

ABSTRACT

DUHART CLARKE, SARAH ELIZABETH. *Indigent Injustice? A Systematic Review and Meta-Analysis of Defendants' Criminal Justice-Related Outcomes.* (Under the direction of Dr. Sarah Desmarais).

The right to an attorney in criminal cases is a constitutional right covered under the Sixth and Fourteenth Amendments of the United States Constitution and is considered fundamental to a fair trial. Over two-thirds of criminal court defendants in the United States are unable to afford their own counsel and thus have an attorney given to them by the court (i.e., indigent defendants). Many legal scholars have debated the effectiveness of indigent defense counsel compared to privately retained counsel. However, in the absence of synthesized data on outcomes for indigent defendants, legal scholars commonly cite the pragmatic and theoretical mechanisms for publicly funded defenders' limitations or strengths to support their arguments about the effectiveness of indigent defense counsel. When empirical evidence on outcomes for indigent defendants is used to support an argument, the research cited is often limited to studies conducted in specific jurisdictions on a specific step in court case processing. Consequently, our overall understanding of outcomes experienced by indigent defendants is limited and disjointed, underscoring the need for a systematic evaluation of the current empirical literature.

The goal of the study in this dissertation was to conduct a systematic literature review and meta-analysis on outcomes for defendants with public defenders, defendants with assigned counsel, and defendants with retained attorneys to better understand what (if any) discrepancies exist in criminal justice-related outcomes as a function of indigent defense status. Specifically, this study examined the current empirical literature on pretrial outcomes, case outcomes, sentencing outcomes, and post-case outcomes for indigent defendants compared to defendants with private/retained attorneys and/or public defenders compared to assigned counsel.

We screened 592 records by title, 471 by abstract, and 245 by full-text, which ultimately resulted in 71 records for full data extraction. I then assessed the outcomes, attorney comparison groups, and reported statistical information for each coded study. I ultimately was able to conduct meta-analyses for eight outcomes using 206 unique effect sizes across 40 studies; outcomes included were pretrial release, case dismissal, case resolved by guilty plea, case resolved by trial, acquittal, conviction, conviction severity, and sentence type. Each outcome was reported dichotomously so odds ratio was used as the indicator of effect size for each analysis. For each outcome, I conducted two analyses: one comparing any indigent defense counsel to retained counsel and one comparing public defenders to assigned attorneys (with the exception of acquittal, which did not have enough studies comparing public defenders to assigned counsel to conduct a meta-analysis).

Results of these analyses showed that, overall, indigent defendants were less likely to be released pretrial, have their case dismissed, and be acquitted, and were more likely to resolve their case by guilty plea, be convicted, and receive a sentence of incarceration than defendants with retained counsel. Analyses comparing type of indigent defense counsel (public defender and assigned counsel) indicated that defendants with public defenders were more likely to resolve their case by guilty plea and were less likely to be convicted than defendants with assigned counsel. These results suggest that disadvantages indigent defendants experience in criminal justice-related outcomes are likely the result of systemic and individual biases rather than the result of ineffective defense counsel. Additionally, all analyses showed considerable heterogeneity in effect sizes, with effect sizes often varying across geographic regions in which studies were conducted. The variance in effect sizes by geographic region highlights the need for evidence-based standards for indigent defense systems and judicial decision-making across jurisdictions.

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Indigent Injustice? A Systematic Review and Meta-Analysis of Defendants' Criminal Justice-Related Outcomes

by
Sarah E. Duhart Clarke

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APPROVED BY:

Dr. Sarah L. Desmarais
Committee Chair

Dr. Laura Widman

Dr. Lynne Baker-Ward

Dr. William R. Smith

BIOGRAPHY

Sarah Elizabeth Duhart Clarke was born in Hartford, Connecticut and grew up in Salem, Oregon. She received her Bachelor of Science in Psychology from Western Oregon University, making her the first person in her family to earn a bachelor's degree. After graduating from Western Oregon University, she moved to North Carolina to begin working as a public health analyst at RTI International. She joined the Applied Social and Community Psychology program at North Carolina State University in 2018 under the advisement of Dr. Sarah Desmarais, where she also earned her Master of Science in Psychology. Broadly, Sarah's research focuses in two areas: carceral system reform and drug use harm reduction. Sarah currently lives with her partner, her three dogs (Perseus, Daisy, and Roman), and their iguana (Jeffrey).

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Introduction

Over 65% of defendants in the United States (US) are unable to afford their own counsel and thus have an attorney given to them by the court (i.e., indigent defendants; Harlow, 2000). Despite heavy representation in the US justice system, there is still much that is not widely known about the experiences of indigent defendants compared to defendants who do not have indigent status. Some research suggests that indigent defendants experience more negative criminal justice outcomes than their non-indigent counterparts; specifically, some studies show that indigent defendants have higher odds of being held pretrial, pleading guilty, conviction, longer custodial sentences, and very long delays in their legal proceedings compared to defendants who can afford their own counsel, (Heaton et al., 2017; Linhorst et al., 2017; Roach, 2017). Conversely, other studies have found no differences in bail, plea bargaining, and sentencing decisions between indigent defendants and defendants with a retained (i.e., privately hired) attorney (Hartley et al., 2010; Harlow, 2000). Studies' incongruity in results and interpretation of findings is reflective of research that was isolated to specific jurisdictions, populations, and court processing outcomes. The disjointed nature of individual research studies examining individuals with indigent defense status currently limits our overall understanding of outcomes experienced by indigent defendants and underscores the need for a systematic evaluation of the current empirical literature. The purpose of the current study was to synthesize the research that has been conducted on outcomes for indigent defendants compared to defendants with retained attorneys to better understand what (if any) discrepancies exist in criminal justice system outcomes as a function of indigent defense status.

History of Indigent Defense Systems in the US

Defendants' right to an attorney in criminal cases is covered under the Sixth Amendment of the US Constitution. In 1963, the Supreme Court Case *Gideon v. Wainwright* (1963) clarified defendants' constitutional right to an attorney by stating that the right to counsel is fundamental to a fair trial and is thus also protected by the Fourteenth Amendment (i.e., Due Process

Clause) of the US Constitution. As such, *Gideon v. Wainwright* (1963) ruled that if a defendant is unable to afford their own attorney, they must have one given to them. For most jurisdictions in the US, this marked the establishment of indigent defense systems.

While the decision of *Gideon v. Wainwright* (1963) was monumental for indigent defense systems in the US, it left many interpretations and decisions regarding the implementation of indigent defense systems up to the states and local jurisdictions. As a result, indigent defense systems were implemented differently across US jurisdictions and remain different in their modern-day practices. Common practices that vary across different indigent defense systems include which cases qualify for indigent defense, at which stage in the court case process indigent defense attorneys are appointed, and costs or fees for which defendants are responsible. Because of these variations, studies that examine outcomes for indigent defendants cannot only be considered in isolation and generalized to the larger population. Rather, study findings on this topic must be considered together in order to get an accurate understanding of indigent defendants' unique experiences in the criminal justice system.

Pragmatic and Theoretical Mechanisms for Outcomes by Attorney Type

There are two main types of publicly funded defenders included within indigent defense systems: public defenders and assigned counsel. Public defenders are defense attorneys who are employed by the government full-time, and thus only take on indigent defense cases. Assigned counsel (also commonly referred to as "court-appointed attorneys") are defense attorneys who work privately but will also take on indigent defense cases when requested by the court. Usually, assigned counsel is granted if there are not enough public defenders in the jurisdiction to handle the current caseload. Most jurisdictions will use either a contract system or a list system for assigned counsel: that is, courts will either contract with specific attorneys after completing a bidding process in which compensation is negotiated, or courts will have a list of defense attorneys who work privately that they can request indigent defense services from periodically. For decades, legal scholars have debated the effectiveness of publicly funded

defense lawyers and whether indigent defendants experience disadvantages or advantages in their case processing and outcomes. In the absence of synthesized data on outcomes for indigent defendants, legal scholars commonly cite the pragmatic and theoretical mechanisms for publicly funded defenders' limitations or strengths to support their arguments about the effectiveness of indigent defense counsel. When empirical evidence on outcomes for indigent defendants is used to support an argument, the research cited is often limited to studies conducted in specific jurisdictions on specific court case processes.

Much of the legal literature asserts that indigent defendants are disadvantaged and experience negative outcomes in the criminal justice system, including reports from the American Bar Association (e.g., ABA, 2004; Eldred, 2013; Posner & Yoon, 2011). These assertions largely stem from the wide breadth of research examining the funding, compensation, and case load of public defenders. National studies on funding for indigent defense systems have found that indigent defense systems, mainly public defender systems, are consistently under-funded (Jaffe, 2018; Lefstein & Spangenberg, 2009; Stevens et al., 2010), especially in contrast to funding for prosecutor offices (Lefstein & Spangenberg, 2009) and compensation for retained attorneys (NALP, 2010). As a result, the ABA has identified lack of adequate funding for indigent defense systems as one of the primary concerns for upholding defendants' right to counsel in criminal cases (ABA, 2004; Brink, 2020). Additionally, over a decade of literature indicates that publicly funded defenders tend to have high caseloads (Benner, 2011; Brink, 2018; Brink, 2019; Farole & Langton, 2010; Lefstein & Spangenberg, 2009). With this evidence in mind, scholars and legal professionals argue that the nature of indigent defense systems has led to publicly funded defenders being overworked and underpaid, and thus unable to give their clients the time and attention necessary to ensure the fairest case outcomes (ABA, 2006; Benner, 2011; Brink, 2019; Jaffe, 2018; Joy, 2010).

Beyond physical and cognitive limitations experienced by attorneys who are overworked and underpaid, issues of high caseloads and low pay also speak to theories of motivation and

reinforcement for public defenders. Payment for work acts as a positive reinforcement for behavior; in theory, paying someone more when they perform well at work incentivizes them to continue to perform well (Skinner, 1948). Additionally, schedules of reinforcement also influence people's motivation to engage in certain behaviors, with ratio schedules (reinforcement that occurs after a certain number of actions or responses) providing stronger reinforcement for behaviors than interval schedules (reinforcement that occurs after a certain amount of time has passed; Ferster & Skinner, 1957; Morgan, 2010). Public defenders are consistently paid on an interval schedule, regardless of if they have high caseloads or not. Meanwhile, privately retained attorneys (and sometimes assigned counsel) are typically paid on a ratio schedule.

Consequently, public defenders are provided weaker reinforcements that would motivate them to consistently ensure the best possible outcomes for their clients. Indeed, a small body of research that has examined the impact of financial incentives on defense attorneys' behavior shows that the payment amount and type of payment (i.e., fixed rate versus hourly) can influence defense attorneys' decisions to negotiate, accept, or reject plea deals offered by the prosecution (Roach, 2017; Stephen et al., 2008).

Literature on the effectiveness of indigent defense systems has also cited public defenders' full-time role in the courts (referred to as the "courtroom workgroup") as a mechanism for outcomes experienced by indigent defendants. Some legal scholars point to public defenders' working relationship with judges and prosecutors, stating that this allows public defenders to have a more substantial say in the case decisions and subsequent outcomes (Gertz, 1980; Walker et al., 1996). This argument could also be supported by the role of focal concerns theory and heuristics in judicial decision-making (Hartley, 2014; Lynch, 2019; Steffensmeier et al., 1993; Tversky & Kahneman, 1974). Specifically, if judicial decision-makers are more familiar with the defense attorney as part of the courtroom workgroup, they may be more likely to make decisions that are favorable to them than they would with retained or assigned defense attorneys that they are less familiar with (Tversky & Kahneman, 1974).

Conversely, other legal scholars argue that the courtroom workgroup actually results in less favorable outcomes for indigent defendants. These scholars assert that, because of public defenders' relationship with other members of the court, their allegiance is actually with the court and not with their client (Blumberg, 1967; Eisenstein et al., 1987; Uphoff, 1992). Thus, the current state of literature identifies multiple different mechanisms that may either strengthen or limit the effectiveness of publicly funded defenders within indigent defense systems.

Key Stages in Criminal Court Case Processing

There are two key stages in criminal court case processing in which individuals involved in the criminal justice system may experience disproportionate outcomes: decisions made at the pretrial stage, and decisions made at the case's conclusion. There is a wide body of literature that has examined each of these stages in the court process and identified outcomes indicative of unequal treatment in the criminal justice system.

Decisions made at the pretrial stage are widely recognized as the starting point for the accumulation of disadvantage that defendants may experience throughout their case processing (Carr, 2017). Research has consistently demonstrated that people detained pretrial are more likely to experience negative court case, social, and economic outcomes than defendants who are released from jail during the pretrial period. Specifically, defendants detained pretrial are more likely to take a guilty plea deal, be convicted of their charges, and receive longer carceral sentences (Austin, 2017; Cohen & Reaves, 2007; Dobbie et al., 2018; Heaton, et al., 2017; Kellough & Wortley, 2002; McCoy, 2007; Ottone & Scott-Hayward, 2018; Philips, 2012; Sacks, et al., 2015; Stevenson, 2018). Additionally, beyond court case outcomes, defendants detained pretrial are more likely to engage in future criminal activity, experience damaged family bonds, lose employment or government assistance, lose housing, and have poorer physical and mental health (Bak, 2002; Dobbie et al., 2018; Ottone & Scott-Hayward, 2018; Rabinowitz, 2010). While pretrial detainment is intended to be indicative of the defendant's threat to public safety and their likelihood of appearing in court, research has shown that decisions made at the pretrial stage

are often influenced by extralegal and subjective factors. One identified mechanism through which defendants experience unequal treatment at the pretrial stage is assigned bail amounts, as assigned bail amounts typically determine defendants' ability to obtain pretrial release. Yet, despite the demonstrated importance of pretrial release, research has identified that factors irrelevant to the case (such as the defendant's race, gender, and age) frequently influence bail decisions (Arnold, et al., 2018; Ball & Bostaph, 2009; Demuth, 2003; Demuth & Steffensmeier, 2004; Pinchevsky & Steiner, 2016; Schlesinger, 2005; Williams, 2017; Wooldredge et al., 2015). Thus, pretrial decisions are recognized as a key stage in criminal court processing in which defendants may experience disproportionate and unequal outcomes.

The second key stage in criminal court processing is the case's conclusion. Decisions made at this stage reflect the overall outcomes of the case and include decisions that impact defendants' rights and liberties: most importantly, whether or not the defendant is convicted of their charges and the sentence they receive. Given the weight of these decisions, it is crucial that case outcomes reflect fair and equal treatment in the criminal justice system. However, research indicates that defendants who belong to socially disadvantaged populations disproportionately experience harsher consequences in their case outcomes. A large body of literature shows that criminal cases for people of color (especially Black men) are more likely to result in conviction and harsher punitive sentences compared to cases for White defendants with similar offenses and criminal histories (Everett & Wojtkiewicz, 2002; Freiburger & Hilinski, 2009; Meeker et al., 1992; Sutton, 2013). Racial biases in case outcomes also tend to be exacerbated by lower socioeconomic status (Lofstrom & Raphael, 2016; van Eijk, 2017). Plea deal practices have been identified as one possible mechanism for disparities in defendants' likelihood of conviction within their case outcome. Specifically, discrepancies in plea deals offered by the prosecution and defendants' ability to engage in plea negotiations may be driving higher rates of conviction among socially disadvantaged populations (Dobbie et al., 2018).

Thus, examining outcomes of case disposition and sentencing, as well as the mechanisms that lead to those decisions, is necessary for understanding fairness in criminal court processing.

Gaps in Current Knowledge

Despite the wide range of research and attention that has been given to indigent defense systems, gaps in knowledge still remain. First, the research on outcomes for indigent defendants has inconsistent findings across studies. As such, it is unclear whether, overall, defendants experience worse, better, or the same outcomes as a function of their indigent status. Second, studies that include information about indigent defendants focus on outcomes for specific stages in the court process. Thus, our understanding of indigent defendants' experiences throughout the entire court process is disconnected and isolated to certain stages. Third, given the disjointed nature of the research to-date on indigent defendants, there is disagreement among legal scholars and professionals as to whether indigent defendants are disadvantaged or privileged within criminal courts. For these three reasons, a systematic review and meta-analysis on the empirical evidence regarding outcomes for indigent defendants is needed.

The Current Study

The purpose of the current study was to conduct a systematic literature review and meta-analysis on outcomes for defendants with public defenders, defendants with assigned counsel, and defendants with retained attorneys to better understand what (if any) discrepancies exist in criminal justice-related outcomes as a function of indigent defense status. Specifically, this study examined the current empirical literature on pretrial outcomes, case outcomes, sentencing outcomes, and post-case outcomes for indigent defendants compared to defendants with private/retained attorneys and/or public defenders compared to assigned counsel.

Methods

To ensure that this study was conducted and reported in a thorough and rigorous manner, I followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement and guidelines (Liberati et al., 2009; Moher et al., 2009; Moher et al., 2015).

Systematic Literature Review

To identify relevant studies for this meta-analysis, we searched six databases: PsychInfo, ProQuest, Web of Science, Google Scholar, Google, and NCJRS Abstracts. In each of these databases, we used the following search terms: “indigent defendant”, “indigent defense”, “public defender”, “attorney type”, “public defense”, “court appointed counsel”, “court appointed attorney”, “legal defense”, “unable to afford counsel”, “private vs court appointed counsel”, and “offenders type of attorney”. We conducted searches through December of 2020. We identified additional sources by reviewing the reference lists of included studies.

We included studies if they met the following criteria: 1) included empirical data on outcome(s) for indigent defendants in criminal courts; 2) were conducted in the United States; and 3) compared outcomes across attorney types. “Indigent defendants” are defined as any defendant who was unable to retain their own attorney and had one given to them by the court; specific definitions of different attorney types are described in the section below. We excluded studies if they did not include empirical data on outcome(s) for indigent defendants, were conducted in non-criminal courts, were conducted outside of the United States, only included outcomes for one attorney type, or were duplicates. We first screened studies by title, then by abstract, then by full text. We conducted all study screenings in Covidence, an online systematic review software. At each screening stage, a minimum of two members of the research team screened each study; as the primary investigator, I resolved all disagreements in screening decisions.

Database searches and screening by title yielded 592 records, 121 of which were excluded as duplicates. We then screened 471 records by abstract and excluded 226 records that were irrelevant. We sought to retrieve 245 records for full text screening and were unable to obtain three records, resulting in 242 records for full text screening. During the full text screening, 45 records were excluded because they did not include any empirical data, 112 records were excluded because their empirical data did not include outcomes for indigent defendants, and one record was excluded because it was conducted outside the US. This left us with 84 records to code for the meta-analysis. During coding, we further excluded 13 records because they did not compare outcomes across attorney type (i.e., only reported outcomes for defendants with one type of attorney). As a result, 71 records were included for full data extraction coding. (See **Figure 1** for the PRISMA flowchart depicting these numbers).

Data Extraction

We coded each of the included studies to extract the following data: study information, such as type of publication; jurisdiction(s) in which data were collected; data collection years and source of information; sample and demographic information; comparison groups; outcomes; and reported statistical results. Three coders extracted data from the included studies using a coding sheet I developed for the purpose of this study (see **Appendix**). We first completed the coding for three studies together. Then, we will all independently coded 10 of the included studies to determine inter-rater reliability (IRR). I assessed IRR by calculating the percentage of agreement between coders (i.e., intercoder agreement scores) across variable categories (Yeaton & Wortman, 1993). Overall, we reached an intercoder agreement score of about 90%. We then divided the rest of the studies to code independently. The first 20 studies coded independently were all reviewed by a second coder to ensure accuracy. As little to no errors were found in the review process for those 20 articles, we then coded the remaining 38 studies independently. After each coding sheet was completed, extracted data was entered into a Qualtrics survey to aid in the final database construction.

Comparison groups. We coded each study for the type of comparison groups examined. These comparison groups include defendants with public defenders, assigned counsel, retained counsel, or no attorney. *Public defenders* indicates that the defendant had a defense attorney who was fully employed by the state and worked for a public defender office. *Assigned counsel* indicates that the defendant had a defense attorney that was given to them by the court, but the attorney was not a public defender and may also take on private cases; most jurisdictions referred to these type of defense attorneys as “court-appointed”, “assigned”, or “contract” counsel. Many of the included studies aggregated all indigent defense counsel into one group or did not describe which type of indigent defense counsel they were reporting for. Thus, for the purpose of this meta-analysis, public defenders and assigned counsel were collapsed into an *indigent defense counsel* group for analyses comparing indigent defense counsel to retained counsel (see **Data Analyses** section below). *Retained counsel* indicates that the defendant was able to secure their own defense counsel and did not need one given to them by the court. *No attorney* refers to defendants who did not have any counsel, likely because either their case did not qualify for indigent defense status, they waived their right to an attorney, or they decided to self-represent. Since few studies reported meaningful comparisons between indigent defense counsel and no attorney groups, I excluded the no attorney group from analyses.

Outcomes. We coded each study for the type of defendant outcome(s) it examined. There were four main types of outcomes: pretrial outcomes, case outcomes, sentencing outcomes, and post-case outcomes. We extracted the relevant statistics for each defendant outcome included in each study. Within pretrial outcomes, we expected to primarily code outcomes of *bail amounts*, *pretrial detention*, and *pretrial release*. Within case outcomes, we expected to primarily code outcomes referring to the final conclusions of the court case, including the *case disposition* (convicted, acquitted, dismissed), *case resolution methods* (plea deal or trial), and *conviction severity* (convicted of lesser charge, convicted of original charge),

as well as the *case length* (time to disposition). Within sentencing outcomes, we expected to primarily include the *type of sentence* (community-based or carceral) and *length of sentence*. We expected post-case outcomes would include *appeals case decision* (conviction reversed, conviction upheld) and *recidivism*.

For each study outcome, we recorded all relevant analytical information that was reported in the study. This included sample size (n); which comparison groups (i.e., attorney types) were included; type of statistical test (e.g., mean difference, correlation, odds ratio); statistical test result, including measures of variance (e.g., standard deviation, confidence intervals) and significance (e.g., *p*-value); and any other relevant information, such as the inclusion of covariates or transformation of raw data. For studies containing pretrial outcome data, we attempted to indicate whether indigent defense system attorneys (i.e., public defenders or assigned counsel) were present at the time pretrial decisions were being made; this was to account for variability in jurisdictional practices, as some jurisdictions provide indigent defense counsel prior to pretrial decisions and some jurisdictions provide indigent defense counsel after pretrial decisions have already been made. However, few studies provided information about when defense attorneys became involved with a case, so this variable ultimately had to be excluded from analyses.

Column three in **Table 1** provides details about the full statistical information needed to include a study's reported outcome in the meta-analyses. If a study's outcome(s) did not contain enough statistical information to be included in the meta-analyses, I reached out (to the extent possible) to the author(s) of the study to request their data or the information needed to convert their findings; if no data were provided, I excluded the study's incomplete outcome(s) from the meta-analysis. Ultimately, over 100 outcome entries and 31 complete studies were excluded because I was unable to obtain complete statistical information for their reported outcomes. Thus, 40 studies were included in the final analytic sample (see **Figure 1** for PRISMA flowchart).

Moderators. We included three moderator variables: *data collection start year*, *geographic region* (national, Northeast, Southeast, Midwest, Southwest, or West), and *indigent defense counsel type* (public defender, assigned counsel, or both). All three moderators were included in analyses comparing indigent defense counsel to retained counsel; only the first two moderators (data collection start year and geographic region) were included in analyses comparing assigned counsel to public defenders. For categorical moderators of geographic region and indigent defense counsel type, reference categories were national and both, respectively. These three moderators were included as indigent defense counsel practices were expected to vary across time, place, and counsel type.

Data Analyses

Calculation of effect sizes. I calculated all effect sizes using Comprehensive Meta-Analysis, version 3 (Borenstein et al., 2009). The indicator(s) of effect size used for this study were chosen based on the statistical results reported for each outcome in the included studies, with the goal of transforming the smallest number of effect sizes possible (Polanin & Snilstveit, 2016). For each outcome of interest, I examined how the included studies most commonly reported statistical results to determine which indicator of effect size would be the most appropriate (see **Table 1**). Outcome measurements were also assessed for similarity across studies; if some studies contained full statistical information but did not measure the outcome in a way that was comparable to the other included studies, it was ultimately excluded from analyses.

For pretrial outcomes, *pretrial release* was most often reported as frequencies within attorney type groups. Thus, odds ratio was the best indicator of effect size for pretrial release. Other pretrial outcomes reported in coded studies were bail amount, transfer to adult court in juvenile cases, decision to indict, and case outcomes; however, not enough studies contained

complete statistical information on these outcomes to include them in meta-analyses.¹ Case outcomes with enough statistical information to include in this meta-analysis were *case dismissal*, *case resolved by guilty plea*, *case resolved by trial*, *acquittal*, *conviction*, and *conviction severity*. Each case outcome was primarily reported dichotomously in the included studies; thus, I chose odds ratio as the best indicator of effect size for case dismissal, case resolution method, acquittal, conviction, and conviction severity. Some coded studies reported conviction severity as a continuous variable of the number of charges the defendant was convicted on; to maintain comparability between study findings, these studies were excluded from analyses. Case length was also reported by coded studies, but we were unable to extract enough statistical information to include this outcome in meta-analyses. For sentencing outcomes, *sentence type* was reported as frequencies, chi-squares, and odds ratios; thus, I selected odds ratio as the indicator of effect size. Sentence length was also reported by coded studies, but we were unable to extract enough statistical information to include this outcome in meta-analyses. For post-case outcomes, appeals decision and recidivism were reported by some coded studies; however, we were unable to extract enough statistical information to include these outcomes in meta-analyses. The studies included in meta-analyses, their outcomes, and reported statistics are depicted for each of these stages in **Tables 2-4**.

I compared attorney types for each outcome in two ways: 1) any indigent defense counsel compared to retained counsel and 2) public defenders compared to assigned counsel. As necessary, I combined studies' comparison groups into broader categories. For instance, I combined reported results for different groups of the same attorney type into one attorney type (e.g., "contract" and "court-appointed" attorneys were combined into *assigned counsel*). Additionally, when studies reported results for both public defenders and assigned counsel, I combined results into *indigent defense counsel* for analyses comparing outcomes between any

¹ Outcomes were included in meta-analyses if there were at least five unique effect sizes across at least five studies

indigent defense counsel and retained counsel. **Tables 2-4** indicate any instance in which attorney groups were combined for meta-analyses. I followed established methodologies to combine groups (Thomas et al., 2021). Specifically, since all included outcomes were reported dichotomously, I summed the sample sizes and frequencies of the outcome event across the groups I combined.

Statistical analyses. Effect size values for each outcome was weighted using the inverse-variance method and then combined. I conducted analyses using a random-effects model because of the known variability in indigent defense system practices across jurisdictions and across time. The random-effects model accounts for variability in indigent defense system characteristics, study-level characteristics, and sampling methods (Lipsey & Wilson, 2001). For each outcome, I assessed statistical heterogeneity using Cochran's Q statistic, the distribution of true effects, and I^2 . A significant Q ($p < .01$) indicates the presence of heterogeneity, while the distribution of true effects and I^2 approximate the amount of heterogeneity. Since I^2 is not always a reliable indicator for amount of heterogeneity, I also assessed the distribution of true effects to assess level of heterogeneity (Borenstein, 2021). When high heterogeneity was present, I first attempted to identify and remove outliers by examining analyses' forest plots and effect sizes' upper and lower confidence limits in comparison to the pooled effect (Viechtbauer & Cheung, 2010). I also conducted "one study removed" sensitivity analyses to determine each study's impact on the overall effect size (Borenstein et al., 2009). In alignment with established guidelines and previously conducted meta-analyses of observational studies, results from analyses with high levels of heterogeneity are still reported in this manuscript (Stroup et al., 2000); rather than excluding these analyses, I attempted to assess source of variance in effect sizes through meta-regression² and subgroup analyses³ (Borenstein et al., 2009; Richardson et

² Meta-regression was conducted if there were at least ten unique effect sizes across at least ten studies

³ Sub-group analyses were conducted if each moderator variable category had at least three unique effect sizes

al., 2019). Analyses with high heterogeneity of effect sizes in which I was unable to determine sources of variance should be interpreted with caution. To assess publication bias, I examined funnel plots of standard errors from random effects; asymmetrical funnel plots were assessed for potential non-reporting bias, though it should be noted that funnel plots with less than ten studies are difficult to assess (Page et al., 2021; Polanin & Tanner-Smith, 2014). I conducted all analyses using Comprehensive Meta-Analysis software, Version 3 (Borenstein et al., 2009).

Results

Overall, I included 40 studies with 206 unique independent effect sizes in these meta-analyses. The included studies covered data collection years 1962 to 2016: 10% of studies began data collection in the 1960's, 27.5% began data collection in the 1970's, 7.5% began data collection in the 1980's, 32.5% began data collection in the 1990's, 17.5% began data collection in the early 2000's, and 5% began data collection in the 2010's. Almost half (42.5%) of studies were from peer-review journal publications, 22.5% were from government reports, 20% were from law review publications, 12.5% were from dissertations, and 2.5% were from book chapters. All 50 states were represented in the included studies; in terms of geographic region, included studies were most commonly conducted in the Southeast (25%) and least commonly in the Southwest (7.5%). These studies included more than 2,400,000 cases represented by public defenders, assigned counsel, or retained counsel. The sections below report details about the included studies and meta-analytic findings for each outcome examined.

Pretrial Outcomes

One pretrial outcome had sufficient statistical information to be included in meta-analysis: pretrial release. Details of the included studies' data collection years, jurisdictions, population, attorney group comparisons, and complete statistical information can be seen in **Table 2**. Included studies covered data collection years of 1962-2015. Most included studies were from reports. All 50 states were included in the included study samples.

Pretrial release. Eleven samples across seven studies were included in the analysis comparing pretrial release status between indigent defense counsel and retained counsel (see studies' details in **Table 2**). The computed effect sizes and their weights can be seen in **Figure 2**. Indigent defendants were about 75% less likely to be released pretrial than defendants with retained attorneys (OR = 0.237, 95% CI = 0.200 – 0.282, $Z = -16.275$, $p < .0001$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 144.624$, $p < .0001$, $I^2 = 92.394$). I first attempted to remove a potential outlier (i.e., Houlden & Balkin, 1985) and re-run the analysis; however, the results remained largely the same. In one study removed analyses, pooled odds ratios ranged from 0.217 to 0.259. Thus, I conducted meta-regression with indigent defense counsel type, data collection start year, and geographic region included as covariates.⁴ Meta-regression results indicated that pretrial release effect sizes did not significantly vary by indigent defense counsel type or year, but effect sizes did vary across geographical regions; studies conducted in the Southwest had significantly less differences in pretrial release rates between counsel type (regression coefficient = -6.6533, 95% CI = -9.4652 - -3.8415, $p < .0001$) and studies conducted in the West had significantly higher differences in pretrial release rates (regression coefficient = 0.9237, 95% CI = 0.4170 – 1.4305, $p = .0004$) than studies conducted nationally. However, there was an insufficient number of studies in groups among geographic region to conduct subgroup analyses. Examination of the funnel plot of standard errors showed potential reporting bias and further indicated high heterogeneity, in that almost all studies were gathered around the top of the funnel plot.

Five samples across five studies were included in the analyses comparing pretrial release status between public defenders and assigned counsel (see studies' details in **Table 2**). The computed effect sizes and their weights can be seen in **Figure 3**. I found no significant differences in pretrial release status between defendants with public defenders and those with

⁴ n's for moderator/covariate categories in each analysis can be seen in Tables 2-4

assigned counsel (OR = 0.954, 95% CI = 0.643, 1.416, $Z = -0.234$, $p = 0.815$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 15.142$, $p = .004$, $I^2 = 75.583$). According to one study removed analyses, pooled effect sizes ranged from 0.796 to 1.028. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. I did not find strong evidence of reporting bias in my examination of the funnel plot of standard errors, though this may also be due to the low number of studies included in the analysis.

Court Case Outcomes

Six court case outcomes had sufficient statistical information to be included in meta-analysis: case dismissal, case resolved by plea, case resolved by trial, acquittal, conviction, and conviction severity. Details of the included studies' data collection years, jurisdictions, population, attorney group comparisons, and complete statistical information included in each analysis can be seen in **Table 3**. Included studies covered data collection years of 1962 - 2013. Most included studies were from peer-reviewed journal articles or reports. All 50 states were included in the included study samples.

Case dismissal. Seventeen samples across 13 studies were included in the analysis comparing case dismissal between indigent defense counsel and retained counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 4**. Indigent defendants were about 25% less likely to have their cases dismissed than defendants with retained attorneys (OR = 0.740, 95% CI = 0.622 – 0.881, $Z = -3.392$, $p < .0001$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 328.565$, $p < .0001$, $I^2 = 95.130$). I attempted to remove a potential outlier (i.e., McCoy, 2002) and re-run the analysis; however, the results remained largely the same. In one study removed analyses, pooled odds ratios ranged from 0.706 to 0.804. Meta-regression results indicated that effect sizes for case dismissal did not differ as a function of indigent defense type or data collection years. Effect sizes did vary by geographic region. Specifically, studies conducted in the

Southeast (regression coefficient = -0.6571, 95% CI = -1.0554 - -0.2588, $p = .0012$) and the Southwest (regression coefficient = -0.8329, 95% CI = -1.3056 - -0.3601, $p = .0006$) had significantly lower differences in case dismissal rates. However, conducting analyses by subgroups within indigent counsel type and geographic region did not resolve high levels of heterogeneity, potentially due to an insufficient number of studies within groups. Examination of the funnel plot indicated potential reporting bias as a result of insignificant findings being unreported, even though the studies in this analysis came from a variety of sources (i.e., law reviews, peer-reviewed journals, government reports, and dissertations / theses; see **Table 3**).

Seven samples across six studies were included in the analysis comparing case dismissal between public defenders and assigned counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 5**. I found no significant differences in case dismissals between defendants with a public defender and those with assigned counsel (OR = 1.371, 95% CI = 0.972 – 1.935, $Z = 1.014$, $p = .073$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 50.241$, $p < .0001$, $I^2 = 88.058$). One study removed analyses indicated that pooled effect sizes ranged from 1.171 to 1.560. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. I did not find strong evidence of reporting bias in my examination of the funnel plot of standard errors, though this may also be due to the low number of studies included in the analysis.

Case resolved by plea. Seven samples across four studies were included in the analysis comparing guilty pleas between indigent defense counsel and retained counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 6**. Indigent defendants were more likely to have their case resolved by entering a guilty plea than defendants with retained attorneys (OR = 1.500, 95% CI = 1.333 – 1.689, $Z = 6.731$, $p < .0001$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 222.402$, $p < .0001$, $I^2 = 97.752$). In one study removed analyses, pooled effect sizes

ranged from 1.388 to 1.613. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. Examination of the funnel plot of standard errors did not strongly indicate presence of publication bias, though this may be due to the low number of studies included in the analysis.

Six samples across five studies were included in the analysis comparing guilty pleas between public defenders and assigned counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 7**. Defendants with public defenders were more likely to resolve their case by entering a guilty plea than defendants with assigned counsel (OR = 1.352, 95% CI = 1.048 – 1.743, $Z = 2.320$, $p = .020$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 18.988$, $p = .002$, $I^2 = 73.667$). According to one study removed analyses, pooled odds ratios ranged from 1.265 to 1.478 when removing each effect size. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. Examination of the funnel plot of standard errors did not strongly indicate presence of publication bias, though this may be due to the low number of studies included in the analysis.

Case resolved by trial. Seventeen samples across 12 studies were included in the analysis comparing trial cases between indigent defense counsel and retained counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 8**. I found no significant differences in rates of cases going to trial between indigent defense counsel and retained counsel (OR = 0.904, 95% CI = 0.800 – 1.022, $Z = -1.617$, $p = .106$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 445.567$, $p < .0001$, $I^2 = 96.409$). In one study removed analyses, pooled odds ratios ranged from 0.831 to 0.928. I was unable to examine sources of heterogeneity using meta-regression due to issues of collinearity among moderator variables. Thus, I instead performed subgroup analyses with the moderator variables of indigent defense counsel type and geographic region. Subgroup analyses by indigent defense counsel type did not resolve issues of heterogeneity.

Subgroup analyses by geographic region resolved issues of heterogeneity among studies conducted in the Midwest (p of heterogeneity = .387), but not among studies conducted nationally ($p < .0001$), in the Southeast ($p < .0001$), or the West ($p = .006$); studies conducted in the Northeast and Southwest contained an insufficient number of studies to perform subgroup meta-analyses. Examination of the funnel plot of standard errors only slightly indicated the presence of publication bias, in that there were slightly more studies with significant results reported than studies with nonsignificant findings.

Eight samples across eight studies were included in the analysis comparing trial cases between public defenders and retained counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 9**. I found no significant differences in rates of cases going to trial between public defenders and assigned counsel (OR = 0.768, 95% CI = 0.521 – 1.131, $Z = -1.337$, $p = .181$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 66.101$, $p < .001$, $I^2 = 89.410$). One study removed analyses indicated that pooled effect sizes ranged from 0.675 to 0.846. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. Examination of the funnel plot of standard errors did not strongly indicate presence of publication bias, though this may be due to the low number of studies included in the analysis.

Acquittal. Fourteen samples across 10 studies were included in the analysis comparing case acquittals between indigent defense counsel and retained attorneys (see studies' details in **Table 3**). Initial analyses indicated that indigent defendants were over 50% less likely to be acquitted than defendants with retained counsel (OR = 0.439, 95% CI = 0.233 – 0.826, $Z = -2.554$, $p = .011$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 212.804$, $p < .0001$, $I^2 = 93.891$). After examining the distribution of effects, I removed the effect size of one outlying study (i.e., Champion, 1989) from analyses. In the revised analysis, Cochran's Q and I^2 indicated that there were comparatively lower levels of

heterogeneity among effect sizes ($Q = 22.498$, $p = .032$, $I^2 = 46.662$). The computed effect sizes and their weights of the revised analysis can be seen in **Figure 10**. Indigent defendants were about 42% less likely to be acquitted than defendants with retained counsel (OR = 0.682, 95% CI = 0.532 – 0.875, $Z = -3.016$, $p = .003$). Meta-regression results indicated that effect sizes did not significantly vary by indigent defense counsel type, data collection start year, or geographic region. Thus, the remaining variance between studies in the revised analysis could not be accounted for. Examination of the funnel plot of standard errors did not strongly indicate presence of publication bias.

There was not a sufficient number of studies examining case acquittals between public defenders and assigned counsel to conduct a meta-analysis.

Conviction. Twenty-five samples across 18 studies were included in the analysis comparing convictions between indigent defense counsel and retained attorneys (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 11**. Indigent defendants were almost 40% more likely to be convicted than defendants with retained counsel (OR = 1.337, 95% CI = 1.082 – 1.652, $Z = 2.691$, $p = .007$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 1207.068$, $p < .0001$, $I^2 = 98.012$). I first attempted to resolve issues of heterogeneity by excluding one potential outlier (i.e., McCoy, 2002) from the analysis; however, results remained largely the same. In one study removed analyses, pooled odds ratios ranged from 1.239 to 1.373. Meta-regression analyses indicated that the effect sizes did not significantly vary by indigent defense counsel type or data collection year. Effect sizes did vary by geographic region; specifically, studies in the Southeast (regression coefficient = 0.6279, 95% CI = 0.3806 – 0.8752, $p < .0001$) and studies in the Southwest (regression coefficient = 1.6620, 95%CI = 1.0784 – 2.2455, $p < .0001$) had significantly higher differences in conviction by attorney type. However, as each geographic region subgroup only included five or less studies, findings from the meta-regression

were not sufficient to determine sources of variance in effect sizes. The funnel plot of standard errors was slightly skewed to the left, indicating presence of potential publication bias.

Sixteen samples across 12 studies were included in the analysis comparing convictions between public defenders and assigned counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 12**. Defendants with public defenders were less likely to be convicted than defendants with assigned counsel (OR = 0.631, 95% CI = 0.443 – 0.901, $Z = -2.538$, $p = .011$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 38731.821$, $p < .0001$, $I^2 = 99.961$). I first attempted to resolve issues of heterogeneity by excluding one potential outlier (i.e., Roach, 2014) from the analysis; however, results remained mostly the same. According to one study removed analyses, pooled effect sizes ranged from 0.596 to 0.908. Meta-regression results indicated that data collection years and geographic region did not significantly account for variance in effect sizes. Examination of the funnel plot of standard errors showed strong evidence of publication bias, in that the majority of studies clustered around the top of the funnel plot. This indicates that most of the studies included in this analysis were larger, which may mean that findings of smaller studies were not published or did not contain enough statistical information to be included in this analysis.

Conviction severity (convicted of lesser charges). Fourteen samples across 10 studies were included in analyses comparing conviction severity between defendants with indigent defense counsel and those with retained counsel (see **Table 3** for studies' details). The computed effect sizes and their weights can be seen in **Figure 13**. I found no significant differences in charge reductions between defendants with indigent defense counsel and those with retained counsel (OR = 0.877, 95% CI = 0.762 – 1.009, $Z = -1.838$, $p = .066$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 77.655$, $p < .0001$, $I^2 = 83.259$). In one study removed analyses, pooled effect sizes ranged from 0.833 to 0.905. Meta-regression analyses indicated that effect sizes did not significantly vary by indigent

defense counsel type, data collection year, or geographical region. Thus, I was unable to account for high heterogeneity. Examination of the funnel plot of standard errors showed slight potential publication bias; specifically, more studies gathered at the top of the funnel plot, indicating that most studies included were larger.

Seven samples across six studies were included in analyses comparing conviction severity between defendants with public defenders and those with assigned counsel (see studies' details in **Table 3**). The computed effect sizes and their weights can be seen in **Figure 14**. I found no significant differences in charge reductions between defendants with public defenders and those with assigned counsel (OR = 1.785, 95% CI = 0.853 – 3.738, $Z = 1.537$, $p = .124$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 441.812$, $p < .0001$, $I^2 = 98.642$). When removing one study, pooled odds ratios ranged from 1.214 to 2.120. Further assessments of variance in effect sizes (i.e., meta-regression and subgroup analyses) were not possible due to an insufficient number of studies. Examination of the funnel plot of standard errors indicated presence of publication bias, though this may be due to the low number of studies included in the analysis.

Sentencing Outcomes

One sentencing outcome had sufficient statistical information to be included in meta-analysis: sentence type. Details of the included studies' data collection years, jurisdictions, population, attorney group comparisons, and complete statistical information can be seen in **Table 4**. Included studies covered data collection years of 1962-2012. Most included studies were from peer-review journal articles or reports. All 50 states were included in the included study samples.

Sentence type (incarceration vs community). Thirty samples across 20 studies were included in analyses comparing sentences of incarceration between indigent defense counsel and retained counsel (see studies' details in **Table 4**). The computed effect sizes and their weights can be seen in **Figure 15**. Defendants with indigent defense counsel were significantly

more likely to receive carceral sentences than defendants with retained counsel (OR = 2.265, 95% CI = 1.869 – 2.744, $Z = 8.346$, $p < .0001$). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 1131.757$, $p < .0001$, $I^2 = 97.438$). After examining the distribution of effect sizes, I re-ran analyses with four potential outliers excluded (i.e., Fernsler, 1979; Rovner-Pieczenik, 1983; McCoy, 2002; and Phillips, 2009); however, removing one or all of these studies did not change the meta-analysis results. According to one study removed analyses, pooled effect sizes ranged from 2.026 to 2.350. Meta-regression results indicated that effect sizes varied across all three moderator variables. Specifically, studies that reported assigned counsel as the only indigent defense counsel type had higher differences in incarceration rates by counsel type (regression coefficient = 0.7827, 95% CI = -0.2795 – 1.2859, $p = .0023$) while studies that reported only public defenders had slightly lower differences in incarceration rates (regression coefficient = -0.5458, 95% CI = -1.0614 - -0.0302, $p = 0.380$). Effect sizes also varied by data collection year, with differences in rates of incarceration slightly increasing with more recent years (regression coefficient = 0.0204, 95% CI = 0.0049 - 0.0358, $p = .0098$). Additionally, studies conducted in the Southwest had higher differences in sentences of incarceration between counsel type (regression coefficient = 1.4971, 95% CI = 0.8414 – 2.1529, $p < .0001$). However, conducting subgroup analyses within indigent defense counsel type groups and geographical region groups did not resolve issues of high heterogeneity. Examination of the funnel plot of standard errors showed some potential publication, primarily due to the outlier studies listed above falling farther outside the 95% confidence interval.

Eighteen samples across 13 studies were included in analyses comparing sentences of incarceration between defendants with public defenders and those with assigned counsel (see **Table 4** for studies' details). The computed effect sizes and their weights can be seen in **Figure 16**. I found no significant differences in carceral sentences between defendants with public defenders and those with assigned counsel (OR = 0.851, 95% CI = 0.658 – 1.100, $Z = -1.231$, p

= .218). Cochran's Q and I^2 indicated that there was considerable heterogeneity among effect sizes ($Q = 178.911, p < .0001, I^2 = 90.498$). I re-ran analyses with two potential outlier studies removed (i.e., Fabelo et al., 2013 and Radtke et al., 1982), but removing these studies did not change the results. According to one study removed analyses, pooled odds ratios ranged from 0.780 to 1.016. Meta-regression analyses indicated that effect sizes varied across data collection years and geographic region. Data collection years accounted for 23% of the variance in effect sizes, with more recent years having lower differences in incarceration by counsel type (regression coefficient = -0.0249, 95% CI = -0.0397 - -0.0100, $p = .0011$). Geographic region accounted for 46% of the variance in effect sizes, with studies conducted in the southwest having lower differences between counsel type (regression coefficient = -2.7935, 95% CI = -3.6965 - -1.8905, $p < .0001$). Subgroup analyses further demonstrated variance in effect sizes across geographic regions; when analyzing by geographic region, issues of heterogeneity were resolved for studies conducted in the Northeast ($p = .796$), the Southeast ($p = .251$), the Southwest ($p = .317$), and the West ($p = .717$). However, as most geographic regions contained less than five effect sizes, subgroup analyses are not reported here. Examination of the funnel plot of standard errors showed strong evidence of publication bias, in that the majority of studies clustered around the top of the funnel plot. This indicates that most of the studies included in this analysis were larger, which may mean that findings of smaller studies were not published or did not contain enough statistical information to be included in this analysis.

Discussion

This meta-analysis covered over five decades of research across all 50 states on criminal justice-related outcomes for people with indigent defense counsel. Overall, findings showed that indigent defendants face worse outcomes than people with retained counsel in pretrial release decisions, case dismissals, resolving cases by guilty plea, acquittals, convictions, and sentences of incarceration. In other words, people with indigent defense counsel were more likely to resolve their case with a guilty plea, be convicted, and receive a

sentence of incarceration, and were also less likely to be released pretrial, have their case dismissed, and have their case acquitted. Conversely, people with retained counsel did not face worse outcomes across any of the examined court processing stages. Results showed fewer discrepancies between types of indigent defense counsel – individuals with public defenders were more likely to resolve their case with a guilty plea than defendants with assigned counsel, though defendants with assigned counsel were more likely to be convicted than those with public defenders. Across all other examined stages, people with public defenders did not face significantly different outcomes than those with assigned counsel. Findings of this meta-analysis also showed that effect sizes frequently varied by geographic region and sometimes varied by data collection years, potentially demonstrating a lack of consistency in indigent defense system practices and judicial decision-making across jurisdiction and time. These results and their implications are discussed in further detail in the paragraphs that follow.

Findings indicate more discrepancies in criminal justice-related outcomes between indigent defendants and those with retained counsel than between indigent defense counsel types (public defenders and assigned counsel). This shows that indigent defendants are likely disadvantaged as a result of biases in court processes and judicial decision-making rather than by attorney performance. As stated in the introduction of this manuscript, many scholars use attorney caseload, compensation, and the courtroom workgroup as explanations for discrepancies in outcomes for indigent defendants (e.g., ABA, 2006; Benner, 2011; Uphoff, 1992). While it is true that public defenders are often overworked and underpaid (Benner, 2011; Brink, 2020; Brink, 2019), assigned counsel attorneys do not necessarily face the same issues of heavy caseloads and low attorney fees. If caseload and fee issues were truly the primary source of differential outcomes between defendants, then we would expect to see more discrepancies between public defenders and assigned counsel in meta-analysis results. Additionally, many legal scholars have also cited the courtroom workgroup as a potential source of defendant outcome discrepancies (e.g., Uphoff, 1992; Walker et al., 1996). In discussing the

courtroom workgroup, some scholars indicate that public defenders may be able to secure more positive outcomes as they are more familiar to judicial decision-makers (Gertz, 1980; Walker et al., 1996), while others assert that their relationship with other members of the court causes them to feel more allegiance to the court than to their clients (Blumberg, 1967; Eisenstein et al., 1987; Uphoff, 1992). However, assigned counsel attorneys typically do not have the same consistent role in the courtroom workgroup. Thus, yet again, if this was truly the primary source of differential outcomes between defendants, then we would expect to see more discrepancies between public defenders and assigned counsel in this meta-analysis.

Instead, findings of this meta-analysis indicate that indigent defendants are more likely disadvantaged by biases in court processes and judicial decision-making. Indigent defendants are, by definition, more financially disadvantaged than people who are able to retain a private attorney. Yet, many practices in the criminal justice system are financially governed. For example, bail practices are largely dependent on a person's financial resources. The median assigned bail amount in the US for felonies is \$10,000 (Rabuy & Kopf, 2016) and for misdemeanors is \$2,000 (Wykstra, 2018); at the same time, almost half of people in the US are unable to afford an unexpected payment of \$400 (Federal Reserve Board of Governors, 2019), making them unable to afford even a fraction of the median assigned bail amounts. To that end, it is no surprise that indigent defendants in the current study were significantly less likely to obtain pretrial release than defendants with retained counsel. People impacted by the criminal justice system are also often subjected to other financial burdens, such as fines or court fees. In most jurisdictions, if a defendant is unable to pay these fines and fees, they will face consequential action such as additional charges or revocation of community release. Additionally, successful court processing relies on defendants' own access to certain resources. For instance, to attend scheduled court dates, individuals are required to obtain reliable transportation to and from the courthouse (which often requires paying for parking or public transportation), and they may be required to take time off work or pay for childcare (Bornstein et

al., 2012). All of these financial obligations disadvantage indigent defendants and can result in negative consequences within their court processing.

The discrepancies in criminal justice-related outcomes for indigent defendants observed in this meta-analysis may also be the result of biases in judicial decision-making. It is well-known that judicial decisions are often influenced by extralegal and even subjective factors (Bobo & Thompson, 2006; Eckhouse et al., 2018; Forlini, 2018; Skeem & Lowenkamp, 2016). In empirical literature, researchers have found that defendants of lower socioeconomic status experience harsher criminal justice sanctioning (Lofstrom & Raphael, 2016; van Eijk, 2017). Legal scholars have also long recognized the potential influence of socioeconomic or class bias in judicial decision-making (e.g., Neitz, 2013), so much so that the American Bar Association includes risk of socioeconomic bias in their Model Code of Judicial Conduct (ABA, 2020). The findings of this meta-analysis provide further evidence that individuals' socioeconomic status and resource access can have implications for the outcomes they experience in their criminal justice system processing. Many of the outcomes in which indigent defendants experienced significantly worse outcomes were the result of judicial decisions: i.e., pretrial release, conviction, and sentence type are outcomes that are primarily decided by judges. Discrepancies in these outcomes between indigent defendants and defendants with retained attorneys, but not between indigent defense counsel types, indicates that the defendant's indigent status alone unfairly prejudices defendants' outcomes within the criminal justice system. It is probable that a defendant's indigent defense status is enough to signal that they are of lower socioeconomic status, triggering judicial decision-makers' class biases.

The implications of indigent defendants being more likely to experience negative criminal justice-related outcomes is concerning for a number of reasons. According to this meta-analysis, indigent defendants were more likely to face periods of incarceration both during the pretrial stage and in their sentencing. Incarceration serves to remove the right to freedom – a right so important and central to a person's being that it is labeled “unalienable” in the second

sentence of the US Declaration of Independence (US, 1776). Moreover, decades of research demonstrates that people who experience incarceration are more likely to also experience long-term consequences of poor physical and mental health, economic strain, damaged personal relationships, and continued re-involvement in the criminal justice system (Mille et al., 2001; Mueller-Smith, 2015; Willmott & van Olphen, 2005). Many of these long-term consequences of incarceration are especially concerning during times of crisis, such as the COVID-19 pandemic. At the time of writing this manuscript, almost 400,000 people housed in prisons had reported contracting COVID-19 and less than two-thirds of them had recovered (The Marshall Project, 2021). Thousands of people housed in jails and prisons died from COVID-19 during the pandemic as a result of their incarceration (Equal Justice Initiative, 2021), many of whom were detained pretrial because they were unable to afford bail (Deitch et al., 2020). According to results from this meta-analysis, indigent defendants are at increased risk for these negative consequences resulting from incarceration.

Findings indicating that indigent defendants experience worse outcomes in their case dispositions or verdicts are also cause for concern. This meta-analysis shows that indigent defendants are less likely to have their case dismissed or be acquitted and are more likely to plead guilty and be convicted than defendants who retain their defense attorney. This means that indigent defendants are more likely to receive punitive actions and a criminal record by the end of their case. The stigmatization of criminality, especially for individuals of intersecting marginalized identities, can lead to strained social relationships, economic adversity, and poor health outcomes for individuals convicted in criminal courts (Laredo, 2012; West, 2015). For instance, individuals with criminal convictions often face barriers to stable employment and housing (Laredo, 2012). According to strain theory of criminal behavior, these economic strains directly contribute to a person's engagement in criminal activity (Agnew, 1985; Agnew, 1992; Merton, 1938). With this in mind, high rates of recidivism and subsequent re-involvement in the criminal justice system (Alper et al., 2018) are unsurprising. Stigmatization of criminality can

also directly impact individuals' self-identity and well-being (Rasmusen, 1996; West, 2015). One mechanism for this is labeling theory, in which individuals internalize the stigmatizing labels placed on them by society and by other people (Becker, 1963). By being more likely to be convicted of the crimes they are charged with, indigent defendants are more likely to experience damages to their economic, social, and mental well-being, even after their involvement in the justice system is over.

Findings from this meta-analysis also highlight potential ways to improve outcomes for indigent defendants. Results show that indigent defendants begin experiencing disadvantages in their court processing as early as the pretrial stage, in which indigent defendants are less likely to be released pretrial than individuals with retained attorneys. Legal scholars and researchers widely recognize the concept of cumulative disadvantage in criminal justice system processing; that is, the disadvantages people experience in the criminal justice system are not isolated to each stage, but rather accumulate into more disadvantages as they move through the system (Kurlycheck & Johnson, 2019). In this way, the negative outcomes indigent defendants experience in later stages of court processing may be improved by addressing issues in pretrial release status. Indeed, research on the impacts of pretrial detention has consistently demonstrated that individuals detained pretrial are more likely to enter a guilty plea, be convicted of the charges against them, and receive sentences of incarceration (Austin, 2017; Cohen & Reaves, 2007; Dobbie et al., 2018; Heaton, et al., 2017; Kellough & Wortley, 2002; Ottone & Scott-Hayward, 2018; Philips, 2012; Sacks, et al., 2015; Stevenson, 2018), all of which are outcomes more likely to be experienced by indigent defendants in this meta-analysis. One potential way to alleviate indigent defendants' likelihood of pretrial detention is to reform traditional bail practices. As stated above, indigent defendants are, by definition, more financially disadvantaged than their non-indigent counterparts, and thus more likely to be detained with even low bail amounts. Further, even beyond bail practices, jurisdictions should consider revising their pretrial release guidelines to allow for more defendants to be released

pretrial, especially defendants who are charged with lower-level crimes that pose no threat to public safety.

Another potential way to improve outcomes for indigent defendants highlighted in this meta-analysis is by establishing evidence-based standards for indigent defense systems and judicial decision-making across jurisdictions. Meta-regression results in this study consistently showed that effect sizes significantly varied across geographic regions. Results also showed that effect sizes did not often vary as a function of indigent defense system type (i.e., public defender or assigned counsel), suggesting that it is not an issue of the type of indigent defense system but rather of how it is implemented and practiced, as well as how decision-makers are influenced by indigent defense status. After *Gideon v Wainwright* (1963), each jurisdiction across the US was largely left to decide how they implemented indigent defense systems and the policies and practices that guide them. As highlighted in the introduction of this manuscript, the lack of guidance or standards for indigent defense systems has resulted in a lot of variances in indigent defense system practices. For example, some jurisdictions provide indigent defense for misdemeanor cases, while others only provide indigent defense for felony cases or cases that could result in sentences of incarceration. The differences between indigent defense policies and practices across jurisdictions may explain the high levels of heterogeneity in the analyses conducted in this study. Thus, creating evidence-based standards that are applicable to all jurisdictions may help to alleviate the discrepancies in negative outcomes experienced by indigent defendants. Additionally, the variance by geographic region also suggests discrepancies in judicial decision-making across jurisdictions. This further highlights the impact of biases in judicial decisions. According to results of this meta-analysis, some jurisdictions may demonstrate more bias as a function of indigent defense status through larger discrepancies in criminal justice-related outcomes between indigent defendants and defendants with retained counsel.

Limitations

One of the largest limitations of this study was the high levels of heterogeneity not explained by subgroup analyses and meta-regressions. Because of the largely unexplained variance in effect sizes, results from this meta-analysis should be interpreted with caution. However, high levels of heterogeneity are not uncommon in meta-analyses on observational studies (Mueller et al., 2018; Stroup et al., 2000), especially in US criminal justice-related meta-analyses given the high variability of criminal justice system practices across jurisdictions (e.g., Lowder et al., 2018; Viljoen et al., 2019). In fact, findings of high heterogeneity and the sources of variances in effect sizes can be just as informative as the meta-analysis results (Dwyer et al., 2001). Additionally, the importance of reporting the findings of this meta-analysis must be considered alongside decisions made to address high levels of heterogeneity (Imrey, 2020; Lowder et al., 2018; Sabitova et al., 2020; Viljoen et al., 2019). Since this is the first meta-analysis conducted on outcomes for indigent defendants across multiple stages of court processing, I determined it was more important to report results of this meta-analysis than to exclude all studies from meta-analysis because of high heterogeneity in effect sizes.

Another limitation of this meta-analysis was the inconsistency across studies. While we were able to find over 70 empirical studies examining outcomes for indigent defendants, I was ultimately only able to include 40 in the final meta-analysis. Many studies were excluded from meta-analyses because they did not measure the outcome variable similarly enough to other included studies. We also were unable to obtain complete statistical information for many of the outcomes we coded. For example, the outcome of sentence length was reported and coded for more than 10 studies. However, after removing entries with incomplete statistical information and examining how studies reported this outcome, there were not enough similarly reported studies with complete statistical information for either comparison group analyses. It is possible that the studies that had to be excluded from analyses would have changed the results of meta-analyses and meta-regression, though there is currently no way of knowing this. Additionally,

many outcomes that are included in this meta-analysis contain less than ten studies. This low number of studies in certain outcomes made it difficult to interpret sources of variance and publication bias.

Finally, this meta-analysis was limited by my ability to control for variables that contribute to the examined outcomes. For example, sentences of incarceration are very influenced by charge type and severity. While some of the included studies reported results separately for defendants with different charge levels, most did not. Further, most studies only included complete statistical information for frequencies of events. If more studies had complete statistical information for more robust analyses that adjust and control for other variables (e.g., odds ratios), the results of this meta-analysis would account for more of the variability in outcomes experienced by defendants. Studies also did not consistently report defendants' race, jurisdictions' urbanicity, and other socio-demographic characteristics that are known to contribute to criminal justice-related outcomes; thus, I was also unable to control for these variables in my analyses. However, despite this limitation and the ones listed above, this meta-analysis presents novel findings that contribute to what is known about outcomes experienced by indigent defendants.

Future Directions

This meta-analysis highlights the need for more research on criminal justice-related outcomes experienced by indigent defendants. More research is desperately needed on outcomes experienced by indigent defendants in stages of court processing beyond case disposition and sentencing decision. Most of the studies included in this meta-analysis focused on outcomes of conviction and sentences of incarceration. Yet, in order to understand high rates of conviction and incarceration among indigent defendants, we also need to better understand outcomes related to pretrial decisions and case resolution methods. For instance, while this meta-analysis showed that indigent defendants were less likely to be released pretrial than defendants with retained counsel, it was unable to provide information about the bail amounts

assigned to indigent defendants, decisions to release defendants on their own recognizance, and other decisions made at the pretrial stage that can impact subsequent case processing. Additionally, I was unable to examine any outcomes defendants experienced post-sentencing. As stated above, it is known that court case outcomes, like conviction or incarceration, can have long-term impacts on people involved in the criminal justice system. This meta-analysis demonstrated that indigent defendants are more likely to experience outcomes associated with negative long-term consequences. As such, it is likely that people are also experiencing disproportionate long-term negative outcomes as a function of indigent defense status; research is needed to better understand outcomes experienced by indigent defendants after their case's resolution.

In addition to needing more research within other stages of court processing, there is also more research needed on the mechanisms for the discrepancies experienced by indigent defendants. Currently, we are only able to speculate on the mechanisms that lead to more negative outcomes for indigent defendants. While I posit that these discrepancies are primarily the result of biases in criminal justice system processes and judicial decision-making, I cannot definitively explain the differences in outcomes experienced by indigent defendants compared to defendants with retained counsel. Research that examines the causes and solutions for negative outcomes experienced by indigent defendants is needed. Specifically, given the variability in effect sizes across geographic region in this meta-analysis, more research is needed to examine the impacts of jurisdictional differences in outcomes experienced by indigent defendants. Additionally, future research conducted through an intersectional lens is needed to better understand the nuances in outcomes experienced by indigent defendants who belong to multiple intersecting marginalized groups.

Conclusion

This was the first meta-analysis conducted on outcomes across court processing stages for indigent defendants compared to defendants with retained counsel and across indigent

defense counsel types. In this meta-analysis, we screened over 500 sources, read over 200 studies, coded 71 studies, and I ultimately analyzed more than 200 unique effect sizes within 40 studies. Findings of this meta-analysis indicate that indigent defendants experience worse outcomes in pretrial release, case disposition, and sentencing decisions compared to defendants with retained counsel. In comparisons across types of indigent defense counsel, individuals with public defenders were more likely to resolve their case with a guilty plea than those with assigned counsel, while individuals with assigned counsel were more likely to be convicted than those with public defenders; all other analyses comparing type of indigent defense counsel showed no significant differences in outcomes. All analyses showed considerable heterogeneity in effect sizes, some which was explained by variances in effect sizes across geographic regions or data collection years. These results suggest that the disadvantages indigent defendants experience in criminal justice-related outcomes are likely not the result of ineffective counsel, but rather the result of systemic and individual biases. Further research is needed to understand additional outcomes experienced by indigent defendants within pretrial and post-case stages, and to understand the mechanisms through which indigent defendants experience more negative criminal justice-related outcomes than their privately represented counterparts.

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Table 1

Indicators of Effect Sizes' Primary Outcome Format and Statistical Entries

Indicator of Effect Size	Primary Outcome Format	Primary Statistical Entries for Calculation
Odds Ratio	Dichotomous	Event frequencies and group sample sizes Chi-squared and total sample size Odds ratio, confidence limits, and confidence level Risk ratio and confidence limits Log risk ratio and standard error or variance Risk difference and confidence limits, standard error, or variance
Hedge's g	Continuous	Means, standard deviations, and group sample sizes Means, sample size, and p- or t-value Difference in means, sample size, and common standard deviation, p-value, or t-value Group sample sizes and p- or t-value Raw difference in means and confidence limits, standard error, or variance Cohen's d and confidence limits, standard error, or variance Hedge's g and confidence limits, standard error, or variance Regression coefficient, standard deviation of outcome, and groups sample sizes Raw mean difference and confidence limits, standard error, or variance
Correlation coefficient r	Correlational	Correlation and sample size, standard error, variance, or t-value Fisher's Z and sample size, standard error, or variance Sample size and p- or t-value for correlation

Table 2

Pretrial Outcome Included Studies

Record Citation	Publication Type	Year(s) Data Collected	Jurisdiction(s)	Population	Attorney Groups	Complete Statistics Reported for Outcome
Outcome: Pretrial Release						
Fersnler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of pretrial release within each attorney group
Harlow, 2000	Report	1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of pretrial release within each attorney group
		1996	Nationally representative sample	Jail inmates	Assigned counsel, retained counsel	Frequency of pretrial release within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of pretrial release within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of pretrial release within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of pretrial release within each attorney group

Table 2 (continued).

		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of pretrial release within each attorney group
Linhorst et al., 2017	Peer-reviewed Journal Article	2003-2015	Missouri	Defendants referred for psychiatric evaluation pretrial	Public defenders, retained counsel	Frequency of pretrial release within each attorney group
McCoy, 2002	Dissertation / Thesis	1999	Harris County, Texas	DUI defendants	Assigned counsel, retained counsel	Frequency of pretrial release within each attorney group
Nagel, 1973	Law Review Article	1962	194 counties in all 50 states	State grand larceny cases	Public defenders and assigned counsel, ^b retained counsel	Frequency of pretrial release within each attorney group
		1962	194 counties in all 50 states	State grand larceny cases	Public defenders, assigned counsel	Frequency of pretrial release within each attorney group
Radtke et al., 1982	Report	1977-1980	Wayneboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants	Public defenders, assigned counsel	Frequency of pretrial release within each attorney group
Singer et al., 1976	Report	1974	Louisville, KY, Baltimore County, MD, Columbus, OH, Philadelphia, PA, Utica, NY, Monterey, CA, Las Vegas, NV, and Oakland, CA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of pretrial release within each attorney group ^c

Table 2 (continued).

Steggerda & McCutcheon, 1974	Report	1973-1974	Polk County, Iowa	All defendants	Public defenders, assigned counsel	Frequency of pretrial release within each attorney group
Williams, 2017	Peer- reviewed Journal Article	1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004	Largest counties in Florida	Felony defendants	Public defenders, retained counsel	Odds ratio ^d

Notes: ^a public defender and assigned counsel groups were combined for analyses examining indigent defense counsel compared to retained counsel; ^b public defender and assigned counsel groups were not reported separately and thus not included in analyses examining public defenders compared to assigned counsel; ^c frequencies were calculated from percentages provided in publication; ^d odds ratios confidence intervals calculated from standard error

Table 3

Case Outcomes Included Studies

Record Citation	Publication Type	Year(s) Data Collected	Jurisdiction(s)	Population	Attorney Groups	Complete Statistics Reported for Outcome
Outcome: Case Dismissal						
Clarke & Koch, 1976	Law Review	1975-1976	Mecklenberg County, North Carolina	Defendants whose charges could result in incarceration	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group ^c
Cohen et al., 1982	Report	1977-1980	Eight jurisdictions in Virginia	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group
Fabelo et al., 2013	Report	2011-2012	Harris County, Texas	Misdemeanor defendants	Public defenders, assigned counsel	Frequency of case dismissal within each attorney group
		2011-2012	Harris County, Texas	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group

Table 3 (continued).

Fersnler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group ^c
Gitelman, 1970	Law Review	1969	Little Rock, AR; Pine Bluff, AR; Fort Smith, AR; Jonesboro, AR; Fayetteville, AR; Texarkana, AR; Blytheville, AR; Bentonville, AR; Russellville, AR	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of case dismissal within each attorney group
Guevara & Spohn, 2004	Peer-reviewed Journal Article	1990-1994	Two largest counties in a midwestern state	All defendants	Public defenders, retained counsel	Chi-squared
Harlow, 2000	Report	1998	US district courts	Federal defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of case dismissal within each attorney group
		1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of case dismissal within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of case dismissal within each attorney group

Table 3 (continued).

		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of case dismissal within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of case dismissal within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of case dismissal within each attorney group
Kutateladze & Leimberg, 2019	Peer-reviewed Journal Article	2010-2011	Manhattan, New York County, New York	Domestic violence defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group ^c
Lehtinen & Smith, 1974	Book Chapter	1968	Los Angeles, California	Superior Court defendants	Public defenders, retained counsel	Frequency of case dismissal within each attorney group
McCoy, 2002	Dissertation / Thesis	1999	Harris County, Texas	DUI defendants	Assigned counsel, retained counsel	Frequency of case dismissal within each attorney group

Table 3 (continued).

Singer et al., 1976	Report	1974	Louisville, KY, Baltimore County, MD, Columbus, OH, Philadelphia, PA, Utica, NY, Monterey, CA, Las Vegas, NV, and Oakland, CA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group
Taylor et al., 1972	Law Review	1970-1971	San Diego, California	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of case dismissal within each attorney group
Yamashiro et al., 2013	Law Review	2004-2007	Los Angeles, California	All defendants	Public defenders, assigned counsel	Chi-squared
Williams, 2013	Peer-reviewed Journal Article	1990-2006	Four large urban counties in Florida	Felony defendants	Public defenders, retained counsel	Odds ratio ^d
Outcome: Guilty Plea						
Anderson & Heaton, 2013	Report	1994-2005	Philadelphia, Pennsylvania	Defendants charged with murder	Public defenders, assigned counsel	Frequency of guilty pleas within each attorney group
Cohen et al., 1982	Report	1977-1980	Eight jurisdictions in Virginia	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of guilty pleas within each attorney group
Fernsler, 1979	Dissertation / Thesis	1974-1976	Montana	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of guilty pleas within each attorney group ^c

Table 3 (continued).

		1974-1976	Montana	Misdemeanor defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of guilty pleas within each attorney group ^c
Harlow, 2000	Report	1996	Nationally representative sample	Jail inmates	Public defenders and assigned counsel, ^b retained counsel	Frequency of guilty pleas within each attorney group
		1997	Nationally representative sample	State prison inmates	Assigned counsel, retained counsel	Frequency of guilty pleas within each attorney group
		1997	Nationally representative sample	Federal prison inmates	Assigned counsel, retained counsel	Frequency of guilty pleas within each attorney group
Kutateladze & Leimberg, 2019	Peer-reviewed Journal Article	2010-2011	Manhattan, New York County, New York	Domestic violence defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of guilty pleas within each attorney group ^c
Radtke et al., 1982	Report	1977-1980	Wayneboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants	Public defenders, assigned counsel	Frequency of guilty pleas within each attorney group
Outcome: Trial						
Anderson & Heaton, 2012	Report	1994-2005	Philadelphia, Pennsylvania	Defendants charged with murder	Public defenders, assigned counsel	Frequency of trials within each attorney group

Table 3 (continued).

Cohen, 2014	Peer-reviewed Journal Article	2004 and 2006	Nation's 75 largest counties	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of trials within each attorney group ^c
Cohen et al., 1982	Report	1977-1980	Eight jurisdictions in Virginia	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of trials within each attorney group
Fernsler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of trials within each attorney group ^c
Gitelman, 1970	Law Review	1969	Little Rock, AR; Pine Bluff, AR; Fort Smith, AR; Jonesboro, AR; Fayetteville, AR; Texarkana, AR; Blytheville, AR; Bentonville, AR; Russellville, AR	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of trials within each attorney group
Harlow, 2000	Report	1998	US district courts	Federal defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of trials within each attorney group
		1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of trials within each attorney group
		1997	Nationally representative sample	State prison inmates	Assigned counsel, retained counsel	Frequency of trials within each attorney group

Table 3 (continued).

		1997	Nationally representative sample	Federal prison inmates	Assigned counsel, retained counsel	Frequency of trials within each attorney group
Hoffman et al., 2005	Peer-reviewed Journal Article	2002	Denver, Colorado	Felony defendants	Public defenders, assigned counsel, retained counsel	Frequency of trials within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of trials within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of trials within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of trials within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of trials within each attorney group
Lehtinen & Smith, 1974	Book Chapter	1968	Los Angeles, California	Superior Court defendants	Public defenders, retained counsel	Frequency of trials within each attorney group

Table 3 (continued).

Levine, 1975	Peer-reviewed Journal Article	1972	Brooklyn, New York		Public defenders, retained counsel	Chi-squared
Nagel, 1973	Law Review Article	1962	194 counties in all 50 states	State grand larceny cases	Public defenders and assigned counsel, ^b retained counsel	Frequency of trials within each attorney group
		1962	194 counties in all 50 states	State grand larceny cases	Public defenders, assigned counsel	Frequency of trials within each attorney group
Phillips, 2009	Peer-reviewed Journal Article	1992-1999	Harris County, Texas	Capital case defendants	Assigned counsel, retained counsel	Frequency of trials within each attorney group
Radtke et al., 1982	Report	1977-1980	Waynesboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants	Public defenders, assigned counsel	Frequency of trials within each attorney group
Singer et al., 1976	Report	1974	Louisville, KY, Baltimore County, MD, Columbus, OH, Philadelphia, PA, Utica, NY, Monterey, CA, Las Vegas, NV, and Oakland, CA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of trials within each attorney group

Table 3 (continued).

Outcome: Acquittal						
Champion, 1989	Peer-reviewed Journal Article	1981-1984	Tennessee, Virginia, Kentucky	Felony defendants	Public defenders, retained counsel	Frequency of acquittal within each attorney group
Fabelo et al., 2013	Report	2011-2012	Harris County, Texas	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of acquittal within each attorney group
Fersnler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of acquittal within each attorney group ^c
Hall, 2014	Dissertation / Thesis	2008-2013	Lawrence District Court, MA	Defendants who went to jury trial	Public defenders and assigned counsel, ^b retained counsel	Odds ratio
Harlow, 2000	Report	1998	US district courts	Federal defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of acquittal within each attorney group
		1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of acquittal within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of acquittal within each attorney group

Table 3 (continued).

		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of acquittal within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of acquittal within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of acquittal within each attorney group
Levine, 1975	Peer-reviewed Journal Article	1972	Brooklyn, New York		Public defenders, retained counsel	Chi-squared
McCoy, 2002	Dissertation / Thesis	1999	Harris County, Texas	DUI defendants	Assigned counsel, retained counsel	Frequency of acquittal within each attorney group
Nagel, 1973	Law Review Article	1962	194 counties in all 50 states	State grand larceny cases	Public defenders and assigned counsel, ^b retained counsel	Frequency of acquittal within each attorney group
		1962	194 counties in all 50 states	State grand larceny cases	Public defenders, assigned counsel	Frequency of acquittal within each attorney group

Table 3 (continued).

Phillips, 2009	Peer-reviewed Journal Article	1992-1999	Harris County, Texas	Capital case defendants	Assigned counsel, retained counsel	Frequency of acquittal within each attorney group
Radtke et al., 1982	Report	1977-1980	Waynseboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants	Public defenders, assigned counsel	Frequency of acquittal within each attorney group
Outcome: Conviction						
Anderson & Heaton, 2012	Report	1994-2005	Philadelphia, Pennsylvania	Defendants charged with murder	Public defenders, assigned counsel	Frequency of conviction within each attorney group
Champion, 1989	Peer-reviewed Journal Article	1981-1984	Tennessee, Virginia, Kentucky	Felony defendants	Public defenders, retained counsel	Frequency of conviction within each attorney group
Chiricos et al., 1972	Peer-reviewed Journal Article	1969-1970	Florida	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Chi-squared
Cohen, 2014	Peer-reviewed Journal Article	2004 and 2006	Nation's 75 largest counties	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
Cohen et al., 1982	Report	1977-1980	Eight jurisdictions in Virginia	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group

Table 3 (continued).

Fabelo et al., 2013	Report	2011-2012	Harris County, Texas	Misdemeanor defendants	Public defenders, assigned counsel	Frequency of conviction within each attorney group
		2011-2012	Harris County, Texas	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
Fersnler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group ^c
Hall, 2014	Dissertation / Thesis	2008-2013	Lawrence District Court, MA	Defendants who went to jury trial	Public defenders and assigned counsel, ^b retained counsel	Odds ratio
Hanson et al., 1992	Report	1987	Wayne County, MI; King County, WA; Denver County, CO; Norfolk, VA; Monterey County, CA; Oxford County, ME; Gila County, AZ; Island County, WA; San Juan County, WA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
Harlow, 2000	Report	1998	US district courts	Federal defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of conviction within each attorney group

Table 3 (continued).

		1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of conviction within each attorney group
Hoffman et al., 2005	Peer-reviewed Journal Article	2002	Denver, Colorado	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of conviction within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of conviction within each attorney group
McCoy, 2002	Dissertation / Thesis	1999	Harris County, Texas	DUI defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group

Table 3 (continued).

Roach, 2014	Peer-reviewed Journal Article	1990, 1992, 1994, 1996, 1998, 2000, 2002, 2004	Large urban counties nationwide	Felony defendants	Public defenders, assigned counsel	Odds ratio ^d
Rovner-Pieczenik, 1983	Report	1978-1979	Distric of Columbia	Robbery defendants	Public defenders, assigned counsel	Frequency of conviction within each attorney group
		1978-1979	Distric of Columbia	Burglary defendants	Public defenders, assigned counsel	Frequency of conviction within each attorney group
		1979	Prince George County, MD	Robbery defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
		1979	Prince George County, MD	Burglary defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group
		1978-1980	Alexandria, VA	Robbery defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group
		1978-1980	Alexandria, VA	Burglary defendants	Assigned counsel, retained counsel	Frequency of conviction within each attorney group

Table 3 (continued).

Shem-Tov, 2019	Dissertation / Thesis	2006-2016	San Diego, California	All defendants	Public defenders, assigned counsel	Odds ratio ^d
		2006-2016	Federal courts	All defendants	Public defenders, assigned counsel	Odds ratio ^d
Steggerda & McCutcheon, 1974	Report	1973-1974	Polk County, Iowa	All defendants	Public defenders, assigned counsel	Frequency of conviction within each attorney group
Stover & Eckart, 1975	Peer-reviewed Journal Article	1972	Largest metropolis in a state west of the Mississippi River	Felony defendants	Public defenders, retained counsel	Frequency of conviction within each attorney group
Taylor et al., 1972	Law Review	1970-1971	San Diego, California	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of conviction within each attorney group
Williams, 2013	Peer-reviewed Journal Article	1990-2006	Four large urban counties in Florida	Felony defendants	Public defenders, retained counsel	Odds ratio ^d
Zane et al., 2021	Peer-reviewed Journal Article	1998	37 large, urban counties across 19 states	All defendants	Public defenders, assigned counsel	Odds ratio
		1998	37 large, urban counties across 19 states	All defendants	Public defenders, retained counsel	Odds ratio
Outcome: Conviction Severity						
Cohen, 2014	Peer-reviewed Journal Article	2004 and 2006	Nation's 75 largest counties	Misdemeanor defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of charge reduction within each attorney group ^c

Table 3 (continued).

Fabelo et al., 2013	Report	2011-2012	Harris County, Texas	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of charge reduction within each attorney group
Hanson et al., 1992	Report	1987	Wayne County, MI; King County, WA; Denver County, CO; Norfolk, VA; Monterey County, CA; Oxford County, ME; Gila County, AZ; Island County, WA; San Juan County, WA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of charge reduction within each attorney group
Harlow, 2000	Report	1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of charge reduction within each attorney group
Hartley, 2004	Dissertation / Thesis	1993	Cook County, IL	Felony defendants	Public defenders, retained counsel	Frequency of charge reduction within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of charge reduction within each attorney group

Table 3 (continued).

		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of charge reduction within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of charge reduction within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of charge reduction within each attorney group
Kutateladze & Leimberg, 2019	Peer-reviewed Journal Article	2010-2011	Manhattan, New York County, New York	Domestic violence defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of charge reduction within each attorney group ^c
Radtke et al., 1982	Report	1977-1980	Waynseboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants who pled guilty	Public defenders, assigned counsel	Frequency of charge reduction within each attorney group
		1977-1980	Waynseboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants who went to trial	Public defenders, assigned counsel	Frequency of charge reduction within each attorney group

Table 3 (continued).

Sterling, 1983	Book	1974-1977	Denver, Colorado	Defendants who resolved case through plea bargaining	Public defenders, assigned counsel, ^a retained counsel	Frequency of charge reduction within each attorney group ^c
Stover & Eckart, 1975	Peer-reviewed Journal Article	1972	Largest metropolis in a state west of the Mississippi River	Felony defendants	Public defenders, retained counsel	Frequency of charge reduction within each attorney group
Hartley et al., 2010	Peer-reviewed Journal Article	1993	Cook County, IL	Felony defendants	Public defenders, retained counsel	Frequency of charge reduction within each attorney group
Williams, 2013	Peer-reviewed Journal Article	1990-2006	Four large urban counties in Florida	Felony defendants	Public defenders, retained counsel	Odds ratio ^d

Notes: ^a public defender and assigned counsel groups were combined for analyses examining indigent defense counsel compared to retained counsel; ^b public defender and assigned counsel groups were not reported separately and thus not included in analyses examining public defenders compared to assigned counsel; ^c frequencies were calculated from percentages provided in publication; ^d odds ratios confidence intervals calculated from standard error

Table 4

Sentencing Outcome Included Studies

Record Citation	Publication Type	Year(s) Data Collected	Jurisdiction(s)	Population	Attorney Groups	Complete Statistics Reported for Outcome
Outcome: Incarceration Sentence						
Cohen, 2014	Peer-reviewed Journal Article	2004 and 2006	Nation's 75 largest counties	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group ^c
Cohen et al., 1982	Report	1977-1980	Eight jurisdictions in Virginia	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Fabelo et al., 2013	Report	2011-2012	Harris County, Texas	Misdemeanor defendants	Public defenders, assigned counsel	Frequency of incarceration within each attorney group
		2011-2012	Harris County, Texas	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Fersnler, 1979	Dissertation / Thesis	1974-1976	Montana	All defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group ^c

Table 4 (continued).

Guevara & Spohn, 2004	Peer-reviewed Journal Article	1990-1994	Two largest counties in a midwestern state	All defendants	Public defenders, retained counsel	Chi-squared
Hanson et al., 1992	Report	1987	Wayne County, MI; King County, WA; Denver County, CO; Norfolk, VA; Monterey County, CA; Oxford County, ME; Gila County, AZ, Island County, WA; San Juan County, WA	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Harlow, 2000	Report	1998	US district courts	Federal defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
		1996	Nation's 75 largest counties	Felony defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
Hartley, 2004	Dissertation / Thesis	1993	Cook County, IL	Felony defendants	Public defenders, retained counsel	Frequency of incarceration within each attorney group

Table 4 (continued).

Hoffman et al., 2005	Peer-reviewed Journal Article	2002	Denver, Colorado	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Houlden & Balkin, 1985	Peer-reviewed Journal Article	1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Felony defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with an assigned counsel indigent defense system	Misdemeanor defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Felony defendants	Public defenders, retained counsel	Frequency of incarceration within each attorney group
		1981-1982	A rural jurisdiction in a midwestern state with a public defender system	Misdemeanor defendants	Public defenders, retained counsel	Frequency of incarceration within each attorney group

Table 4 (continued).

Kutateladze & Leimberg, 2019	Peer-reviewed Journal Article	2010-2011	Manhattan, New York County, New York	Domestic violence defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group ^c
Martinez & Pollock, 2008	Law Review	2004	Most populous county in a southern state	White defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
		2004	Most populous county in a southern state	Black defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
		2004	Most populous county in a southern state	Hispanic defendants	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
McCoy, 2002	Dissertation / Thesis	1999	Harris County, Texas	DUI defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
Nagel, 1973	Law Review Article	1962	194 counties in all 50 states	State grand larceny cases	Public defenders and assigned counsel, ^b retained counsel	Frequency of incarceration within each attorney group
		1962	194 counties in all 50 states	State grand larceny cases	Public defenders, assigned counsel	Frequency of incarceration within each attorney group

Table 4 (continued).

Phillips, 2009	Peer-reviewed Journal Article	1992-1999	Harris County, Texas	Capital case defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
Radtke et al., 1982	Report	1977-1980	Wayneboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants who pled guilty	Public defenders, assigned counsel	Frequency of incarceration within each attorney group
		1977-1980	Wayneboro County, Stanton County, Augusta County, Roanoke, Petersburg, and Virginia Beach, VA	Felony defendants who went to trial	Public defenders, assigned counsel	Frequency of incarceration within each attorney group
Rovner-Pieczenik, 1983	Report	1978-1979	District of Columbia	Robbery defendants	Public defenders, assigned counsel	Frequency of incarceration within each attorney group
		1978-1979	District of Columbia	Burglary defendants	Public defenders, assigned counsel	Frequency of incarceration within each attorney group

Table 4 (continued).

		1979	Prince George County, MD	Robbery defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
		1979	Prince George County, MD	Burglary defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
		1978-1980	Alexandria, VA	Robbery defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
		1978-1980	Alexandria, VA	Burglary defendants	Assigned counsel, retained counsel	Frequency of incarceration within each attorney group
Singer et al., 1976	Report	1974	Louisville, KY, Baltimore County, MD, Columbus, OH, Philadelphia, PA, Utica, NY, Monterey, CA, Las Vegas, NV, and Oakland, CA	Felony defendants who resolved case with plea	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group

Table 4 (continued).

		1974	Louisville, KY, Baltimore County, MD, Columbus, OH, Philadelphia, PA, Utica, NY, Monterey, CA, Las Vegas, NV, and Oakland, CA	Felony defendants who resolved case with trial	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Steggerda & McCutcheon, 1974	Report	1973-1974	Polk County, Iowa	All defendants	Public defenders, assigned counsel	Frequency of incarceration within each attorney group
Stover & Eckart, 1975	Peer-reviewed Journal Article	1972	Largest metropolis in a state west of the Mississippi River	Felony defendants	Public defenders, retained counsel	Frequency of incarceration within each attorney group
Taylor et al., 1972	Law Review	1970-1971	San Diego, California	Felony defendants	Public defenders, assigned counsel, ^a retained counsel	Frequency of incarceration within each attorney group
Williams, 2002	Law Review	1994-1996	Medium sized northern Florida county	Felony defendants	Public defenders, retained counsel	Odds ratio ^d
Williams, 2013	Peer-reviewed Journal Article	1990-2006	Four large urban counties in Florida	Felony defendants	Public defenders, retained counsel	Odds ratio ^d

Notes: ^a public defender and assigned counsel groups were combined for analyses examining indigent defense counsel compared to retained counsel; ^b public defender and assigned counsel groups were not reported separately and thus not included in analyses examining public defenders compared to assigned counsel; ^c frequencies were calculated from percentages provided in publication; ^d odds ratios confidence intervals calculated from standard error

Figure 1

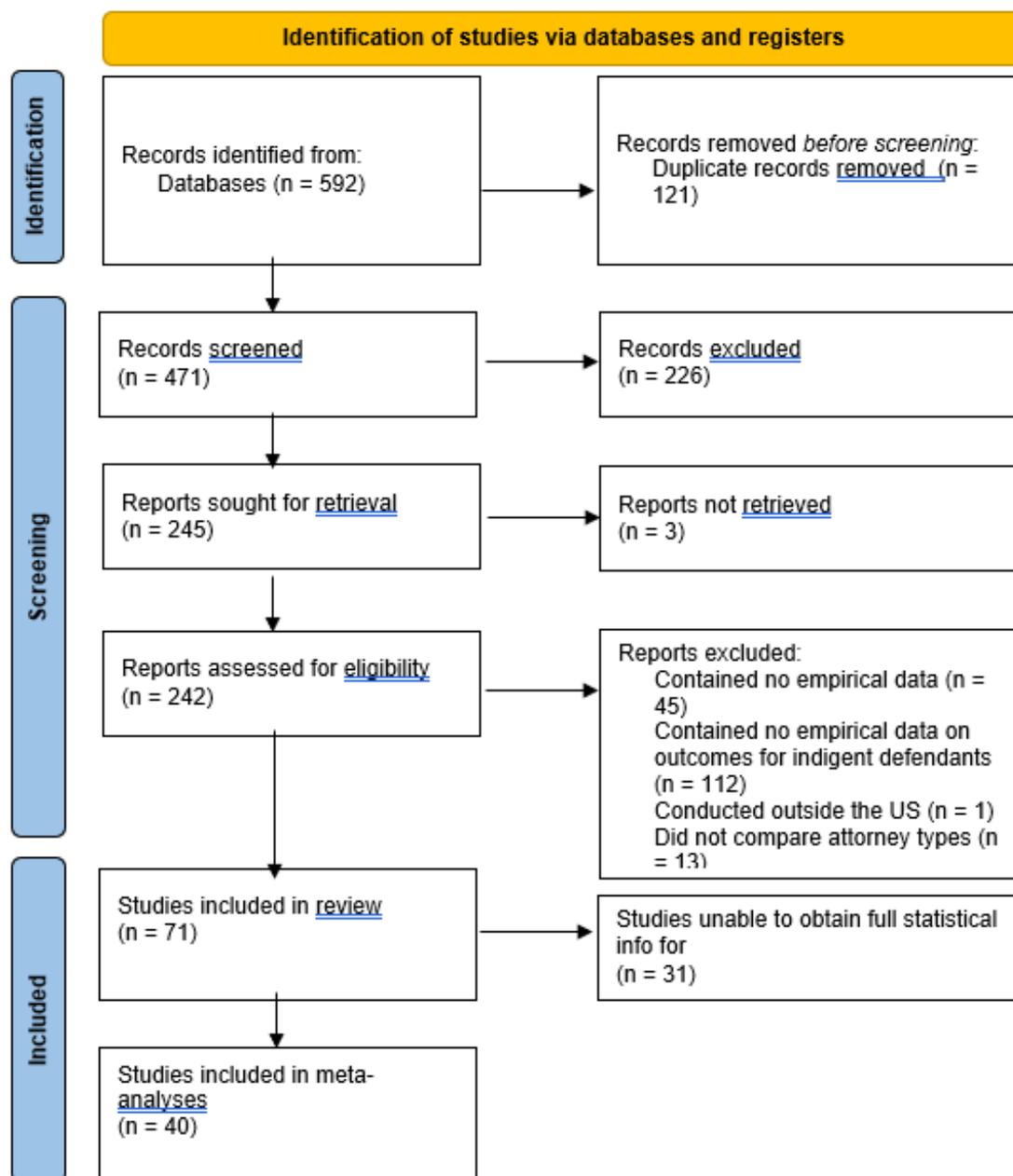
PRSMA Flow Diagram of Studies Identified in Systematic Review

Figure 2

Forest Plot for Pretrial Release between Indigent Defense and Retained Counsel

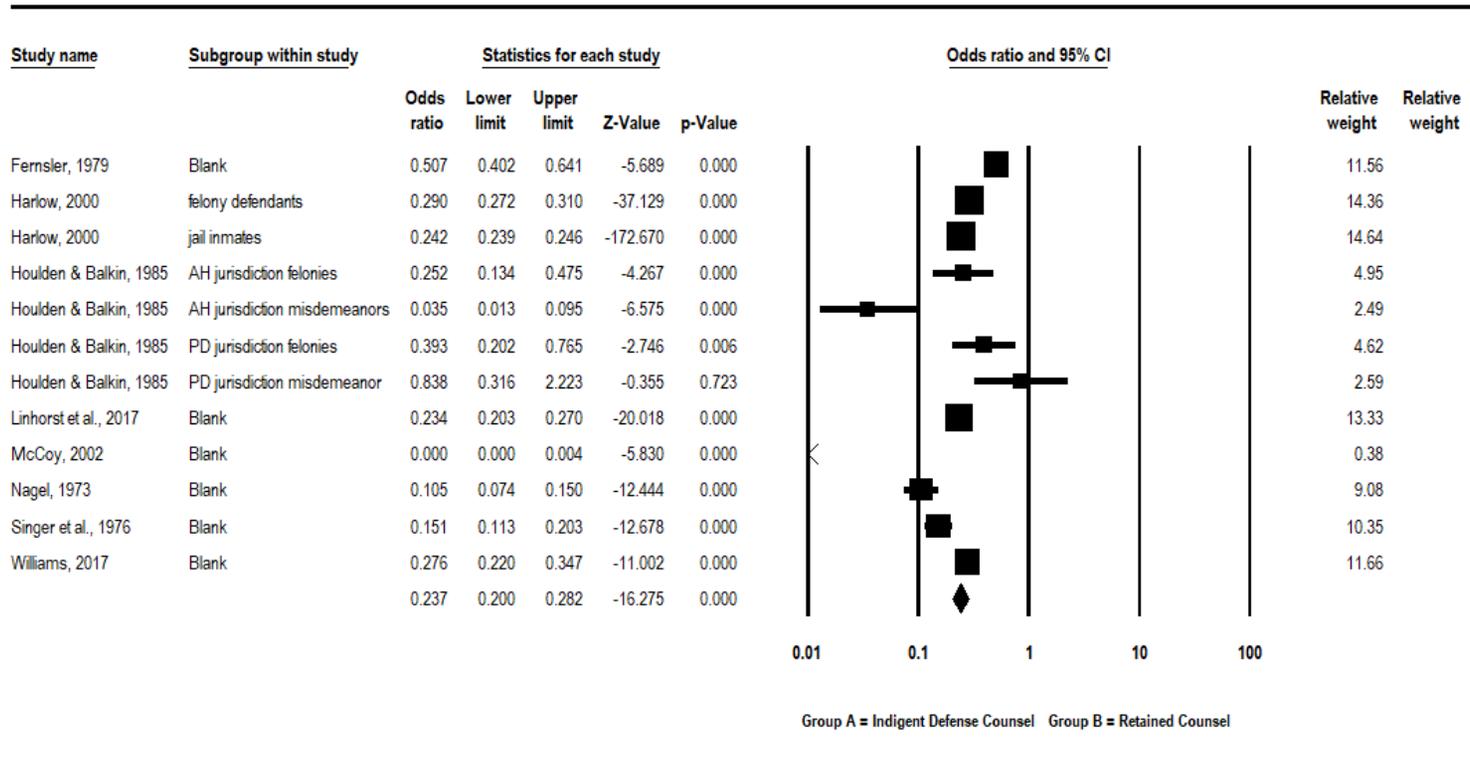


Figure 3

Forest Plot for Pretrial Release between Public Defenders and Assigned Counsel

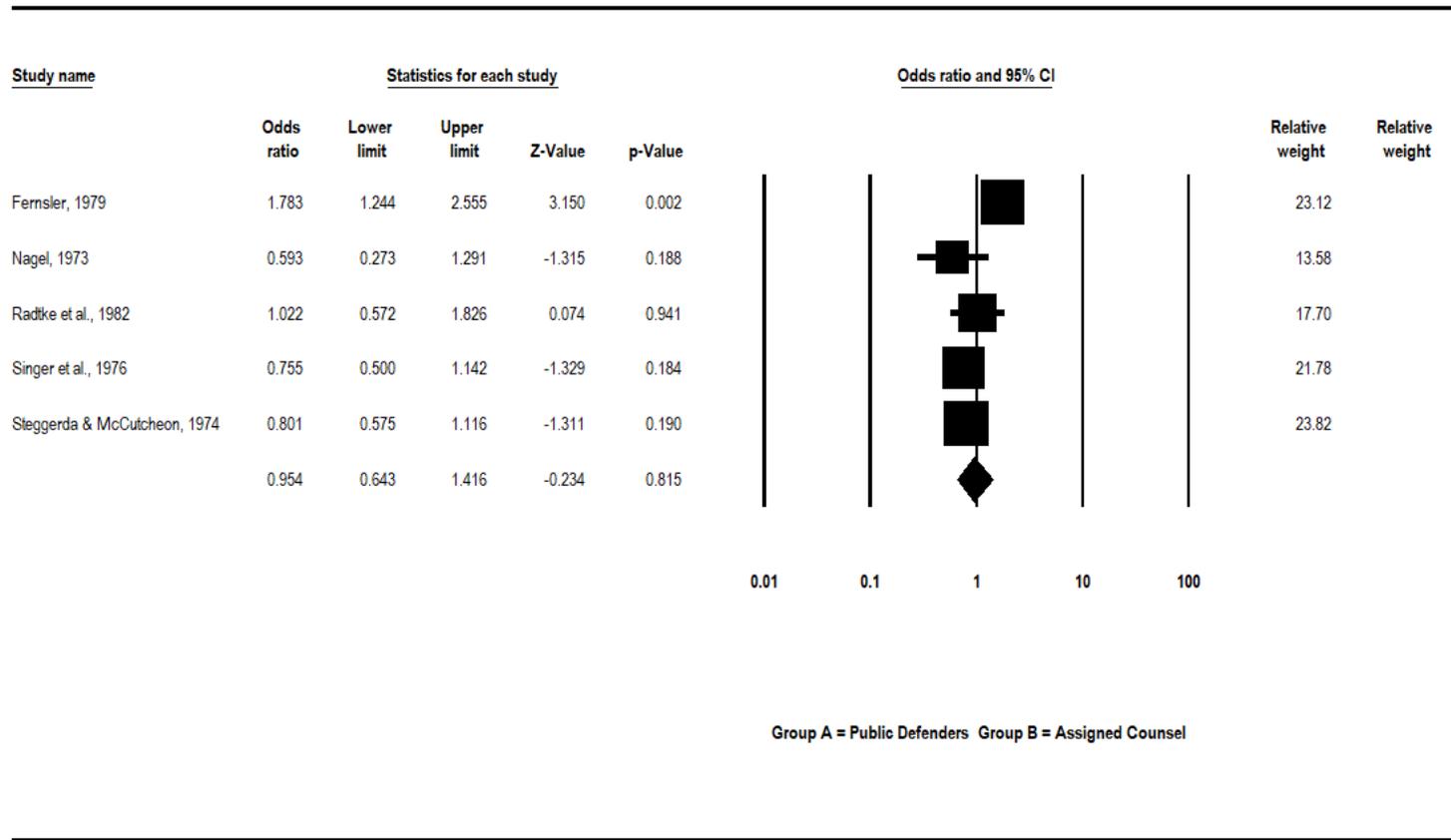


Figure 4

Forest Plot for Case Dismissal between Indigent Defense and Retained Counsel

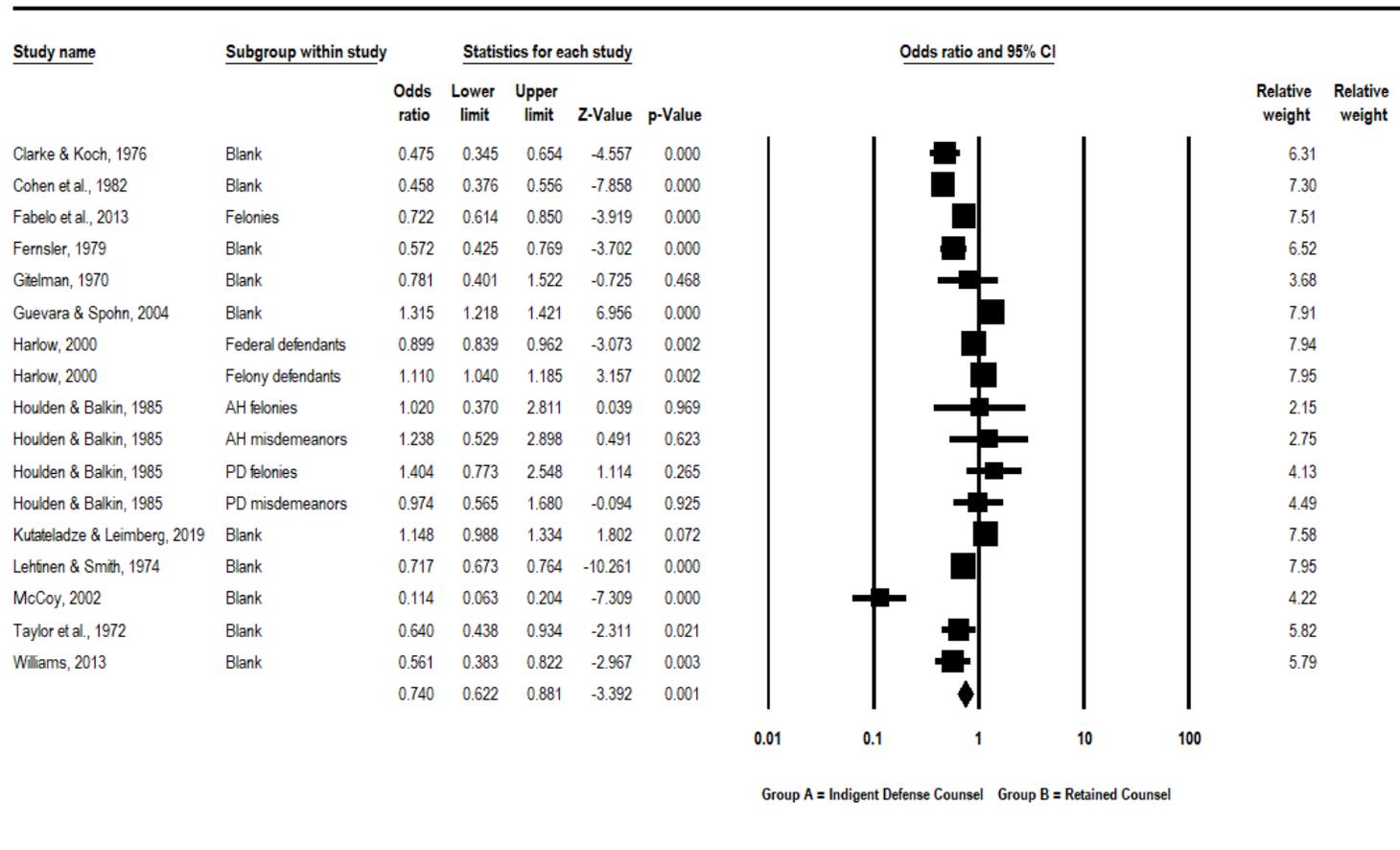


Figure 5

Forest Plot for Case Dismissal between Public Defenders and Assigned Counsel

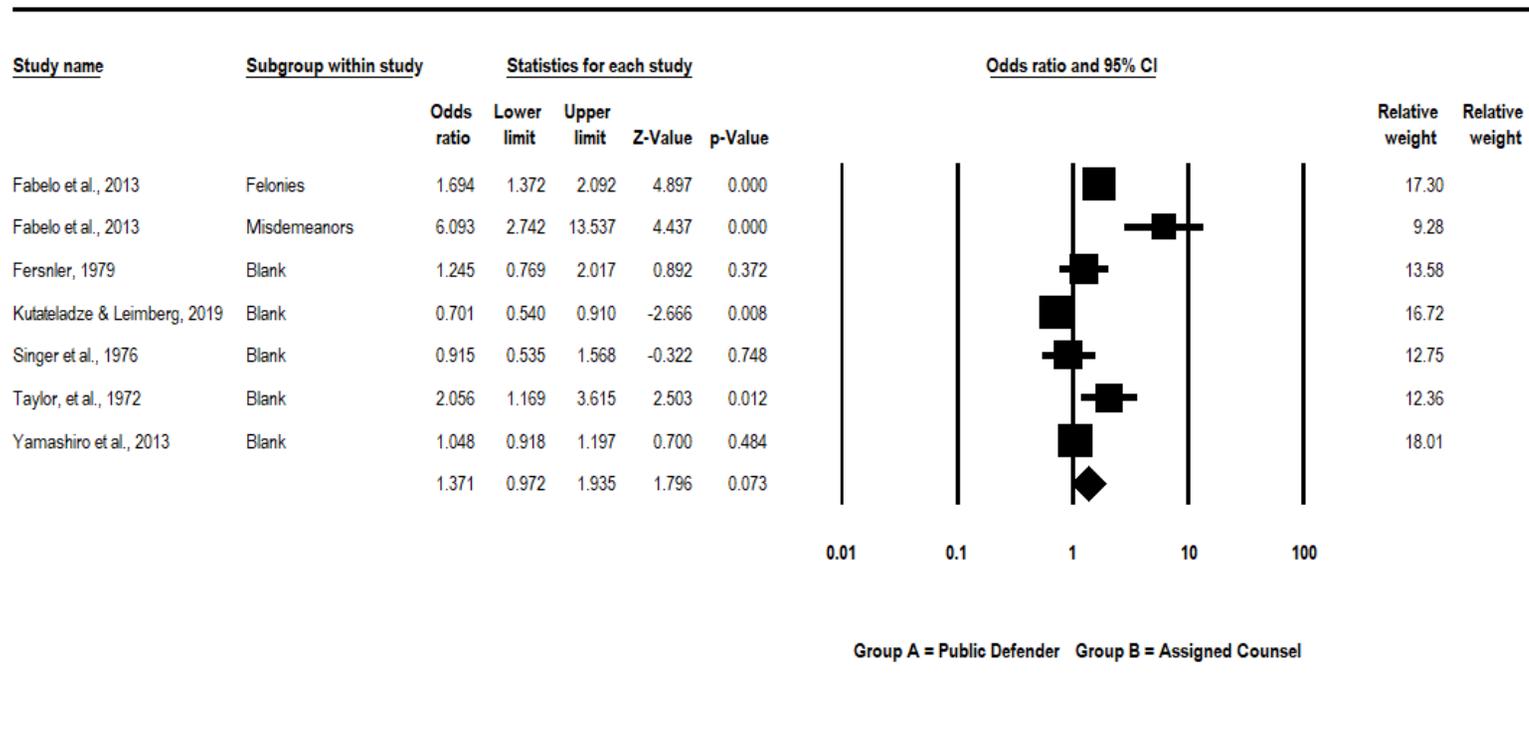


Figure 6

Forest Plot for Guilty Pleas between Indigent Defense and Retained Counsel

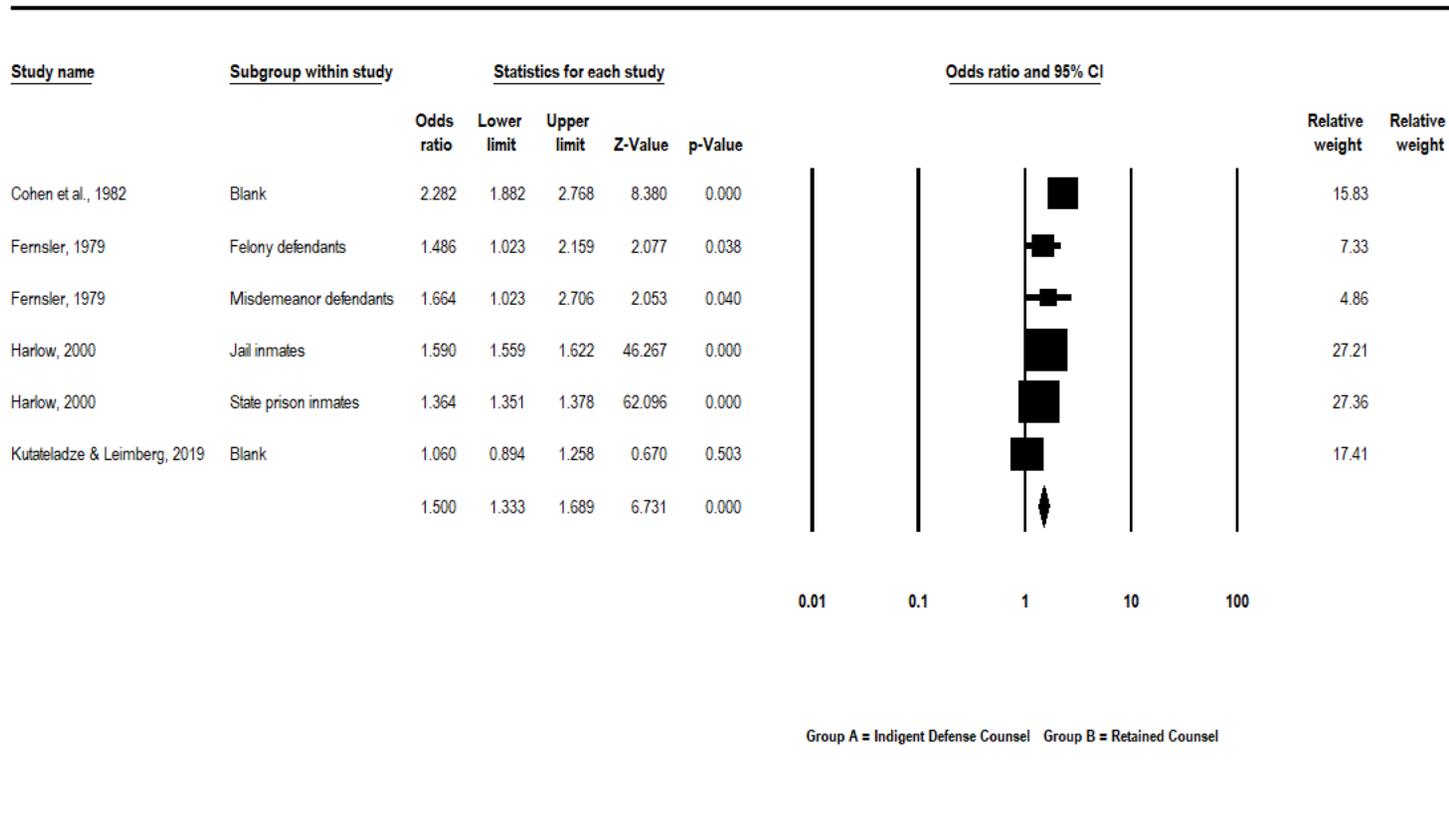


Figure 7

Forest Plot for Guilty Pleas between Public Defenders and Assigned Counsel

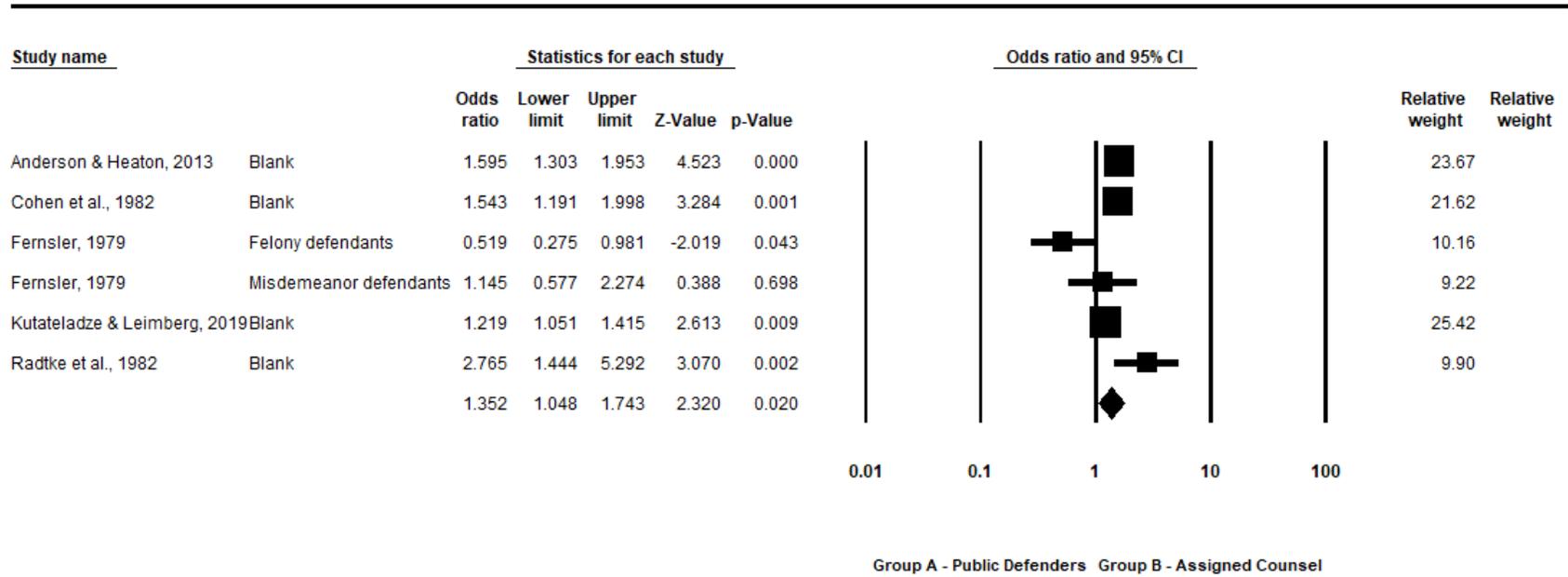


Figure 8

Forest Plot for Cases Resolved by Trial between Indigent Defense and Retained Counsel

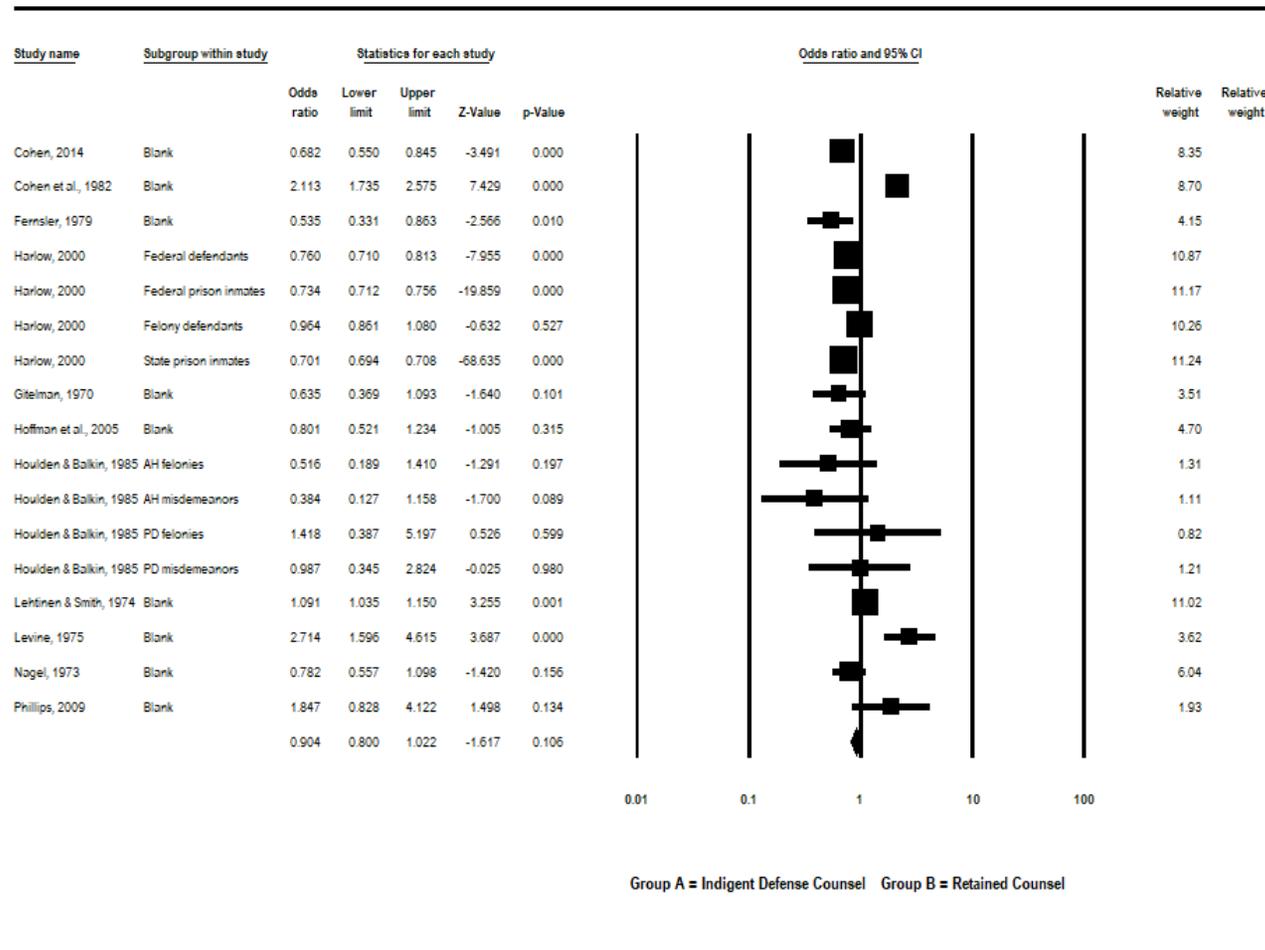


Figure 9

Forest Plot for Cases Resolved by Trial between Public Defenders and Assigned Counsel

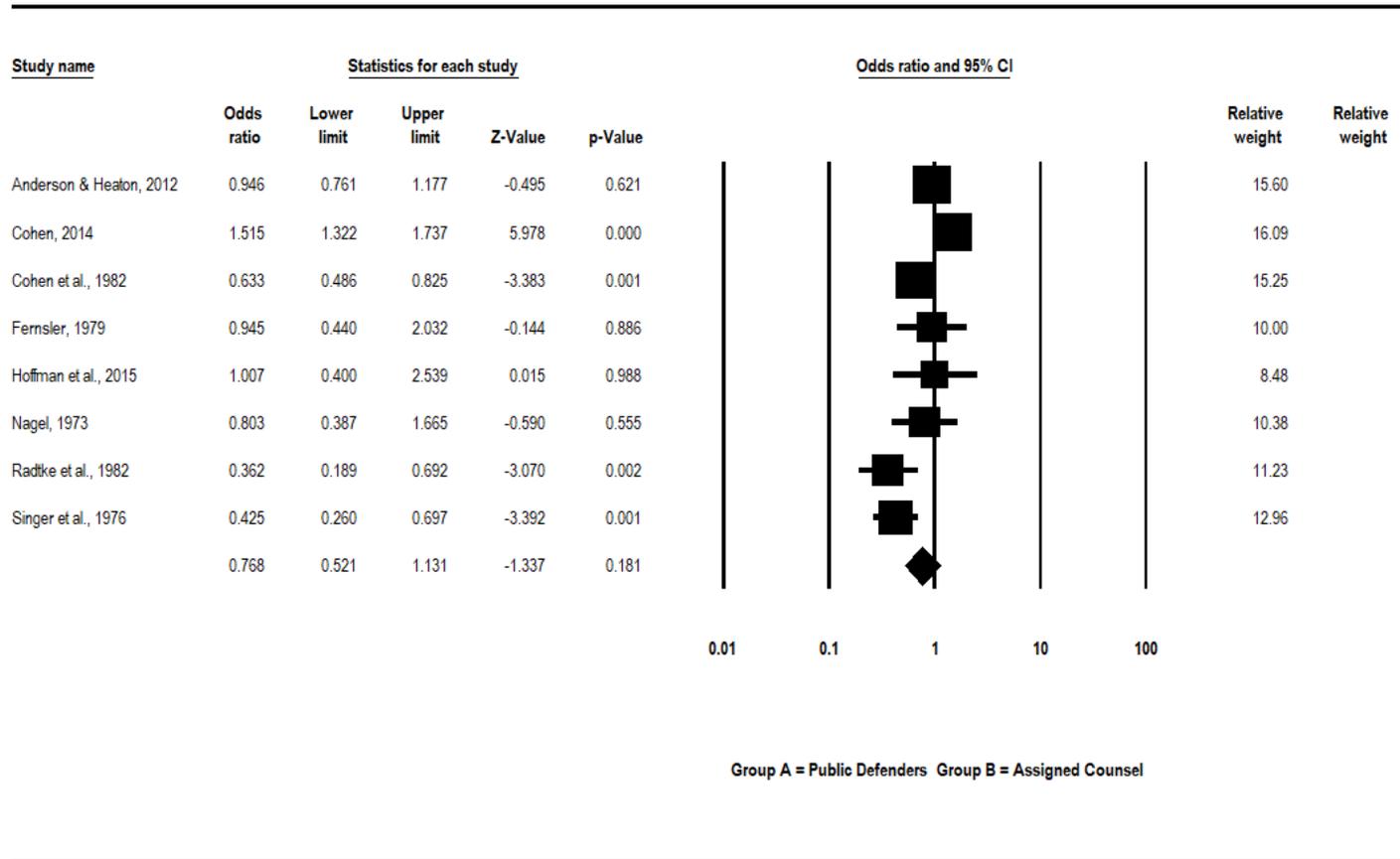


Figure 10

Forest Plot for Case Acquittals between Indigent Defense and Retained Counsel

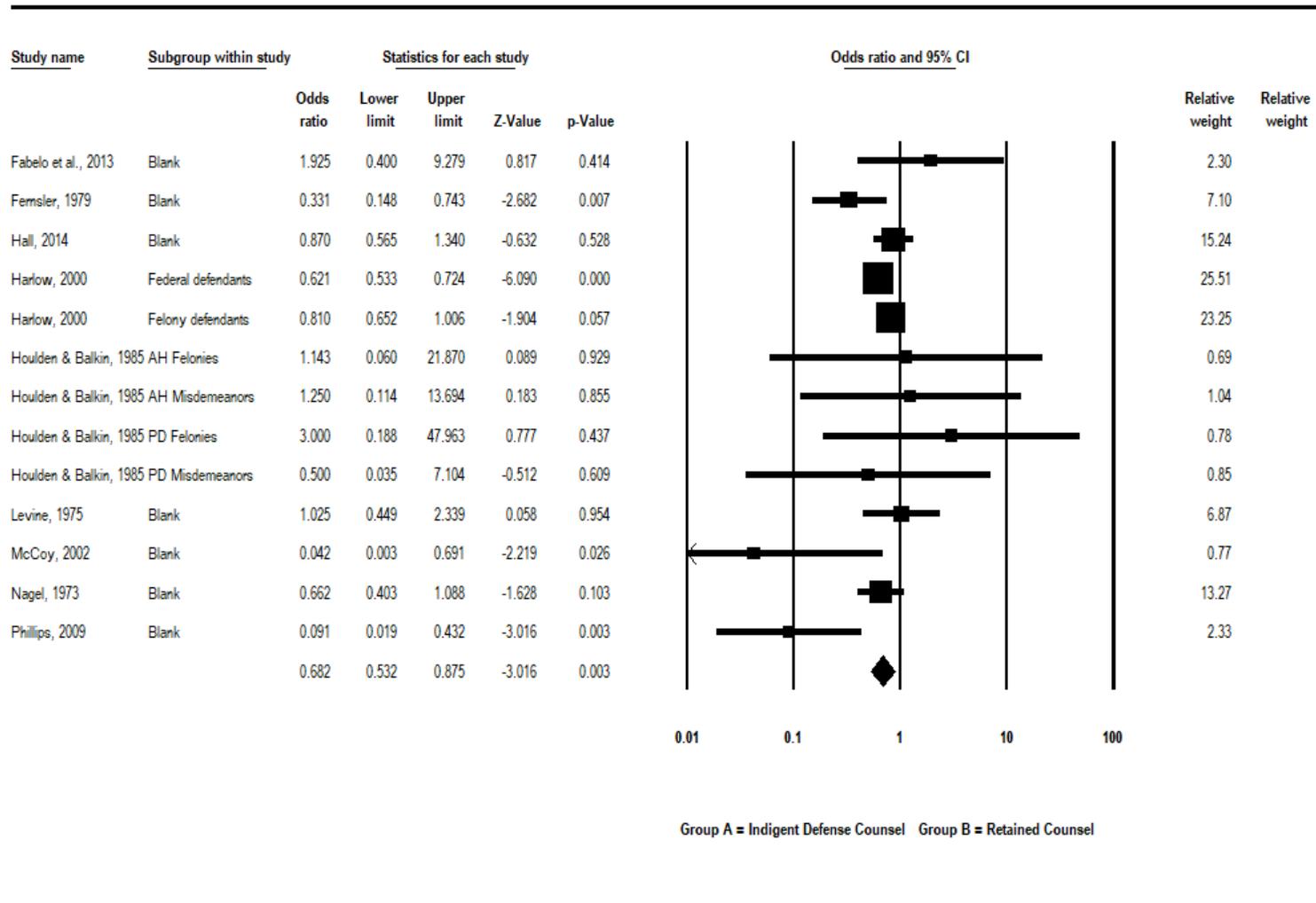


Figure 11

Forest Plot for Convictions between Indigent Defense and Retained Counsel

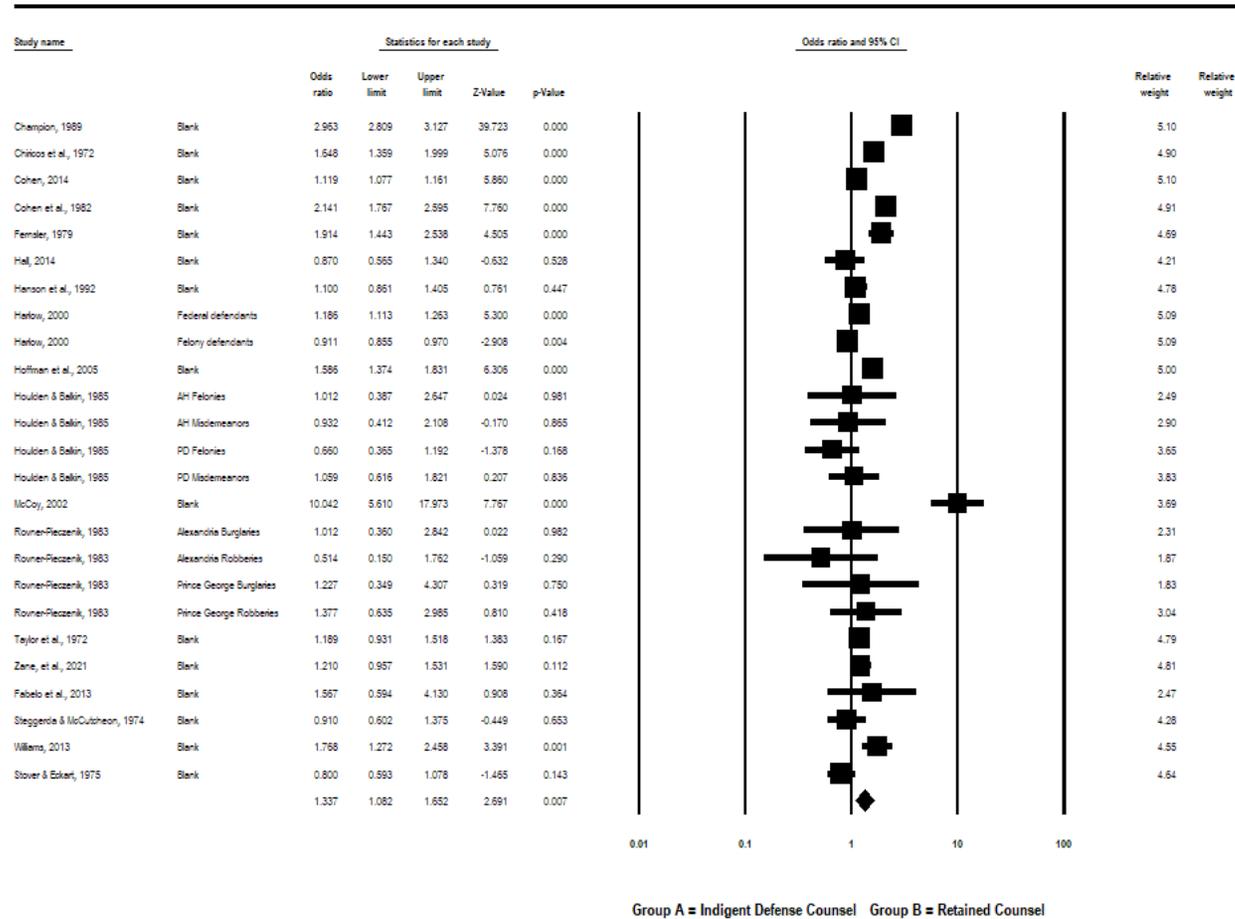


Figure 12

Forest Plot for Convictions between Public Defenders and Assigned Counsel

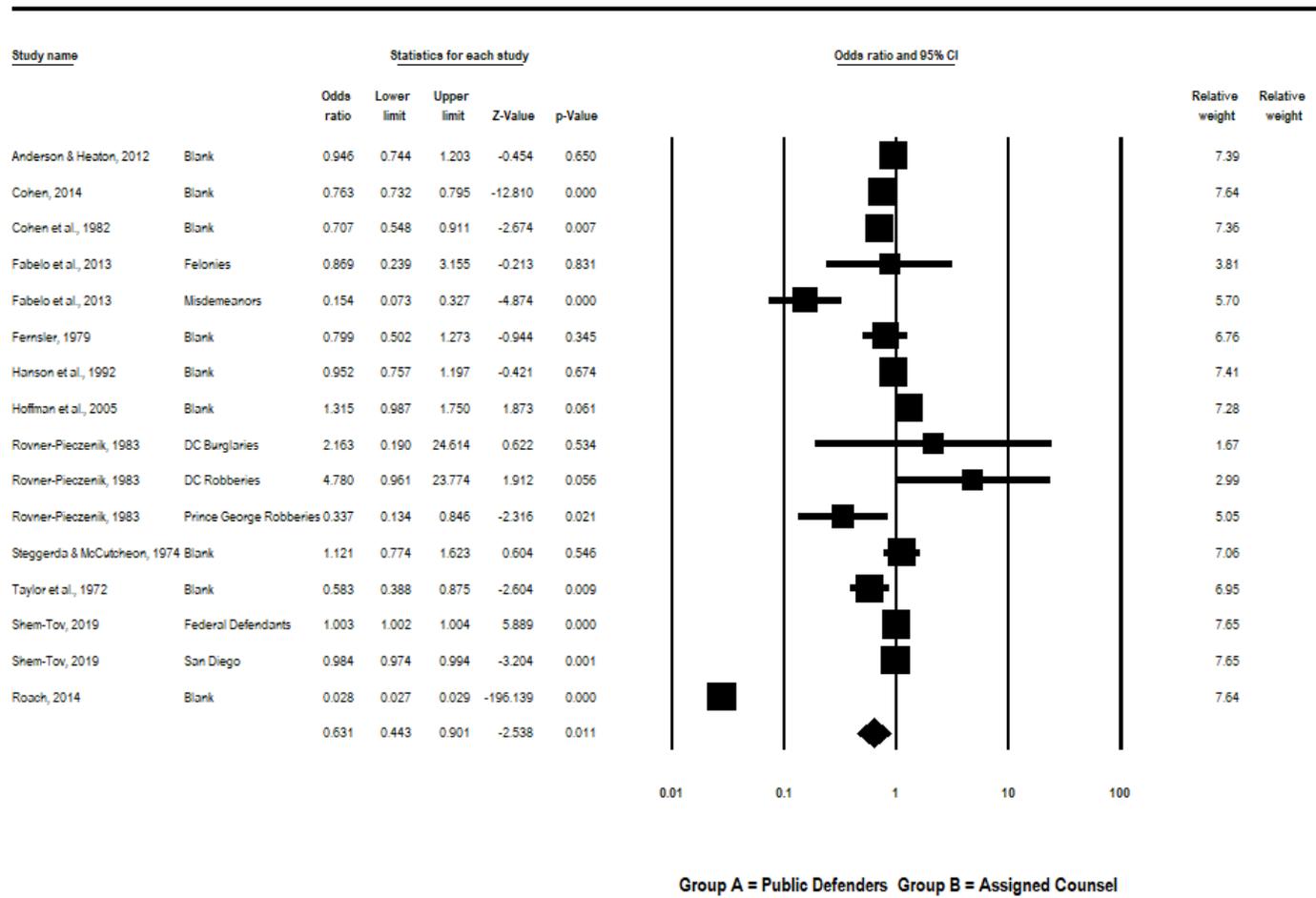


Figure 13

Forest Plot for Conviction Severity between Indigent Defense and Retained Counsel

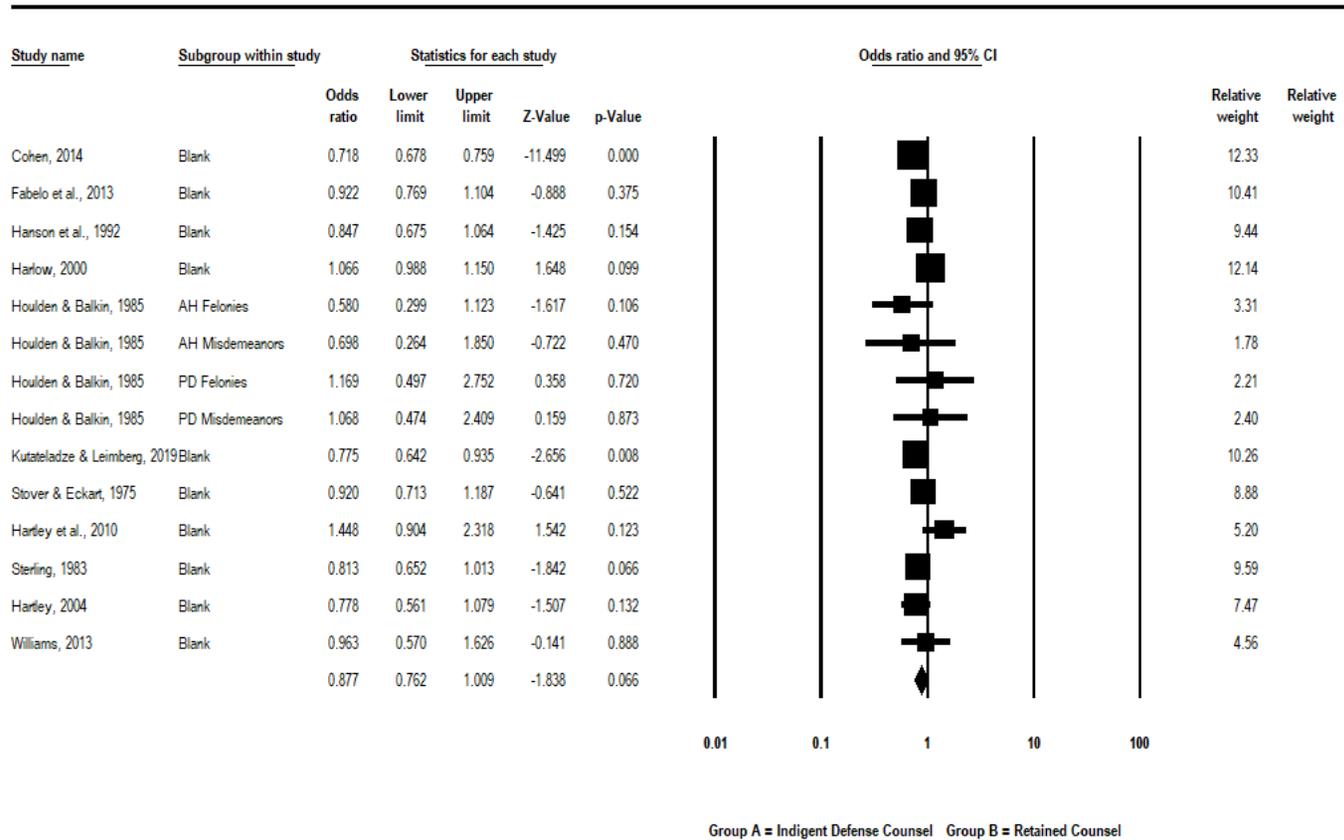


Figure 14

Forest Plot for Conviction Severity between Public Defenders and Assigned Counsel

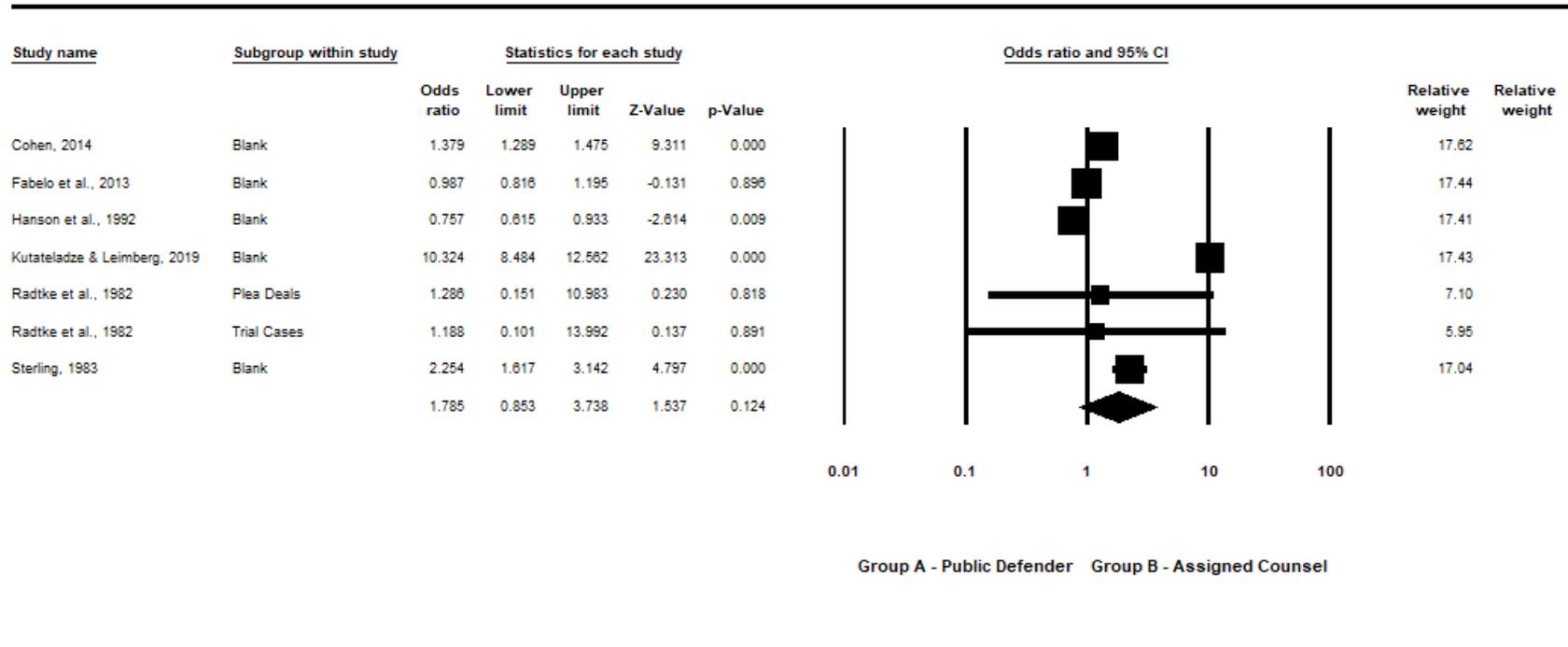


Figure 15

Forest Plot for Incarceration Sentences between Indigent Defense and Retained Counsel

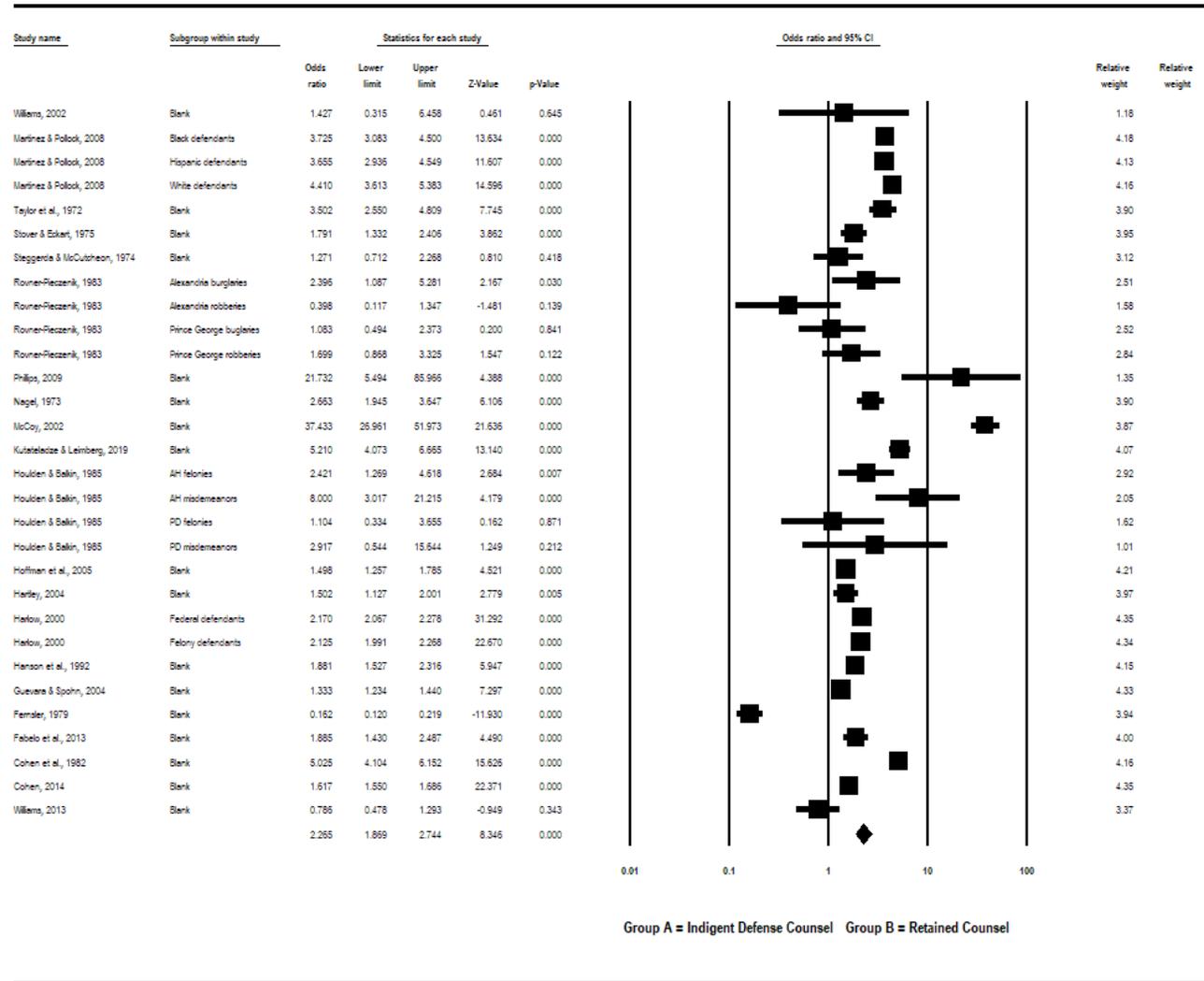
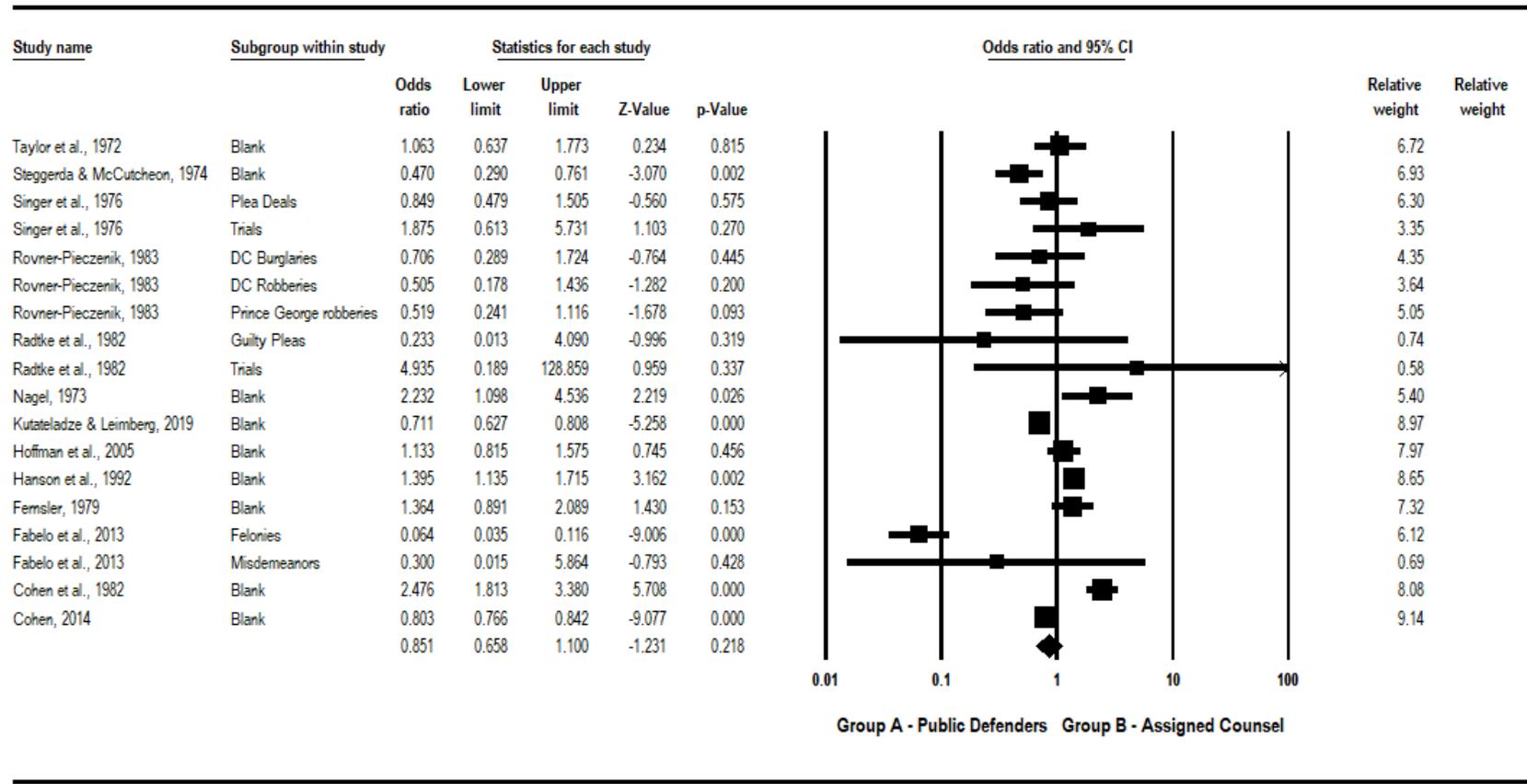


Figure 16

Forest Plot for Incarceration Sentence between Public Defenders and Assigned Counsel



APPENDIX

Data Extraction Coding Template

Background study info:

Coder initials: _____

Study citation (authors, year, Covidence #): _____

Publication type:

- Journal article
- Law Review
- Newspaper article
- Government report
- Book chapter
- Dissertation/thesis
- Other: _____

Jurisdiction(s):

Data collection years: _____

- Reported, but unclear: _____
- Not reported

Stage(s) in court processing examined:

- Pretrial
- Case outcomes (e.g., verdict, disposition, sentencing)
- Post-trial (e.g., recidivism, appeals)
- Other: _____

Does the study provide a theoretical framework for discrepancies in outcomes for indigent defendants? (potentially to explain hypotheses or findings, or just generally)

- Yes
- No
- Unclear: _____

Source of information (check all that apply):

- Official records (auto-populate)
- Official records (file review by a human)
- Interview with defendant
- Interview with others (Specify: _____)
- Mixed (i.e., combination of above)
- Other (Specify: _____)
- Reported, but unclear: _____
- Not reported

Sample information:

Population:

- All defendants
- Felony defendants
- Misdemeanor defendants
- Federal defendants
- Capital case defendants
- DUI defendants
- Other: _____
- Reported, but unclear: _____
- Not reported

Does the sample include juveniles?

- No, only adults
- Yes, both juveniles and adults reported together
- Yes, both juveniles and adults reported separately
- Yes, only juveniles
- Reported, but unclear: _____
- Not reported

Total sample size:

- N = _____
- Reported, but unclear: _____
- Not reported

Is the sample size number of people or number of cases?

- Number of people
- Number of cases
- Reported, but unclear: _____
- Not reported
- Other: _____

What are the attorney type comparison groups? I.e., which attorney types were used as predictors for study outcomes?

- Public defenders (defined as a defense attorney who was fully employed by the state and worked for a public defenders office)
- Assigned counsel/court-appointed attorneys (defined as a defense attorney that was given to them by the court, but the attorney was not a public defender; most jurisdictions will refer to these type of defense attorneys as “court-appointed”, “contract”, or “assigned” counsel)
- Private/retained attorneys (defined as defense counsel that the defendant was able to secure on their own and did not need an attorney given to them by the court)
- No attorney (defined as defendants who did not have any counsel, likely because either their case did not qualify for indigent defense status, they waived their right to an attorney, or they decided to self-represent)
- Other: _____

Demographic information:

Defendant demographics reported for:

- Full sample
- Comparison group(s): _____
- Attorneys or decision-makers
- Other: _____
- Not reported

(If demographics reported for multiple groups, indicate below the group that each reported demographic corresponds to)

Sex:

- Percentage men: _____
- Percentage women: _____
- Reported, but unclear: _____
- Not reported

Race/Ethnicity:

- Percentage white: _____
- Percentage Black: _____
- Percentage Hispanic: _____
- Percentage Native American: _____
- Percentage Asian: _____
- Percentage other (define) _____ : _____
- Percentage other (define) _____ : _____
- Reported, but unclear: _____
- Not reported

Mean age: _____ years (SD: _____)

- Reported, but unclear: _____
- Not reported

Other demographics reported:

Outcomes and Statistics (repeat page as-necessary):

1. Outcome: _____ Subsample (if applicable): _____

How is this outcome variable measured and reported?

- Dichotomous: _____
- Continuous: _____
- Categorical: _____
- Other: _____
- Reported, but unclear: _____
- Not reported

Total n: _____

Comparison Group 1: _____ n: _____

Comparison Group 2: _____ n: _____

Comparison Group 3: _____ n: _____

Comparison Group 4: _____ n: _____

Comparison Group 5: _____ n: _____

If outcome is at the pretrial stage, were indigent defense attorneys present? _____

Frequency of outcome within groups:

Event	Comparison Group	% or frequency

Mean of outcome within groups:

- Mean: _____ SD: _____ Comparison Group: _____
- Mean: _____ SD: _____ Comparison Group: _____
- Mean: _____ SD: _____ Comparison Group: _____

Statistical Results

Statistic Reported (e.g., OR, r , χ^2)	Statistical value	Measure of variance	Variance value	Significance (define type and value)	Other

Other statistical information to include (e.g., covariates): _____