest.

Related to the need to address behavioral health concerns among adults in pre-arrest diversion programs, a recent meta-analytic review highlighted the associations between personality inventory scores (similar to the internalizing, externalizing, substance use disorder, and crime/violence subscales utilized in the current study) and behavioral misconduct among criminal justice-involved samples (Gardner, Boccaccini, Bitting, & Edens, 2015). Although this evidence underscores the important roles that behavioral and emotional health assessments play in gauging programmatic decisions, these types of assessments have primarily been used with post-adjudicated populations, including detained correctional populations or other closely

monitored groups, such as drug-involved offenders who suffer from severe drug use disorders. All of these groups may require various levels of behavioral health treatment, but the preliminary evidence presented here emphasizes the need to consider these needs among adults who come into contact with the criminal justice system for the first time due to a minor, non-serious offense.

It is also important to note that more than two thirds of participants who failed to successfully complete the program were also subsequently arrested. Many other specialty programs that cover a broad range of criminal justice services have also found successful program completion to be a cardinal indicator of long-term success. For instance, research conducted with drug court participants demonstrated a significantly smaller proportion of adults who successfully completed the program were rearrested compared to participants who were unsuccessfully terminated from the program (Peters & Murrin, 2000). The same result was observed among participants in a prostitution diversion program who were also significantly less likely to be rearrested if they successfully completed all the program requirements (Roe-Sepowitz, Hickie, Loubert, & Egan, 2011). This association was also noted with the completion of a mental health court program which was indicative of a lower likelihood of arrest relative to the failure to complete (Hiday & Ray, 2010). These programs cover a broad range of programming options, but the commonality between them is the importance of program completion as a critical component related to the reduction of future criminal justice involvement.

The results also demonstrated female participants tended to be more successful relative to their male peers, which is consistent with a significant amount of research focused on gender differences in success rates within criminal justice programs. Researchers have found that

women were more successful than men in completing programs in drug court settings (Gray & Saum, 2005), reentry programs for recently releases prison inmates (Severson, Veeh, Bruns, & Lee, 2012), and substance use treatment programs for parolees (Johnson et al., 2011). Further inquiry is needed to probe these gender differences to learn how the program may be better tailored to increase program completion rates, especially among male participants.

Drug test results must also be strongly considered in projecting program success, especially given the strength of the association between a positive drug test, failure to complete the program, and post-program rearrest. This is commensurate with previous research which has highlighted the link between positive drug test results and noncompliance or unsuccessful termination from other types of programs (e.g. Zanis, Coviello, Lloyd, & Nazar, 2009).

Although it should be considered as complementary to a comprehensive assessment of substance use disorders rather than as an isolated indicator, a positive drug test is likely to be a proximal sign of recent and perhaps chronic drug use among PAD/ACC program participants. The program is designed to specifically address these underlying issues associated with the activities which may have led to the involvement in the pre-arrest diversion program, but there may be a relatively small (6%,  $n = 53$  scored in the high range of the Substance Use Disorder subscale) subgroup of participants who require more intensive drug-related programming to more adequately address drug-using behavior. This is an important area for future research given the direct connections between positive drug test results, unsuccessful program completion, and subsequent arrest.

This study contributes to the paucity of knowledge on the performance of pre-arrest diversion and deflection programs, but there are several limitations requiring attention. First, arrest data were drawn from formal contact with criminal justice agencies within the state of

Florida. It is possible that participants were subsequently arrested outside the state, and were not recorded in the arrest database. These instances would not have been detected in the official records which served as the basis for the current study. The use of official arrest data also precludes the analysis of self-reported post-program criminal activity, which was not collected. Another important consideration is this study also did not have access to a control group of adults. Further work is necessary to determine the extent to which a similar group of adults, who were eligible for the program but instead were prosecuted for a first-time misdemeanor offense, would be any more or less likely to be rearrested. Relatively small numbers of participants either failed to complete the program ( $N = 74$ ) or were arrested ( $N = 109$ ), which could have contributed to the inability to detect small, yet significant statistical effects. Finally, the lack of available information from the group which failed to report to the program did not allow for the analysis of these participants. These participants could represent a unique group, perhaps at greater risk for future arrest, which deserve further attention. Similarly, some selection bias may have been introduced among participants who did not completed the program, many of whom simply failed to fulfill the obligations of the program (e.g. appear for scheduled counseling sessions, complete educational modules by assigned deadlines), leading to their unsuccessful termination. Considering these limitations, it is unclear if these results will be observed among adults in similar programs operating in different settings. These findings should also be interpreted as correlational rather than indicating a causal relationship between initial program assessment information and program outcome status.

The Pre-Arrest Diversion-Adult Civil Citation program has great potential to alleviate the criminal justice system of the burdens associated with processing first-time misdemeanor offenders, while simultaneously offering eligible adults the opportunity to avoid a criminal arrest

record. As the program continues to expand, it is important to keep a keen eye on completion rates and rearrest, but special attention must be devoted to the factors associated with these key outcomes. This process will help refine service delivery, maximizing program engagement and program completion, while also reducing future involvement in the criminal justice system.

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Table 1. Descriptive statistics by program completion status

Variable	Successful ( <i>n</i> = 780)		Unsuccessful ( <i>n</i> = 74)	
	M(SD)	%	M(SD)	%
Age	24.0(8.9)		22.0(5.6)	
Male		88		13
Female		95		5
Race and ethnicity				
White		92		8
Black		91		9
Other		92		9
Offense type				
Petit theft		93		7
Drug-related		90		10
Other offenses		89		11
Positive drug test		84		16
Negative drug test		94		6
GAIN subscale scores				
Internalizing scale	1.2(1.3)		1.5(1.3)	
Externalizing scale	1.0(1.2)		1.3(1.3)	
Substance use scale	0.7(0.9)		1.0(1.0)	
Crime/Violence scale	0.6(0.8)		0.9(1.0)	

Table 2. Descriptive statistics by post-program arrest status

Variable	No arrest ( <i>n</i> = 745)		Arrest ( <i>n</i> = 109)	
	M(SD)	%	M(SD)	%
Age	23.9(8.9)		23.1(7.4)	
Male		84		16
Female		90		10
Race and ethnicity				
White		88		12
Black		86		14
Other		91		9
Offense type				
Petit theft		88		12
Drug-related		87		13
Other offenses		86		14
Positive drug test		77		23
Negative drug test		90		10
GAIN subscale scores				
Internalizing scale	1.2(1.3)		1.5(1.3)	
Externalizing scale	1.0(1.2)		1.3(1.2)	
Substance use scale	0.7(0.9)		1.0(1.0)	
Crime/Violence scale	0.6(0.8)		0.9(0.9)	

Table 3. Logistic regression results predicting successful program completion

Variable	$\beta$ (SE)	Wald's		OR	95% CI	
		$\chi^2$	<i>p</i>		Lower	Upper
Age	-.04(.02)	2.82	.093	0.96	0.92	1.01
Female	-.91(.29)	10.06	.002	0.40	0.23	0.71
Race and ethnicity						
Black	.15(.28)	0.30	.582	1.17	0.68	2.01
Other	.13(.58)	0.05	.818	1.14	0.37	3.54
Offense type						
Drug-related	-.10(.31)	0.11	.735	0.90	0.49	1.65
Other offenses	.47(.35)	1.80	.180	1.60	0.80	3.19
Positive drug test	.84(.27)	9.47	.002	2.32	1.36	3.95
GAIN subscale scores						
Internalizing scale	.13(.12)	1.01	.314	1.13	0.89	1.45
Externalizing scale	.02(.14)	0.02	.877	1.02	0.78	1.34
Substance use scale	.10(.16)	0.42	.519	1.11	0.81	1.51
Crime/Violence scale	.23(.17)	1.92	.166	1.26	0.91	1.76

Table 4. Logistic regression results predicting post-program arrest

Variable	$\beta$ (SE)	Wald's $\chi^2$	<i>p</i>	OR	95% <i>CI</i>	
					Lower	Upper
Age	-.02(.01)	1.08	.299	0.99	0.96	1.01
Female	-.65(.24)	7.51	.006	0.52	0.33	0.83
Time	.06(.01)	21.49	<.001	1.06	1.03	1.08
Race and ethnicity						
Black	.21(.24)	0.79	.375	1.24	0.77	1.98
Other	-.04(.57)	0.01	.938	0.96	0.31	2.91
Offense type						
Drug-related	-.18(.27)	0.42	.517	0.84	0.49	1.43
Other offenses	-.02(.33)	0.00	.952	0.98	0.52	1.86
Positive drug test	.77(.24)	10.34	.001	2.16	1.35	3.46
GAIN subscale scores						
Internalizing scale	.17(.11)	2.53	.112	1.19	0.96	1.46
Externalizing scale	-.08(.12)	0.41	.519	0.93	0.73	1.17
Substance use scale	-.07(.14)	0.25	.614	0.93	0.72	1.22
Crime/Violence scale	.21(.15)	1.83	.176	1.23	0.91	1.65