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I, Joshua S. Long, hereby submit this original work as part of the requirements for the degree of Doctor of Philosophy in Criminal Justice.

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**Appropriate classification of prisoners: Balancing prison safety with the least restrictive placements of Ohio inmates**

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**Appropriate Classification of Prisoners:  
Balancing Prison Safety with the Least Restrictive Placements of Ohio Inmates**

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## **Abstract**

**Objective:** This study is an evaluation of the Ohio Risk Assessment System – Prison Intake Tool for predicting institutional misconduct in Ohio prisons. Data for this examination were provided by the Ohio Department of Rehabilitation and Correction for 32,433 inmates (comprised of 26,677 men and 5,756 women) who were admitted to prison between January 2<sup>nd</sup> 2014 and December 30<sup>th</sup> 2016. The analyses compare the risk assessment tool to the state’s official placement decisions to determine if classification can be improved. This study also examines the impact of security levels on inmate behavior to ensure that predictive tools are contextualized within different custodial environments.

**Methods:** A variety of analytic approaches were employed to determine the validity estimates of the ORAS-PIT for different sub-groups of prisoners in different settings and for different misconduct outcomes. A battery of validation statistics were presented (receiver operator characteristics, point biserial correlation, Somers’ *d*, and odds ratio). Pooled sample binary logistic regression models, propensity score matching, and hierarchical linear models (HLM), were used to explore the relationship between security levels and misconduct outcomes.

**Results:** The results of the analyses found that the ORAS-PIT was a valid method of predicting misconduct for this sample of prisoners, but only as a “poor-to-fair” predictor, and the current method of classification had greater predictive power. The security level of the prisoner’s initial placement was found to significantly influence the predictive validity of the ORAS-PIT, but most comparisons found that the differences were not substantial. A Modified Prison Intake Tool was developed as a hybrid of both classification methods to improve prediction, but was not found to be superior to the current ODRC classification criteria. The models also failed to

consistently demonstrate that increases in security level have a significant effect on misconduct, which casts doubt on the classification process as an effective correctional practice for reducing misconduct.

**Conclusions:** Dynamic risk assessment tools are useful for guiding case plans and targeting criminogenic needs. This process can be used within each prison environment to reduce misconduct, but dynamic risk assessment tools like the ORAS-PIT are not recommended for making security level classification decisions.



*Dedicated to Heather, Kim, Bianca, & Lucas*

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## **Chapter 1.**

### **Introduction**

“Classification is essential to the operation of an orderly and safe prison. It is a prerequisite for the rational allocation of whatever program opportunities exist within the institution. It enables the institution to gauge the proper custody level of an inmate, to identify the inmate’s education, vocational, and psychological needs, and to separate non-violent inmates from the more predatory. These goals are recognized by state law, which provides that classification shall serve a rehabilitative function. Classification is also indispensable for any coherent future planning.”

Palmigiano v. Garrahy, 443 F. Supp. 956 (D.R.I. 1977)

Prison administrators have sought a reliable way to identify the “least restrictive” security level for individual inmates while also prioritizing safety. A least restrictive environment is preferred because it maximizes autonomy, provides more opportunities to prepare for release to the community, and avoids wasting resources on more expensive security settings (Mears 2006; Pizarro & Narag, 2008; Rubin, 1975; Solomon & Camp, 1993). Safety and security are a priority to keep inmates from harming the community, staff, and other inmates, but also because a safe and orderly environment is a prerequisite for offering rehabilitation and job programs (Bonta & Wormith, 2008; DiIulio, 1987). These competing goals are not easy to balance when doing so relies on predicting the behavior of individuals with differing personalities, backgrounds, and ways of adapting to prison life.

Prison officials have attempted to maintain order in their facilities using a variety of methods; including placement of rule violators in solitary confinement (Teeters, 1937), and

separating inmates based on the results of psychological tests (Van Voorhis, 1994b). Modern prison classification decisions vary from state to state and often use risk assessment tools that are not validated or reliable (Byrne & Dezimmer, 2017)

Today, prison administrators are required to justify security level placement decisions on rational and reasonable grounds derived from landmark court decisions. Otherwise they may be vulnerable to lawsuits related to the various consequences of misclassification (Belbot & Del Carmen, 1993). If a dangerous inmate is placed in a security level that is less restrictive than necessary they may commit violence that was otherwise preventable. If a low risk inmate is overclassified into a higher security level they may be victimized or cut off from vocational or rehabilitative programming available at lower security facilities. A security placement is considered “appropriate” as long as safety and institutional order are preserved while maintaining the least restrictive environment for the prisoners (Morris & Miller, 1985; Solomon & Camp, 1993). The fear of lawsuits has created an incentive for prison administrators to implement reliable systems for classification based on empirically supported criteria rather than arbitrary or capricious judgments (Belbot & Del Carmen, 1993). Various risk assessments have been adopted over the past fifty years. Some have relied entirely on static criminal history factors, while others require in-depth personality assessments (Bonta & Wormith, 2018; Van Voorhis, 1994b). Ultimately, the success or failure of each tool depends upon the commitment of the administrators (Burke & Adams, 1991) and the validity and reliability of the tool itself (Van Voorhis, 1994b).

This dissertation is an examination of how the criteria in a risk assessment tool (the Ohio Risk Assessment System) can be used in classification decisions to improve the prediction of institutional misconduct, especially violence. It will also take into account the role of the prison



environment in shaping inmate behavior to determine if increased security can interfere with risk prediction by suppressing or amplifying misconduct. If prison officials use a validated, objective, and uniform system to guide their decisions, it can help to place inmates in the least restrictive setting possible while maintaining safety and preserving custodial resources for the highest risk inmates. It will also demonstrate that their method of classification is evidence-based and is not arbitrary, capricious, or outdated.

### **Misconduct and Prison Order**

Institutional rules and regulations are an omnipresent element of prison life. When surveyed, most prison wardens regard the orderly operation of their facilities as the most important responsibility they have, because so many other goals *require* a safe and orderly living environment (Cullen, Latessa, Burton, & Lombardo, 1993). When rules are violated, prison staff can discipline the inmate for their misconduct with a variety of sanctions. Of course, this requires prison staff to detect the offense and may also require a rule infraction board to determine “guilt.” Many acts of misconduct go undetected or unaddressed, and this can undermine prison order, especially when the infractions involve violence (Gendreau, Goggin, & Law, 1997; Steiner & Wooldredge, 2013) (See Appendix A for a description of each rule infraction and frequency of their occurrence in the sample of Ohio inmates used in this dissertation).

An extensive body of research has been conducted to help identify the factors that most accurately predict rule violations in prison. Among them are personal characteristics (such as age, offense history, gang membership, and substance abuse), factors related to the prison environment (such as perceived staff legitimacy or prison size/crowding), and lack of purposeful activities (Gaes et al., 2002; Camp, Gaes, Langan, & Saylor, 2003; Wooldredge & Steiner, 2009; Steiner, Butler, & Ellison, 2014; McGuire, 2018). Policies have been developed to reduce

misconduct in prison that range from offering more effective rehabilitation programs (French & Gendreau, 2006; Smith & Schweitzer, 2012), implementing more effective disciplinary sanctions (Meyers, Indante, & Wright, 2018), and training staff to use situational control methods to resolve conflicts before they result in violence (McGuire, 2018).

On the front end, prison administrators try to reduce incidents of misconduct by classifying inmates according to their likelihood of violating prison rules. If dangerous inmates are housed in the same facilities, away from low risk inmates, prison administrators can direct their limited custodial resources on those facilities rather than spread the risk across the entire state (Berk, Ladd, Graziano, & Baek, 2003; DiIulio, 1987; Proctor, 1994; Solomon & Camp, 1993). The primary focus in the initial classification decision is on predicting the likelihood of escape (which is rare) and the likelihood of violence, and also to consider the inmate's risk for committing other infractions that are disruptive or disorderly. The classification assessment can be conducted in a variety of ways, all with the goal of accurately identifying the most dangerous offenders so they can be housed in facilities with more security and custodial resources (Bonta & Wormith, 2018).

However, the separation of inmates according to their risk level may present methodological problems when evaluating classification policies. A self-fulfilling prophecy may occur. It is impossible to know for sure how an inmate would have behaved if they had been classified at a different level, so a low risk inmate may behave like a high risk inmate if placed in a higher security level. Another problem is the custody level itself. It is possible that higher security placement will result in *more* misconduct because the extreme conditions of confinement may be more criminogenic (through deprivation, labelling, social learning, etc.), and increase the density of dangerous offenders who necessarily come into conflict with each

other during confinement (Bayer, Hjalmarsson, & Pozen, 2009; Bench & Allen, 2003; Blevins, Listwan, Cullen, & Jonson, 2010; Chen & Shapiro, 2007; Drury & DeLisi, 2011; Petersillia, 2009; Shermer, Bierie, & Stock, 2012). On the other hand, high security prisons are designed to *reduce* misconduct, so they could be expected to suppress the effect sizes of any predictive factors if custody-level is not accounted for in a multi-level model or separate analysis (Bottoms, 1999; Camp, et al., 2003; Wooldredge, Griffin, & Pratt, 2001; Worrall & Morris, 2011; Shermer, Bierie, & Stock, 2012).

### **Incorporating Actuarial Risk Assessment Tools in Classification Decisions**

The current state of institutional misconduct assessment can be summarized by a recent survey by Byrne and Dezemmer (2017). The authors asked the research directors of state corrections agencies which methods they use to classify prisoners. They received responses from 32 out of 50 state agencies (Ohio did not respond). Of the 32 states, four used the ORAS, six used the LSI-R/LSCMI, and two used the COMPAS. These tools are validated and commonly used assessment systems for predicting post-release recidivism (Andrews & Bonta, 2017; Farabee, Zhang, Roberts, & Yang, 2010; Latessa, Smith, Lemke, Makarios, & Lowenkamp, 2009). The remaining 20 states (63 percent) either reported using risk assessment tools they developed themselves, some “other” method, or they did not respond to the question. Few states reported that their methods were appropriately validated for predicting prison violence because they used post-release recidivism as the only outcome variable. The statistical methods of validation were not standardized across states, making comparisons difficult. However, the research directors from these states expressed strong support for improving their classification policies to reduce the number of violent incidents in their prisons. These survey results offer a national perspective on the state of prisoner classification in the United States. Few states report

using dynamic risk assessment tools to make their decisions, those tools are not often being validated for use with their population of inmates, and when they are validated the methodology is not standardized, and the prediction outcome of the tools is post-release recidivism not institutional misconduct (Byrne & Dezember, 2017). This echoes the call for more research on developing and improving prisoner classification (Bonta & Wormith, 2018; Hamilton, Tollefsbol, Campagna, & van Wormer, 2016).

Over the past few decades, the science of actuarial risk assessment has been refined for use in a variety of correctional settings. The risk-need-responsivity (RNR) model has emerged as one of the most widely used and validated approaches to managing offenders and matching them to treatment resources (Andrews & Bonta, 2010, 2017; Andrews, Bonta, & Hoge, 1990; Andrews & Dowden, 2006;; Bonta & Wormith, 2018; Lowenkamp, Latessa, & Smith, 2006; Ogloff & Davis, 2004). The RNR model focuses on the principles of effective intervention for prioritizing treatment programs for those with the highest risk, targeting dynamic criminogenic needs, and using treatment modalities that offenders are most likely to respond to such as cognitive-behavioral interventions (Andrews & Bonta, 2017). The first and most important step in this process is to properly assess the offender's risk and need profile (a simultaneous process). This allows case managers to recommend a proper "dosage" of treatment based on risk, and to target their specific criminogenic needs with a comprehensive treatment plan to reduce their likelihood of recidivism (Andrews & Bonta, 2017; Sperber, Latessa, & Makarios, 2013). In the state of Ohio, treatment programs are usually voluntary (except for mandatory general education programming for inmates who have not completed a high school level of education). There are also eligibility requirements such as the amount of time remaining before they are scheduled to be released, and program availability in their facility (see Latessa, Lugo, Pompoco, Sullivan, &

Wooldredge, 2015 for a description of the Ohio Department of Rehabilitation and Correction's re-entry approved programs).

To ensure that risk levels and criminogenic needs are being properly assessed, several actuarial tools have been created to guide corrections officials. One of these tools is the Ohio Risk Assessment System (ORAS hereafter). The ORAS was developed by the University of Cincinnati for the Ohio Department of Rehabilitation and Correction to manage offenders at different stages in the criminal justice system, including: 1) pre-trial detainment, 2) community supervision, 3) prison intake, and 4) community reentry (Latessa, Smith, Lemke, Makarios, & Lowenkamp, 2009; OAC 5120.114, 2011).

One of these sub-systems, the Prison Intake Tool (ORAS-PIT hereafter), was designed to help prison officials prioritize treatment resources for inmates with the highest risk of post-release recidivism. Out of 200 potential predictors of recidivism, 30 risk factors significantly associated with recidivism were retained, and these fell into categories of age, criminal history, education/employment/finances, family and social support, substance abuse, and criminal lifestyle. Initial validation analyses found that the ORAS- PIT outperformed other commonly used risk assessment tools like the Level of Service Inventory-Revised and the Wisconsin Risk Needs Assessment tool (Latessa, et al., 2009). These early assessments found four categories of risk for male inmates (low 0-8, moderate 9-16, high 17-24, and very high 25+), and three categories for female inmates (low 0-12, moderate 13-18, and high 19+) (Latessa, Lemke, Makarios, Smith, & Lowenkamp, 2010). The ORAS-PIT became the standard risk assessment tool for inmate processing in the state of Ohio in April of 2011. See Appendices B and C for the full list of criteria contained in the ORAS-PIT and the brief screener version, the ORAS-PST.

Most risk assessment tools are designed to predict recidivism in the community after release from prison, but risk factors in the ORAS-PIT have been validated for predicting institutional misconduct within prison (Makarios & Latessa, 2013). This dual functionality may not be surprising to those who have noticed the high correlation between institutional misconduct and post-release recidivism (Cochran, et al., 2014; Gendreau & Goggin, 2013; Gendreau, Goggin, & Law, 1997), but this convenient overlap is not sufficient for adopting these tools to predict institutional misconduct. Actuarial tools are designed to maximize prediction with the fewest factors possible to facilitate an easier assessment process. The factors chosen are necessarily those with the strongest association with the desired outcome: which is typically recidivism measured as “any arrest for a new crime” after release from prison. A high correlation between recidivism and institutional misconduct does not imply that prediction is equally valid when the same tool is used to predict both outcomes (Makarios & Latessa, 2013).

### **Classification in Ohio**

As mentioned above, the Ohio Department of Rehabilitation and Correction (ODRC hereafter) conducts a risk and needs assessment using the ORAS-PIT. The ODRC Bureau of Classification does not use the ORAS-PIT information to make their initial security level recommendation for incoming prisoners, and they have a list of other mandatory and discretionary override criteria that do not incorporate ORAS-PIT domains. It is possible that this initial classification decision is more predictive of misconduct than the ORAS-PIT score alone, but there is also potential for “misclassification”; where some inmates are placed in unnecessarily high security levels not justified by their risk level, or high risk inmates may be placed in unsuitable low risk settings. The decision-making process is vague enough to justify an examination of the classification process. It may be possible to calibrate the system using

existing data to achieve greater accuracy in predicting misconduct. This dissertation is an attempt to validate the ORAS-PIT as a stand-alone predictor of prison misconduct, and to explore the possibility of improving prediction by incorporating other relevant risk factors.

The ODRC has written policy for determining the security level classification of prisoners using objective and uniform criteria (see Appendix D). An “appropriate” level of classification is defined as one where the safety and security of the community, inmates, and staff are prioritized, and the institution can safely pursue efforts at rehabilitation. Ideally, the ODRC Bureau of Classification will place inmates in the least restrictive environment available, where they will reside as close as possible to their family members and have the most autonomy. However, ODRC can place inmates in facilities with more restrictions if the inmate is judged to be a security risk. This assessment of risk is based upon many factors including the individual’s prior behavior, criminal record, and affiliations with security threat groups, as well as age, gender, sex, and medical or mental illness status. Facility security ranges from Level 1 (with the most privileges and fewest restrictions) up to Level 4 (with the fewest privileges and most restrictions). Inmates who pose a serious threat in their institutions due to violent and disruptive behavior may also be placed in extended restrictive housing (Level 5) where they may be restricted to their cells for more than twenty-two hours each day (ODRC Rule/Code 53-CLS-04, see Appendices E and F).

The purpose of the dissertation is to examine the effectiveness of the ORAS-PIT as a stand-alone predictor of institutional misconduct, and then to determine if certain criteria in the ORAS-PIT assessment can be used to improve misconduct prediction in a parsimonious way. Ultimately, if the ORAS-PIT score is a useful addition to the current method of assigning prisoners to security levels, it may help reduce incidents of misconduct, reduce the costs of

confinement in higher security levels, and/or reduce recidivism after release. Regardless of the findings, the information will help ODRC evaluate their steps to comply with administrative regulations on placing inmates in safe and minimally restrictive environments using criteria that are rational, reasonable, and based on the most up-to-date scientific evidence currently available in this field.

### **The Plan of the Dissertation**

This dissertation begins with a discussion of the empirical literature to fully understand the challenge of risk assessment and prisoner classification. Chapter 2 includes the history of prison classification, risk assessment tools, validation techniques, and the consequences of unnecessary overrides. My particular focus will be on the methods used in these studies to evaluate risk assessment tools for their predictive validity, and comparisons of different tools and criteria. I summarize the research that has been conducted on the ORAS. I also identify and list gaps in the literature and frame my research questions to address them. In Chapter 3 I detail an analytic plan to examine the role of the ORAS-PIT for improving prisoner classification, and present the results of my analyses. Chapter 4 examines the results the analyses conducted to answer each research question. Chapter 5 presents a thorough discussion of the results and their implications for improving prisoner classification and directing future research. The conclusion offers a “big picture” summary of the findings along with suggestions for future research.



## **Chapter 2.**

### **The Science of Prisoner Classification**

This chapter looks at the development of the science of prisoner classification in the United States beginning with a brief historical overview to establish the purpose of classification. Then I explain the rationale for developing objective and uniform classification systems and the early attempts to predict risk for misconduct. I introduce the reader to the literature on risk and needs assessment in the RNR model, and summarize the creation and validation of the ORAS tools that have been conducted to date. Finally, the consequences of misclassification due to unnecessary overrides are presented.

#### **The Early History of Classification**

The great reformer John Howard assessed the conditions of the gaols and prisons in England in the 18<sup>th</sup> century, and was appalled by the conditions. Not only were they lacking basic necessities (e.g. water, food, and medicine), but very few attempted to separate men from women, children from adults, or petty offenders from experienced criminals. This made the lower risk groups vulnerable to corrupting influences and victimization. Even prisoners with smallpox were housed in the same cramped quarters as everyone else, spreading disease and causing an unknown number of deaths (Howard, 1792). His work in exposing these conditions led to substantial reforms in Europe and served as a warning to prison officials in the newly established United States (Field, 1850; Teeters, 1937).

Partly due to these warnings, the Pennsylvania Prison Society maintained that complete separation was necessary to avoid the corrupting influences of criminal associations and vice on vulnerable prisoners. The Society designed the Walnut Street Jail to separate all inmates from

one another to achieve complete isolation from harmful influences, but mismanagement and overcrowding undermined these intentions. As a response, the much larger Eastern State Penitentiary was built to house inmates under the same scheme, but eventually the number of inmates exceeded the building's capacity and complete separation was impossible (Teeters, 1937). Other states used a congregate style prison system where inmates worked together during the day but maintained complete silence and slept in solitary cells. This required constant supervision from prison guards and was enforced with corporal punishment. This system was more cost effective but also became infeasible due to overcrowding and challenges that the system was inhumane (Rothman, 1998). This period of classification in United States prisons is referred to as separation by types; as it classified prisoners on the basis of sex, age, offense type, mental health status, and work abilities (Hippchen, 1982; Teeters, 1955; Mackenzie, 1989).

The reformatory movement of American corrections occurred after the Civil War and was based upon the ideals of rehabilitation. A key component was assessing the individual "criminality" of the offender based on their history of criminal involvement and perceived immorality. Prisoners considered morally depraved were placed in the most restrictive environments while relatively minor offenders were given more freedom. Prisoners could earn privileges by following rules and demonstrating good behavior (McCartney, 1933; Rothman, 1998). Some administrators wanted to give inmates as much freedom as possible to prepare them for responsible decision-making after their release, and so they believed that restrictions on liberty should only be imposed for necessary security purposes (Lawes, 1932). Eventually the reformation process would result in their eventual release back into the community (Rothman, 1998). This rehabilitation-focused classification system was an influence on the medical model of corrections in the 20<sup>th</sup> century (MacKenzie, 1989), and is the forerunner of the modern

conception of risk and needs assessment (Bonta & Wormith, 2017; Clear & Cole, 1986). It also developed into the reintegration model of corrections where treatment in the community was prioritized over prison sentences. This method was seen as promoting the least restrictive environment possible but was criticized for increasing risk to the community, so precise classification was of vital importance to determine who was suitable for community-based supervision (MacKenzie, 1989).

In her summary of the phases of classification, Doris MacKenzie explains that officials began separating prisoners for diverse purposes in the 20<sup>th</sup> century, and therefore developed diverse methods to classify them. Some researchers developed classification methods on a psychological basis while others focused on prison management priorities (MacKenzie, 1989; see also Van Voorhis, 1994b). The psychological perspective assesses behavior risks associated with the individual's personality, mental health status, and social history. This can identify a treatment plan for reducing those putative causes of criminal behavior and identify an optimal housing situation that may be in the community or a specific incarceration setting where the individual's needs can be addressed (MacKenzie, 1989).

### ***The Psychological Perspective***

Inmates adapt to prison life in different ways, often because their personalities and learning histories guide them to certain patterns of behavior. Academic books on prisoner subcultures support one another's claims that some inmates are more violent than others, and that their patterns of behavior can be described categorically (Irwin, 1980; Sykes, 1958; Toch, 1977). But why do some inmates adapt to prison with violence while others do not? Researchers have attempted to develop assessment tools to classify inmates according to their personality types in order to predict how they might adapt to prison life. This contributes to the development of

policies that limit the convergence of personality types that may conflict, and policies that can guide treatment providers to address offenders' psychiatric needs with greater precision.

Several psychological classification models and tools have been used in prisons since the 1970's. Among them were the "integration level" or I-level assessments of how mature the individuals' personal interactions were at the time. It was thought that interviews with each prisoner could identify a personality profile based on their patterns of adaptation to stressful situations. These levels would be further classified into subtypes depending on their degree of passivity, aggression, conformity, anxiety, reactivity, and other patterns (Warren, 1976; Jessness & Wedge, 1985). I-level assessments were criticized for being time and cost prohibitive in a prison setting, as well as highly technical and subjective (MacKenzie, 1989). Another method was the Minnesota Multiphasic Personality Inventory (MMPI) that assessed personality traits of depression, hysteria, psychopathy, masculinity, paranoia, introversion, and other characteristics often measured in psychiatric interviews (Megargee & Bohn, 1979). The MMPI was used in prisons and subjected to many evaluations of its effectiveness at predicting violence with mixed results (Bohn, 1979; Hanson, Moss, Hosford, & Johnson, 1983; Van Voorhis, 1994b; Wright, 1988).

A final example of a psychological assessment tool is the commonly used Adult Internal Management System (AIMS), also known as the Quay system (Quay, 1983; Quay & Parsons, 1971). This tool was designed to identify five categories of offenders: aggressive psychopath, manipulator, situational, inadequate-withdrawn, and neurotic-anxious (Kratcoski, 1981). It was also designed to be conducted by trained correctional staff and caseworkers, and was supported by research that found reductions in violence when prisoners were housed with matching personality groups (Levinson, 1988). At one time, the Quay system was the most commonly

used prison classification tool in the United States (Austin, 2003), but when all 50 state prison agencies were surveyed in 2017 (with 32 states responding), only one state still relied on the Quay system for prisoner classification, and three other states used it as part of a hybrid assessment system (Byrne & Dezemmer, 2017).

These psychological classification tools saw rapid development in the 70's and 80's, and many were adopted for use in prisons without a complete evaluation of their effectiveness for new prison populations (Wright, Clear, & Dickerson, 1984). Some tools, like the Jessness Inventory, were designed for juveniles but were adopted in adult prisoner classification (Van Voorhis, 1994b). Others were not being conducted properly by correctional staff due to poor training or deliberate noncompliance (Austin, 1986). In 1994, Patricia Van Voorhis published a thorough analysis and comparison of the I-level, Jessness Inventory, Quay, Megargee MMPI, and the Conceptual Level classification systems for a sample of 150 federal prisoners and 122 prison camp inmates. To summarize her findings it is sufficient to say that each one was able to identify certain personality characteristics associated with various disciplinary outcomes, but that the Jessness Inventory (even though designed for juveniles) was perhaps the most promising (p. 132). Van Voorhis cautioned that each tool had its own strengths and weaknesses. A common concern is the amount of time and expertise necessary to properly conduct psychological interviews. The error rates and inter-rater reliability alone could render these tools unsustainable in the long-term, and given their relatively weak correlations with misconduct it is unlikely that they will revolutionize prison management. Van Voorhis concluded that there was potential for each of these tools to be used to help reduce misconducts, but they were designed to coordinate treatment services to help clients adapt to prison and reintegrate into the community. She notes that the risk of misconduct and the need for treatment was “more interchangeable than was

previously assumed” (p. 263), which clearly aligns with the risk-need-responsivity model proposed by Andrews, Bonta, and Hoge (1990).

The psychological perspective on prisoner classification is still developing, but due to the diverse needs of prison administrators, personality assessments are typically reserved for prisoners who are already identified as having psychiatric needs for the purposes of psychiatric therapy. Given their limited usefulness for subgroups on a need-to-need basis, psychological classification models based on symptoms of mental illness are not recommended for security level classifications in a general sense (Bonta & Wormith, 2018). Rather, these tools are seen as a second assessment, or internal classification mechanism that takes place after the initial facility placement has already been decided (Van Voorhis, 1994b).

### ***The Management Perspective***

From a management perspective, safety is always a priority. The public, staff, and inmates can only be protected if the most dangerous inmates are identified and supervised accordingly (MacKenzie, 1989). There have been occasions when prison officials abandoned the quest for “least restrictive” placements at the individual level and they resorted to uniform security procedures for all inmates, such as the “administrative control model” in Texas prisons between 1963 and 1983 where all facilities were classified and operated as “maximum security” environments (DiIulio, 1987). Due to the massive expansion of the prison system during this time period (Cullen & Jonson, 2012; Jonson, Eck, & Cullen, 2014; Vaughn, 1993), security resources were strained across the country and it did not make sense to house all inmates in the same manner. Some could be housed in minimum security settings with fewer security and custody resources, while others required extreme restrictions to stop them from escaping or committing violent acts. Classification became a method of merely *managing* large populations

of inmates for the duration of their sentence, not helping them adapt to prison life or preparing them for their return to the community (Feeley & Simon, 1992; Irwin, 1980; Kruttschnitt & Gartner, 2005; Silver & Miller, 2001; Steiner & Meade, 2014). For this approach to be “effective” it was not necessary to actually reduce the overall rates of misconduct, but only to congregate the most violent prisoners in the same locations so they could not prey on lower risk inmates (Berk, Ladd, Graziano, & Baek, 2003; Steiner & Meade, 2014).

The United States Penitentiary (U.S.P.) at Alcatraz is one of the best known examples of a super-maximum security facility in the federal prison system. Notorious criminals and inmates with histories of escape were sent to Alcatraz as a last resort for the “worst of the worst.” But high security comes at a cost. In 1963, extremely high operating expenses led to the closure of Alcatraz and the remaining prisoners were dispersed across the country to other federal prisons (Esslinger, 2016). Officials argued that dispersing the highest risk prisoners could make them more manageable than concentrating them in one location. Another federal penitentiary that opened at this time was U.S.P. Marion in southern Illinois. By 1973, the dispersal policy was waning and Marion began receiving disruptive inmates from other facilities to concentrate in a special “control unit.” Marion was then designated as the highest security facility in the federal system. Conditions at Marion were seriously altered after the murders of two correctional officers in October of 1983. All inmates were “locked down” in their cells under extremely restrictive conditions. Inmates had their hands cuffed and feet chained before being escorted from their cells for any reason, and were strip searched before and after meeting with their attorneys (Ward & Werlich, 2003).

It was thought that highly restrictive facilities like Marion could help reduce violence in state prison systems as well. Marion became the model for “supermax” prisons across the

country (Mears, 2006; Pizzaro & Narag, 2008). It may be that these high security settings are not only unnecessary because they incorrectly label some inmates as “dangerous” (Bench & Allen, 2003; Reiter, 2016), but the living conditions may be harmful to the mental health of the prisoners housed there (Kupers, 2017). This excess of security has been described as “custodial overkill” (Toch, 2001, p.376). Another problem is the extremely high cost of supermax confinement. The highest security housing units can be two to three times more expensive than the average prison because they cost more to build and require more correctional officers and staff relative to the number of prisoners (Lawrence & Mears, 2004). It is beyond the scope of this dissertation to examine the voluminous research on the harmful effects of highly restrictive environments (e.g. Andersen, 2004; Cloud Drucker, Browne, & Parsons, 2015; Andersen, Sestoft, Lilebaek, Gabrielsen, & Kramp, 1996; Grassian, 2006; Guenther, 2013; Haney, 2003, 2018; Haney & Lynch, 1997; Kupers, 1999; Smith, 2006; but see also Chadick, Batastini, Levulis, & Morgan, 2018; O’Keefe, Klebe, Metzner, Dvoskin, Fellner, & Stucker, 2013; Morgan et al., 2016), but the potential danger and excessive costs of overclassification are important justifications for evidence-based risk assessment. If truly “dangerous” inmates are properly identified it can be beneficial for the prison system and the prisoners themselves (Bonta & Wormith, 2018).

Karemet Reiter (2016) describes how California’s Pelican Bay prison receives the so-called “worst of the worst” inmates for long-term segregation in maximum security. While some of the high profile inmates were leaders of dangerous gangs or committed murders in prison, some were confined because they were *perceived* to be members of security threat groups; such as the Aryan Brotherhood or the Mexican Mafia. These inmates may be labeled a security threat because they associate with other known gang members, they have tattoos that resemble gang



symbols, or even if they draw gang-related symbols in their cells. Many of these inmates contest that the “dangerous” label is inaccurate but they are unable to prove they are *not* dangerous because of a sinister Catch-22. The only way to prove you are no longer a member of the gang is to “snitch,” but if you were not truly a gang member you would not have any information to share. Also, if you did snitch you would open yourself to retaliation from the gang and need to remain in protective custody.

Classification officials have a tendency to *overclassify* inmates rather than under-classify them (Solomon & Camp, 1993). As Reiter explains, there was a rush to fill Pelican Bay with “the worst of the worst” after it was opened, and it is possible that many of the inmates chosen to fill the beds were not dangerous enough to require supermax security environments (2016). But why would officials waste maximum security resources on inmates who do not need them? There are two competing theories of prison population forecasting to explain this phenomenon. The first theory (“build and fill”) argues that if more prisons are built, then they will soon be filled to capacity. In other words, increases in capacity generate additional prison sentences that were not necessary (Zimring & Hawkins, 1991). This conforms to “Parkinson’s Law” that states public agencies will justify new expenses by expanding their use of those resources beyond what is necessary (Parkinson, 1957; D’Alessio & Stolzenberg, 1997). Guetzkow (2015) argued that expanding prison capacity is a politically convenient response to prison crowding while releasing low risk inmates is politically dangerous. The opposing theory (“limit space/ limit population”) argues that new prison space does not, itself, create an increase in prison sentences, but there was a preexisting need for more space and judges were merely holding back on giving sentences they considered appropriate until the new facilities were built (Zimring & Hawkins, 1991). In other words, less available space leads to more departures from normal sentencing patterns. One or

both of these theories may be at work in classification decisions as well. When a state builds a maximum or super-maximum security prison they may overclassify inmates in order to fill the bed space and justify their investment, or perhaps the new space gives them freedom to reclassify prisoners already considered dangerous.

The tendency to overclassify may be due to an overabundance of caution combined with a lack of accountability for overclassifying. A false positive error results in placing a low risk inmate in a higher classification setting than necessary, which is not much of a burden to the official making the classification decision. The costs of incarceration are greater but it is considered better to be “safe than sorry” and classification officials will not be scrutinized for overclassifying individuals until the budget is sufficiently overstrained. On the other hand, a false negative prediction of risk may result in violence, death, or escape, and the decision-makers who placed a high risk inmate in an inappropriately low security setting are more likely to be held accountable (Brennan, 1985; 1993); especially if the mistake is politically embarrassing and highly publicized (Austin, 1993).

Reiter’s criticism of Pelican Bay is one extreme example of how being labeled “dangerous” can have long-lasting consequences in prison, and it serves as a cautionary tale for those who make this classification (2016). It also highlights the importance of classifying dangerousness on a scale (rather than a binary label), using statistically validated prediction methods (not subjective criteria), and including criteria that are dynamic in order to permit the possibility of moving back into lower security levels (rather than unchangeable/static criteria) (Morris & Miller, 1985).

## **Legal Challenges and Agency Responses to Prisoner Classification**

This section draws heavily on the work of Barbara Belbot and Rolando del Carmen in their summary of legal issues related to prisoner classification published by the American Correctional Association (1993). The authors identified key legal decisions in federal and state courts that spurred a new interest in objective and uniform classification systems. In the 1960's courts began hearing more cases on prisoners' constitutional rights, overturning the "hands off" doctrine that allowed prison officials to maintain order without judicial oversight. Classification was often an indirect target of law suits related to prison conditions, but some rulings have impacted the way prisoners are classified (*Laaman v. Helgemoe*, 347 [F. Supp. 269, 275, 1977]). In a general sense, courts have ruled that classification decisions must be based on criteria that are "*rational and reasonable as opposed to arbitrary and capricious*" (Belbot & del Carmen, 1993, p. 25, emphasis added).

The common ground in the legal debate on classification is that prisoners have a constitutional right to a "reasonably" safe and secure environment while they are incarcerated (*Grubbs v. Bradley*, 552 F. Supp. 1052 [M. D. Tenn. 1982]). The extent of this protection and the obligations of the state to secure it have not been clearly defined, but courts have been willing to point out specific situations when the "reasonable" line was crossed. For example, other cases have ensured prisoners' rights to medical care, so inmates with specific medical needs must be classified into facilities that can meet those needs (Belbot & del Carmen, 1993). The Supreme Court has ruled that involuntary transfers from prison to mental institutions create a "liberty interest" for the individual, so the prison officials must provide the inmate with due process before forcing the transfer (*Vitek v. Jones* [445 U.S. 480, 1980]), but transfers within a prison system *do not* invoke constitutional protections unless the state's laws specifically confer due

process to the inmates based on their individual circumstances (*Meachum v. Fano* [427 U.S. 215, 1976]; *Montanye V. Haymes* [427 U.S. 236, 1976]).

The wording contained in state laws are the vital component in deciding state liability. Words such as “shall,” “will,” and “must” confer explicit obligations to following guidelines (*Hewitt v. Helms* [459 U.S. 460, 1983]; Belbot & del Carmen, 1993). *Miller v. Henman* (804 F.2d 421 [7<sup>th</sup> Cir. 1986]) involved a case where a federal inmate was transferred from a level 5 security prison to U.S.P. Marion (a level 6 security prison) without a hearing or due process. The court rejected the inmate’s claims, in part because the wording of the Federal Bureau of Prisons regulations did not explicitly forbid professional discretion in transfer decisions. In the Tennessee prison system there were statutes and regulations that clearly defined how security level classifications were made, and this created a liberty interest for the inmates, so due process hearings were required in that case (*Beard v. Livesay* [798 F. 2d. 874, 6<sup>th</sup> Cir. 1986]).

Clearly, *wording* is important. Fewer written regulations permit discretion in classification decisions, but with discretion comes the responsibility for misclassification and accusations that the criteria is unfair or irrational. When classification officials use too much discretion they open themselves up to accusations that their criteria is irrational (not based on true risk factors), unfair, discriminatory, or arbitrary (Clements, 1981; Austin, 1983; MacKenzie, 1989). Too much discretion also imposes a certain amount of secrecy. Without explicit classification rules we would have to trust that officials are experienced and fair enough to consistently make optimal decisions, and that their successors will do the same (Toch, 1981).

The state of Ohio law on the initial classification of inmates uses explicit and mandatory terminology that places legal obligations on appropriate classification. One phrase reads “the Bureau of Classification will, within the limits of the available resources, attempt to assign the

inmate to an institution most compatible with his security and programming needs (O.A.C. 5120-9-52). This language imposes an obligation on the Bureau of Classification and the law also lists relevant criteria for making a “compatible” placement, but it also contains room for discretion and resource constraints with terms like “attempt” and “within limits.”

On the other end of the liberty/safety spectrum, courts have ruled that prison officials have some obligation to protect inmates from harm. These obligations are often unclear because the rulings use terms that require subjective interpretation, such as “reasonable protection” or “good faith efforts.” Courts have noted that violence occurs in prisons with enough regularity that inmate safety is not guaranteed, but if they “reasonably inform” the prison staff of a clear danger then the officials have an obligation to “reasonably respond” (*Withers v. Levine* [615 F.2d. 158, 4<sup>th</sup> Cir. 1980]; Belbot & del Carmen, 1993). In some cases it has been the prisoners themselves who sued for more accurate classification to remove dangerous inmates from the general population. The court decisions in these cases relied on whether the prison officials acted with “deliberate indifference” by mixing dangerous inmates with their victims; which is further defined as the “unnecessary and wanton” infliction of pain, which would be a violation of the Eighth Amendment protection against cruel and unusual punishment. If the inmate can prove that prison officials knew that a dangerous situation was imminent (such as putting two rival gang members in the same cell), it may be a violation of constitutional rights and subject the prison to personal injury lawsuits (Belbot & del Carmen, 1993).

The important takeaway for our purposes is that states may be vulnerable to litigation if they do not have a rational and reasonable system to classify prisoners. Each case draws our attention to the delicate balancing act of ensuring safety while trying to provide the least restrictive prison environment for each inmate. For some, it should be enough that a prison

sentence is able to reasonably protect public safety without unnecessarily restricting the offender's liberty, so the "least restrictive" placement should be a priority and more restrictions should be justified on a case-by-case basis (Rubin, 1975). But "least restrictive" is a goal that *requires* valid assessment of risk, and perhaps that is why so many risk assessment tools have been developed over the past few decades. In *Addington v. Texas*, 441 U.S. 418 (1979) civil commitment requires a "clear and convincing" evidence that the patient is a danger to himself or others, while acknowledging that a "clear and convincing" standard is difficult to define. It is often confused with "balance of probabilities" or "beyond a reasonable doubt." This confusion has carried over to the field of risk assessment as a whole. What is the legal standard that a prediction tool must aspire to, statistically speaking, in order to be considered "clear and convincing?" It is impossible to provide a specific estimate or threshold to meet this standard (Edens, Buffington-Vollum, Keilen, Roskamp, & Anthony, 2005; Morris & Miller, 1985). In *Ramos v Lamm* (485 F. Supp. 122 [D. Colo., 1979]) the court ruled that "any system of classification, placement, and assignment must be clearly understandable, consistently applied and conceptually complete. *Methods of validation must be completed*" (emphasis added). As prison administrators are held responsible for their decisions they will need to rely on valid, verifiable risk assessment procedures to protect themselves from accusations that their classifications are arbitrary and capricious (MacKenzie, 1989; Austin, 1993; Belbot & del Carmen, 1993).

### **The Development of Assessment Tools**

As John P. Conrad once wrote: "it is very hard to predict, especially the future" (1981, p.15), and this appears to be true given the large numbers of prediction tools and statistical validation techniques found in the literature (Desmarais and Singh, 2013). However, Morris and

Miller (1985) argued against surrendering the job of prediction to the unreliable intuition of psychiatrists and justice officials. It is possible to increase prediction and guide decision-making with evidence-based actuarial tools while acknowledging that there are many caveats and conditions that should limit our overreliance on any risk assessment system. In this section I will discuss the different types of prediction and the development of advanced assessment systems.

Morris and Miller refer to static, unchangeable predictors of future behavior as *anamnestic* prediction (1985). Past behavior predicts future behavior, to a certain extent, but is flawed by the assumption that people and their situations do not change. Few penologists would make this claim, and the basis of our legal system of punishment and rehabilitation would be undermined if it were true. The aging and maturation processes alone argue against it. However, static, unchangeable factors from an inmate's criminal history are given priority in many assessments of risk in the prison classification process (Brennan, Wells, & Alexander, 2004; Bonta & Wormith, 2018).

*Actuarial* prediction, by contrast, is a process of inferring that groups of people behave in similar ways. This is the basis for calculating drivers' insurance rates. If the data show that young male drivers are more likely to be involved in a car accident, then other young male drivers are expected to pay more for their insurance. They are a higher risk to insure because their demographic is considered "dangerous." The actuarial assessment process in criminal risk assessment works in much the same way. Data are collected on a large number of criminal offenders to identify the factors most highly correlated with future criminal behavior. These become criminal risk factors used to predict offending patterns in new subjects (Morris & Miller, 1985).

The third type of prediction is *clinical*. This relies on the experience and professional training of an individual decision-maker who decides how dangerous an offender may become. There is much research to suggest that clinical judgment is less accurate than actuarial assessments when trying to predict future behavior (Ægisdottir, et al., 2006; Carroll, Weiner, Coates, Galegher, & Alibrio, 1982; Glaser, 1955; Gottfredson, 1987; Gottfredson & Moriarty, 2006; Grove, Zald, Lebow, Snitz, & Nelson, 2000; Hiltermann, Nicholls, & van Nieuwenhuizen, 2014; Holland, Holt, Mario, & Beckett, 1983; Jones, 1996; Meehl, 1954; Oleson, van, Benschoten, Robinson, & Lowenkamp, 2011). This is partly because there is less accountability for inconsistent decisions with clinical judgment (Solomon & Camp, 1993), and that officials often rely on extra-legal heuristics to make their decisions (see Albonetti, 1991; Steffensmeier & Demuth, 2006; Steffensmeier, Painter-Davis, & Ulmer, 2017 for a discussion of focal concerns theory in court decision-making and Butler & Steiner, 2016; Cochran, Toman, Mears, & Bales, 2017; Logan, Dulisse, Peterson, Morgan, Olma, & Paré, 2017 for an examination of focal concerns theory in prison discipline decisions). A major concern with clinical prediction is the inability to verify their effectiveness until the event occurs, unlike anamnestic and actuarial prediction which lends itself to aggregate statistical evaluation and comparison (Morris & Miller, 1985).

It is also possible to blend these three methods into a system more commonly found in criminal justice decision-making. Many professionals offer their clinical judgment after it has been informed by a combination of anamnestic and actuarial factors (Morris & Miller, 1985). Many modern assessment tools and judicial sentencing guidelines have built-in opportunities for the user to override the recommended decision if their clinical judgment offers a compelling reason (Andrews, Bonta, & Hoge, 1990; Girard and Wormith, 2004; Guay & Parent, 2018).



Overrides are possible when justified, and are even encouraged if there is a justifiable rationale, but there should be clear goals to keep overrides to an appropriate minimum. Solomon and Camp (1993) recommend that, at most, 15-20% of cases should have their recommended risk level overridden by the assessor. Given the limits of predictive accuracy in risk assessment tools, all results should be *advisory* in nature, and not mandatory without the application of human judgment on mitigating or aggravating issues (Brennan, 1993). Some research indicates that structured professional judgment supplemented with actuarial data can predict recidivism with similar accuracy to actuarial tools alone (Fazel, Singh, Doll & Grann, 2012), but the overall benefit of clinical overrides is disputed (DeClue & Zavodny, 2014; Harris, Rice, Quinsey, & Cormier, 2015; Wormith, 2014; Wormith, Hogg, & Guzzo, 2012).

McCafferty (2017) compared the predictive power of the Ohio Youth Assessment System in juvenile courts and found that the original, unadjusted risk levels were better at predicting recidivism than risk levels that were overridden by agency officials. Scotland, Vaswani, and Merone (2014) and Carns and Martin (2011) both found that the YLS/CMI risk and needs assessment tool lost some of its predictive power in cases that were overridden by professional judgment. Guay and Parent (2018) studied LS/CMI assessments and found that some types of overrides led to worse predictive validity than other types of overrides. Out of 3,636 Canadian offenders, they found that a relatively low percentage of cases were overridden by probation officers (6.5 percent compared to 16.5 to 35.1 percent of offenders in other Canadian jurisdictions). Both upward and downward clinical overrides were found to decrease predictive accuracy of the risk assessment tool, but downward overrides had a worse effect on prediction than upward overrides.

Papp (2019) studied the effects of overrides on the predictive validity of risk assessment tools for 4,383 youth in a juvenile court. He found that a common reason for overriding a risk level was due to the nature of the juvenile's offense, and that lower risk youth were more likely to receive an override to a higher risk level than others were to receive downward overrides. Ultimately, he found that overrides appeared to undermine the assessment process because youth who were given an override had risk assessment scores that were not predictive of recidivism, while those who did not receive an override had assessment scores with acceptable levels of prediction. The current evidence shows that overrides can sabotage risk assessment systems if they are not used sparingly and with good justifications.

A major concern in decision-making is the cost we are willing to pay for false positive and false negative predictions. When the loss of liberty is negligible, or of short duration, it may be acceptable to be safe rather than sorry. However, when a large number of inmates are classified into expensive high security prisons with serious restrictions on their privileges and rehabilitation opportunities, small inefficiencies in prediction can have serious consequences (Floud & Young, 1981; Monahan, 1981). This is why trustworthy validation assessments are necessary for every system-wide risk assessment method.

There have been a multitude of offending prediction tools developed over the past 30 years. Desmarais and Singh (2013) identified 19 primary risk assessment instruments used in adult correctional settings in the United States and 47 other tools used in specific jurisdictions, as well as several other tools used to predict specific behavior outcomes (such as violence or sexual offending only). In their comparison of predicted validity, some tools had more statistical support than others, but this depended on the number of evaluation studies conducted up to that point and the methods used for validation. One finding in their report is the lack of consistent

evaluation standards for risk prediction tools, which makes it difficult for agencies to decide if they should adopt it for their own correctional populations.

Given the emphases placed on prison classification and security level placement, it may be surprising to learn that classification is an unreliable method of controlling inmate behavior. In 2008, James Byrne and Donald Hummer reviewed the evidence on what we know about prison violence from social science research. They argue that many of the factors trumpeted as “causes” or solutions to prison violence actually have an unknown effect because we cannot draw firm conclusions from poorly designed, limited studies. At this point in time, we cannot conclude that risk assessment validity and classification of inmates by security-level can actually reduce prison violence. Placing inmates in higher security level facilities does not have strong empirical support for the reduction of misconduct (Byrne & Hummer, 2008). Classification might simply be displacing misconduct from lower security prisons to higher security prisons (see Irwin, 2005; Steiner & Meade, 2014).

Wooldredge and Steiner (2015) examined misconduct rates in 246 state correctional facilities in 40 different states (using data from the *Survey of Inmates in State and Federal Correctional Facilities*) to determine if the population characteristics of the inmates were better predictors of misconduct levels than the administrative controls associated with security levels (such as the proportion of inmates in maximum security settings, the number of inmates housed in single cells, and the ratio of officers to inmates). They found that many of the effects of security level administrative controls were either nonsignificant or weakened when the composition of the inmates’ risk levels were included in the analysis. Counter-intuitively, coercive controls in prisons were associated with *higher* assault levels. In other words, many of the administrative controls meant to reduce misconduct were not having their intended effects on

overall misconduct rates. Wooldredge and Steiner summarize the results of these analyses by writing “Considering the direct effects... of environmental and administrative controls, none is consistent with the idea that more punitive practices at the state level and greater control over inmates at the facility level generate *lower* levels of inmate assaults once the composition of inmate populations are controlled” (2015, p. 244, emphasis in the original).

The failures of risk assessment and classification can be qualified by several potential explanations: 1) most research on prison classification and subsequent misconduct is not of a high enough quality to draw adequate conclusions (Alexander & Austin, 1992a; Brennan & Austin, 1997; Byrne & Hummer, 2008; MacKenzie, 1989; Sechrest, 1987), 2) the risk assessment procedures that are currently used in prisons are not capable of predicting human behavior well enough to have a meaningful impact (Alexander & Austin, 1992a; Van Voorhis, 1994b), 3) the tools are valid but they are not being applied with enough fidelity to maximize their impact (Burke & Adams, 1991), and 4) there are situational and cultural factors in prisons that override our ability to predict and control inmate behavior with classification alone (Toch, 2001). These concerns have been an issue for decades. Leslie Wilkins (1969, p.63) wrote that classification techniques in the 1960’s were “heavily oversold” and based on weak methodology. Still, Wilkins argued that classification was a developing field that was valuable because it helped researchers think in operational terms about decision-making, especially from a continuous improvement model of evaluation. He encouraged researchers to overcome the methodological weaknesses of the earlier tools and develop reliable scientific forms of evaluation. In recent years, researchers have advanced the field of risk prediction with the development of the risk-need-responsivity model of corrections, and it may be possible to

harness these developments to advance the science of risk classification and reduce misconduct in prisons (Andrews & Bonta, 2017).

### **The RNR Model and Actuarial Assessment in Corrections**

The modern approach to rehabilitation is to identify the individual criminogenic needs of the offender in order to assess their risk level and then target those needs for appropriate treatment (Andrews & Bonta, 2017). This harkens back to the rehabilitation and reintegration-based methods of classification mentioned previously (MacKenzie, 1989). Those with the lowest risk of recidivism are given the least intensive treatment because the process itself may keep them from pro-social relationships and opportunities they already possess, and their participation takes resources from the higher risk offenders who need it most (Lowenkamp, Latessa, & Holsinger, 2006). If the factors causing their criminal behavior are changeable (dynamic) rather than permanent (static), they can theoretically be resolved or sufficiently minimized to reduce the likelihood of future criminal activity. A “level of service” assessment tool was designed to help guide this process and properly identify risk levels and needs (Andrews & Bonta, 2017).

The Level of Service Inventory (LSI) tools (e.g. LSI-R, LS/CMI) give special consideration to a list of risk factors referred to as the “Central Eight.” These are (1) a history of antisocial behavior, (2) antisocial personality patterns, (3) antisocial cognitions, (4) antisocial associates, (5), family and/or marital problems, (6) school and/or work problems, (7) leisure and/or recreation problems, and (8) substance abuse (Andrews, Bonta, & Wormith, 2006). While LSI systems were designed for measuring the risk of recidivism and guiding case plans, the criteria they measure is also useful for predicting misconduct in prison (Motiuk, 1991). Gendreau, Goggin, and Law (1997) conducted a meta-analysis on 39 studies of prison misconduct. While the sources differed in terms of quality and measurement, the results

supported the central eight criteria as being useful for predicting institutional misconduct as well as post-release recidivism. The advantage of this method of risk assessment is to target criminogenic needs with effective treatment, not merely to classify them according to risk level.

### **The Ohio Risk Assessment System**

In April of 2011, Ohio began using the ORAS statewide for prison intake risk assessment. The ORAS is heavily influenced by the RNR model tools like the LSI-R and is designed to assess an individual's risk of recidivism and identify their criminogenic needs for coordinating treatment services, but it has the advantage of assessing risk *at different stages in the criminal justice system*. This includes a 7-item pretrial assessment, a 4-item community supervision screening, a more detailed 35-item community supervision assessment, a 31-item prison intake tool, and a 20-item prison re-entry tool. The information gathered at earlier points can be carried over into later assessments but can also be updated to reflect changes to dynamic risk factors that have occurred between assessments. There is also a prison screening tool that is used to screen out very low risk inmates who do not require the complete prison intake assessment. Each tool has a slightly different scoring system to classify offenders as “low” to “very high” risk, with different cut-off scores depending on the tool or gender of the client. The scoring process occurs after data are collected from official records and a structured interview. Interviewers are trained by the Ohio Department of Rehabilitation and Correction through partnership with the University of Cincinnati Corrections Institute. The ORAS is currently being used in 15 states agencies (Singh, Kroner, Wormith, Desmarais, & Hamilton, 2018; Vera Institute of Justice, 2011).

The Ohio Risk Assessment System- Prison Intake Tool (ORAS-PIT) has been validated (Latessa, et al., 2010) and re-validated (Makarios & Latessa, 2013; Latessa, et al, 2017) for

predicting risk, using 30 items with a maximum score of 40. These scores are divided into five major categories: (1) criminal history, (2) education, financial, and employment, (3) family and social support, (4) substance abuse and mental health, (5) criminal lifestyle, age, and gender.

The ORAS-PIT was designed to measure risk factors that are present when an inmate is entering the prison system that predict recidivism after they are released. These are long-term risk factors that can be targeted for change, but are assumed to persist or worsen if they are not addressed by effective programming. The initial validation studies found that the tool was correlated with new arrests for men at 0.32 (AUC = 0.67) and 0.35 (AUC = 0.69) for women, and it did well in discriminating low, moderate, and higher risk inmates from one another. Desmarais and Singh (2013) compared the ORAS-PIT to 18 other evaluated actuarial tools for predictive accuracy (including 4 other ORAS sub-systems). Desmarais and Singh (2013) found that the ORAS tools were good or excellent predictors of recidivism, comparable to or exceeding the predictive validity of many other commonly used risk assessment tools. The ORAS-PIT had similar predictive accuracy to the Post Conviction Risk Assessment tool (Johnson, Lowenkamp, VanBenschoten, & Robinson, 2011), the Salient Factor Score tools (Hoffman & Adelberg, 1980), the Service Planning Instrument for Women (Millson, Robinson, & Van Dieten, 2010), and the Static Risk and Offender Needs Guide tools (Barnoski & Drake, 2007). The ORAS-PIT outperformed the Correctional Offender Management Profile for Alternative Sanctions (Farabee, Zhang, Roberts, & Yang (2010), the Level of Service Inventory tools (Andrews & Bonta, 2017), the Risk Management System (Dow, Jones, & Mott, 2005), the Salient Factor Score (1974 version; see Hoffman & Adelberg, 1980), and the Wisconsin Risk and Needs tools (Baird, Heinz, & Bemus, 1979; Eisenberg, Bryl, & Fabelo, 2009). These comparisons demonstrate that the

ORAS-PIT stands out as potentially one of the best risk assessment tools currently available in offender corrections.

### **The Current Method of Classification in Ohio**

Ohio state law requires the ODRC to process inmates through a reception center where their risks and needs are assessed before sending them to serve their prison sentence at a designated security level (O.A.C. 5120-9-52). The administrative code also lists key criteria for making this decision but does permit deviations due to availability of resources or criteria that the bureau considers to be relevant to their classification choice. The criteria listed are: *1) the nature or seriousness of the offense for which the inmate was committed, 2) the length of the inmate's sentence, 3) medical and mental health needs, 4) previous behavior on parole, furlough, probation, and post release control, 5) the nature of prior criminal conduct in official records, 6) the inmate's age, 7) their potential for escape, 8) the "potential of danger to the inmate, other inmates, staff, or the community through the inmate's actions or actions of others," 9) availability of housing, work, and programming within institutions, 10) the physical facilities of an institution, and 11) any other "relevant information" contained in the reports.*

It is further explained that inmates should be designated at a security level of 3 while they are being classified at the reception center, and leaves room for the inmate to be assigned to a facility with a security level higher than the inmate's own designation, if necessary. Given the vagueness of some of these guidelines, it is expected that case manager discretion will result in the inconsistent classification of prisoners. The ODRC further defines these criteria to make their decisions more consistent and reliable, but they do not use the ORAS-PIT scores.

The classification specialists review the case file of the inmates and interview them to collect information. Then they complete a form that guides their decision-making. For men, there



are only five major factors that determine the recommended security level of the prisoner. These are age at current admission, most serious current conviction offense, security level they were released from in their last prison sentence (if any), assault conviction history, and prior release as a security threat group member. There are non-discretionary overrides that require the offender to be placed in a security level with a double perimeter fence. Sex offenders, kidnappers, abductors, murderers, those whose felonies resulted in the death of a police officer, those whose felonies led to the death of a person while incarcerated, former death row or life-without-parole offenders, those who had a documented escape from prison, and those who were convicted of a notorious or high-level felony. These mandatory override categories remove much discretion from the classification specialists, but there are non-mandatory override criteria as well. Only two of these are vague enough to justify a *downward* departure from the recommended security level. These are “prior prison adjustment” and “time since prior incarceration.” Presumably, an inmate who had good prior adjustment and a long time since their prior incarceration would stand a better chance of having their classification level reduced, but this is not specified in the document. Only upward departures (overclassification) are explained. When finished, the recommended security level classification and the override recommendations are approved by the warden and the Bureau of Classification officials.

Women in Ohio prisons receive a different assessment process that is comprised of somewhat different classification criteria. They share two main classification factors with men: whether their current admission offense was violent, and their age. Women are also assessed depending on whether they had used illegal drugs or were convicted of a drug offense in the past twelve months, as well as the number of prior felonies they had been convicted of. Drug use history is not included in the main risk criteria for men. Women share many of the same

mandatory override criteria with men, but reasons for their discretionary overrides are not recorded. However different these criteria may be, the classification of women prisoners does not result in many options for the ODRC. There are only two women's prisons in the state, and classification is merely a tool for guiding placement within the facility and assigning restrictions or privileges.

The ODRC has a mission statement that claims their process of classification is “uniform and objective.” They also prioritize safety of the public, staff, and inmates while making it a goal to place prisoners in the “least restrictive setting possible.” Next, they prioritize keeping the inmate in a geographic location that is “reasonably close” to the inmate’s former residence in the community so they can be visited by their loved ones. They address the need for safety by describing their system of privileges and sanctions depending on the inmate’s own behavior and describe the criteria they use to make their initial classification decisions. Most of these are comparable to the state regulations listed above and some overlap with the ORAS-PIT risk factors, but they also consider some additional factors that the ORAS-PIT does not include (see Table 1 for a comparison of the ODRC classification criteria and the ORAS-PIT domains).

After classification, an inmate is designated as a security level of 1, 2, 3, 4, or 5 and assigned to a facility that is considered suitable to supervise them. A Level 1 inmate has the greatest number of privileges and is typically housed in facilities with more freedom to participate in reintegration programming and employment, including work camps and community-based work sites. A Level 2 inmate still has some freedom of movement during the day and may work or engage in leisure activities, but they are held in facilities with a double perimeter fence with razor wire and armed patrols to prevent escape. A Level 3 inmate has more direct security and supervision than Level 2 but is still permitted to interact with other inmates in

**Table 1:** Comparison of the ODRC classification criteria and the ORAS-PIT items

ODRC Classification Criteria (for men)	ORAS-PIT Items*
<b>Main Criteria</b>	
Age	Age
Most serious current offense	Most serious arrest before age 18
Security level of last adult prison release	-
Assault conviction history	Arrests for violent offense as adult
Prior release as an active or disruptive STG	-
<b>Mandatory Overrides</b>	
Sex offenders	-
Kidnapping or abduction offenders	-
High notoriety case offender	-
Current conviction for murder	-
Felony involved law enforcement death	Escape attempt
Felony involved a death while incarcerated	-
Former death row or life without parole	-
Documented escape from confinement	Escape attempt
Indefinite sentence for Felony 1 or 2	-
<b>Discretionary Overrides</b>	
Prior Prison Adjustment	Official misconduct while incarcerated
Time to earliest hearing/stated term	-
Violent threat	Uses anger to intimidate others
Notoriety of case	-
Documented escape from supervision	-
Documented escape with unknown details	-
Felony detainee	-
Time since prior incarceration	-
Sex offense consideration	-
Current active or disruptive STG participation	Current gang membership
Meets behavioral criteria for Level 4B/5	-
Other	-

\*Other ORAS-PIT items that the ODRC criteria does *not* consider for men are juvenile commitments and school expulsion, employment record, attitudes toward employers, use of leisure time, marital status, living situation, emotional and personal support, drug and alcohol use, health and mental illness, anger management, impulsivity, and personal control over events. See Appendix B for the full ORAS-PIT scoring criteria and thresholds.

a “general population” setting. A Level 4 inmate is a “control unit” with fewer privileges and more restrictions than Level 3, but exact conditions depend on needs and availability of the

facility. There is a fifth security level designation for inmates who are connected to “violent, disruptive, predatory, riotous actions” because they are considered a serious threat. These are placed in Extended Restrictive Housing (ERH), including supermax, and are often locked in their cells for 22 hours or more every day (ODRC, *Inmate Classification*, <https://drc.ohio.gov/policies/classification>).

There is sufficient ambiguity in the classification process to assume that the ORAS-PIT score will produce a risk assessment that differs from one that includes all of the factors that the Bureau of Classification attempts to prioritize. This creates an opportunity to compare the predictive validity of the ORAS-PIT designation to the actual placement decision. Then it may be possible to calibrate the classification process by prioritizing the ORAS-PIT scores to achieve greater accuracy in predicting misconduct. This dissertation will analyze the predictive validity of the ORAS-PIT as a stand-alone method of classification, and this will be compared to the actual classification made by the ODRC. If the ORAS-PIT scores are a better predictor of institutional misconduct than the structured judgment of the Bureau of Classification, then perhaps their decisions can be improved by adhering closer to the ORAS-PIT recommendations.

### **Gaps in the Literature**

The initial ORAS validation studies did not always report receiver operator characteristics that would help to compare the tool with other risk assessment systems (Singh, et al., 2013). New validations can help facilitate comparisons by providing a battery of statistical tests and estimated effects sizes. Also, prior validation studies of the ORAS tools have been limited by relatively small sample sizes for under-represented subgroups of inmates (such as high risk female prisoners). It has been noted that many of these studies also used assessment scores that were collected in interviews conducted by trained university research staff and not

corrections officials in the field, making it difficult to know if the tool is still valid after it is scaled-up for use in a state-wide agency. Another concern is that the validation studies occurred before the ORAS tools were mandated by state law, so the inmates included in the analyses had to provide informed consent, and they resided in prisons that had agreed to participate in the study, which could introduce some selection bias (Latessa, et al., 2010). The initial studies also suffered from relatively short follow-up periods for measuring recidivism (12 months) when longer periods are preferred (Jones, 1996). Validation is an ongoing process. Assessment tools should be validated before being adopted agency-wide, should be re-validated continually to ensure that procedures are being followed, should be re-validated in each new correctional setting that adopts the system, and the tool should be updated to improve prediction whenever the data suggest this is necessary (Alexander & Austin, 1992b; Brennan, 1993).

A new evaluation of the ORAS-PIT is needed in order to fill the gaps in the literature and resolve some of the pressing questions about its use in Ohio's prisons. This dissertation contains a comprehensive analysis that validates the ORAS-PIT for within-prison outcomes rather than post-release recidivism (as recommended by Byrne & Dezemmer, 2017). It also uses data collected by corrections officials rather than trained research staff, and uses data on all assessed inmates rather than data on individuals who voluntarily participated in a research study (as recommended by Latessa, et al., 2010). This study also subjects the data to a battery of statistical methods of validation in order to compare the ORAS with prior evaluations of other tools (as recommended by Singh, et al., 2013), and explores the concept of "hybrid" assessment tools to assess the relative predictive value of individual risk factors rather than the tool as a whole (as recommended by Makarios & Latessa, 2013). Results are also broken down by the type of misconduct, which is not always specified in other research (Steiner & Wooldredge, 2013).

Findings from this dissertation will benefit ODRC by providing them with more information about how to use ORAS data they have already collected, and can potentially lead to reductions in misconduct as well as cost reductions if prisoners are classified more efficiently.

This study will also attempt to address the confounding effects of various security levels on the validation analysis. The primary goal of the external risk classification of inmates is to suppress misconduct by assigning them to a facility with enough security resources to control their behavior. Facilities with conditions of extreme confinement make some types of misconduct nearly impossible to commit, even if these conditions are theoretically more criminogenic than lower security settings (Bayer, Hjalmarsson, & Pozen, 2009; Blevins, Listwan, Cullen, & Jonson, 2010; Chen & Shapiro, 2007; Drury & DeLisi, 2011; Petersillia, 2009; Shermer, Bierie, & Stock, 2012). When the post-assessment environment directly influences the inmate's predicted behavior it is impossible to assess the validity of a risk assessment tool with a pooled sample of all inmates. For example, if a cohort of inmates are classified as high risk and are sent to a maximum security facility, but they commit less misconduct than inmates in medium security facilities, what would this imply about the risk assessment tool? Did the tool fail to classify the "medium" security inmates according to their actual risk level, or did the maximum security facilities successfully control the behaviors of those classified as "maximum" security? What if the maximum security inmates committed *more* misconduct than medium security inmates? Does this support the risk assessment validation, or is this to be expected due to the criminogenic factors in more restrictive settings and the congregation of dangerous inmates in a single location? Clearly, any research on this topic must address the environmental effects of security level on post-assessment outcomes (Steiner & Wooldredge, 2008; Worrall & Morris, 2011).

A pooled sample of inmates ignores the endogeneity bias caused by security classification itself (Steiner & Wooldredge, 2008; Worrall & Morris, 2011). One method of addressing this issue is to examine prisoners with different risk assessment scores who reside in facilities with the same security level (as in Baird, 1993). A corresponding method is to examine prisoners with the *same* risk assessment scores who are assigned to different security levels (as in Chen & Shapiro, 2007 and Camp & Gaes, 2005). It is also possible to isolate the effects of security levels on misconduct after controlling for inmate and prison-level predictors of misconduct using multi-level modeling or instrumental variable analyses (Steiner & Wooldredge, 2008; Worrall & Morris, 2011). Shermer, Bierie, and Stock (2012) recommend that researchers report the results of both a pooled regression model *and* multi-level models that control for facility-level factors to help specify the effects that custodial environment has on misconduct outcomes (as well as unmeasured factors like crowding, staffing, culture, and prison size).

### **Chapter 3.**

#### **Research Questions and Method**

This chapter outlines the research questions that will organize the analyses and address the questions related to risk assessment and prisoner misconduct. This chapter also describes the data and sample of prisoners, defines each of the model variables, and lays out the analytic plans designed to address each research question. Below are the research questions that guide the analysis of the ORAS-PIT and its utility for improving prisoner classification in Ohio prisons:

**Q1:** What is the base rate of each type of misconduct in Ohio prisons at each security level?

**Q2:** What is the base rate of each type of misconduct for inmates in each category of risk as determined by the ORAS-PIT?

**Q3:** What is the statistical validity measure of the ORAS-PIT for predicting misconduct in Ohio prisons?

**Q4:** What are the characteristics of inmates who are “misclassified” in higher or lower security facilities and how do they compare to inmates who were not over- or under-classified?

**Q5:** Do inmates commit misconduct at rates comparable to the ORAS-PIT score or their actual placement?

**Q6:** Does the ORAS-PIT score improve prediction of misconduct even after controlling for other individual (inmate) level covariates of risk?

**Q7:** Does the ORAS-PIT score improve prediction of misconduct even after controlling for other aggregate (facility) level covariates of risk?

**Q8:** Can the predictive power of the ORAS-PIT be improved by incorporating alternative measures or other factors in its assessment?



## **Samples and Data**

The data used in this analysis were provided by the ODRC to support a study on the use and impacts of restrictive housing that was supported by a grant from the National Institute of Justice (Award #2016-IJ-CX-0013). The larger project contained information on all 224,322 inmates who were admitted to prison between January 2007 and December 2016. This includes both men and women housed in public and private facilities. The year 2016 was the cut-off date chosen to allow for a suitable follow-up period for measuring post-release recidivism (which is not an outcome used in this dissertation). Additionally, the ODRC Bureau of Research provided data for this dissertation analysis that contained the ORAS-PIT scores and ODRC prisoner classification information. Not all cases in the full sample had ORAS-PIT scores so the sample size decreased to 55,407 inmates who were admitted to prison between January 2<sup>nd</sup> 2014 and December 30<sup>th</sup> 2016. January 2014 marks the period where the ORAS tools were officially used for all new admissions and not in pilot studies or select facilities.

Out of the full sample, 16,967 were given the ORAS-PST brief screener tool for low risk inmates and 38,440 were given the complete ORAS-PIT assessment (see Appendices B and C). Inmates who scored “low” on the screener are considered “low” on the complete ORAS-PIT, but those who score “moderate/high” must complete the full ORAS-PIT assessment. The sample sizes listed here do not include any inmates who were scored “moderate/high” on the screener who did not receive the full ORAS-PIT tool, because this would result in an incomplete assessment that will interfere with the validation of the tool. There were 1,905 such cases that were omitted from the sampling frame. This sample was once again reduced after initial analyses found that only 32,433 prisoners spent a minimum of 90 days in their initial placement. It would not be possible to conduct analyses on misconduct outcomes contingent on environmental

context if the inmate transferred quickly between facilities. This final sample of inmates (hereafter referred to as the “full sample”) contains 26,677 men and 5,756 women, all of whom received an ORAS-PIT or ORAS-PST risk assessment score and spent at least 90 days in their initial placement.

The goal of this dissertation is to examine inmates who were assessed with the ORAS-PIT and the ORAS-PIT screener tool during their initial classification at one of the reception centers in Ohio. Inmates are transferred from these locations to other facilities to serve their sentences upon classification. This decision can be changed at a later time (e.g. after a prisoner commits misconduct, requests a transfer, or is re-classified to a new security level), but the true value of the ORAS-PIT assessment in my analysis is in its ability to predict misconduct in their initial placement. Future researchers may want to assess the dynamic aspect of risk assessment (e.g. increases and decreases in risk level over time), and the influence of transferring up or down in security level, but the data required to perform this analysis is not currently available. The ORAS-PIT screener tool (ORAS-PST) is a short questionnaire that screens out very low risk offenders who do not need to be assessed with the full ORAS-PIT tool. Inmates who score “low” on this tool (a score of 0-1) are classified as “low risk” for the purposes of this study. Inmates who were classified as “moderate/high” risk with the screener will only be included in the analyses if they also had a full ORAS-PIT assessment. This will allow me to analyze the separate risk domains without fear of contaminating the ORAS-PIT data with non-comparable scores. These sample size distinctions will be noted whenever they vary between analyses.

Facility security level and other characteristics are also relevant to this study and are included in the multi-level design. Ohio had twenty-eight prisons during the study window (see Table 2 for a full description). These included fourteen “mixed-minimum” security facilities, six

**Table 2: Ohio prison facility descriptions**

Facility Name	Security Level	Sex of Population	Total Inmate Population (as of 6/1/2016)
Allen-Oakwood Correctional	1, 2	Male	1,637
Belmont Correctional	1, 2	Male	2,713
Chillicothe Correctional	1, 2	Male	2,784
Grafton Correctional	1, 2	Male	2,074
Lake Erie Correctional	1, 2	Male	1,766
London Correctional	1, 2	Male	2,317
Madison Correctional	1, 2	Male	1,791
Marion Correctional	1, 2	Male	2,623
North Central Correctional Complex	1, 2	Male	2,893
Northeast Ohio Correctional Center	1, 2	Male	454
Noble Correctional	1, 2	Male	2,482
Pickaway Correctional	1, 2	Male	2,088
Richland Correctional	1, 2	Male	2,613
Southeastern Correctional Complex	1, 2	Male	2,017
Lebanon Correctional	3	Male	2,399
Mansfield Correctional	3	Male	2,685
Ross Correctional	3	Male	2,033
Trumbull Correctional	3	Male	1,523
Toledo Correctional	3	Male	1,208
Warren Correctional	3	Male	1,328
Ohio State Penitentiary	4, 5	Male	526
Southern Ohio Correctional Facility	4, 5	Male	1,179
Dayton Correctional	Female	Female	938
Ohio Reformatory for Women	Female	Female	2,648
Franklin Medical Center	Medical/Female	Male/Female	648
Northeast Reintegration Center	Medical/Female	Female	651
Correctional Reception Center	Reception	Male	1,780
Lorain Correctional	Reception	Male	1,718

“medium” security facilities, two “maximum” security facilities, two prisons for women, two medical centers, and two reception centers. Within a “mixed” security facility it is possible to be assigned a security level of “1” or a “2”, but the difference is largely a matter of privileges and

not custodial restrictions. The medium facilities are labeled with a security level of “3”, but there are some mixed security units within each prison. For example, each facility has a designation for restrictive housing and protective custody that an inmate can be assigned to for a considerable portion of their prison sentence. The maximum security facilities have a numeric level of “4” or “5” and have the most extreme restrictions. Female facilities and medical centers are truly mixed in terms of the security level of the inmate population because there are so few housing options for them in the Ohio prison system. Reception centers are supposed to be considered a level “3” facility until an inmate is classified and placed in a different prison. As of June 1, 2016, the facility with the smallest population of inmates held 295 prisoners and the facility with the largest population held 2,784.

### **Measures**

The primary dependent variable in this study will be “misconduct” as measured by official findings of guilt documented by the ODRC rule infraction board. There are 61 official rule infractions that an inmate can be found guilty of in Ohio prisons (see Appendix A for the full list and frequency of guilty findings in the current study sample). For the sake of thoroughness, I will be evaluating the ORAS-PIT on its ability to predict “any misconduct”, serious and discretionary misconduct (serious being any infraction that could qualify for new criminal charges, e.g. property or violent crimes), and each type of misconduct (violent, drug-related, property, and all “other” types of misconduct). The scope of this analysis is limited to misconducts committed in the facility where inmates were initially placed after their security level classification, and not those committed in after being reclassified or transferred. I will conduct supplementary analyses for the number of guilty findings in the initial facility placement, but some inmates may not have the opportunity for repeat offenses because even one

infraction may be enough to result in the prisoner being transferred to another security level. For this reason, the main models will use “at least one” of the types of misconduct as the dependent variable. A second dependent variable in some of these analyses will be “upward override.” This term refers to inmates who received a recommended security level according to their ODRC classification assessment, but were placed in a higher security level.

### ***Misconduct Prediction Variables***

The primary independent variable in this dissertation is the ORAS-PIT assessment. Scores were derived from interviews and file reviews and were conducted by trained ODRC personnel after being admitted to prison. The scoring procedures follow a structured interview process to measure a prisoner’s risk and need level according to established guidelines. The Bureau of Classification personnel performed these assessments as a routine part of their normal duties after the entire state had adopted the ORAS-PIT for all prison admissions. The ORAS-PIT contains items in six major domains: 1) age, 2) criminal history, 3) education/employment/finances, 4) family and social support, 5) substance abuse and mental health, and 6) criminal lifestyle. There are a total of 31 items to be scored that are spread across these domains. The domains are the same for men and women, but the cutoff scores for each risk level are different. See Appendix B for the full ORAS-PIT scoring sheet and risk level designation guide, and see Table 3 for a summary of the ORAS-PIT score for each sample and their average risk scores.

While the primary focus of this analysis is on the ability of the ORAS-PIT to predict misconduct, I will also include relevant covariates in the logistic regression models that are not a part of the ORAS-PIT scoring domains. This analysis will include covariates that can help contextualize the role of the ORAS-PIT score within the wider literature on institutional misconduct. The data provided by the ODRC permit me to include an inmate’s race/ethnicity,

**Table 3:** Description of the ORAS-PIT sample (n = 32,433)

<i>Misconduct Risk Level</i>	<i>Range of Scores</i>	<i>n</i>	<i>%</i>
Male Subsample			
Low	0 - 8	6,011	22.5
Moderate	9 - 16	7,969	28.9
High	17 - 24	9,941	37.3
Very High	25 - 36	2,756	10.3
Female Subsample			
Low	0 - 12	4,199	73.0
Moderate	13 - 18	779	13.5
High	19 - 33	778	13.5
			<i>r w/any</i>
<i>Risk Score</i>	<i>Range</i>	<i>M (SD)</i>	<i>misconduct</i>
Risk Score - All	0 - 36	12.46 (8.97)	0.19***
Risk Score- Males	0 - 36	13.83 (8.68)	0.16***
Risk Score- Females	0 - 33	6.15 (7.44)	0.09***

\* p &lt; .05, \*\* p &lt; .01, \*\*\* p &lt; .001

sex, age, education prior to incarceration, offense(s) incarcerated for, sentence length, gang membership, and gang activity (see Steiner, Butler, & Ellison 2014).

Controlling for the effects of program participation is especially important, because the ORAS-PIT is designed to guide case planning and direct rehabilitation services to target criminogenic needs. If an inmate received treatment for their risk factors, they would be presumed to have a lower risk of misconduct than those inmates who did not receive treatment linked to their assessed risk factors. Most treatment programs are designed for reentry preparation so they occur within the last two years of a prison sentence, but some inmates participate earlier and most inmates enter these programs fairly quickly because their sentences are two years or less. Therefore, program participation and completion in the reception center

and the initial facility placement are necessary measures to include in these models to ensure that programming is not interfering with the risk assessment validation. The data provided by the ODRC allow me to include variables indicating whether the inmate participated in (or completed) substance abuse treatment programs, and educational programs. See Table 4 for the descriptive statistics of these variables for this sample of inmates.

The covariates will be useful in diving deeper into the scoring process of the ORAS-PIT, because often a single item on the assessment can indicate there is a “risk” associated an offense, but the official prison records show more detail. For example, breaking down a question of “have you ever been a member of a gang or are you currently a member of a gang” may provide less detail than an official designation of whether the person is an active, passive, or disruptive gang member in the prison system. This can help clarify differences between the ORAS-PIT measures and the ODRC classification process for items where they overlap and measure similar concepts. If the bureau of classification has a superior method of measuring a particular risk factor, there is no reason why their data cannot be incorporated into a hybridized assessment tool along with the ORAS-PIT scores.

An item-by-item comparison can help decide which measure of a particular risk factor is a superior predictor of misconduct. The ORAS-PIT scoring scheme was derived from quantitative analytic procedures during the validation process. A modified Burgess method allowed some items to have greater predictive value than others (such as receiving a 0, 1, or 2 on a particular item) while others were only single point items, depending on the strength of their correlation with predicted outcomes (Latessa, et al., 2009). This process may differ from the subjective weight that the ODRC Bureau of Classification assigns to a particular behavior. For example, one risk factor that is considered by the ODRC Bureau of Classification is

**Table 4.** Descriptive statistics for men and women included in the analyses (n = 32,433)

	Men n = 26,677		Women n = 5,756	
	Mean/Proportion	S.D.	Mean/Proportion	S.D.
<b>Outcome variables</b>				
Any misconduct	0.31	0.46	0.15	0.35
Any serious misconduct	0.24	0.42	0.10	0.30
Any discretionary misconduct	0.18	0.38	0.07	0.26
Any violent misconduct	0.17	0.37	0.09	0.29
Any drug-related misconduct	0.11	0.31	0.02	0.14
Any property misconduct	0.11	0.30	0.02	0.14
Any other misconduct	0.22	0.42	0.09	0.29
<b>Predictor variables</b>				
ORAS-PIT total scores	13.83	8.68	6.15	7.43
TCU <sup>a</sup> level: None	0.29	0.45	0.23	0.41
TCU <sup>a</sup> level: Mild	0.08	0.27	0.06	0.23
TCU <sup>a</sup> level: Moderate	0.10	0.29	0.09	0.28
TCU <sup>a</sup> level: Severe	0.54	0.50	0.62	0.48
High School or GED <sup>b</sup>	0.25	0.43	0.32	0.47
Non-serious mental illness	0.11	0.32	0.06	0.24
Serious mental illness	0.06	0.24	0.06	0.24
White	0.56	0.60	0.82	0.38
African American	0.41	0.49	0.17	0.37
Hispanic	0.02	0.14	0.01	0.08
Other race	0.01	0.08	0.00	0.05
Age at time of commitment	32.73	10.49	32.82	9.07
Prior incarcerations	1.22	1.75	0.48	1.09
Sentence length (years)	4.25	8.04	2.03	2.92
Security Threat Group: Disruptive	0.01	0.99	0.00	0.00
Security Threat Group: Active	0.02	0.15	0.00	0.05
Security Threat Group: Passive	0.09	0.29	0.01	0.06
Recovery services program	0.11	0.31	0.18	0.38
Educational program	0.05	0.23	0.05	0.21

<sup>a</sup> Texas Christian University Drug Screen 5 (0-1 symptom = no need for services, 2-3 symptoms = mild need, 4-5 symptoms = moderate need, and 6+ symptoms = severe need)

<sup>b</sup> At time of admission to prison



“previous adjustment” to a correctional facility. This measure is somewhat subjective, but it considers any misconduct that occurs in pre-sentencing detention and the correctional reception center. This can be characterized as “misconduct prior to initial placement” and it can be a substantial predictor of future misconduct (Blanchette, Verbruge, & Wichmann., 2002; Buchanan, Whitlow, & Austin, 1986; Drury & DeLisi, 2010; Gendreau, Goggin, & Law, 1997; Hardyman, Austin, & Tulloch, 2002; Hanson, Moss, Hosford, & Johnson, 1983).

The data provided by the ODRC allows me to include several detailed variables that may help further refine the assessment process. These are: 1) substance abuse scales (using the full Texas Christian University Drug Screen data), 2) mental health status (no mental illness, non-serious mental illness, and serious mental illness), and 3) security threat group status (e.g. gang membership that is either disruptive, passive, or active). Both the ODRC Bureau of Classification and the ORAS-PIT include some consideration of these factors, but further analysis can reveal the significance and strength of those relationships in greater detail and possibly determine whether the ORAS-PIT scoring system can be improved with full inclusion of the available data.

### ***Official Classification Measures***

The ODRC Bureau of Classification data measure a wide range of factors that will also be included in some of these analyses, especially when comparing the predictive value of those criteria to the ORAS-PIT domains. The first of these variables is an alternative measure for *age at current admission* that gives a score of ‘0’ if the person is older than 35 years old, a ‘1’ if they are between 26 and 34 years old, and a ‘2’ if they are younger than 25 years old. The second variable is a binary measure of *adjustment risk*.

Inmates are given a '1' if their conviction offense is abduction, abortion manslaughter, aggravated arson, aggravated burglary, aggravated murder, aggravated riot, aggravated robbery, aggravated trafficking in drugs (1<sup>st</sup> and 2<sup>nd</sup> degree only), aggravated vehicular assault, aggravated vehicular homicide, 2<sup>nd</sup> degree burglary, engaging in a pattern of corrupt activity, escape from a detention facility, felonious assault, felonious sexual penetration, gross sexual imposition, inciting to violence, involuntary manslaughter, kidnapping, murder, negligent homicide, 1<sup>st</sup> degree possession of drugs, rape, reckless homicide, robbery, sexual battery, terrorism, unlawful sexual conduct with a minor, vehicular homicide, and voluntary manslaughter. If their conviction offense was any other type not listed here then they receive a '0' for this variable.

The third classification criterion is *security level of last release*. An inmate who had never been to an Ohio prison, or who had been released from a Level 1 prison receives a '0', those who were previously released from a Level 2 prison receive a '1', and those who were released from a Level 3 or higher prison receive a '2' on this variable.

In addition to the "adjustment risk" variable there is also another indicator for *assault conviction history* where the inmate receives a '0' if they have no history of assault convictions and a '1' if they do. The final classification criterion is *prior release as STG member*. If the inmate was released from a prior prison term and was documented as being an active or disruptive member of a security threat group, they receive '2' additional points to their classification score.

### ***Mandatory Override Criteria***

The ODRC has a list of variables that require an override from a lower security level to a facility with a double-parameter fence. These are all dichotomous indicator variables. These are 1) *sex offender*, 2) *kidnapping*, 3) *high notoriety*, 4) *murder*, 5) *their felony caused the death of a*

*law enforcement officer* (or any other person while incarcerated), 6) *former death row of life sentence*, 7) *documented escape from confinement*, and 8) *awaiting a hearing for a felony 1 or felony 2*. Most of these indicator variables are self-explanatory, but they do overlap with the more subjective discretionary override criteria.

### ***Discretionary Override Criteria***

The Bureau of Classification staff can also recommend a higher security level if the prisoner meets some of the following criteria: 1) *prior prison adjustment*, 2) *time to earliest hearing/stated term*, 3) *violence threat*, 4) *documented escape from supervision*, 5) *documented escape with unknown details*, 6) *felony detainer*, 7) *time since prior incarceration*, 8) *sex offense consideration*, 9) *current active or disruptive STG participation*, and 10) *meets behavioral criteria for Level4B/5*. Some of these variables require additional explanation. A “documented escape from supervision” differs from the mandatory override variable for escaping from “confinement” because it refers to absconding from supervision and not escaping from a secure facility. The variable for sex offense “considerations” is used when a sex offender is determined to require a higher security level than their recommended classification and the mandatory override to a facility with a double-fence perimeter. The behavioral criteria required for “Level4B/5” is outlined in the ODRC regulation 53-CLS-04 for placement into extended restrictive housing (see Appendix E section C). This includes 1) causing or attempting to cause physical harm to another individual, 2) compelling or attempting to compel sexual conduct or contact, 3) coercing another individual by force or threat of force to provide anything of value or to perform any act, or to violate a rule, or 4) extorting or intimidating staff or other individuals. See Table 5 for the distribution of these risk scores among men and women in this sample of prisoners.

**Table 5.** Classification criteria descriptive statistics for men and women included in the analyses (n = 32,433)

	Men n = 26,677		Women n = 5,756	
	Mean/Proportion	S.D.	Mean/Proportion	S.D.
<b>Official classification criteria</b>				
Adjustment risk	0.46	0.50	0.83	0.99
Prior security level	0.39	0.65	1.12	0.99
Assault conviction	0.43	0.50	1.62	0.78
History of STG	0.04	0.26	-	-
Violent current offense	-	-		
Prior adult felonies	-	-		
Illegal drug use/offense	-	-		
<b>Mandatory override criteria</b>				
Sex offender	0.08	0.28	0.02	0.13
Kidnapping	0.03	0.17	0.02	0.15
High notoriety	0.00	0.01	0.03	0.16
Current murder	0.01	0.12	0.00	0.06
Death of law enforcement	0.00	0.02	0.00	0.01
Former death row or life	0.00	0.02	-	-
Documented escape	0.01	0.11	0.02	0.13
Awaiting hearing on F1/2	0.00	0.05	0.00	0.01
<b>Discretionary override criteria</b>				
Prior prison adjustment	0.02	0.14	-	-
Time to earliest hearing	0.05	0.21	-	-
Violence threat	0.02	0.16	-	-
Notoriety of case	0.00	0.16	-	-
Escape from supervision	0.01	0.02	-	-
Escape w/o details	0.02	0.12	-	-
Felony detainer	0.02	0.14	-	-
Time since prior	0.01	0.10	-	-
Sex offense consideration	0.04	0.19	-	-
Security Threat Group	0.01	0.07	-	-
Behavioral criteria	0.00	0.02	-	-

As mentioned in Chapter 2, women do not have the same classification criteria as men. Their *age at current admission* allocates a '0' for women who are 33 years old or older, and a '2' for any who are 32 years old or younger. They are also classified based on *violent current offense* with a score of '0' for 'none' and '3' for yes. Their criminal history is summarized in a variable for *adult felony convictions* and they receive a '0' if they had none and '2' if they had one or more felony convictions as an adult. Women are also assessed as higher risk if they have a history of illegal drug usage or drug offense in the past twelve months. The variable *illegal drug use/offense* is scored as a '0' if there are none and '2' if there is such a history. Finally, it can be seen in Table 5 that women do not have their discretionary override criteria recorded.

### ***Prison-Level Variables***

This dissertation will also be examining the effects of the environment on individual behavior. The key prison-level variable will be the security level of the facility where each inmate is initially placed. These will be categorized by male-minimum, male-medium, and male-maximum, but the mixed security facilities will also be examined. These include any female-only prisons, medical centers, and reception centers. Women do receive a security level designation and are assigned to units with varying levels of custodial resources, so their individual restriction levels will be substituted for minimum, medium, and maximum security placements in some of these analyses.

The second prison-level variable that will be included in the male-only multi-level models is the ratio of average daily prison population in each facility to the rated capacity of each facility. The average daily population snapshot was provided by the ODRC and reflects the number of inmates held in each facility on June 1<sup>st</sup>, 2016. The rated capacity of each facility was taken from the Correctional Institution Inspection Committee official reports

(<http://www.ciic.state.oh.us/inspection-reports-department-of-rehabilitation-and-correction>).

Each report was chosen for proximity to the date of the population snapshot. After both components were gathered the population count was divided by the rated capacity to produce the numeric variable *population:capacity* used in the multi-level models. The lowest *population:capacity* value in male-only prisons was 0.70 (reflecting a population that was at 70% of the facility's capacity) and the highest value was 1.81 (reflecting a population that was 81% over capacity). The values of these measures were supported by similar calculations reported by the Correctional Institute Inspection Committee findings, but it is possible that more "room" was made for prisoners beyond the rated capacity of each facility by expanding the facility, double-bunking, or designating more spaces for prisoner housing.

### **Analytic Plan**

The analyses were performed in stages to address each of the research questions organizing this dissertation. The description of each approach is detailed below, broken down by topic and research question.

#### ***Base Rates of Misconduct (Q1 and Q2)***

The analysis began with an exploratory description of the current state of misconduct in Ohio prisons, broken down by facility type and security level. The base rate of misconduct for each security level is presented along with the base rate for each ORAS-PIT risk level category within each security level. These rates are presented for any type of misconduct, "serious" or "discretionary" misconduct, and by type of misconduct (violent, drug, property, and other).

These analyses help address research questions 1 and 2.

### ***ORAS-PIT Validation (Q3)***

Assessing the predictive validity of an actuarial tool requires evidence that the tool has acceptable levels of calibration and discrimination. Singh (2013) recommends that validation researchers conduct a battery of tests in order to facilitate comparisons with other risk assessment tools. Unfortunately, most validation assessments either do not estimate these statistics or they are not reported (Desmarais & Singh, 2013). My analysis of the ORAS-PIT includes the point-biserial correlation coefficient ( $r_{pb}$ ) to measure the direction and strength of the relationship between the ORAS-PIT scores and misconduct, and the alternative Somers'  $d$  coefficient. I also present the conventional bar charts displaying the percentage of inmates who commit misconduct in each category between risk level groups (Latessa, Lemke, Makarios, Smith, & Lowenkamp, 2010). I also include an analysis using logistic regression to specify the ratio of the odds that a higher risk prisoner committed misconduct compared to prisoners with lower risk scores.

The primary validation statistic throughout this dissertation is the Area Under the Curve (AUC) statistic that demonstrates the probability that a randomly selected prisoner who committed misconduct would have received a higher risk classification than a randomly selected prisoner who had a lower risk classification. The AUC uses the receiver operating characteristic curve to plot the rates of true and false positive predictions for each category of risk. A higher AUC value indicates that the tool has fewer false positives and greater predictive validity. Rice and Harris (2005) calculate that an AUC value less than 0.55 is "poor," 0.55-0.63 is "fair," 0.64 - 0.70 is "good," and 0.71-1.00 is "excellent." AUC scores can be compared to tools measured in other prison misconduct prediction studies to determine if the ORAS-PIT is still a valid and useful method of classification.

One important aspect of actuarial tool validation is determining whether the tool was administered in a reliable manner. This means that the scores assigned to each inmate should be accurate (i.e., the scoring was performed as it was intended by the authors) and consistent (the inter-rater reliability shows that different assessors score the same inmates in the same way). There are no concrete data available that will permit a proper analysis of reliability for this sample of inmates. However, there are some alternative evaluations that can offer some insights into how well the ORAS-PIT performs depending on who was assessed, and where they were assessed. I compare the AUC scores for predicting misconduct for prisoners in each race category (white, African American, Hispanic, and any other race), and I compare the AUC scores for sex offenders and non-sex offenders. If there are significantly different AUC values for these different groups of inmates then it is possible that the tool is not being conducted properly, or that it does not predict as well for all groups. A more convincing comparison is the location where the assessment took place. There are two major reception centers for male prisoners, and some received their first ORAS-PIT assessment in a non-reception center. I compare the AUC scores for predicting misconduct depending on the location of the assessment. If there are significant differences in the AUC then perhaps the staff in some locations are scoring the tool with greater accuracy than other locations, giving us an idea of the average “inter-facility” rating reliability.

#### ***Misclassification Characteristics (Q4)***

To address the fourth research question I provide descriptive statistics of the characteristics of inmates who are “misclassified” versus those not misclassified (differences in means/proportions) to determine if misclassification is associated with particular inmate characteristics. I also conducted a binary logistic regression analysis to determine if those



characteristics retain their statistical significance after controlling for ORAS-PIT criteria, criminal history, and security threat group classification.

#### ***Maximum Likelihood Models for Misconduct (Q5)***

I provide comparisons of how well the tool accurately predicts misconduct in comparison to the method currently employed by the ODRC Bureau of Classification. To achieve this, I conducted a binary logistic regression analysis predicting misconduct for inmates housed in the same security levels. When there is a mixture of different ORAS classifications within the same security level these inmates can be compared to determine if they committed misconduct at rates comparable to their observed security level, or at rates comparable to their ORAS-PIT score. Their shared environment will help reduce confounding effects of security and custody levels (Baird, 1993).

#### ***Multivariate Models (Q6)***

The predictive power of the ORAS-PIT may be modified or suppressed by other individual factors related to misconduct that are not included in the assessment. Some of these factors are “self-fulfilling” in that the ORAS-PIT helps assign inmates to treatment for specific needs, and if these programs help address their criminogenic needs they would be less likely to offend. Therefore, a multivariate model is necessary to control for the effects of substance abuse treatment and educational programs that take place in the reception center and soon after arrival in their initial placement facility. Additionally, the ORAS-PIT does not include direct measures for sentence length, type of gang membership status, serious mental illness, or race/ethnicity. Another methodological concern is “time-at-risk” because some inmates spent more time in their initial placement than others, and therefore had more time to violate rules. These factors may

attenuate or amplify the predictive power of the ORAS-PIT, so including them in the model in a stepwise manner can help expose potential avenues for future research.

### ***Propensity Score Matching (Q6)***

An alternative way to address the role of custodial levels on rule infractions is to determine whether prisoners with the same risk levels commit misconduct at the same rates in different security levels (rather than different risk levels in the same security level). The best way to examine this with the current data was to match inmates according to their ORAS-PIT risk level and on the significant covariates used in the multivariate models described above, then to designate a “treatment group” as those in a higher security level than the “control group” in a lower security level. If a significant difference in misconduct rates exists between these two groups (after matching) then the facility security level may play an operative role in increasing or decreasing misconduct beyond the effects of the matching variables. These matching and assessment procedures were replicated to compare minimum to medium security facilities, medium to maximum security facilities, and minimum to maximum security facilities. These comparisons could only be conducted for men in those settings, because prisoners housed in female, medical, or reception centers reside in mixed-security facilities. The *psmatch2* command in Stata 15 was used to conduct these analyses, using a caliper of 0.01 and exact matching for ORAS-PIT risk levels.

### ***Multi-level Models (Q7)***

As mentioned above, custody level can have a confounding impact on misconduct research (Steiner & Wooldredge, 2008; Worrall & Morris, 2011). Inmates who are classified as high risk may be sent to higher security level facilities than inmates assessed as low risk. The high security facilities have greater custodial resources and more restrictions on inmate

movement, which limits the ability of an inmate to engage in misconduct. This could have a suppression effect on the validity of the risk prediction tool because it will predict more misconduct, but the post-assessment actions taken by prison officials can reduce their opportunities to break institutional rules. On the other hand, since high security facilities are theorized to *cause* more misconduct through deprivation, labelling, social learning, etc. (in conjunction with congregations of the most dangerous inmates in one location), it is possible that the predictive validity of the assessment tool will be exaggerated (Bayer, Hjalmarsson, & Pozen, 2009; Bench & Allen, 2003; Blevins, Listwan, Cullen, & Jonson, 2010; Chen & Shapiro, 2007; Drury & DeLisi, 2011; Petersillia, 2009; Shermer, Bierie, & Stock, 2012). It is possible to conduct a multi-level analysis to control for the individual-level predictors of misconduct and examine the second level effects of variations between security levels using HLM 8.0.

These multi-level models use the significant predictors of misconduct determined in the multivariate models described above (including the ORAS-PIT scores). This controls for the personal characteristics that explain misconduct in this sample of inmates. The second-level variables attempt to measure the environmental factors that may confound our understanding of misconduct prediction. Higher security facilities are meant to reduce misconduct, but they may not produce their intended effect (Wooldredge & Steiner, 2015). The first model separates male facilities into groups according to their designated security level (minimum, medium, and maximum) to measure the difference in misconduct rates after controlling for individual-level factors. The second-level also includes a variable for prison “crowding” based on the average daily prison population for each facility divided by their rated capacity (derived from the Correctional Institution Inspection Committee reports for dates in this sample frame). If the results of the multi-level models indicate that security levels are a significant factor in

suppressing or increasing misconduct beyond the individual level effects then it will have implications for future risk assessment validation attempts.

### ***Hybrid Tool Development (Q8)***

The final series of analyses break down the ORAS-PIT scores by domain and try to determine if some of the criteria can help increase misconduct predictions without relying on the full ORAS-PIT score. This can be accomplished by computing an AUC score for each domain as a stand-alone predictor of misconduct along with the AUC of the total score (as in Campbell, D'Amato, & Papp, 2020). This will indicate whether any particular domain is useful for the development of a hybrid assessment procedure that can help ODRC improve their current methods without relying on the entire ORAS-PIT score. If any item has a significant and substantial predictive power and it is not currently used in the bureau's classification decision, it can potentially be added without adopting the entire ORAS-PIT score in their decision-making process. Alternative measures and additional variables can be included in the hybrid tool to maximize the AUC value of the ORAS-PIT. The validation analyses conducted for Q2 and Q3 were also replicated for this new tool.

### **Summary**

These analytic procedures help answer my proposed research questions and update our current knowledge on the role of risk assessment in prison classification. The ORAS-PIT should be validated for predicting institutional misconduct with a large sample of inmates. If the tool is a valid and superior predictor of misconduct than the current method of classification it can be adopted by the ODRC as a benchmark for making future decisions. This is a necessary part of the continual evaluation and improvement process in corrections. Processes and practices must be routinely measured if they are expected to remain effective. Organization staff must receive

feedback on their performance outcomes so they can understand whether their decisions are having their intended effect, and so they can learn how they can improve (Sperber, Henderson-Hurley, & Hanley, 2005).

Finally, this dissertation provides a thorough assessment of the Ohio prison classification process to answer important questions about the predictors of misconduct and how they vary across facility types. The regression models provide an opportunity to measure the differences in results between pooled-sample analyses and multi-level models. This can help guide future research on prison classification by explaining the effects that security level has (or does not have) on inmate behavior (Shermer, Bierie, & Stock, 2012; Steiner & Wooldredge, 2008).

## **Chapter 4.**

### **Results**

This chapter presents the results of each phase of the analyses. The findings are divided into sub-groups based on each research question and analytic approach.

#### **Base Rates of Misconduct (Q1 and Q2)**

A descriptive analysis of the prevalence of misconduct is presented in Table 6 and graphically displayed in Figure 1. The division of misconduct rates by gender and prison setting demonstrate variation across groups, as well as fluctuations in the rates of different types of misconduct. We should begin by noting that the majority of inmates were men, and most of them (76 percent) spent a minimum of 90 days in their initial placement in a minimum security facility. A smaller number of male inmates (20 percent) were initially sent to medium security facilities, and only one percent were initially sent to a maximum security facility. The remaining men were sent to medical facilities as their initial placement, and some stayed in the reception center throughout the study window. A higher proportion of men (in any setting) were found guilty each type of misconduct than women.

There is a smaller prevalence of misconduct in minimum security settings than in medium security settings (with the exception of drug-related misconduct). A higher proportion (0.26) of male prisoners were found guilty of violent misconduct in maximum security facilities than in medium (0.24) or minimum security facilities (0.15). This was also apparent for property-related misconduct (maximum = 0.36, medium = 0.08, minimum = 0.07), but discretionary misconduct and drug-related misconduct were not as prevalent among men in maximum security settings as in minimum or medium security facilities. It is also worth noting that medical centers

and reception centers have relatively low base rates for each type of misconduct compared to men's minimum, medium, and maximum security settings.

Figure 2 offers an overview of counts of each infraction that these prisoners were found guilty of in Ohio prisons. The most frequent type of misconduct was “fighting” (4,795 separate incidents), followed by possessing/manufacturing/consuming drugs (3,307 incidents), refusal to accept an assignment (2,233 incidents), disobeying an order (1,468 incidents), and self-mutilation/tattooing (995 incidents). The offense types in Figure 2 are sorted according to the coding scheme used in this dissertation. A description of each rule infraction is included in Appendix A.

Table 7 represents the dispersion of ORAS-PIT risk levels across each security setting. Male-only prisons had some prisoners of each risk category present (except for medical centers who did not have any “very high” risk men). There was a higher proportion of low risk men in minimum security prisons than in medium or maximum security prisons. Conversely, there were more “high” and “very high” risk men in maximum security settings than in lower security settings. This dispersal of categories across facilities will permit analyses that examine the role of shared environments on misconduct for prisoners with different risk levels. These tables are summarized in graphical displays on the following pages (Figures 3, 4, and 5).

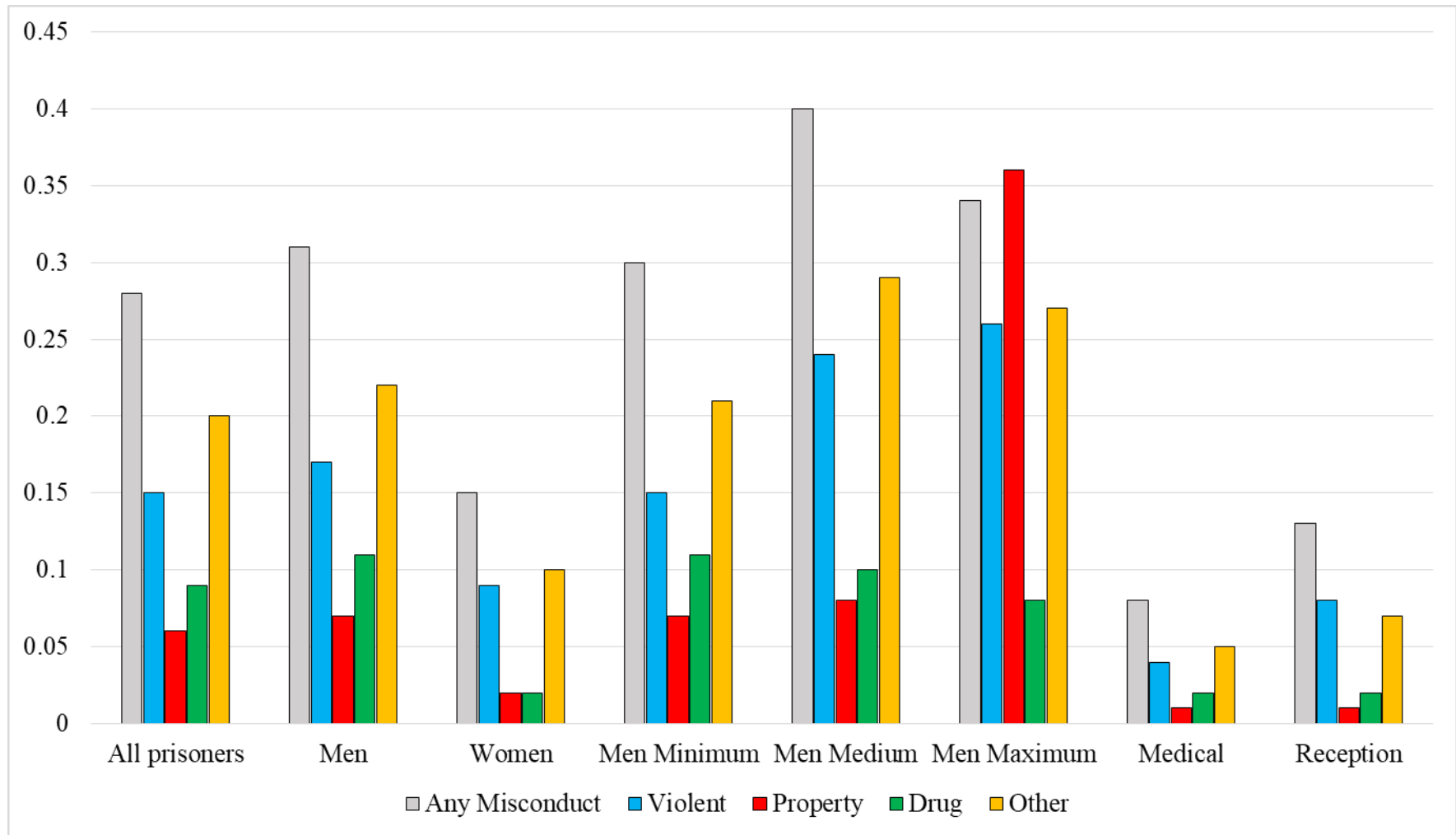
**Table 6: Prevalence of misconduct across security settings**

	Full Sample (n = 32,433)			All Men (n = 26,677)			All Women (n = 5,756)		
	Proportion	SD	#Individuals	Proportion	SD	#Individuals	Proportion	SD	#Individuals
Any Misconduct	0.28	0.45	9,173	0.31	0.46	8,334	0.15	0.35	839
Serious	0.22	0.41	6,872	0.24	0.42	6,278	0.10	0.3	594
Discretionary	0.16	0.37	5,251	0.18	0.38	4,823	0.07	0.26	428
Violent	0.15	0.36	5,015	0.17	0.37	4,472	0.09	0.29	543
Property	0.06	0.23	1,896	0.07	0.25	1,780	0.02	0.14	116
Drug-Related	0.09	0.29	2,931	0.11	0.31	2,810	0.02	0.14	121
Other	0.20	0.4	6,496	0.22	0.42	5,944	0.1	0.29	552
	Men in Minimum (n = 20,153)			Men in Medium (n = 5,300)			Men in Maximum (n = 305)		
	Proportion	SD	#Individuals	Proportion	SD	#Individuals	Proportion	SD	#Individuals
Any Misconduct	0.30	0.46	6,004	0.40	0.49	2,110	0.34	0.48	104
Serious	0.22	0.42	4,485	0.30	0.46	1,611	0.30	0.46	90
Discretionary	0.17	0.38	3,449	0.24	0.43	1,298	0.14	0.35	43
Violent	0.15	0.36	3,042	0.24	0.43	1,275	0.26	0.44	79
Property	0.07	0.25	1,309	0.08	0.28	449	0.36	0.19	11
Drug-Related	0.11	0.31	2,224	0.10	0.3	543	0.08	0.27	24
Other	0.21	0.41	4,235	0.29	0.46	1,562	0.27	0.45	83
	Men in Medical (n = 759)			Men in Reception (n = 900)					
	Proportion	SD	#Individuals	Proportion	SD	#Individuals			
Any Misconduct	0.08	0.27	62	0.13	0.34	116			
Serious	0.06	0.23	42	0.10	0.3	92			
Discretionary	0.03	0.18	26	0.04	0.19	33			
Violent	0.04	0.2	31	0.08	0.28	76			
Property	0.01	0.07	4	0.01	0.11	11			
Drug-Related	0.02	0.12	12	0.02	0.14	19			
Other	0.05	0.23	41	0.07	0.26	64			

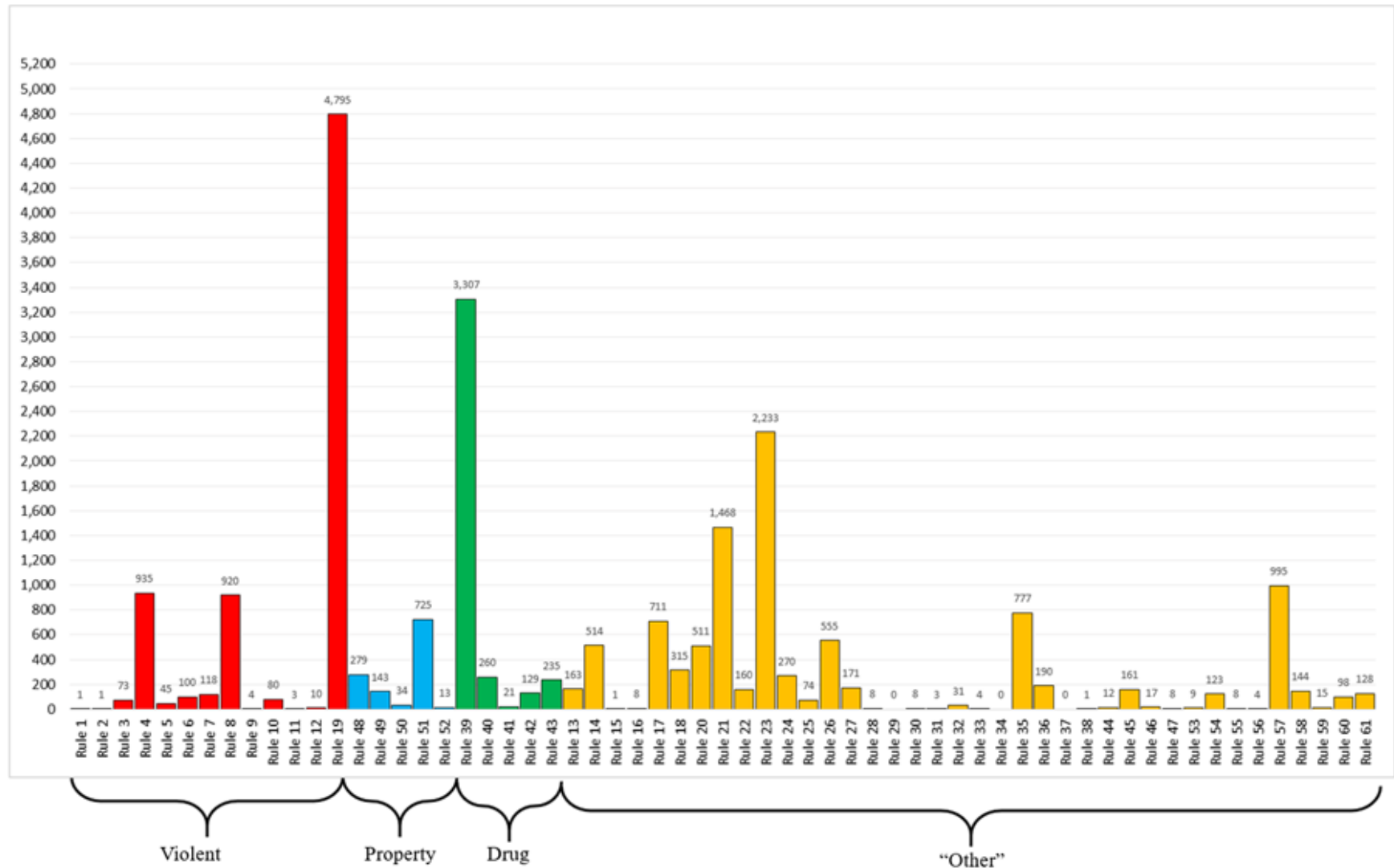
Note: All outcomes were for guilty findings that occurred in initial placement (minimum 90 days in facility).



**Figure 1:** Proportion of prisoners with at least one misconduct by facility type



**Figure 2:** Frequency of guilty findings by type of misconduct



**Table 7:** Prevalence of ORAS-PIT risk levels across security settings

	Full Sample (n = 32,433)			All Men (n = 26,677)			All Women (n = 5,756)		
	Proportion	SD	#Individuals	Proportion	SD	#Individuals	Proportion	SD	#Individuals
Low Risk	0.31	0.46	10210	0.23	0.42	6011	0.73	0.44	4199
Moderate Risk	0.27	0.44	8748	0.3	0.46	7969	0.14	0.34	779
High Risk	0.33	0.47	10719	0.37	0.48	9941	0.14	0.34	778
Very High Risk	0.09	0.28	2756	0.1	0.3	2756	-	-	-

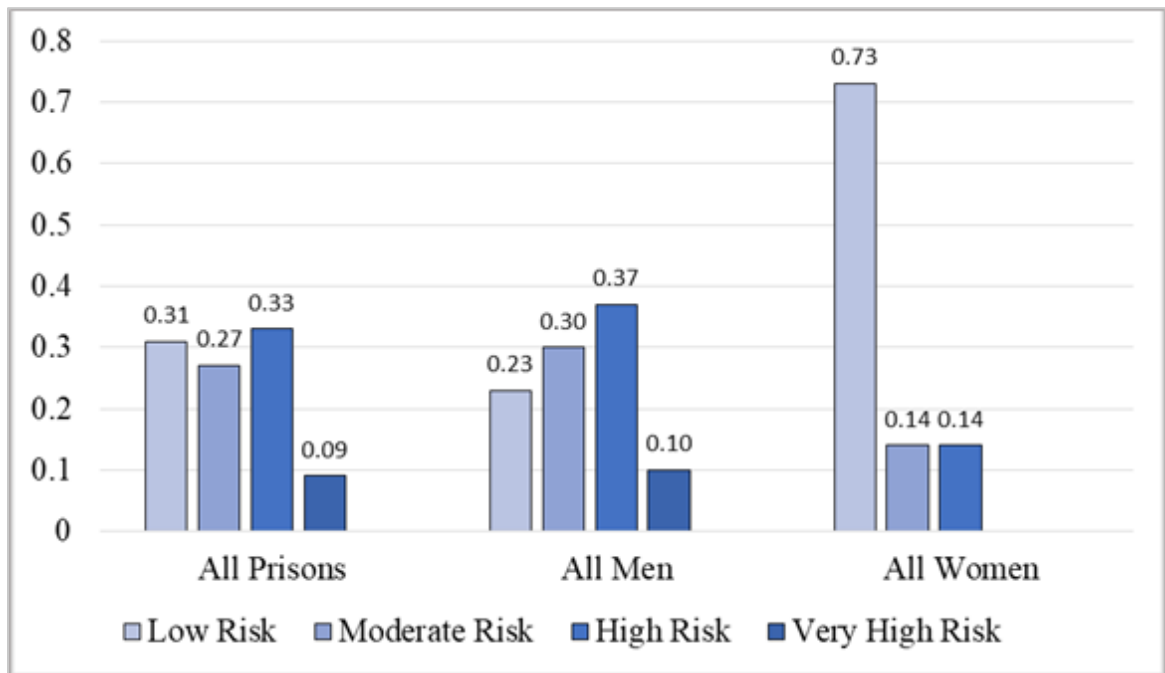
	Men in Minimum (n = 20,153)			Men in Medium (n = 5,300)			Men in Maximum (n = 305)		
	Proportion	SD	#Individuals	Proportion	SD	#Individuals	Proportion	SD	#Individuals
Low Risk	0.24	0.43	4778	0.18	0.39	965	0.13	0.33	39
Moderate Risk	0.32	0.46	6356	0.25	0.433	1316	0.18	0.39	56
High Risk	0.36	0.48	7292	0.41	0.29	2180	0.3	0.49	123
Very High Risk	0.09	0.28	1727	0.16	0.37	839	0.29	0.45	87

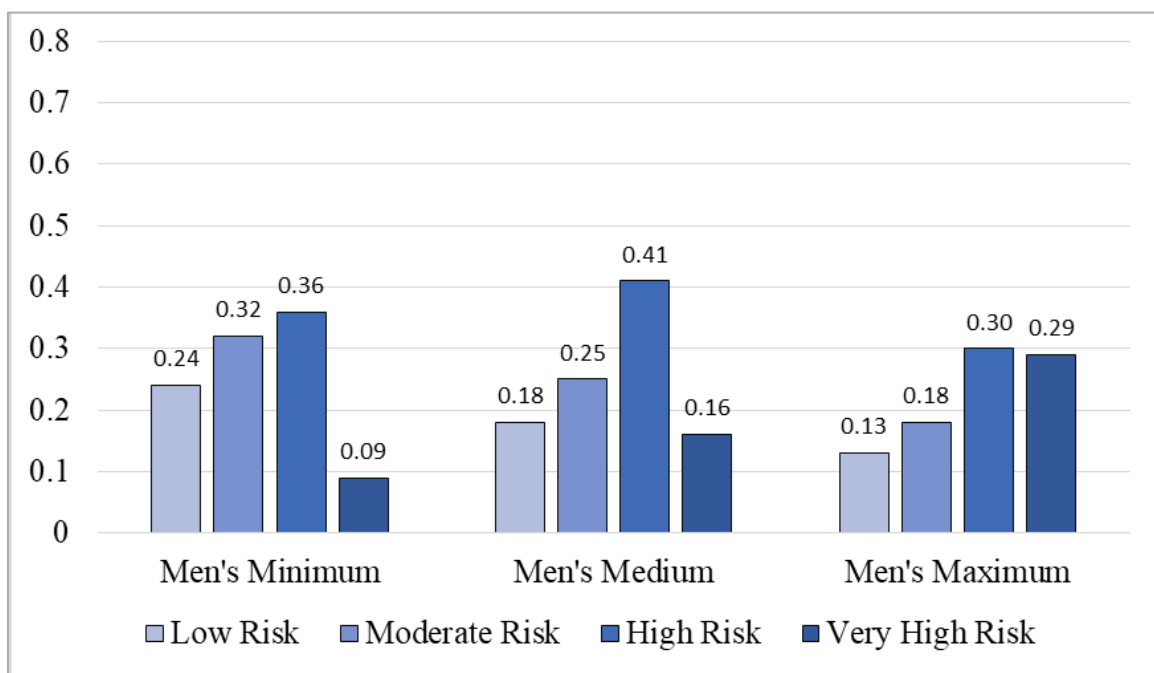
	Men in Medical (n = 759)			Men in Reception (n = 900)		
	Proportion	SD	#Individuals	Proportion	SD	#Individuals
Low Risk	0.74	0.44	563	0.25	0.43	225
Moderate Risk	0.17	0.37	128	0.26	0.44	233
High Risk	0.09	0.28	67	0.38	0.49	340
Very High Risk	0	0.04	1	0.11	0.32	102

Note: only prisoners who received an ORAS assessment and were in their initial placement facility for at least 90 days were included; Low Risk categories include prisoners who were assessed with the PST screener tool or the full PIT.

**Figure 3:** Prevalence of ORAS-PIT risk levels for all prisoners, men, and women



**Figure 4:** Prevalence of ORAS-PIT risk levels in each of the security levels for men



**Figure 5:** Prevalence of ORAS-PIT risk levels for men in medical and reception centers

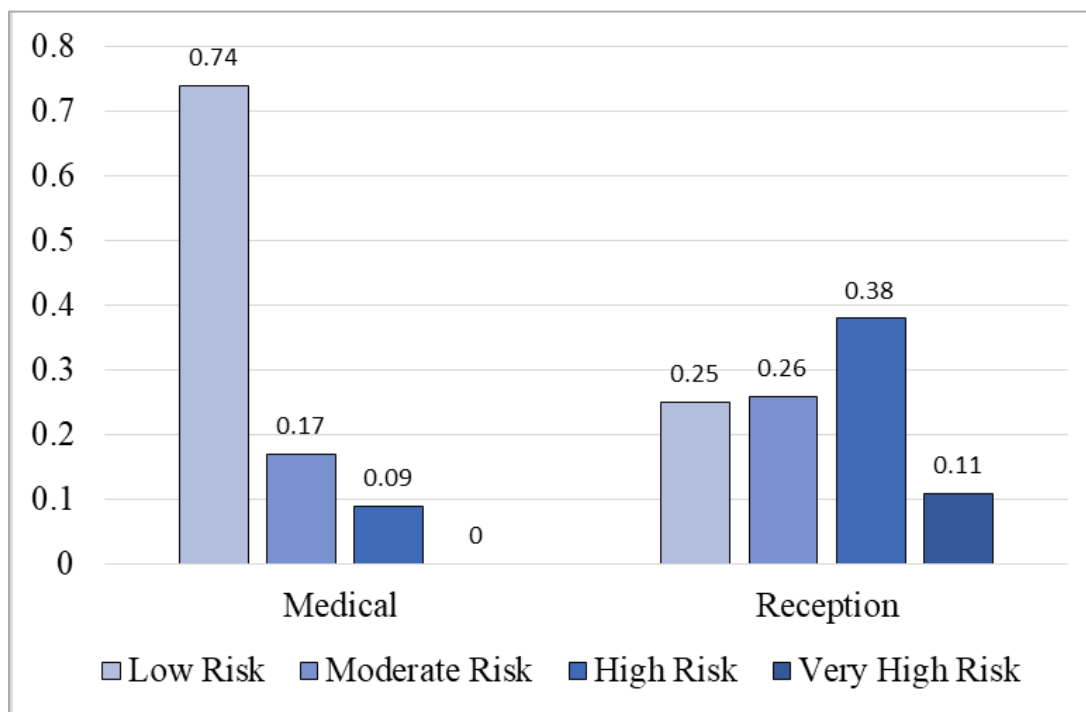


Table 8 divides misconduct into groups depending on the risk level of the prisoner according to their ORAS-PIT and ORAS-PST assessment for men, and Table 9 shows the same information for women. Every inmate who received a PST and scored moderate or high risk were required to take the full PIT to be included in this analysis. Those who remained “low” risk were analyzed separately in these descriptive statistics. Some classification accuracy is lost with the PST, as 21 percent of men who received a low risk designation were found guilty of misconduct, but only 18 percent of the men who received a low risk designation with the full PIT were found guilty. This implies that some of the factors not measured in the ORAS-PST may have qualified the prisoners for a higher risk level if they had received the full PIT, but even with this loss of accuracy the PST rates of misconduct for low risk prisoners were lower than the rates for moderate (28 percent), high (37 percent), or very high risk (45 percent).

**Table 8:** Prevalence of misconduct by ORAS-PIT risk level for men

	Low n = 10,210		Moderate n = 8,748		High n = 10,719		Very High n = 2,756	
	Proportion	SD	Proportion	SD	Proportion	SD	Proportion	SD
<b>Full Sample</b>								
Any Misconduct	0.17	0.38	0.27	0.44	0.36	0.48	0.45	0.50
Serious	0.12	0.32	0.20	0.40	0.28	0.45	0.36	0.48
Discretionary	0.09	0.29	0.15	0.36	0.21	0.41	0.27	0.45
Violent	0.09	0.29	0.13	0.34	0.20	0.40	0.28	0.45
Property	0.03	0.17	0.05	0.22	0.09	0.27	0.10	0.30
Drug-Related	0.04	0.20	0.09	0.29	0.12	0.32	0.14	0.35
Other	0.12	0.32	0.18	0.39	0.26	0.44	0.34	0.47
<b>PIT Men</b>	n = 1,585		n = 7,969		n = 9,941		n = 2,756	
Any Misconduct	0.18	0.39	0.28	0.45	0.37	0.48	0.45	0.50
Serious	0.12	0.33	0.20	0.40	0.29	0.45	0.36	0.48
Discretionary	0.10	0.30	0.16	0.36	0.22	0.41	0.27	0.45
Violent	0.08	0.37	0.13	0.34	0.21	0.41	0.28	0.45
Property	0.04	0.19	0.06	0.23	0.08	0.27	0.10	0.30
Drug-Related	0.07	0.25	0.10	0.30	0.13	0.33	0.14	0.35
Other	0.11	0.32	0.19	0.39	0.27	0.44	0.34	0.47
<b>PST Men</b>	n = 4,426							
Any Misconduct	0.21	0.40	-	-	-	-	-	-
Serious	0.14	0.35	-	-	-	-	-	-
Discretionary	0.12	0.32	-	-	-	-	-	-
Violent	0.10	0.30	-	-	-	-	-	-
Property	0.04	0.19	-	-	-	-	-	-
Drug-Related	0.06	0.24	-	-	-	-	-	-
Other	0.15	0.35	-	-	-	-	-	-

**Table 9:** Prevalence of misconduct by ORAS-PIT Risk Level for women

	Low n = 254		Moderate n = 779		High n = 778	
<b>PIT Women</b>	<u>Proportion</u>	<u>SD</u>	<u>Proportion</u>	<u>SD</u>	<u>Proportion</u>	<u>SD</u>
Any Misconduct	0.13	0.33	0.16	0.37	0.23	0.42
Serious	0.09	0.28	0.12	0.32	0.17	0.38
Discretionary	0.05	0.21	0.08	0.27	0.13	0.33
Violent	0.08	0.28	0.11	0.31	0.16	0.37
Property	0.01	0.11	0.02	0.12	0.04	0.20
Drug-Related	0.02	0.15	0.03	0.17	0.04	0.20
Other	0.08		0.10	0.30	0.15	0.36
<b>PST Women</b>						
	n = 3,945					
Any Misconduct	0.13	0.33	-	-	-	-
Serious	0.09	0.28	-	-	-	-
Discretionary	0.06	0.25	-	-	-	-
Violent	0.08	0.27	-	-	-	-
Property	0.02	0.13	-	-	-	-
Drug-Related	0.02	0.12	-	-	-	-
Other	0.08	0.28	-	-	-	-

The descriptive statistics presented in Table 10 display the proportion of inmates who were found guilty of at least one type of misconduct, but rather than separate them by ORAS risk level they are separated by their official ODRC Bureau of Classification risk level. Men and women have different classification criteria, so their classification levels are presented separately. Also, this table compares the prisoner's initial classification (recommended security level) and their final classification (based on override criteria and warden approval). These measures of "risk assessment" will serve as a comparison to the ORAS-PIT in the forthcoming validation assessments. It can be seen in figures 6-20 that the ODRC classification and override classification schemes were both able to discriminate prisoners according to their risk of

misconduct. Each increasing risk level is associated with an increase in the prevalence of misconduct (with a slight exception where Level 4 men are found guilty of some types of misconduct at a slightly lower rate than Level 3 men).

There are situations where the decision to override a classification level increases the accuracy of the classification, and other situations where it decreases accuracy. This can be determined if the point estimate for the proportion of prisoners with overrides falls outside the confidence interval of the proportion of prisoners without an override. If the point estimate is less than the lower estimate of the 95 percent confidence interval, then there is less accuracy in discriminating risk levels when an override is given. For example, 50 percent of male prisoners with a recommended security level of “3” were found guilty of “any misconduct,” but only 41 percent of male prisoners with the same recommended security level were found guilty of misconduct when they were given an override (table 10). Because the point estimate (0.41) falls outside the lower boundary of the confidence interval (0.48-0.51) we can argue that overrides of men in this category are harmful to the accuracy of the classification criteria.

In some cases the proportion of prisoners with overrides who were found guilty of misconduct is greater than the upper estimate of the confidence interval for prisoners without overrides. This can be demonstrated in the results for women who received an override after being classified at “Level 1” (table 11). The 95 percent confidence interval for the proportion of women who are found guilty of any misconduct is 0.08-0.10, and the point estimate for the proportion of women with an override is 0.16. It appears that the decision to override women in this category for this outcome improves accuracy of classification.



**Table 10:** Prevalence of misconduct among men by ODRC classification scoring (n = 26,677)

	Men without overrides			Men with overrides		
	Proportion	SD	95% CI	Proportion	SD	95% CI
<b>Male Security Level 1</b>						
Any Misconduct	0.15	0.36	0.14-0.16	0.17	0.38	0.14-0.21
Serious Misconduct	0.10	0.30	0.09-0.10	0.12	0.33	0.09-0.16
Discretionary Misconduct	0.08	0.28	0.08-0.09	0.09	0.29	0.06-0.12
Violent Misconduct	0.05	0.22	0.05-0.06	0.08	0.27	0.05-0.11
Property Misconduct	0.04	0.18	0.03-0.04	0.04	0.21	0.02-0.06
Drug-Related Misconduct	0.06	0.24	0.05-0.06	0.06	0.25	0.04-0.09
Other Misconduct	0.09	0.28	0.08-0.09	0.11	0.31	0.08-0.14
	n = 6,729			n = 386		
<b>Male Security Level 2</b>						
Any Misconduct	0.35	0.48	0.34-0.36	0.30	0.46	0.28-0.32
Serious Misconduct	0.27	0.44	0.26-0.27	0.21	0.41	0.20-0.23
Discretionary Misconduct	0.20	0.40	0.19-0.21	0.18	0.39	0.17-0.20
Violent Misconduct	0.18	0.39	0.18-0.19	0.16	0.37	0.15-0.18
Property Misconduct	0.08	0.26	0.07-0.08	0.07	0.25	0.06-0.08
Drug-Related Misconduct	0.13	34.00	0.12-0.14	0.09	0.29	0.08-0.10
Other Misconduct	0.25	0.43	0.24-0.26	0.22	0.41	0.20-0.23
	n = 12,823			n = 2,279		
<b>Male Security Level 3</b>						
Any Misconduct	0.50	0.50	0.48-0.51	0.41	0.50	0.38-0.44
Serious Misconduct	0.39	0.49	0.38-0.41	0.32	0.47	0.29-0.35
Discretionary Misconduct	0.30	0.46	0.28-0.31	0.24	0.43	0.21-0.27
Violent Misconduct	0.32	0.47	0.30-0.33	0.25	0.44	0.23-0.28
Property Misconduct	0.10	0.30	0.09-0.11	0.07	0.25	0.05-0.08
Drug-Related Misconduct	0.12	0.33	0.11-0.13	0.10	0.31	0.08-0.12
Other Misconduct	0.37	0.48	0.35-0.39	0.30	0.46	0.28-0.33
	n = 3,209			n = 1,050		
<b>Male Security Level 4</b>						
Any Misconduct	0.48	0.50	0.36-0.60	0.54	0.50	0.45-0.62
Serious Misconduct	0.36	0.48	0.24-0.47	0.49	0.50	0.49-0.51
Discretionary Misconduct	0.30	0.46	0.19-0.41	0.19	0.40	0.13-0.26
Violent Misconduct	0.34	0.48	0.23-0.45	0.43	0.50	0.35-0.52
Property Misconduct	0.08	0.28	0.02-0.15	0.07	0.25	0.02-0.11
Drug-Related Misconduct	0.11	0.31	0.04-0.18	0.13	0.34	0.08-0.19
Other Misconduct	0.41	0.50	0.30-0.53	0.45	0.50	0.36-0.53
	n = 73			n = 134		

**Table 11:** Prevalence of misconduct among women by ODRC classification scoring (n = 5,756)

	Women without overrides			Women with overrides		
	Proportion	SD	95% CI	Proportion	SD	95% CI
<b>Female Security Level 1</b>						
Any Misconduct	0.09	0.29	0.08-0.10	0.16	0.36	0.08-0.23
Serious Misconduct	0.06	0.24	0.05-0.07	0.08	0.27	0.02-0.13
Discretionary Misconduct	0.04	0.20	0.03-0.05	0.10	0.30	0.04-0.16
Violent Misconduct	0.57	0.23	0.05-0.06	0.08	0.27	0.02-0.13
Property Misconduct	0.01	0.10	0.01-0.01	0.01	0.11	0.00-0.03
Drug-Related Misconduct	0.01	0.11	0.01-0.01	0.02	0.15	0.00-0.05
Other Misconduct	0.06	0.23	0.05-0.06	0.11	0.32	0.05-0.18
	n = 3,293			n = 90		
<b>Female Security Level 2</b>						
Any Misconduct	0.21	0.42	0.16-0.25	0.19	0.39	0.17-0.20
Serious Misconduct	0.15	0.38	0.11-0.19	0.13	0.34	0.12-0.15
Discretionary Misconduct	0.09	0.34	0.06-0.12	0.09	0.28	0.08-0.10
Violent Misconduct	0.15	0.37	0.11-0.19	0.11	0.21	0.10-0.13
Property Misconduct	0.02	0.19	0.01-0.04	0.03	0.16	0.02-0.03
Drug-Related Misconduct	0.01	0.20	0.00-0.02	0.04	0.19	0.03-0.05
Other Misconduct	0.13	0.37	0.09-0.16	0.12	0.32	0.10-0.13
	n = 356			n = 1,681		
<b>Female Security Level 3</b>						
Any Misconduct	0.44	0.50	0.38-0.50	0.39	0.49	0.28-0.49
Serious Misconduct	0.36	0.48	0.30-0.42	0.31	0.46	0.21-0.41
Discretionary Misconduct	0.32	0.47	0.27-0.38	0.26	0.44	0.16-0.35
Violent Misconduct	0.35	0.48	0.29-0.41	0.27	0.45	0.17-0.37
Property Misconduct	0.10	0.30	0.06-0.13	0.07	0.26	0.02-0.13
Drug-Related Misconduct	0.04	0.21	0.02-0.07	0.05	0.21	0.00-0.09
Other Misconduct	0.36	0.48	0.31-0.42	0.32	0.47	0.22-0.42
	n = 247			n = 85		

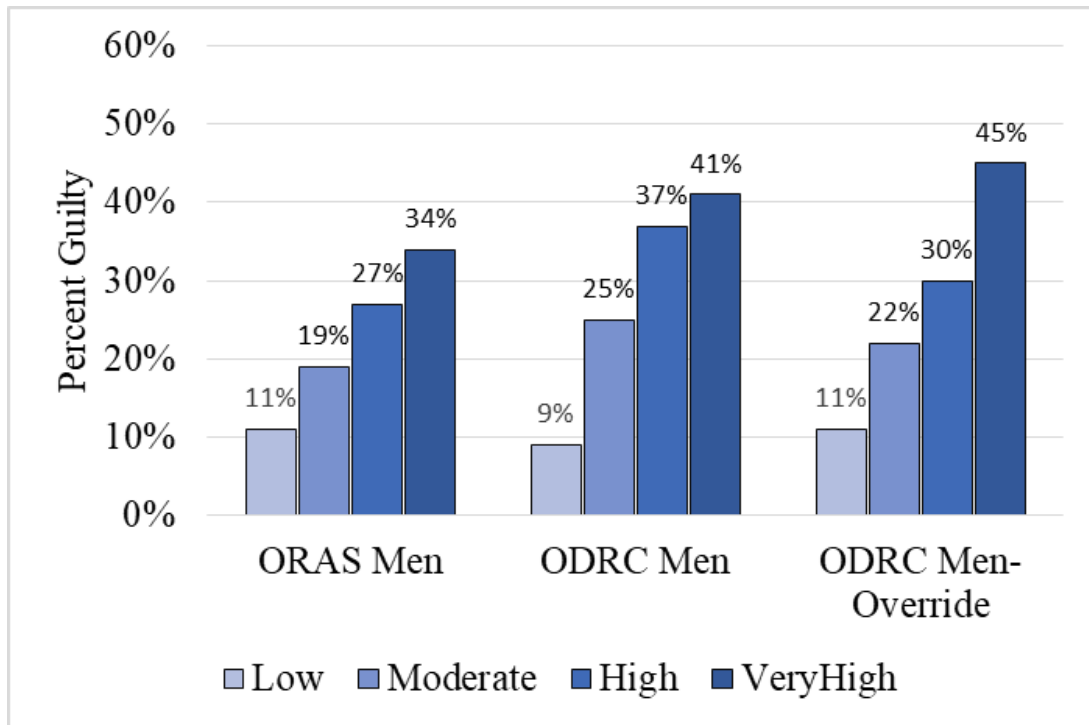
Given the mixed findings, it can only be said that accuracy is weakened in some situations when an override is approved, and sometimes accuracy is improved depending on the sample and the outcome being measured. These concepts are explored in more detail later in this dissertation.

Figures 6 – 20 offer a cursory appraisal of the predictive ability of the ORAS-PIT, the ODRC original classification, and the ODRC override classification for separating inmates according to their risk levels. Each ORAS-PIT risk level and misconduct type show evidence of an incremental increase in predicted outcomes (the staircase relationship). This demonstrates a fundamental aspect of risk assessment validation. If there were no differences in rates of misconduct between risk levels then the tool is not classifying subjects according to its intended design. This basic measure of risk discrimination is depicted in figures 6 – 19.

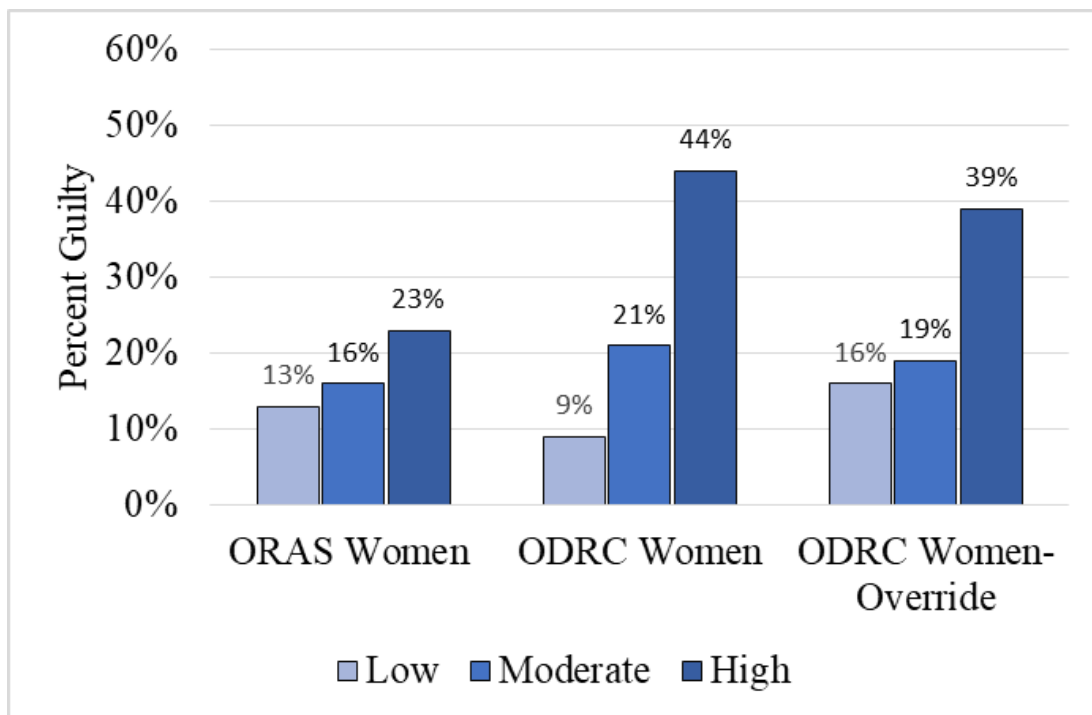
### ***Summary of Q1 and Q2***

- There are differences in the proportions of inmates who are found guilty of misconduct depending on which custodial setting they reside during their initial placement.
- The percentage of prisoners who are found guilty of misconduct differ depending on the ORAS-PIT risk level and the official ODRC classification score.
- Official overrides of the ODRC classification recommendation sometimes improve prediction of misconduct and sometimes decrease prediction depending on the setting and the type of misconduct being measured.

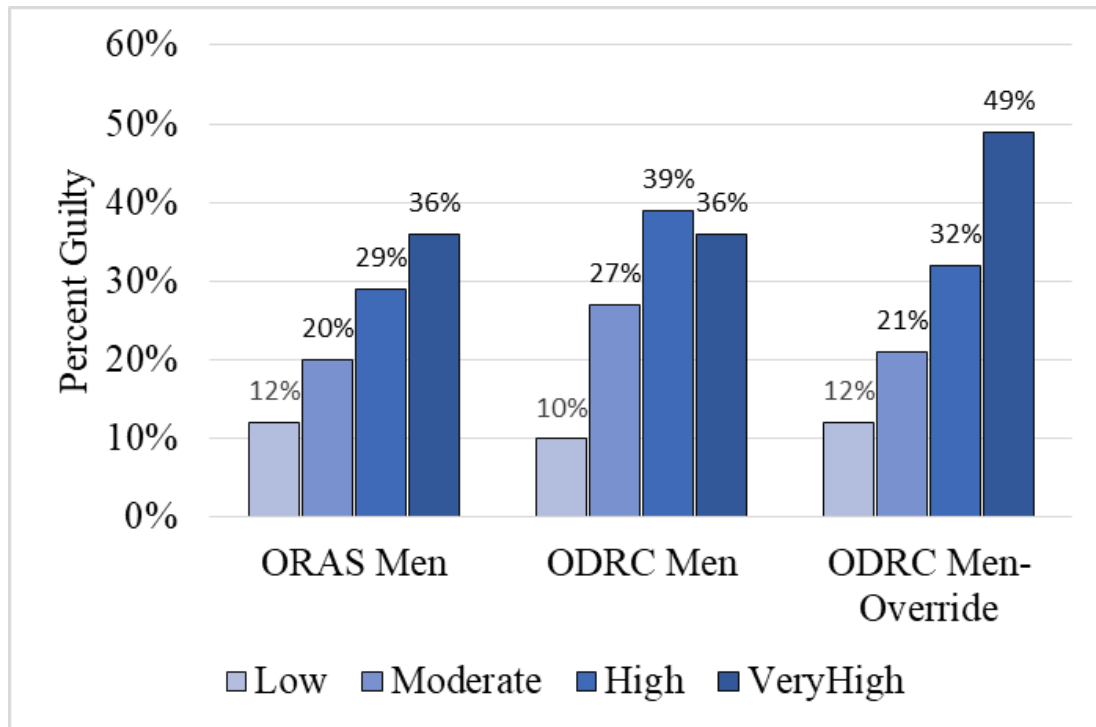
**Figure 6:** Concurrent validity of male classification methods for Any Misconduct



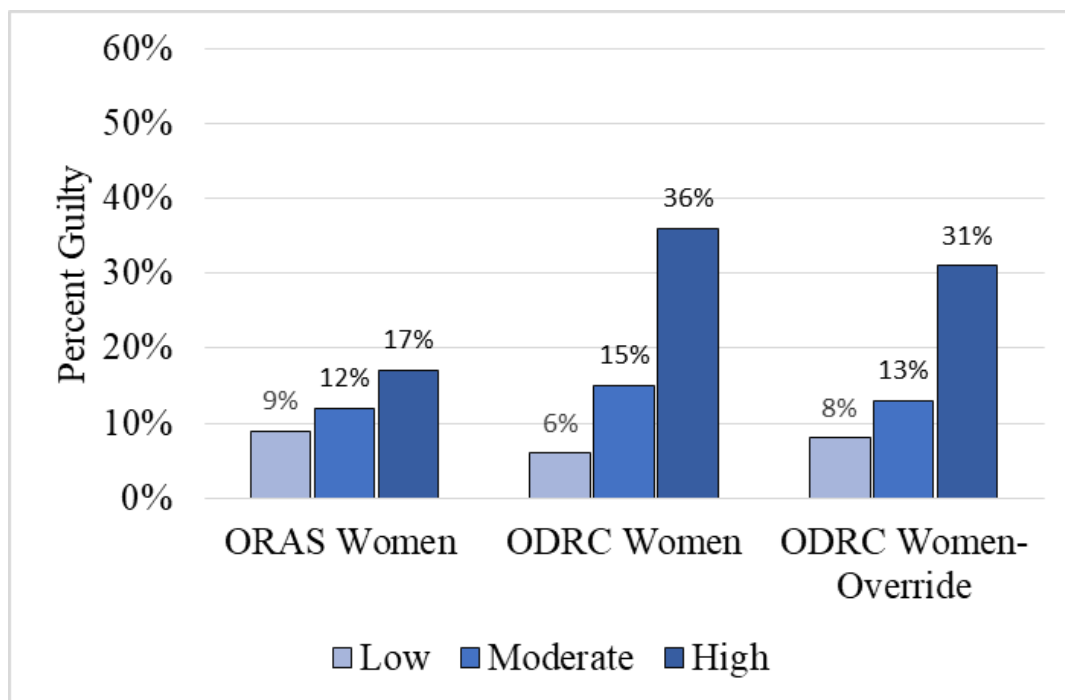
**Figure 7:** Concurrent validity of female classification methods for Any Misconduct



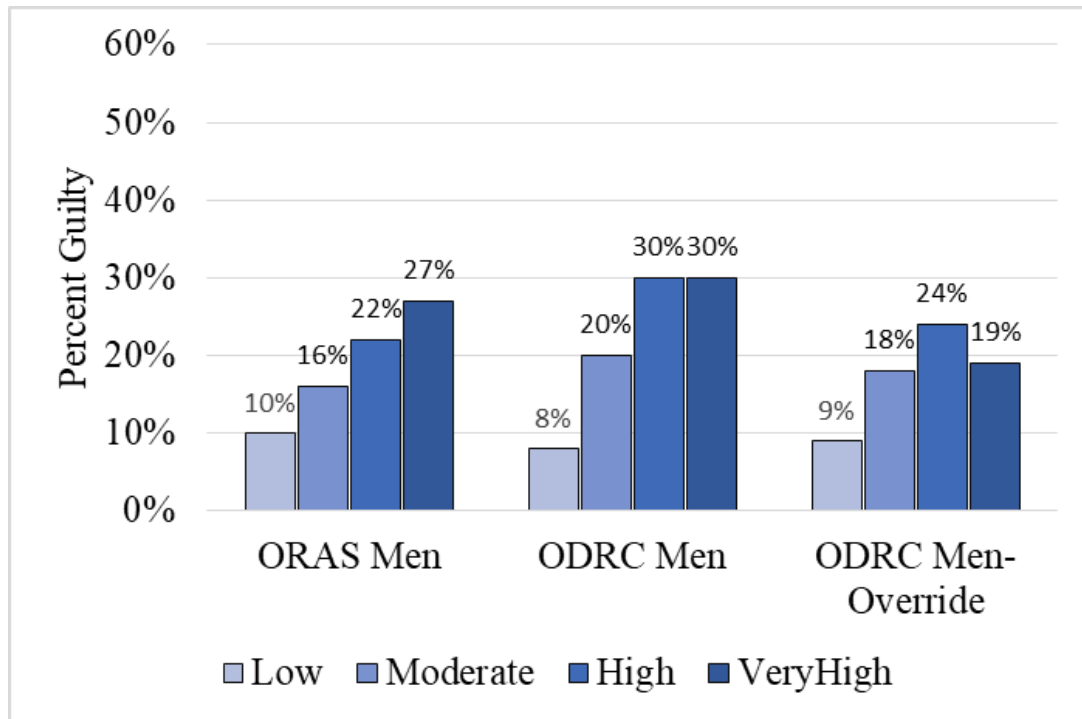
**Figure 8:** Concurrent validity of male classification methods for Serious Misconduct



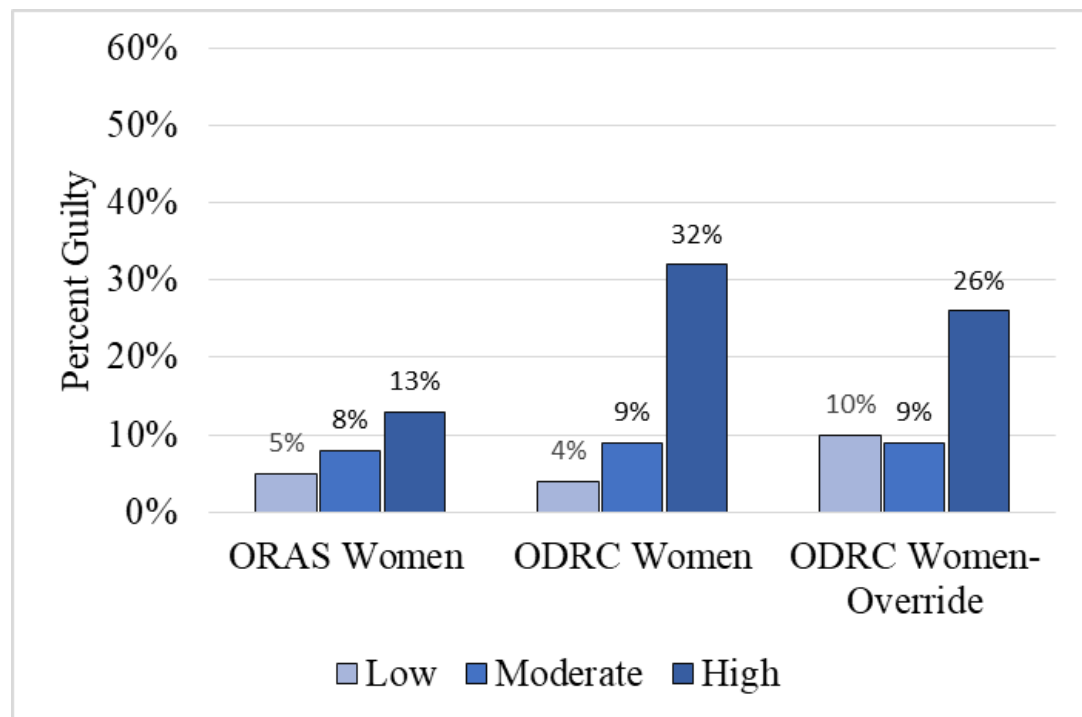
**Figure 9:** Concurrent validity of female classification methods for Serious Misconduct



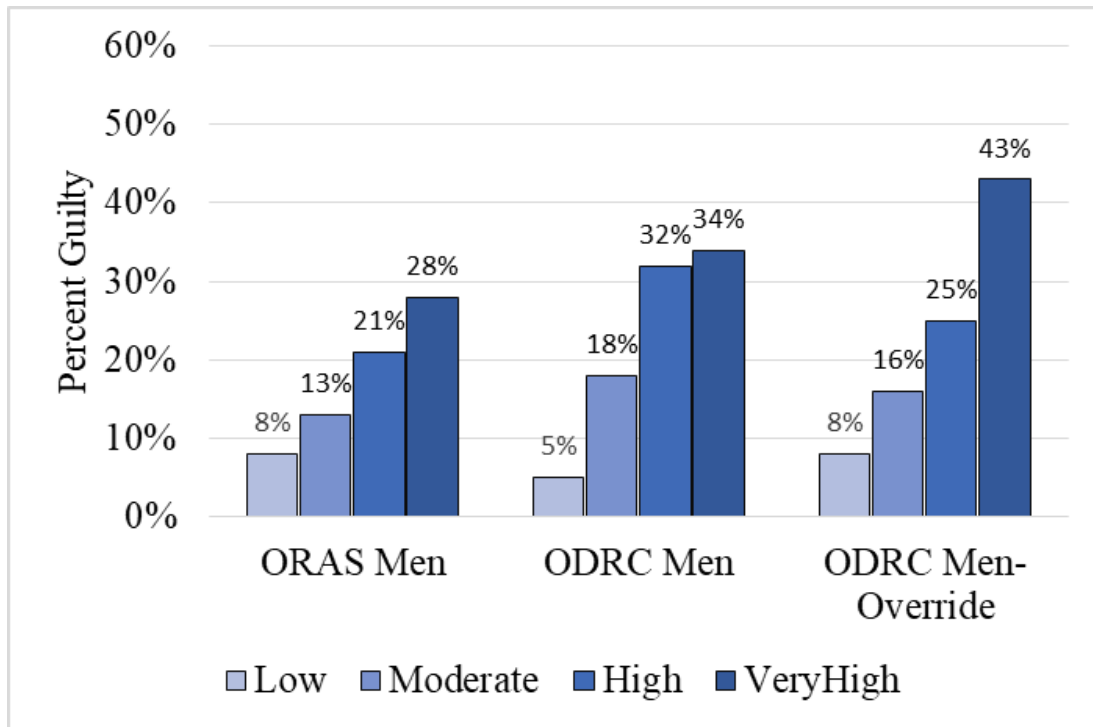
**Figure 10:** Concurrent validity of male classification methods for Discretionary Misconduct



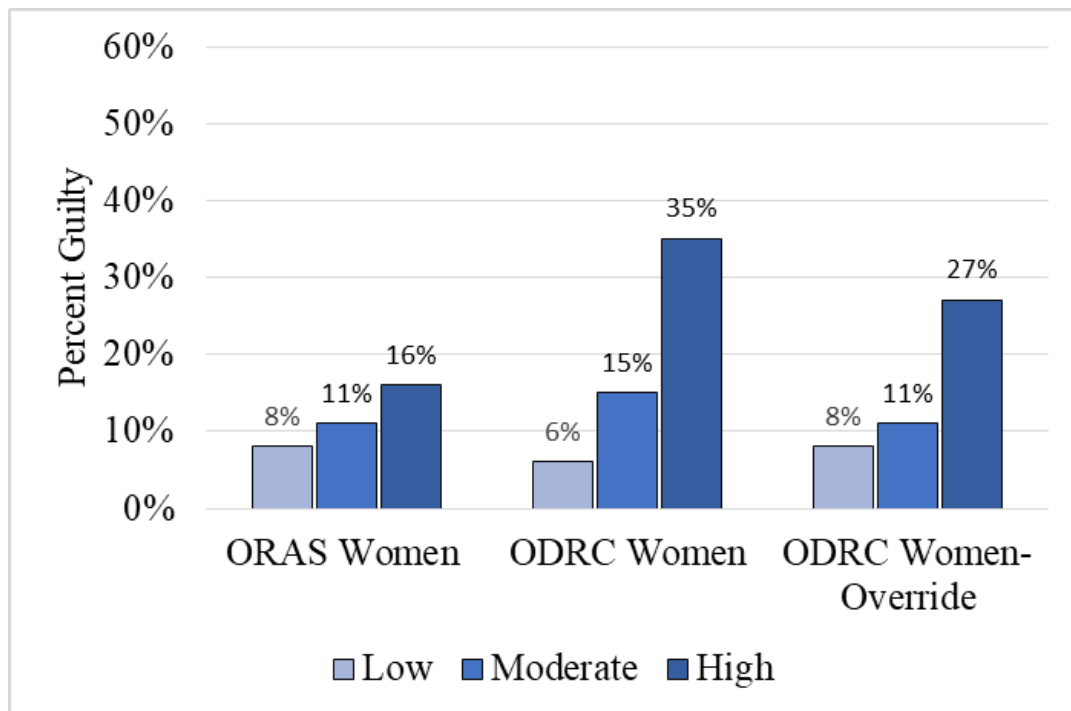
**Figure 11:** Concurrent validity of female classification methods for Discretionary Misconduct



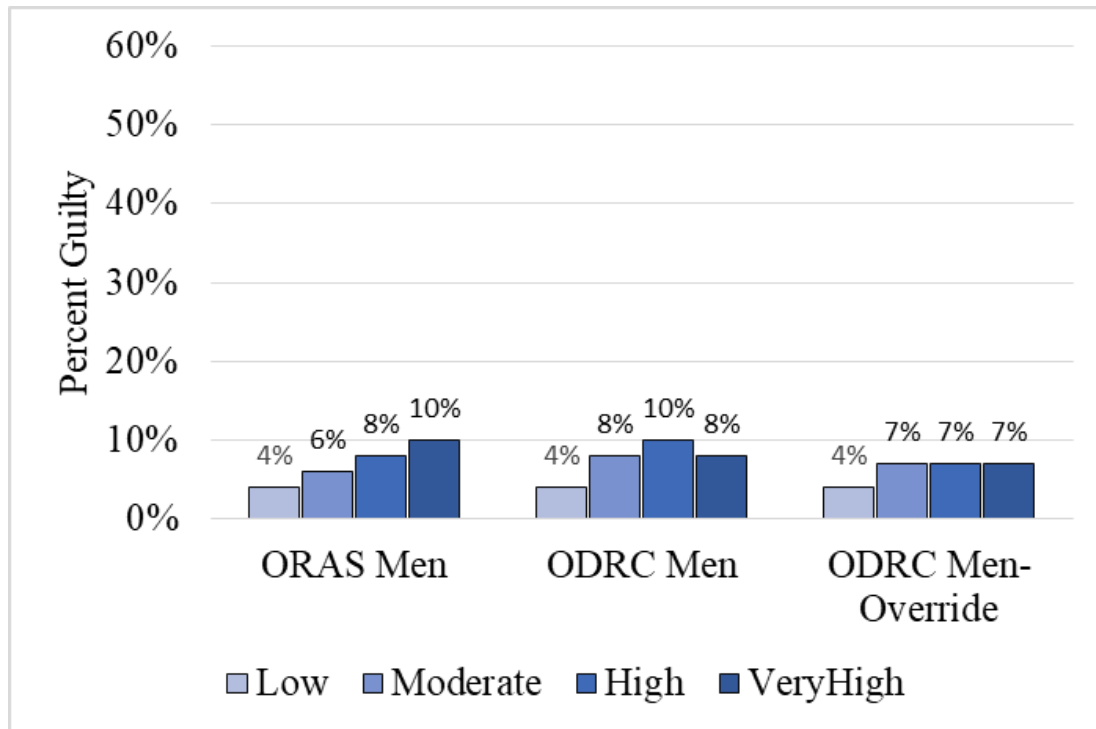
**Figure 12:** Concurrent validity of male classification methods for Violent Misconduct



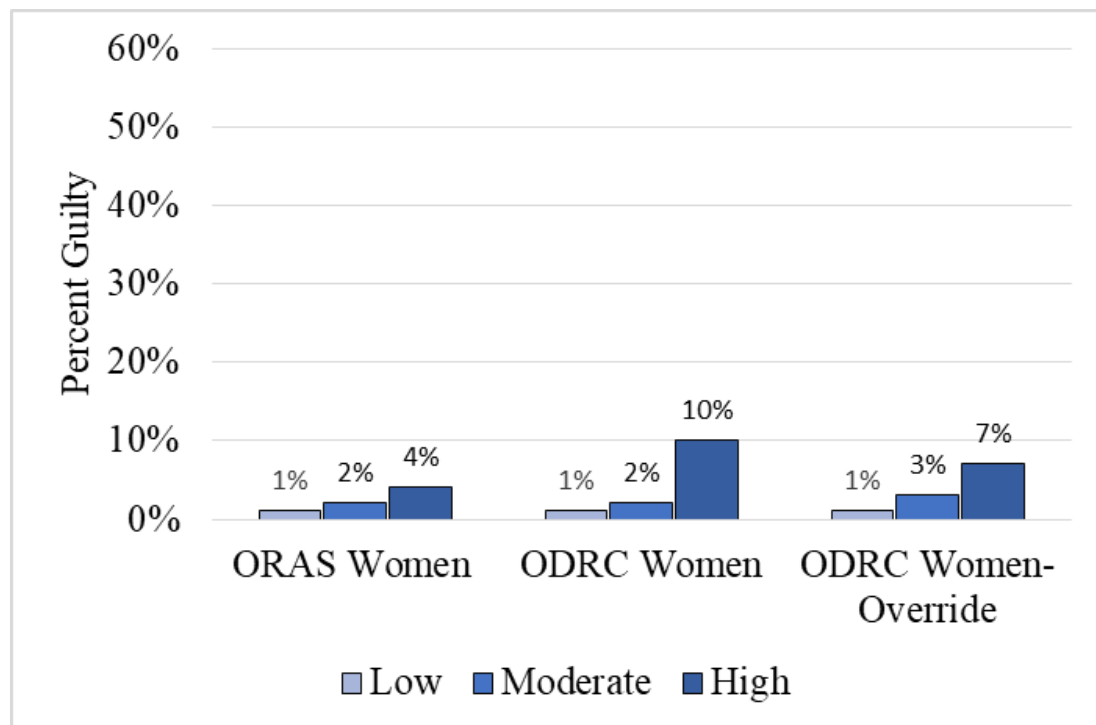
**Figure 13:** Concurrent validity of female classification methods for Violent Misconduct



**Figure 14:** Concurrent validity of male classification methods for Property Misconduct

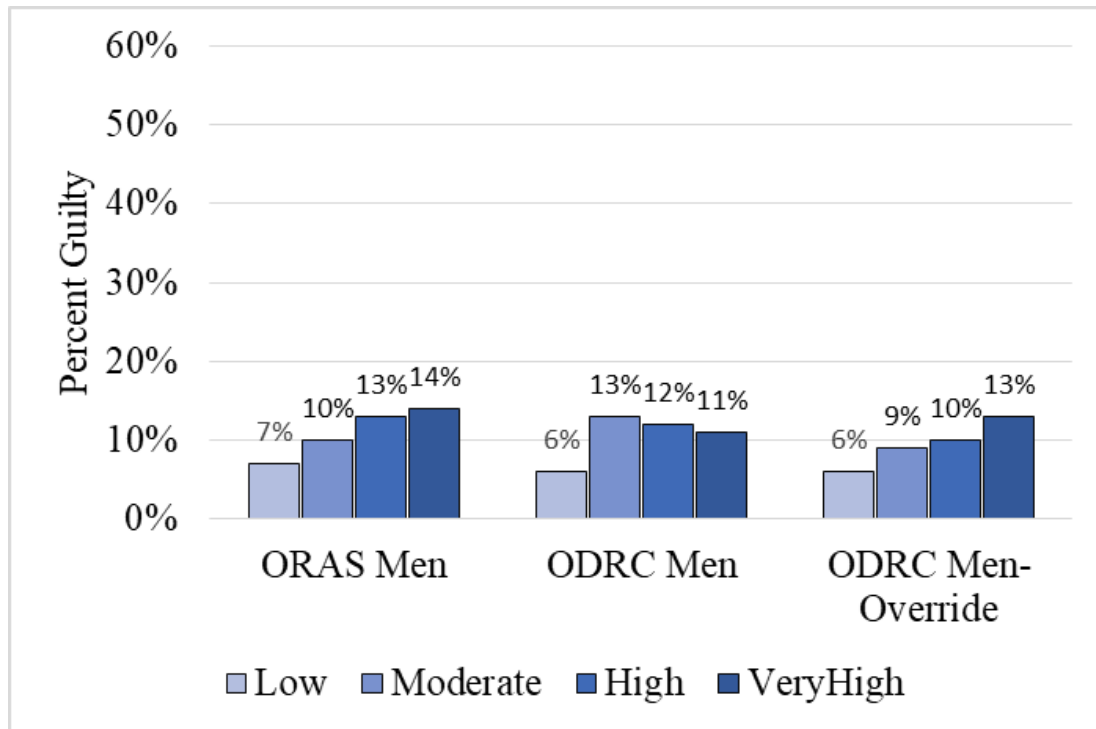


**Figure 15:** Concurrent validity of female classification methods for Property Misconduct

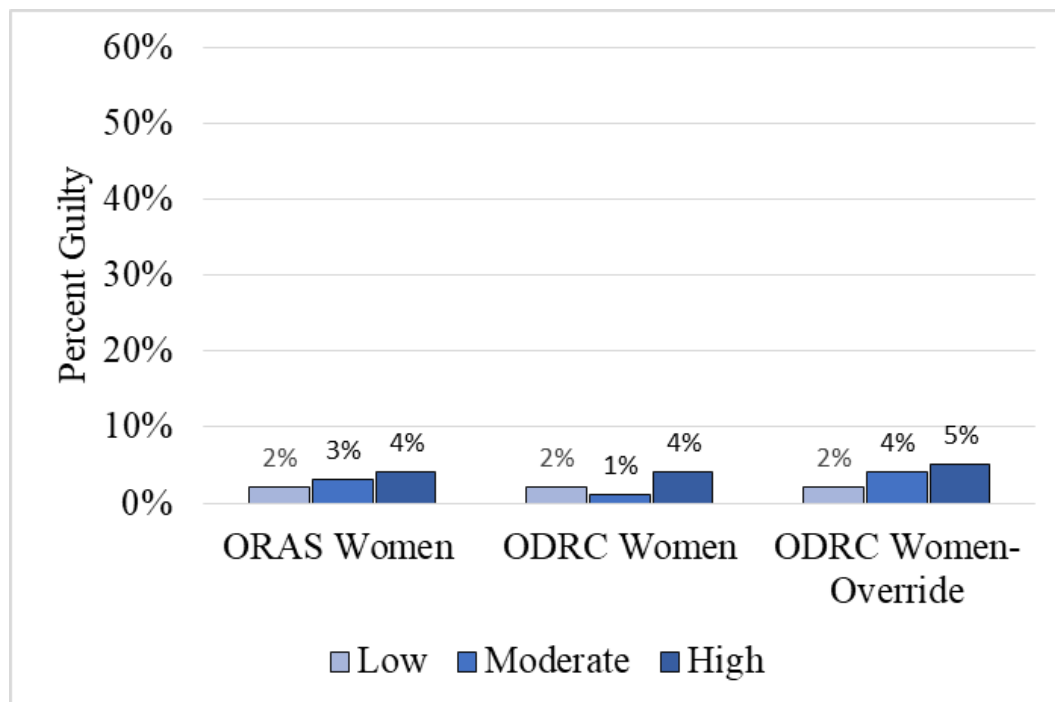




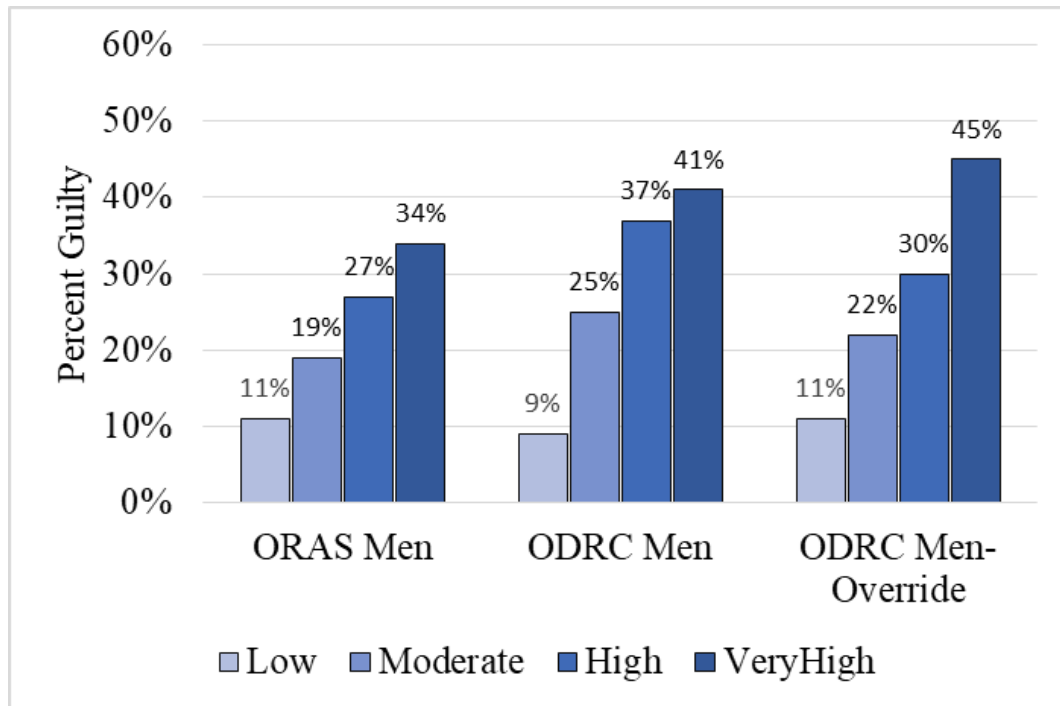
**Figure 16:** Concurrent validity of male classification methods for Drug Misconduct



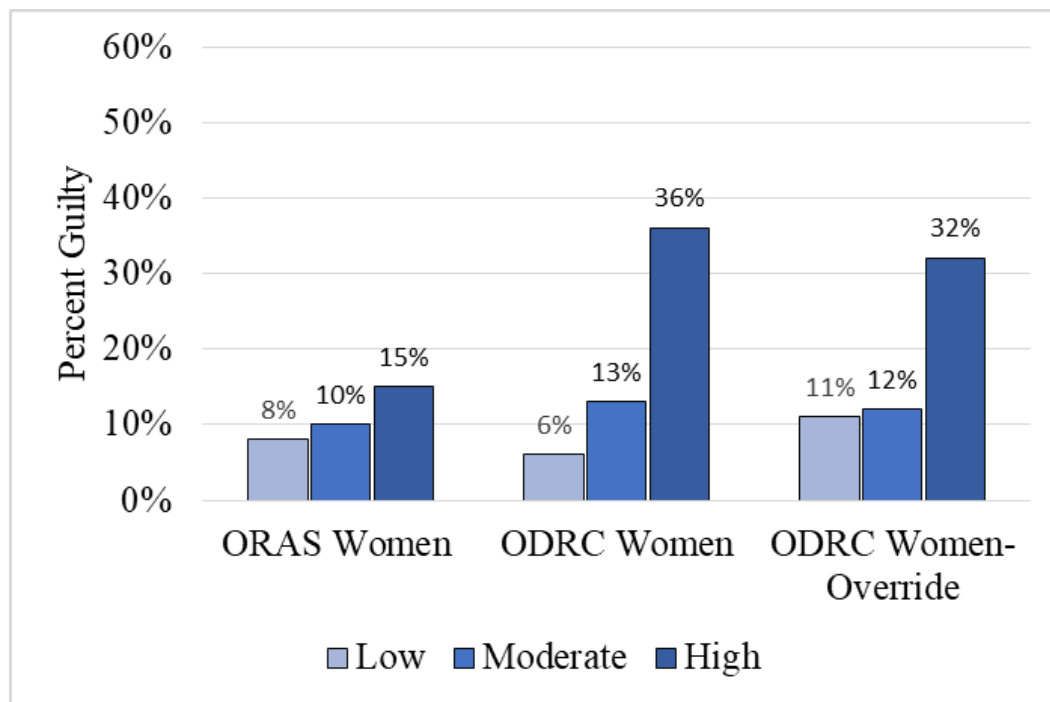
**Figure 17:** Concurrent validity of female classification methods for Drug Misconduct



**Figure 18:** Concurrent validity of male classification methods for Other Misconduct



**Figure 19:** Concurrent validity of female classification methods for Other Misconduct



### **ORAS-PIT Validation (Q3)**

The tables and graphs presented above provide a basic description of how well prisoners are classified (in terms of predicting misconduct) according to the ORAS-PST, ORAS-PIT, the ODRC classification, and the ODRC override classification schemes. This section offers more precision by pinpointing the predictive power of each method using common validation statistics. The analyses summarized in tables 12 and 13 use the full range of scores in the PST and PIT to predict each outcome. It can be seen that the Area Under the Curve (AUC) for each outcome is in the “poor” to “fair” range for each type of misconduct except when the PIT is used to predict property-related misconduct among women (thresholds determined by Rice and Harris 2005:  $<0.55$  = “poor,”  $0.55-0.63$  is “fair,”  $0.64-0.70$  is “good,” and  $0.71-1.00$  is “excellent”).

Table 12 also includes the point biserial correlation for the total PST and PIT score with misconduct, the Somers’  $d$  statistic, and the change in the odds ratio for misconduct associated with each one-unit increase in the PST or PIT score. For men, the tool appears to predict violent misconduct with greater precision than other types of misconduct, but the difference is not significant. Drug-related misconduct is predicted with the least accuracy among all types of misconduct for each analysis. Many of the PST validation statistics are not statistically significant, while the full PIT is consistently significant for all outcomes. The same procedures were replicated for the ODRC classification criteria and the override criteria. Table 14 summarizes the results of these analyses for men, and Table 15 summarizes the results for women. In almost all cases, each method of validation produced higher values than the ORAS-PST and ORAS-PIT. There were no instances where inmates with classification overrides had scores with more predictive validity than non-overridden inmates. Women who had their classification overridden had scores with negative predictive power.

**Table 12:** Predictive validity estimates produced by total men's ORAS-PIT and PST scores

<b>Full Sample (n = 32,433)</b>	AUC	s.e.	95% CI	$r_{pb}$	Somers' $d$	$e^b$
Any Misconduct	0.63***	0.00	0.62 - 0.64	0.20***	0.11***	1.06***
Serious	0.63***	0.00	0.63 - 0.64	0.19***	0.14***	1.06***
Discretionary	0.62***	0.00	0.61 - 0.63	0.16***	0.07***	1.05***
Violent	0.63***	0.00	0.62 - 0.64	0.17***	0.07***	1.06***
Property	0.62***	0.01	0.61 - 0.64	0.10***	0.03***	1.05***
Drug-Related	0.61***	0.01	0.60 - 0.62	0.12***	0.04***	1.05***
Other	0.63***	0.00	0.62 - 0.64	0.18***	0.09***	1.06***
<b>PIT Men (n = 22,251)</b>						
Any Misconduct	0.60***	0.00	0.59 - 0.61	0.16***	0.09***	1.06***
Serious	0.60***	0.00	0.59 - 0.61	0.15***	0.08***	1.06***
Discretionary	0.60***	0.01	0.58 - 0.60	0.13***	0.06***	1.06***
Violent	0.61***	0.01	0.60 - 0.62	0.15***	0.07***	1.07***
Property	0.58***	0.01	0.57 - 0.60	0.07***	0.02***	1.05***
Drug-Related	0.56***	0.01	0.55 - 0.57	0.06***	0.02***	1.04***
Other	0.60***	0.00	0.60 - 0.61	0.15***	0.08***	1.06***
<b>PST Men (n = 4,426)</b>						
Any Misconduct	0.53**	0.01	0.51 - 0.55	0.05***	0.05***	1.32***
Serious	0.53*	0.01	0.50 - 0.55	0.04***	0.03***	1.27**
Discretionary	0.53*	0.01	0.51 - 0.56	0.05**	0.03**	1.35**
Violent	0.53	0.01	0.50 - 0.56	0.04*	0.02*	1.28
Property	0.54	0.02	0.50 - 0.59	0.03*	0.01*	1.45*
Drug-Related	0.53	0.16	0.49 - 0.56	0.03	0.01	1.24
Other	0.53**	0.01	0.51 - 0.56	0.05**	0.04**	1.34**

Note: AUC = area under the curve; CI = confidence interval;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; PIT = full Prison Intake Tool (scores range from 0 - 36); PST = Prison Screening Tool (low risk scores range from 0 - 1 for men and 0-3 for women; PST inmates with a moderate score had to receive the full PIT for inclusion.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

**Table 13:** Predictive validity estimates produced by total women's ORAS-PIT and PST scores

<b>PIT Women (n = 1,811)</b>	AUC	s.e.	95% CI	$r_{pb}$	Somers' $d$	$e^b$
Any Misconduct	0.60***	0.02	0.56 - 0.63	0.14***	0.06***	1.08***
Serious	0.60***	0.02	0.56 - 0.64	0.12***	0.05***	1.08***
Discretionary	0.62***	0.02	0.58 - 0.67	0.14***	0.04***	1.10***
Violent	0.59*	0.00	0.55 - 0.63	0.11*	0.04*	1.07*
Property	0.71***	0.00	0.64 - 0.79	0.14***	0.02***	1.19***
Drug-Related	0.59*	0.04	0.52 - 0.66	0.05*	0.01*	1.06*
Other	0.61***	0.02	0.57 - 0.65	0.13***	0.05***	1.09***
<b>PST Women (n = 3,949)</b>						
Any Misconduct	0.53	0.01	0.50 - 0.55	0.03	0.02*	1.10
Serious	0.52	0.02	0.49 - 0.55	0.02	0.01	1.09
Discretionary	0.55	0.02	0.51 - 0.59	0.04**	0.04**	1.20
Violent	0.52	0.02	0.48 - 0.55	0.02	0.01	1.07
Property	0.56	0.03	0.49 - 0.62	0.03	0.01	0.08
Drug-Related	0.57	0.04	0.50 - 0.64	0.03	0.01	1.30
Other	0.52	0.02	0.49 - 0.55	0.02	0.01	1.07

Note: AUC = area under the curve; CI = confidence interval;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; PIT = full Prison Intake Tool (scores range from 0 - 36); PST = Prison Screening Tool (low risk scores range from 0 - 1 for men and 0-3 for women; PST inmates with a moderate score had to receive the full PIT for inclusion.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

**Table 14:** Predictive validity estimates produced by men's ODRC classification total scores

<b>All Men (n = 26,677)</b>	AUC	s.e.	95% CI	$r_{pb}$	Somers' $d$	$e^b$
Any Misconduct	0.67***	0.00	0.66 - 0.67	0.26***	0.18***	1.54***
Serious	0.66***	0.00	0.66 - 0.67	0.24***	0.15***	1.53***
Discretionary	0.65***	0.00	0.64 - 0.66	0.20***	0.11***	1.46***
Violent	0.69***	0.00	0.68 - 0.70	0.24***	0.13***	1.61***
Property	0.62***	0.00	0.61 - 0.64	0.10***	0.04***	1.33***
Drug-Related	0.59***	0.00	0.58 - 0.60	0.09***	0.04***	1.23***
Other	0.67***	0.00	0.66 - 0.68	0.24***	0.15***	1.55***
<b>No Override Men (n = 22,828)</b>						
Any Misconduct	0.67***	0.00	0.66 - 0.67	0.26***	0.18***	1.57***
Serious	0.66***	0.00	0.66 - 0.67	0.24***	0.15***	1.56***
Discretionary	0.65***	0.00	0.64 - 0.66	0.20***	0.12***	1.59***
Violent	0.69***	0.00	0.68 - 0.70	0.25***	0.13***	1.66***
Property	0.63***	0.00	0.61 - 0.64	0.11***	0.04***	1.36***
Drug-Related	0.59***	0.00	0.58 - 0.60	0.09***	0.44***	1.23***
Other	0.67***	0.00	0.66 - 0.68	0.25***	0.15***	1.57***
<b>Men w/ Override (n = 3,849)</b>						
Any Misconduct	0.65***	0.00	0.63 - 0.67	0.25***	0.16***	1.42***
Serious	0.65***	0.00	0.63 - 0.67	0.23***	0.14***	1.41***
Discretionary	0.64***	0.00	0.61 - 0.66	0.19***	0.10***	1.36***
Violent	0.66***	0.00	0.64 - 0.68	0.23***	0.12***	1.44***
Property	0.60***	0.00	0.56 - 0.64	0.09***	0.03***	1.24***
Drug-Related	0.59***	0.00	0.56 - 0.63	0.10***	0.04***	1.22***
Other	0.65***	0.00	0.63 - 0.68	0.24***	0.14***	1.43***

Note: AUC = area under the curve; CI = confidence interval;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

**Table 15:** Predictive validity estimates produced by women's ODRC classification total scores

<b>All Women (n = 5,756)</b>	AUC	s.e.	95% CI	$r_{pb}$	Somers' $d$	$e^b$
Any Misconduct	0.61***	0.00	0.59 - 0.63	0.14***	0.07***	1.23***
Serious	0.63***	0.00	0.61 - 0.65	0.14***	0.06***	1.27***
Discretionary	0.61***	0.00	0.59 - 0.64	0.10***	0.04***	1.23***
Violent	0.62***	0.00	0.60 - 0.65	0.13***	0.05***	1.25***
Property	0.62***	0.00	0.56 - 0.67	0.06***	0.01***	1.24***
Drug-Related	0.60***	0.00	0.55 - 0.66	0.05***	0.01***	1.21***
Other	0.62***	0.00	0.60 - 0.65	0.13***	0.05***	1.25***
<b>No Override (n = 3,900)</b>						
Any Misconduct	0.61***	0.00	0.59 - 0.63	0.21***	0.09***	1.44***
Serious	0.63***	0.00	0.61 - 0.65	0.20***	0.08***	1.50***
Discretionary	0.61***	0.00	0.59 - 0.64	0.19***	0.06***	1.53***
Violent	0.62***	0.00	0.60 - 0.65	0.20***	0.07***	1.49***
Property	0.62***	0.00	0.56 - 0.67	0.11***	0.02***	1.56***
Drug-Related	0.60***	0.00	0.55 - 0.66	0.05***	0.01***	1.26**
Other	0.62***	0.00	0.60 - 0.65	0.21***	0.08***	1.53***
<b>w/ Override (n = 1,856)</b>						
Any Misconduct	0.46*	0.02	0.43 - 0.50	-0.47	-0.28*	0.94
Serious	0.49	0.02	0.45 - 0.52	-0.01	-0.01	0.75
Discretionary	0.44**	0.02	0.40 - 0.48	-0.07**	-0.03**	0.88
Violent	0.48	0.02	0.44 - 0.51	-0.02	-0.01	0.98
Property	0.44	0.04	0.37 - 0.51	-0.04	-0.01	0.88
Drug-Related	0.51	0.04	0.44 - 0.57	-0.00	-0.00	0.99
Other	0.46*	0.02	0.42 - 0.50	-0.05*	-0.03*	0.93

Note: AUC = area under the curve; CI = confidence interval;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score.

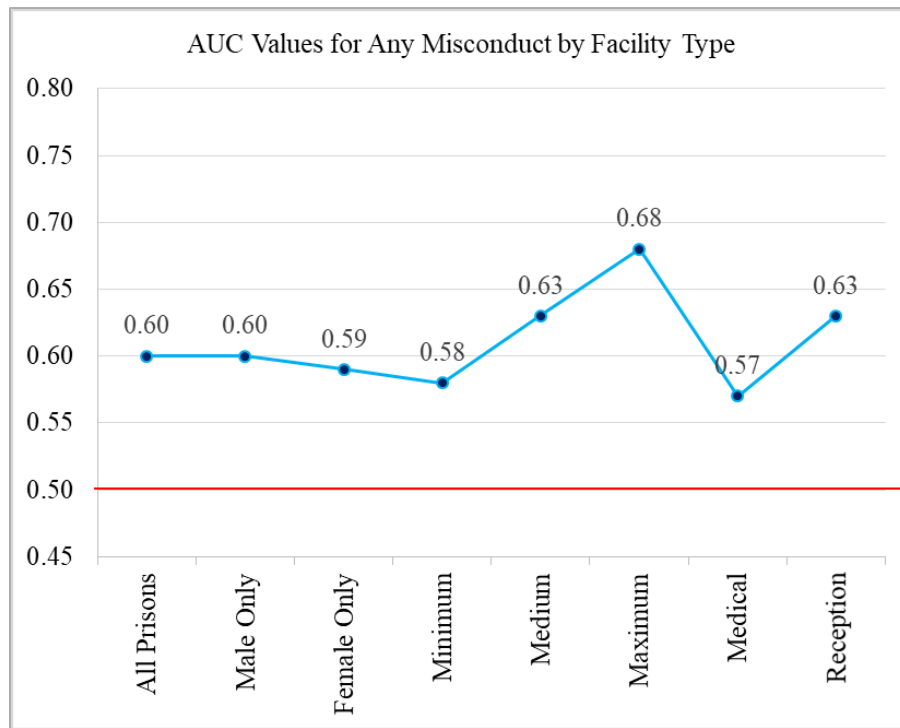
\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

One focus of this dissertation is to assess the role of the prison environment on the predictive validity of the ORAS-PIT. One step in this process is to compute the AUC and validation statistics for inmates who were housed in each security setting. “All prisons” refers to the entire sample of men and women in the data; “male only” refers to all men in the data regardless of where they are housed; “female only” refers to all women in the data; “minimum” refers to men’s prisons with a designation of minimum security; “medium” refers to men’s prisons with a designation of medium security; “maximum” refers to men’s prisons with a designation of maximum security; “medical” refers to medical centers (which have a mixed population of men and women); and “reception” refers to the two mixed security reception centers for men (women are classified in one of the women-only facilities). Figures 20 and 21, along with Table 16, offer a comparison of the ORAS-PIT validity in these different settings.

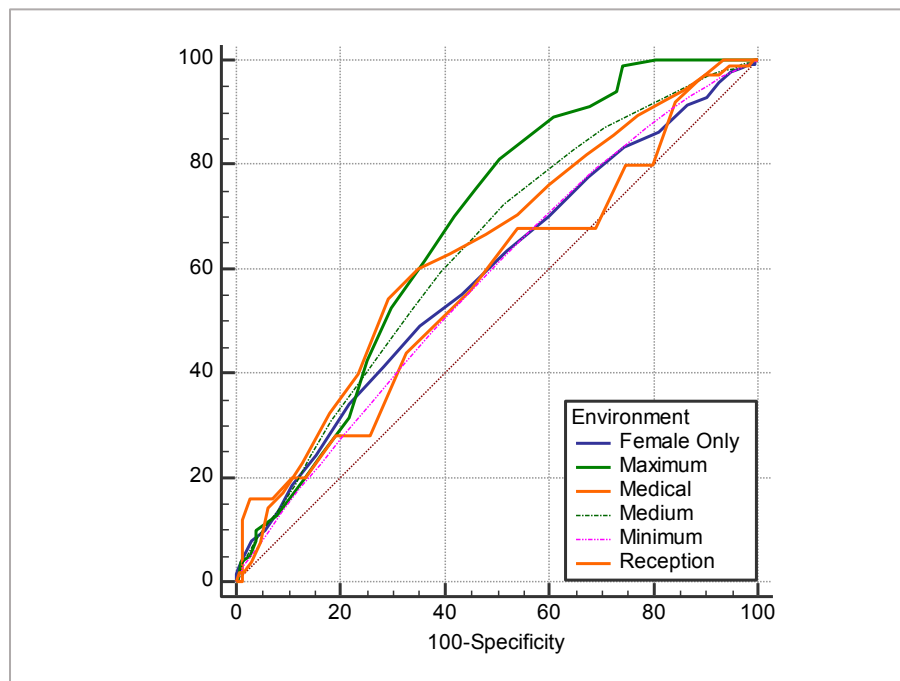
Figure 20 depicts the AUC values for the full PIT (predicting “any misconduct”) in all prisons compared to the AUC for sub-samples of prisoners housed in different settings. The corresponding Figure 21 displays the ROC curves for each setting. Each AUC was compared to all others using the z-statistic method outlined by DeLong, DeLong, and Clarke-Pearson (1988). Statistically significant differences in AUC values were found between women’s prisons and men’s medium security prisons ( $p < .05$ ) as well as women’s prisons and men’s maximum security prisons ( $p < .05$ ), but there was no significant difference between the tool’s AUC in women’s prisons and men’s minimum security settings. Minimum security facilities for men had a significantly lower AUC value than both medium ( $p < .001$ ) and maximum security prisons for men ( $p < .01$ ). There were not enough instances of misconduct in medical facilities to permit a proper assessment, but these tools do not appear to have any predictive validity in medical settings.



**Figure 20:** AUC point estimates for predicting any misconduct in different custodial settings



**Figure 21:** Concurrent ROC curves for predicting any misconduct in different custodial settings



**Table 16:** Predictive validity estimates produced by full ORAS-PIT total scores by facility type

	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.60***	0.16***	0.09***	1.06***
Male Only (n = 22,251)	0.60***	0.16***	0.09***	1.06***
Women Only (n = 1,577)	0.59***	0.13***	0.06***	1.078***
Men's Minimum (16,710)	0.58***	0.13***	0.07***	1.05***
Men's Medium (n = 4,543)	0.63***	0.23***	0.14***	1.09***
Men's Maximum (n = 275)	0.68***	0.31***	0.17***	1.12***
Medical (n = 255)	0.57	0.09	0.03	1.07
Reception (n = 708)	0.63***	0.16***	0.07***	1.09***

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

$p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

Significant differences in AUC found between:

Women Only vs. Men's Medium \*

Women Only vs. Men's Maximum \*

Men's Minimum vs. Men's Medium \*\*\*

Men's Minimum vs. Men's Maximum \*\*

The AUC for prisoners in the reception center is comparable to the AUC of male prisoners in medium security settings (0.63\*\*\*) which is a finding supported by their official designation as medium (technically “level 3”) security facilities. Overall, it can be said that the AUC of the ORAS-PIT does vary across settings, and it is has the greatest predictive power among male prisoners housed in maximum security settings. This justifies further exploration into the effects of prison security level on misconduct in the subsequent analyses because it implies that the context of the prison environment can influence the validity of the assessment tool depending on the location, sample, and outcome being measured.

The figures and tables described above have been replicated for each type of misconduct. The results of these analyses can be found in Appendices G-L. A noteworthy finding is that maximum security settings are associated with the greatest AUC values for all types of

misconduct except property-related infractions, but maximum security settings have the smallest sample size ( $n = 275$ ) of all male settings so this could be interfering with the comparison.

The final component of the validation analyses was to assess alternative measures of universal validity and reliability for the ORAS-PIT. First, AUC values were determined for the ORAS-PIT, the ORAS-PST, the ODRC classification criteria, and the ODRC decisions for those who were given an override, but the AUC was computed for each sub-group of inmates according to their race/ethnicity. The results are presented in Table 17. The ORAS-PIT was found to have similar predictive power for all races, but the tool had significantly worse prediction for African American men than white men ( $\Delta = 0.04$ ,  $p < .01$ ). The ORAS-PST was a significantly better predictor for prisons with a race other than white, African American, or Hispanic, but only when compared to white inmates. There were no significantly different AUC values between men or women when the ODRC criteria was examined, even when the examination focused on those with overrides.

The second comparison is between sex offenders and any prisoner who was not identified as a sex offender. The results of these comparisons are listed in Table 18. The ORAS-PIT had significantly better prediction for sex offenders (AUC = 0.63) than non-sex offenders (AUC = 0.60,  $\Delta p < .05$ ), but there were no other significant differences between the two groups for predicting *any* misconduct using the other classification methods. There were not enough female sex offenders to permit a comparison.

**Table 17:** AUC values for predicting any misconduct by race and ethnicity

	White	African American	$\Delta$ from white	Hispanic	$\Delta$ from white	Other Race	$\Delta$ from white
<b>Men</b>							
ORAS-PIT	0.61 <sup>***</sup>	0.57 <sup>***</sup>	0.04 <sup>***</sup>	0.60 <sup>***</sup>	0.02	0.57	0.04
ORAS-PST	0.53 <sup>*</sup>	0.52	0.01	0.51	0.02	0.69 <sup>*</sup>	0.15 <sup>***</sup>
ODRC	0.66 <sup>***</sup>	0.66 <sup>***</sup>	0.00	0.65 <sup>***</sup>	0.01	0.62 <sup>**</sup>	0.04
ODRC w/ Override	0.65 <sup>***</sup>	0.62 <sup>***</sup>	0.02	0.72 <sup>***</sup>	0.08	0.59	0.05
<b>Women</b>							
ORAS-PIT	0.61 <sup>***</sup>	0.57 <sup>*</sup>	0.05	-	-	-	-
ORAS-PST	0.54 <sup>*</sup>	0.52	0.03	-	-	-	-
ODRC	0.60 <sup>***</sup>	0.63 <sup>***</sup>	0.04	-	-	-	-
ODRC w/ Override	0.56 <sup>**</sup>	0.57 <sup>**</sup>	0.01	-	-	-	-

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

The reliability estimation separated male prisoners into groups depending on *where* they received their risk assessment. Facility A and Facility B are the two designated reception centers, and if prisoners received their assessment in any other non-reception facility they were included in a separate category. Table 19 shows there were significant differences in AUC values for prisoner who were assessed in Facility A versus the non-reception centers, and significant differences between those assessed in Facility B versus the non-reception centers, but there were no significant differences between the two reception center facilities. There were more dramatic differences between the predictive ability of the ODRC classification criteria depending on where the classification took place. Inmates processed through Facility B (AUC = 0.69) had scores with significantly better AUC values than Facility A (AUC = 0.65,  $\Delta p < .001$ ). This was more pronounced when inmates with override decisions were analyzed separately. Inmates processed through Facility B had classification scores with an AUC of 0.68 compared to Facility A scores with an AUC of 0.59 ( $\Delta p < .001$ ).

**Table 18:** AUC values for predicting any misconduct by offense type (men only)<sup>a</sup>

	Non-Sex Offenders	Sex Offenders	$\Delta$
ORAS-PIT	0.60 <sup>***</sup>	0.63 <sup>***</sup>	0.04 <sup>*</sup>
ORAS-PST	0.53 <sup>*</sup>	0.54	0.00
ODRC	0.66 <sup>***</sup>	0.67 <sup>***</sup>	0.01
ODRC w/ Override	0.63 <sup>***</sup>	0.67 <sup>***</sup>	0.04

<sup>a</sup> There were too few female sex offenders to permit comparisons of ROC curves.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

### ***Summary of Q3***

- The ORAS-PIT is a “fair” predictor of “any misconduct” for men and women, but the official ODRC classification score is a “good” predictor of any misconduct for men and a “fair” predictor for women.
- The ORAS-PST is not a valid predictor of misconduct.
- The decision to override a classification score sometimes improves prediction of misconduct and sometimes weakens prediction of misconduct.
- There are significant differences in the predictive power of each assessment method depending on the custodial setting where the prisoner is initially placed, and on the type of misconduct being predicted.
- The ORAS-PIT does not predict as well for African-American men as white men, but it does predict significantly better for sex offenders than non-sex offenders.
- ORAS-PIT assessments conducted in a designated reception center have significantly greater validity estimates for predicting misconduct than assessments conducted in non-reception facilities.

**Table 19:** AUC values for predicting misconduct by assessment location (men only)<sup>a</sup>

	Facility A	Facility B	Non-Reception Facilities	$\Delta$ Facility A- Facility B	$\Delta$ Facility A- Non-Rec.	$\Delta$ Facility B- Non- Rec.
ORAS-PIT	0.60***	0.63***	0.58***	0.02	0.03**	0.04***
ORAS-PST	0.55***	0.52*	0.51	0.01	0.03	0.04
ODRC	0.65***	0.69***	-	0.03***	-	-
ODRC w/ Override	0.59***	0.68***	-	0.09***	-	-

<sup>a</sup> Most women were assessed in the same facility.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

### Misclassification Characteristics (Q4)

The fourth research question asked whether there were any individual characteristics of inmates that were associated with classification overrides. Only “upward” overrides (increases in recommended security level) were considered for this analysis because the data on documented override criteria provided by the ODRC are primarily “risk factors” that are used to increase security level placements. An upward override was defined as any occurrence where the prisoner was actually placed in a security level that was higher than their initial recommended security level. Table 20 summarizes the descriptive statistics for men and table 21 summarizes the descriptive statistics for women included in this phase of the analysis. Out of 26,677 men, 2,683 were given an upward override (10 percent). Among the 5,756 women, 1,059 were given an upward override. It is unknown why a larger proportion of women received an override than men, but it may be a result of having fewer placement options.

The ODRC bureau of classification documents their override decisions by recording the reason for the override. Mandatory override criteria is documented for men and women, but only

men have discretionary criteria recorded. The proportion of overridden male inmates who were African American (0.40) is comparable to their proportion of the total prison population (0.41) and falls into the 95 percent confidence interval of the population (0.40-0.42), but the proportion of African American women who received an upward override was greater (0.27) than in the total prison population (0.17) and this falls outside of the confidence interval (0.16-0.18). It is worth noting at this point that a large number of inmates are overridden because they were classified as sex offenders (636 men and 37 women) or had a “sex offense consideration” (577 men). The use of mandatory overrides for sex offenders will be discussed later in this dissertation.

Binary logistic regression models were conducted for this sample of men to determine which predictors of overrides were statistically significant, and to quantify their relative impact on override decisions. The first model contained only demographic variables such as age, race/ethnicity (African American, Hispanic, and other races relative to white inmates), and mental health status (inmates with serious and non-serious mental illness relative to those with no diagnoses). All of these were significant predictors of overrides when they were included in the model without official ODRC override criteria, but only age and non-serious mental illness retained statistical significance in the second model (see table 22). This second model included all mandatory and discretionary override criteria recorded by the ODRC Bureau of Classification. The same procedure was replicated for women prisoners, but there were no data available on discretionary override criteria. The results of these models for women prisoners are presented in Table 23.

**Table 20:** Descriptive statistics of factors involved in overrides for men (n=26,677)

	All men (n = 26,677)		Men with upward overrides (n = 2,683)	
	Proportion	95% CI	Proportion	95% CI
African American	0.41	0.40-0.42	0.40	0.38-0.42
Hispanic	0.02	0.02-0.02	0.03	0.02-0.03
Other race	0.01	0.01-0.01	0.01	0.01-0.01
Age at commitment	32.73	32.61-32.86	37.58	37.12-38.04
Non-serious mental illness	0.11	0.10-0.11	0.16	0.14-0.17
Serious mental illness	0.06	0.06-0.06	0.08	0.07-0.09
<i>Mandatory Criteria</i>				
Sex offender	0.08	0.08-0.09	0.24	0.22-0.25
Kidnapping	0.03	0.03-0.03	0.07	0.06-0.08
High notoriety offense	0.00	0.00-0.00	0.00	0.00-0.00
Murder	0.01	0.01-0.02	0.10	0.09-0.11
Death of law enforcement	0.00	0.00-0.00	0.00	0.00-0.00
Former death row or life	0.00	0.00-0.00	0.00	0.00-0.01
Documented escape	0.00	0.00-0.00	0.03	0.02-0.03
Awaiting hearing F1/2	0.02	0.00-0.00	0.02	0.01-0.03
<i>Discretionary Criteria</i>				
Prior prison adjustment	0.02	0.02-0.02	0.11	0.09-0.12
Time to earliest hearing	0.05	0.04-0.05	0.27	0.25-0.29
Violence threat	0.02	0.02-0.03	0.16	0.14-0.17
Notoriety of case	0.00	0.00-0.00	0.00	0.00-0.01
Escape from supervision	0.01	0.01-0.01	0.04	0.03-0.04
Escape w/o details	0.02	0.01-0.02	0.05	0.04-0.06
Felony detainer	0.02	0.02-0.02	0.06	0.05-0.07
Time since prior	0.01	0.01-0.01	0.03	0.02-0.04
Sex offense consideration	0.04	0.04-0.04	0.22	0.20-0.23
Security Threat Group	0.01	0.00-0.01	0.01	0.01-0.02
Behavioral criteria	0.00	0.00-0.00	0.00	0.00-0.01



**Table 21:** Descriptive statistics of factors involved in overrides for women (n=5,756)

	All women (n = 5,756)		Women with upward overrides (n = 1,059)	
	Proportion	95% CI	Proportion	95% CI
African American	0.17	0.16-0.18	0.27	0.25-0.30
Hispanic	0.01	0.00-0.01	0.00	0.00-0.01
Other race	0.00	0.00-0.00	0.00	0.00-0.01
Age at commitment	32.82	32.58-33.05	35.33	34.74-35.92
Non-serious mental illness	0.06	0.05-0.07	0.07	0.06-0.09
Serious mental illness	0.06	0.06-0.07	0.07	0.05-0.08
<i>Mandatory Criteria</i>				
Sex offender	0.02	0.01-0.02	0.03	0.02-0.05
Kidnapping	0.02	0.02-0.03	0.04	0.03-0.05
High notoriety offense	0.03	0.02-0.03	0.09	0.07-0.11
Murder	0.00	0.00-0.00	0.01	0.01-0.02
Death of law enforcement	0.00	0.00-0.00	0.00	0.00-0.00
Former death row or life	-	-	-	-
Documented escape	0.02	0.00-0.00	0.02	0.01-0.02
Awaiting hearing F1/2	0.00	0.00-0.00	0.00	0.00-0.00

Note: Discretionary override criteria are not documented for women.

The largest mandatory override factors were high notoriety offenses ( $e^b = 21.24$ ,  $p < .001$ ), murder convictions ( $e^b = 15.72$ ,  $p < .001$ ), and causing the death of a law enforcement officer or the death of someone in a prison ( $e^b = 10.92$ ,  $p < .01$ ) (see table 22). It should be noted that two of these factors were extremely rare events so their effects have a large standard error term. As for discretionary criteria, a more subjective measure of “notoriety of the case” was the largest predictor ( $e^b = 21.3$ ,  $p < .001$ ) followed by a consideration of the prisoner’s time until their earliest hearing ( $e^b = 12.3$ ,  $p < .001$ ). A designation of “sex offender” is a mandatory override category and was associated with a change in the odds ratio of 1.46 ( $p < .001$ ), while the discretionary category for “sex offense consideration” was associated with a change in the odds ratio of 8.85 ( $p < .001$ ).

**Table 22:** Results of binary logistic regression model for predicting upward security level overrides for men (n = 26,677)

Predictors	Model 1			Model 2		
	<i>b</i>	s.e.	<i>e<sup>b</sup></i>	<i>b</i>	s.e.	<i>e<sup>b</sup></i>
Constant	-3.80	0.07		-4.53	0.09	
African American <sup>a</sup>	0.13	0.04	1.14**	-0.01	0.05	1.00
Hispanic <sup>a</sup>	0.32	0.13	1.38*	0.14	0.16	1.15
Other Race <sup>a</sup>	0.50	0.22	1.62*	0.09	0.29	1.09
Age at Commitment	0.04	0.00	1.04***	0.04	0.00	1.04***
Non-serious mental illness <sup>b</sup>	0.33	0.08	1.40***	0.15	0.07	1.16**
Serious mental illness <sup>b</sup>	0.44	0.06	1.55***	0.02	0.10	1.03
<i>Mandatory Criteria</i>						
Sex offender	-	-	-	0.38	0.09	1.46***
Kidnapping	-	-	-	0.43	0.12	1.54***
High notoriety	-	-	-	3.06	1.31	21.2**
Current murder	-	-	-	2.76	0.15	15.7***
Death of law enforcement	-	-	-	2.39	0.85	10.9**
Former death row or life	-	-	-	1.54	1.07	4.68
Documented escape	-	-	-	0.21	0.19	1.23
Awaiting hearing on F1 or 2	-	-	-	1.05	0.42	2.86**
<i>Discretionary Criteria</i>						
Prior prison adjustment	-	-	-	2.27	0.11	9.71***
Time to earliest hearing	-	-	-	2.51	0.08	12.3***
Violence threat	-	-	-	2.31	0.11	10.0***
Notoriety of case	-	-	-	3.06	0.79	21.3***
Escape from supervision	-	-	-	1.18	0.15	3.25***
Escape with unknown details	-	-	-	1.52	0.13	4.55***
Felony detainer	-	-	-	2.02	0.11	7.53***
Time since prior	-	-	-	0.58	0.17	1.79***
Sex offense consideration	-	-	-	2.18	0.10	8.85***
Security Threat Group	-	-	-	0.04	0.286	1.04
Behavioral criteria	-	-	-	2.23	0.849	9.30*
-2 Log Likelihood	16,756.68			11,880.02		
Model chi square	654.93***			5,531.59***		
Nagelkerke R <sup>2</sup>	0.05			0.39		

Reference groups : <sup>a</sup> White, <sup>b</sup> no mental illness; \* p < .05, \*\* p < .01, \*\*\* p < .001.

**Table 23:** Results of binary logistic regression model for predicting upward security level overrides for women (n = 5,756)

Predictors	Model 1			Model 2		
	b	s.e.	$e^b$	b	s.e.	$e^b$
Constant	-2.87	0.08		-2.91	0.13	
African American <sup>a</sup>	0.83	0.53	2.30***	0.91	0.08	2.21***
Hispanic <sup>a</sup>	-0.52	0.65	0.60	-0.46	0.53	0.63
Other Race <sup>a</sup>	0.14	0.00	1.16	-0.52	0.77	0.60
Age at Commitment	0.04	0.14	1.04***	0.04	0.04	1.04***
Non-serious mental illness <sup>b</sup>	0.28	0.13	1.33*	0.10	0.14	1.10
Serious mental illness <sup>b</sup>	0.04	0.14	1.04	-0.06	0.14	0.94
Mandatory Criteria						
Sex offender	-	-	-	0.77	0.24	2.16**
Kidnapping	-	-	-	0.42	0.21	1.52*
High notoriety	-	-	-	1.64	0.18	5.15***
Current murder	-	-	-	1.42	0.51	4.31**
Death of law enforcement	-	-	-	-	-	-
Former death row or life	-	-	-	-	-	-
Documented escape	-	-	-	-0.13	0.28	0.88
Awaiting hearing on F1 or 2	-	-	-	-	-	-
-2 Log Likelihood	5,296.32			5,159.37		
Model chi square	199.26***			336.21***		
Nagelkerke R <sup>2</sup>	0.06			0.09		

Reference groups : <sup>a</sup> White, <sup>b</sup> no mental illness; \* p < .05, \*\* p < .01, \*\*\* p < .001.

Note: Female classification does not measure structured discretionary criteria; other criteria eliminated because there were zero instances in this sample.

Unlike the models for men, race remained a significant factor for women even after controlling for the effects of mandatory override criteria. African-American women were 2.3 times more likely to receive an override in the first model ( $p < .001$ ), and were 2.2 times more likely to receive an override in the second model ( $p < .001$ ). Interestingly, for both men and women, an increase in age was associated with increases in the likelihood of an override, although younger offenders are typically considered to be more dangerous (Steffensmeier, Painter-Davis, & Ulmer, 2017). Within the mandatory override criteria, women are more likely to receive an upward override when they were sex offenders ( $e^b = 2.16$ ,  $p < .001$ ), were convicted of kidnapping ( $e^b = 1.52$ ,  $p < .05$ ) or murder ( $e^b = 4.31$ ,  $p < .001$ ), or had a high notoriety case ( $e^b = 5.15$ ,  $p < .001$ ).

#### ***Summary of Q4***

- A greater proportion of women received an override to their recommended security level than men.
- Race was not a significant predictor of an override for men after controlling for the effects of official override criteria.
- African-American women were more likely to receive an override than white women after controlling for all documented override criteria.
- Some of the override criteria were more likely to result in an override than others, with “high notoriety” criminal histories having the strongest relationships for men and women.

### ***Maximum Likelihood Models for Misconduct (Q5 and Q6)***

The fifth research question asked whether inmates committed misconduct at rates comparable to their ORAS-PIT risk level or if they committed misconduct at rates similar to other inmates housed in the same security settings. A series binary logistic regression models were produced to determine the relative likelihood of committing any misconduct in any security level before being broken down into sub-groups for comparison. The first model in Table 24 only included indicators for the ORAS-PIT risk categories of moderate risk inmates, high risk inmates, and very high risk inmates (low risk inmates were the reference group, and included inmates determined to be low risk by the ORAS-PST). Each risk group was associated with a significant increase in the odds of misconduct compared to low risk inmates. Moderate risk inmates were 1.53 times more likely to be found guilty of any misconduct ( $p < .001$ ), high risk inmates were 2.34 times more likely ( $p < .001$ ), and very high risk inmates were 3.26 times more likely ( $p < .001$ ).

The second model included covariates for predictors of misconduct that are supported by literature on prison rule violations. While each of those factors are interesting and worthy of further exploration, it is their influence on the effect size of the ORAS-PIT categories that is the focus of this study. The third model included official classification criteria maintained by the ODRC in their placement decisions. The fourth model contained all mandatory and discretionary override criteria approved by the ODRC. After the inclusion of these relevant factors, the significance and effect size of the ORAS-PIT categories remain, and have even increased. Moderate risk inmates are 1.56 times more likely ( $p < .001$ ), high risk inmates are 2.45 times more likely ( $p < .001$ ), and very high risk inmates are 3.5 times more likely to be found guilty of misconduct than low risk inmates.

**Table 24:** Results of binary logistic regression model for predicting any misconduct for men in all security levels (n = 26,677;  $e^b$  reported)

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>
<b>Predictors</b>				
Constant				
ORAS-PIT Moderate Risk <sup>a</sup>	1.53***	1.59***	1.61***	1.56***
ORAS-PIT High Risk <sup>a</sup>	2.34***	2.70***	2.57***	2.45***
ORAS-PIT Very High Risk <sup>a</sup>	3.26***	4.28***	3.66***	3.50***
<i>Misconduct Predictors</i>				
Completed GED in prison	-	0.96	0.95	0.94*
Recovery Services in prison	-	0.62***	0.67***	0.65***
African American <sup>b</sup>	-	1.34***	1.24***	1.22***
Hispanic <sup>b</sup>	-	1.38**	1.30**	1.31**
Other Race <sup>b</sup>	-	1.10	1.08	1.11
Non-serious mental illness <sup>c</sup>	-	1.22***	1.15**	1.20***
Serious mental illness <sup>c</sup>	-	1.30***	1.22**	1.27***
Time at risk in placement	-	1.92***	1.83**	1.82***
Prior incarcerations	-	0.90***	0.87***	0.87***
Sentence length	-	1.02***	1.01***	1.01***
Misconduct before placement	-	1.02***	1.20***	1.21***
<i>Classification Criteria</i>				
Adjustment risk	-	-	1.49***	1.55***
Prior security level	-	-	1.44***	1.43***
Assault conviction	-	-	0.94*	0.91**
History of STG	-	-	1.11*	1.13*
<i>Mandatory Criteria</i>				
Sex offender	-	-	-	0.67***
Kidnapping	-	-	-	1.04
High notoriety	-	-	-	-
Current murder	-	-	-	0.61***
Death of law enforcement	-	-	-	0.29
Former death row or life	-	-	-	1.50
Documented escape	-	-	-	0.96
Awaiting hearing on F1/2	-	-	-	0.83
<i>Discretionary Criteria</i>				
Prior prison adjustment	-	-	-	1.17
Time to earliest hearing	-	-	-	0.80**
Violence threat	-	-	-	1.08
Notoriety of case	-	-	-	1.00
Escape from supervision	-	-	-	0.76*
Escape w/o details	-	-	-	1.28*

Felony detainer	-	-	-	0.86
Time since prior	-	-	-	0.93
Sex offense consideration	-	-	-	0.55***
Security Threat Group	-	-	-	0.85
Behavioral criteria	-	-	-	0.45
-2 Log Likelihood	32,327.85	30,749.74	30,310.47	30,104.95
Model chi square	805.55***	2,383.67***	2,822.93***	3,028.45***
Nagelkerke R <sup>2</sup>	0.04	0.12	0.14	0.15

Reference groups : <sup>a</sup> ORAS-PIT Low Risk (screener and full PIT); <sup>b</sup> White; <sup>c</sup> no mental illness.

\* p < .05, \*\* p < .01, \*\*\* p < .001.

These models serve as a baseline comparison for the next phase of the analysis. It was hypothesized that *place* matters and *outcome* matters in determining the impact of the ORAS-PIT classification. Table 25 summarizes the results of 42 replications of the binary logistic regression model described above. These replications are for each of the three male security levels (minimum, medium, and maximum security), for each type of misconduct (any, serious, discretionary, violent, property, drug, and other), in two phases (with no controls and the full model seen above). Only the change in the odds ratio ( $e^b$ ) is reported to facilitate easier interpretation of trends across models. It can be seen that each type of misconduct outcome is incrementally associated with risk levels in minimum security settings, and that the size of the change in the odds ratio increases when the full list of covariates are included in the model. The relationship is not so easily explained in the medium security facilities because the difference between low and moderate risk inmates was not significant for some of the outcome measures. Also, some of the effect sizes decreased when the full list of covariates were included in the model. Most importantly, none of the differences between low risk and other categories retained their significant for any outcome when only prisoners in maximum security settings were examined with all covariates included, but this may be due to the small sample size (n = 305) which casts doubt on the previous tests of the ORAS-PIT'S predictive validity in this setting.

**Table 25:** Summary of ORAS-PIT risk levels in binary logistic regression models for predicting misconduct for different male security levels (change in odds ratio  $e^b$  reported)

	Minimum Security		Medium Security		Maximum Security	
	<u>No controls</u>	<u>Full model<sup>a</sup></u>	<u>No controls</u>	<u>Full model<sup>a</sup></u>	<u>No controls</u>	<u>Full model<sup>a</sup></u>
<b>Any Misconduct</b>						
Moderate Risk <sup>b</sup>	1.54***	1.57***	1.41***	1.44**	2.30	2.28
High Risk <sup>b</sup>	2.11***	2.41***	2.99***	2.43***	7.95**	2.46
Very High Risk <sup>b</sup>	2.74***	3.57***	4.14***	3.34***	11.73***	1.47
<b>Serious</b>						
Moderate Risk	1.65***	1.68***	1.45**	1.47**	1.44	0.84
High Risk	2.29***	2.63***	3.22***	2.63***	6.22**	1.99
Very High Risk	2.86***	3.85***	4.70***	3.95***	9.75***	1.67
<b>Discretionary</b>						
Moderate Risk	1.48***	1.50***	1.34*	2.28***	3.73	7.41
High Risk	2.04***	2.28***	2.04***	2.28***	6.94	2.46
Very High Risk	2.69***	3.39***	2.04***	2.50***	9.91*	1.85
<b>Violent</b>						
Moderate Risk	1.48***	1.46***	1.60***	1.57**	2.64	2.99
High Risk	2.24***	2.50***	3.32***	2.64***	8.27**	2.92
Very High Risk	2.82***	3.76***	5.48***	4.77***	10.76**	1.87
<b>Property</b>						
Moderate Risk	1.51***	1.51***	1.31	1.38	-	-
High Risk	2.12***	2.48***	2.32***	2.11***	2.29	0.43
Very High Risk	2.63***	3.74***	2.86***	2.73***	1.36	0.03
<b>Drug</b>						
Moderate Risk	1.65***	1.70***	1.38	1.46*	-	-
High Risk	2.07***	2.37***	2.40***	2.22***	-	-
Very High Risk	2.44***	3.08***	2.52***	2.35***	-	-
<b>Other</b>						
Moderate Risk	1.47***	1.48***	1.36**	1.36**	1.44	1.76
High Risk	2.05***	2.32***	2.87***	2.26***	5.78**	1.83
Very High Risk	2.55***	3.35***	4.01***	3.06***	7.70**	0.93

<sup>a</sup> Full models control for all covariates listed in Table 24; <sup>b</sup> Reference group for all risk levels is ORAS-PIT Low Risk (screen and full PIT).

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



The same process was replicated for women, although it required some alternative methodology. Table 26 shows the initial model predicting any misconduct for women in all non-medical settings. The first model found a significant difference between low risk women and moderate risk women ( $e^b = 1.33$ ,  $p < .01$ ) and high risk women ( $e^b = 2.01$ ,  $p < .001$ ). These differences remained significant in the final model that included all covariates (exempting the unavailable data on discretionary overrides mentioned previously). In the final model moderate risk women were 34% more likely to be found guilty of misconduct than similarly situated low risk women ( $p < .05$ ), and high risk women were 219% more likely than low risk women ( $p < .001$ ). Once again, these models were replicated with alternative outcomes and for different contexts, but since women do not have separate security levels for housing it was necessary to separate women according to “restriction” levels. Women are assigned a “security” level before going to their initial placement and they can be categorized as minimum, medium, and maximum, but they are not directly comparable to the male facilities listed previously (e.g. a maximum security setting for women may differ from a maximum security setting for men) and the limited number of facilities for women means that the same prison administrators operate multiple levels of security for women rather than separate staff and organizational climates for the male facilities. These subsequent analyses are summarized in Table 27. The relationship between risk level and misconduct is not well exemplified in these results, but we do see an indication that high risk women are more likely to be found guilty of all types of misconduct in “minimum” restriction settings, but this relationship differs in other restriction settings. The difference between low and moderate risk women is only significant for predicting some outcomes in medium or maximum restriction environments.

**Table 26:** Results of binary logistic regression model for predicting any misconduct for women in all security levels (n = 5,756;  $e^b$  reported)

Predictors	Model 1	Model 2	Model 3	Model 4
ORAS-PIT Moderate Risk <sup>a</sup>	1.33**	1.34*	1.33*	1.34*
ORAS-PIT High Risk <sup>a</sup>	2.07***	2.28***	2.19***	2.19***
<i>Misconduct Predictors</i>				
Completed GED in prison	-	0.88	0.87	0.86
Recovery Services in prison	-	0.58***	-0.58***	0.58***
African American <sup>b</sup>	-	2.56***	2.50***	2.44***
Hispanic <sup>b</sup>	-	1.74	1.8	1.86
Other Race <sup>b</sup>	-	0.55	0.55	1.22
Non-serious mental illness <sup>c</sup>	-	1.33	1.22	1.12
Serious mental illness <sup>c</sup>	-	1.22*	1.18	1.11
Time at risk in placement	-	1.75***	1.74***	1.75***
Prior incarcerations	-	0.95	0.90*	0.90**
Sentence length	-	1.03**	1.03*	1.02
Misconduct before placement	-	3.26***	3.13***	3.17***
<i>Classification Criteria</i>				
Violent current offense	-	-	1.11**	1.10**
Prior adult felonies	-	-	1.16**	1.16**
Illegal drug use/offense	-	-	1.02	1.01
<i>Mandatory Criteria</i>				
Sex offender	-	-	-	0.51
Kidnapping	-	-	-	1.50
High notoriety	-	-	-	0.94
Current murder	-	-	-	1.69
Documented escape	-	-	-	1.05
-2 Log Likelihood	32,327.85	30,749.74	30,310.47	30,104.95
Model chi square	805.55***	2,383.67***	2,822.93***	3,028.45***
Nagelkerke R <sup>2</sup>	0.04	0.12	0.14	0.15

Reference groups : <sup>a</sup> ORAS-PIT Low Risk (screener and full PIT); <sup>b</sup> White; <sup>c</sup> no mental illness.

\* p < .05, \*\* p < .01, \*\*\* p < .001.

**Table 27:** Summary of ORAS-PIT risk levels in binary logistic regression models for predicting misconduct for different female security levels (change in odds ratio  $e^b$  reported)

	Women's Minimum <sup>a</sup>		Women's Medium <sup>a</sup>		Women's Maximum <sup>a</sup>	
	No controls	Full model <sup>b</sup>	No controls	Full model <sup>b</sup>	No controls	Full model <sup>b</sup>
<b>Any Misconduct</b>						
Moderate Risk <sup>c</sup>	1.2	1.26	1.44	2.05*	1.37	1.17
High Risk <sup>c</sup>	2.09***	2.40***	1.61	3.19**	1.67**	1.29
<b>Serious</b>						
Moderate Risk	1.18	1.26	1.89	2.27**	1.33	1.05
High Risk	1.97***	2.27***	1.63	3.48**	2.06***	1.65*
<b>Discretionary</b>						
Moderate Risk	1.15	1.21	0.58	0.68	1.63	1.27
High Risk	2.36***	2.72***	1.46	2.04	1.59*	1.04
<b>Violent</b>						
Moderate Risk	1.22	1.33	1.69	2.39*	1.53	1.22
High Risk	1.97***	2.36***	2.39*	2.94**	2.23***	1.77*
<b>Property</b>						
Moderate Risk	0.48	0.48	1.49	1.92	1.58	1.38
High Risk	2.62***	2.57**	1.33	1.58	2.72**	1.27
<b>Drug</b>						
Moderate Risk	1.84*	1.71	4.49	3.27	1.62	1.46
High Risk	2.49**	2.29**	16.56*	11.66*	1.56	0.94
<b>Other</b>						
Moderate Risk	1.14	1.21	0.97	1.28	1.38	1.02
High Risk	1.99***	2.36***	1.42	2.15	1.66*	1.25

<sup>a</sup> Women are housed in mixed security facilities with restrictions based on security level (Min = 1/2, Med = 3, Max = 4/5); <sup>b</sup>Full models control for all covariates listed in Table 26; <sup>c</sup> Reference group for all risk levels is ORAS-PIT Low Risk (screen and full PIT);

\* p < .05, \*\* p < .01, \*\*\* p < .001.

### **Propensity Score Matching (Q6)**

Propensity score matching was an alternative method that was used to examine the relationship between risk level and ORAS-PIT classification. The benefit of using this approach is that each subject is “matched” to another with similar characteristics except for their exposure to a treatment scenario; which in this case is differing security levels. Stata 15 (*psmatch2*) was used to match male prisoners according to their full ORAS-PIT score, GED and recovery services participation, race/ethnicity, mental health status, time at risk in placement, number of prior incarcerations, sentence length, misconduct in the reception center, ODRC classification criteria for men, and override criteria for men. The treatment variable in the first model was initial placement in “minimum vs. medium” security facilities. A caliper of 0.01 was used when matching one prisoner to their “nearest neighbor” in the dataset. The balance of covariates before and after matching are displayed in Tables 28 - 30. There were significant and substantial imbalances in covariates in the matching model separating inmates by minimum and mediums security facilities (Table 28), but only “time at risk” was imbalanced in the comparison of medium versus maximum security facilities (Table 29). There were no significant imbalances in the medium versus maximum security model (Table 30).

**Table 28:** Propensity score matching balancing properties (minimum vs. medium)

	Mean / Proportion		% Reduction in Bias	t-value
	Minimum	Medium		
ORAS-PIT score	17.65	17.65	0.00	0.01
GED completion	0.34	0.31	-6.10	-2.27
Recovery services participation	0.13	0.11	-4.50	-1.66
African American	0.42	0.47	9.20	3.41**
Hispanic	0.18	0.17	-1.00	-0.41
Other race	0.01	0.01	1.50	0.52
Non-serious mental illness	0.12	0.09	-7.10	-2.67**
Serious mental illness	0.05	0.06	3.40	1.37
Prior incarcerations	1.24	1.07	-9.90	-4.12***
Misconduct in reception	0.09	0.09	3.10	1.18
Adjustment risk	0.43	0.54	19.60	7.23***
Security level of last release	0.55	0.44	-14.90	-5.82***
Assault conviction history	0.50	0.53	5.60	2.04*
Prior release as STG member	0.03	0.02	-2.70	-1.65
Sex offender	0.07	0.06	-5.10	-1.95
Kidnapping	0.04	0.03	-1.20	-0.43
Murder	0.01	0.01	1.10	0.64
Felony caused death of L.E.	0.07	0.06	3.50	1.73
Former death row or life	0.00	0.00	0.00	0.00
Documented escape	0.01	0.00	3.20	1.51
Awaiting hearing F1/2	0.01	0.02	-8.80	-3.41
Prior prison adjustment	0.02	0.00	-1.60	-0.59
Time to earliest hearing	0.00	0.00	-6.60	-2.41
Violence threat	0.03	0.02	0.00	0.00
Notoriety of case	0.06	0.05	0.00	-0.13
Escape from supervision	0.04	0.03	-0.30	-0.46
Escape without details	0.00	0.00	-1.10	-1.60
Felony detainer	0.02	0.01	-4.10	-0.12
Time since prior incarceration	0.01	0.13	-0.40	-0.90
Sex offense consideration	0.03	0.03	-2.40	-2.84**
STG consideration	0.01	0.00	-6.00	-0.53
Sentence length	3.87	4.81	9.20	4.62***
Time at risk in initial placement	1.02	1.05	4.20	1.59

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

**Table 29:** Propensity score matching balancing properties (minimum vs. maximum)

	Mean / Proportion		% Reduction in Bias	t-value
	Minimum	Maximum		
ORAS-PIT score	16.47	17.61	-18.70	-1.37
GED completion	0.27	0.30	-6.50	-0.47
Recovery services participation	0.70	0.69	2.50	0.15
African American	0.31	0.29	4.10	0.31
Hispanic	0.01	0.01	0.00	0.00
Other race	0.00	0.00	0.00	0.00
Non-serious mental illness	0.03	0.03	0.00	0.00
Serious mental illness	0.06	0.10	-14.50	-1.04
Prior incarcerations	0.81	0.87	-3.80	-0.37
Misconduct in reception	0.13	0.13	0.00	0.00
Adjustment risk	0.18	0.28	-18.50	-1.53
Security level of last release	0.43	0.49	-8.20	-0.58
Assault conviction history	0.24	0.35	-20.70	-1.57
Prior release as STG member	0.00	0.00	0.00	0.00
Sex offender	0.03	0.02	4.20	0.45
Kidnapping	0.02	0.04	-12.90	-0.83
Murder	0.00	0.00	0.00	0.00
Felony caused death of L.E.	0.00	0.01	-10.00	-1.00
Former death row or life	0.00	0.00	0.00	0.00
Documented escape	0.00	0.00	0.00	0.00
Awaiting hearing F1/2	0.00	0.03	-26.90	-1.75
Prior prison adjustment	0.00	0.00	0.00	0.00
Time to earliest hearing	0.01	0.01	0.00	0.00
Violence threat	0.02	0.00	10.30	1.42
Notoriety of case	0.03	0.03	0.00	0.00
Escape from supervision	0.00	0.00	0.00	0.00
Escape without details	0.02	0.02	0.00	0.00
Felony detainer	0.00	0.00	0.00	0.00
Time since prior incarceration	0.01	0.03	-11.10	-1.01
Sex offense consideration	0.00	0.00	0.00	0.00
STG consideration	0.00	0.00	0.00	0.00
Sentence length	2.00	2.71	-6.40	-1.44
Time at risk in initial placement	0.58	0.75	-25.30	-2.65**

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

**Table 30:** Propensity score matching balancing properties (medium vs. maximum)

	Mean / Proportion		% Reduction in Bias	t-value
	Medium	Maximum		
ORAS-PIT score	18.66	19.83	19.00	1.39
GED completion	0.33	0.29	-8.90	-0.69
Recovery services participation	0.39	0.38	-2.10	-0.13
African American	0.48	0.45	-5.00	-0.39
Hispanic	0.00	0.02	13.40	1.42
Other race	0.00	0.00	0.00	0.00
Non-serious mental illness	0.06	0.12	21.40	1.79
Serious mental illness	0.06	0.08	9.00	0.75
Prior incarcerations	1.38	1.32	-4.00	-0.34
Misconduct in reception	0.17	0.22	14.50	1.14
Adjustment risk	0.43	0.41	-3.30	-0.26
Security level of last release	1.08	1.14	6.40	0.48
Assault conviction history	0.55	0.48	-13.30	-1.03
Prior release as STG member	0.41	0.36	-6.80	-0.49
Sex offender	0.04	0.05	3.70	0.31
Kidnapping	0.02	0.04	8.90	0.72
Murder	0.00	0.00	0.00	0.00
Felony caused death of L.E.	0.01	0.02	4.50	0.58
Former death row or life	0.00	0.00	0.00	0.00
Documented escape	0.00	0.00	0.00	0.00
Awaiting hearing F1/2	0.00	0.02	19.40	1.75
Prior prison adjustment	0.00	0.00	0.00	0.00
Time to earliest hearing	0.14	0.13	-2.20	-0.19
Violence threat	0.03	0.05	6.90	0.64
Notoriety of case	0.09	0.05	-13.00	-1.26
Escape from supervision	0.01	0.00	-7.80	0.00
Escape without details	0.02	0.02	0.00	0.00
Felony detainer	0.01	0.01	0.00	0.00
Time since prior incarceration	0.01	0.05	21.60	1.92
Sex offense consideration	0.04	0.02	-12.00	-0.72
STG consideration	0.03	0.05	7.20	0.64
Sentence length	4.68	4.26	-3.00	-0.36
Time at risk in initial placement	0.82	0.87	6.90	0.57

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

Table 31 shows the final comparison of prison security levels after matching according to the covariates in Tables 29-31. Some of these effects are significant, indicating that security level (or unmeasured confounding factors) are associated with misconduct beyond the matching criteria. However, most of these significant differences appear in the comparison of minimum versus medium security inmates. There were no significant differences in the comparisons of any misconduct outcome between inmates in minimum versus maximum security settings, and only one significant difference was found between medium and maximum security inmates (discretionary misconduct,  $t = -2.20$ ,  $p < .001$ ).

### ***Summary of Q5 and Q6***

- The ORAS-PIT levels were found to be significant predictors of all types of misconduct in the binary logistic regression models with incremental increases in the likelihood of misconduct as risk levels increased.
- When the sample was broken into security levels by sex there were some comparisons where the ORAS-PIT levels were not significant depending on the sample, setting, and outcome. This implies that inmates with different risk levels behave differently within the same shared custodial environment, but sometimes the difference is not significant.
- The propensity score matching analysis revealed that similarly situated inmates behave differently in different security levels after matching on other plausible causes of their behavior.
- Generally speaking, prisoners in medium security facilities were found guilty of misconduct more often than inmates they were matched to in minimum security facilities, but maximum security inmates were not significantly more likely to be found guilty of misconduct than minimum or medium security inmates.



**Table 31:** Prevalence of misconduct for inmates in one security level versus another after matching on other covariates.

	Mean/proportion				
	Lower Security	Higher Security	Raw difference	% Reduction in Bias	t-value
<b>Minimum vs. Medium</b>					
Any misconduct	0.33	0.37	0.04	8.6	3.24**
Serious misconduct	0.25	0.28	0.03	7.0	2.65**
Discretionary	0.18	0.22	0.04	10.0	3.85***
Violent misconduct	0.17	0.22	0.04	10.2	3.90***
Property misconduct	0.07	0.08	0.01	4.90	1.86
Drug-related	0.11	0.10	-0.01	-4.10	-1.57
Other misconduct	0.23	0.27	0.05	10.3	3.91***
<b>Minimum vs. Maximum</b>					
Any misconduct	0.24	0.16	-0.08	-17.2	-1.42
Serious misconduct	0.21	0.15	-0.06	-13.7	-1.10
Discretionary	0.06	0.05	-0.01	-2.7	-0.31
Violent misconduct	0.13	0.13	0.00	0.0	0.00
Property misconduct	0.04	0.03	-0.01	-4.5	-0.38
Drug-related	0.10	0.06	-0.04	-13.3	-1.04
Other misconduct	0.14	0.11	-0.03	-7.0	-0.64
<b>Medium vs. Maximum</b>					
Any misconduct	0.42	0.36	-0.06	-11.8	-0.92
Serious misconduct	0.32	0.31	-0.01	-1.8	-0.14
Discretionary	0.27	0.16	-0.12	-28.8	-2.20***
Violent misconduct	0.26	0.27	0.01	1.9	0.14
Property misconduct	0.10	0.07	-0.03	-13.6	-0.93
Drug-related	0.08	0.12	0.03	11.1	0.86
Other misconduct	0.33	0.28	-0.05	-10.8	-0.83

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

### **Multi-level Models (Q7)**

Two additional approaches were taken to help explain the relationship between ORAS-PIT risk levels and misconduct accounting for the potentially confounding influences of different security levels. The first method was to begin a binary logistic regression model with environmental factors, then to include individual-level factors in a step-wise procedure to determine if the environmental factors retained their significance. The second approach was to use Hierarchical Linear Modelling to control for the level-1 effects of individual characteristics to see if there were any significant level-2 effects remaining. These procedures could not be conducted for women because their housing options are too limited to measure and control for the effects of security level or crowding. Only male prisoners are included in these analyses.

The results of the first method are presented in Table 32. This binary logistic regression model began with only two independent variables: the security level of the facility (minimum, medium, and maximum) and the ratio of average daily prison population to the prison's rated capacity (a measure of crowding). In the first model, both factors were significant predictors of any misconduct. An increase in security level (from minimum to medium or medium to maximum) was associated with a change in the relative odds of misconduct of 1.47 ( $p < .001$ ). A one-unit increase in the ratio of population to capacity (corresponding to an overcrowding percentage of 100%) was associated with a change in the odds ratio of 1.26 ( $p < .001$ ).

**Table 32:** Results of binary logistic regression model for predicting any misconduct for men accounting for security level (n = 25,758),  $e^b$  reported

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>
<i>Second Level Factors</i>				
Security Level (min, med, max)	1.47***	1.35***	1.25***	0.98
Population: capacity	1.26***	1.28***	1.16**	1.14*
<i>Individual Level Factors</i>				
ORAS-PIT Moderate Risk <sup>a</sup>	-	1.52***	1.58***	1.55***
ORAS-PIT High Risk <sup>a</sup>	-	2.29***	2.77***	2.44***
ORAS-PIT Very High Risk <sup>a</sup>	-	3.10***	4.14***	3.50***
<i>Misconduct Predictors</i>				
Completed GED in prison	-	-	0.97	0.94*
Recovery Services in prison	-	-	0.62***	0.64***
African American <sup>b</sup>	-	-	1.29***	1.22***
Hispanic <sup>b</sup>	-	-	1.34**	1.29**
Other Race <sup>b</sup>	-	-	1.12	1.14
Non-serious mental illness <sup>c</sup>	-	-	1.15**	1.16**
Serious mental illness <sup>c</sup>	-	-	1.25***	1.16**
Time at risk in placement	-	-	1.90***	1.84***
Prior incarcerations	-	-	0.91***	0.87***
Sentence length	-	-	1.01***	1.01***
Misconduct before placement	-	-	1.17**	1.18**
<i>Classification Criteria</i>				
Adjustment risk	-	-	-	1.52***
Prior security level	-	-	-	1.45***
Assault conviction	-	-	-	0.91**
History of STG	-	-	-	1.14*
<i>Mandatory Override Criteria</i>				
Sex offender	-	-	-	0.67***
Kidnapping	-	-	-	1.03
Current murder	-	-	-	0.65**
Death of law enforcement	-	-	-	2.79
Former death row or life	-	-	-	1.51
Documented escape	-	-	-	0.95
Awaiting hearing on F1/2	-	-	-	0.82

*Discretionary Override Criteria*

Prior prison adjustment	-	-	-	1.16
Time to earliest hearing	-	-	-	0.82**
Violence threat	-	-	-	1.08
Notoriety of case	-	-	-	1.06
Escape from supervision	-	-	-	0.79
Escape w/o details	-	-	-	1.30*
Felony detainer	-	-	-	0.85
Time since prior	-	-	-	0.95
Sex offense consideration	-	-	-	0.54
Security Threat Group	-	-	-	0.94
Behavioral criteria	-	-	-	0.45
<hr/>				
-2 Log Likelihood	32,073.11	31,356.67	29,838.66	29,501.89
Model chi square	183.565***	900.01***	2,418.01***	2754.78***
Nagelkerke R <sup>2</sup>	0.01	0.05	0.13	0.14

Reference groups: <sup>a</sup> ORAS-PIT Low Risk (screener and full PIT); <sup>b</sup> White; <sup>c</sup> no mental illness.

\* p < .05, \*\* p < .01, \*\*\* p < .001.

These environmental factors retained their statistical significance after the ORAS-PIT risk levels were included in the model, but after the entire host of covariates were controlled security level no longer had a significant effect. *Population:capacity* retained a smaller significant increase associated with more crowding ( $e^b = 1.14$ ,  $p < .05$ ). Meanwhile, the ORAS-PIT risk levels retained their significance and their relative impact on misconduct was similar to that found in the logistic regression models that did not include environmental effects. This procedure was replicated for each type of misconduct and the results are summarized in table 33. A noteworthy finding is that each ORAS-PIT risk level retain their significant difference from low risk inmates in all models, but security level effects lose their significance in all models.

**Table 33:** Summary of environmental factors and ORAS-PIT risk levels in binary logistic regression models for predicting misconduct

	<u>Second Level Factors Only</u>			<u>Full Model<sup>a</sup></u>		
	<i>b</i>	s.e.	<i>e<sup>b</sup></i>	<i>b</i>	s.e.	<i>e<sup>b</sup></i>
<b>Any Misconduct</b>						
Security Level	0.39	0.03	1.47***	-0.02	0.04	0.98
Population: capacity	0.23	0.05	1.26***	0.13	0.05	1.14*
Moderate Risk <sup>b</sup>	-	-	-	0.44	0.04	1.55***
High Risk <sup>b</sup>	-	-	-	0.89	0.04	2.44***
Very High Risk <sup>b</sup>	-	-	-	1.25	0.06	3.50***
<b>Serious Misconduct</b>						
Security Level	0.39	0.03	1.47***	-0.07	0.04	0.93
Population: capacity	0.23	0.05	1.26***	0.14	0.06	1.15*
Moderate Risk	-	-	-	0.05	0.05	1.64***
High Risk	-	-	-	0.98	0.05	2.65***
Very High Risk	-	-	-	1.36	0.06	3.90***
<b>Discretionary</b>						
Security Level	0.36	0.03	1.43***	-0.02	0.04	0.99
Population: capacity	0.27	0.06	1.30***	0.16	0.06	1.18*
Moderate Risk	-	-	-	0.39	0.05	1.48***
High Risk	-	-	-	0.80	0.05	2.23***
Very High Risk	-	-	-	1.14	0.07	3.12***
<b>Violent Misconduct</b>						
Security Level	0.55	0.03	1.74***	0.06	0.05	1.06
Population: capacity	0.41	0.06	1.50***	0.29	0.07	1.34***
Moderate Risk	-	-	-	0.40	0.06	1.49***
High Risk	-	-	-	0.94	0.05	2.55***
Very High Risk	-	-	-	1.39	0.07	4.02***
<b>Property Misconduct</b>						
Security Level	0.2	0.05	1.22***	-0.12	0.07	0.89
Population: capacity	0.15	0.09	1.16	0.06	0.10	1.06
Moderate Risk	-	-	-	0.38	0.08	1.47***
High Risk	-	-	-	0.87	0.80	2.37***
Very High Risk	-	-	-	1.20	0.10	3.33***
<b>Drug Misconduct</b>						
Security Level	-0.12	0.05	0.89*	-0.39	0.06	0.68***
Population: capacity	-0.20	0.08	0.82**	-0.22	0.08	0.80**
Moderate Risk <sup>b</sup>	-	-	-	0.51	0.07	1.66***

High Risk <sup>b</sup>	-	-	-	0.87	0.07	2.39***
Very High Risk <sup>b</sup>	-	-	-	1.06	0.09	2.88***
<b>Other Misconduct</b>						
Security Level	0.41	0.03	1.51***	-0.01	0.04	0.99
Population: capacity	0.31	0.06	1.36***	0.20	0.06	1.22**
Moderate Risk	-	-	-	0.38	0.05	1.46***
High Risk	-	-	-	0.85	0.05	2.33***
Very High Risk	-	-	-	1.18	0.06	3.27***

<sup>a</sup>Full models control for all covariates listed in Table 32.

<sup>b</sup> Reference group for all risk levels is ORAS-PIT Low Risk (screen and full PIT).

\* p < .05, \*\* p < .01, \*\*\* p < .001.

The second approach was to conduct a multi-level model measuring the significant differences between prison environments after controlling for the effects of individual-level factors. HLM 8.0 was used to conduct this analysis (Table 34). The level-2 variables were the same as those included in the pooled analysis mentioned above. The individual-level factors were the same as well. The model found that the ORAS-PIT risk levels were significantly associated with incremental increases in the risk for misconduct (p < .001), but the second level factors were not. Again, this model was replicated for each outcome type, and the results were consistent with the model predicting any type of misconduct (Table 35). Individual level factors remained significant while environmental factors were not significant.

**Table 34.** Hierarchical regression model predicting any misconduct for men housed in minimum, medium, or maximum security facilities (n=25,758)

	$\beta$	s.e. $\beta$	$e^b$	95% CI
Intercept	-1.57	0.08		
<b>Level-2 variables</b>				
Security Level (min, med, max)	-0.13	0.10	0.88	0.70 - 1.09
Population: capacity	0.15	0.20	1.16	0.76 - 1.78
<b>Level-1 variables</b>				
ORAS-PIT Moderate Risk <sup>a</sup>	0.40	0.04	1.49***	1.37 - 1.63
ORAS-PIT High Risk <sup>a</sup>	0.87	0.06	2.38***	2.19 - 2.58
ORAS-PIT Very High Risk <sup>a</sup>	1.21	0.05	3.36***	3.00 - 3.76
Completed GED in prison	-0.06	0.03	0.94***	0.88 - 0.99
Recovery Services in prison	-0.29	0.05	0.68***	0.62 - 0.74
African American <sup>b</sup>	0.21	0.03	1.23***	1.16 - 1.31
Hispanic <sup>b</sup>	0.27	0.10	1.32**	1.09 - 1.59
Other Race <sup>b</sup>	0.16	0.18	1.17	0.83 - 1.66
Non-serious mental illness <sup>c</sup>	0.18	0.05	1.20***	1.10 - 1.31
Serious mental illness <sup>c</sup>	0.22	0.06	1.24***	1.11 - 1.39
Time at risk in placement	0.60	0.02	1.82***	1.74 - 1.89
Prior incarcerations	-0.13	0.01	0.88***	0.86 - 0.90
Sentence length	0.01	0.00	1.01***	1.01 - 1.02
Misconduct before placement	0.17	0.05	1.18***	1.07 - 1.31
Adjustment risk	0.38	0.03	1.46***	1.37 - 1.55
Prior security level	0.33	0.03	1.39***	1.32 - 1.47
Assault conviction	-0.12	0.03	0.89***	0.84 - 0.94
History of STG	0.15	0.05	1.16**	1.04 - 1.29
Sex offender	-0.38	0.06	0.68***	0.60 - 0.77
Current murder	-0.47	0.13	0.63***	0.49 - 0.81
Time to earliest hearing	-0.17	0.07	0.85*	0.74 - 0.98
Escape w/o details	-0.22	0.13	0.80	0.62 - 1.04
Sex offense consideration	-0.63	0.10	0.53***	0.44 - 0.65
Reliability Estimate	0.9			
Random Effect	0.27	0.07	df=18	$\chi^2 294.91$ ***

Note: This data does not have a moderate or large number of level 2 units so robust standard errors are not reported.

<sup>a</sup> Men housed in medical or reception centers were excluded.

\*  $p \leq 0.05$ , \*\*  $p \leq 0.01$ , \*\*\*  $p \leq 0.001$ .

**Table 35.** Summarized results of key variables in hierarchical regression models for men housed in minimum, medium, or maximum security facilities<sup>a</sup> (n=25,758)

	$\gamma/\beta$	s.e. $_{\gamma}$	$e^b$	95% CI
<b>Serious Misconduct</b>				
Security Level	-0.10	0.09	0.90	0.75 - 1.09
Population: capacity	0.16	0.17	1.17	0.83 - 1.67
Moderate Risk	0.46	0.05	1.59***	1.44 - 1.75
High Risk	0.96	0.05	2.61***	2.38 - 2.86
Very High Risk	1.33	0.06	3.78***	3.34 - 4.28
<b>Discretionary</b>				
Security Level	-0.20	0.12	0.82	0.63 - 1.06
Population: capacity	0.27	0.24	1.31	0.79 - 2.18
Moderate Risk	0.36	0.05	1.43***	1.29 - 1.58
High Risk	0.78	0.05	2.18***	1.98 - 2.41
Very High Risk	1.10	0.07	3.02***	2.65 - 3.44
<b>Violent Misconduct</b>				
Security Level	-0.01	0.09	0.99	0.83 - 1.19
Population: capacity	0.28	0.16	1.32	0.94 - 1.84
Moderate Risk	0.38	0.06	1.46***	1.31 - 1.63
High Risk	0.92	0.05	2.50***	2.25 - 2.78
Very High Risk	1.36	0.07	3.89***	3.40 - 4.46
<b>Property Misconduct</b>				
Security Level	-0.18	0.16	0.83	0.60 - 1.16
Population: capacity	0.18	0.29	1.20	0.65 - 2.22
Moderate Risk	0.37	0.08	1.33***	1.22 - 1.70
High Risk	0.86	0.08	2.35***	2.01 - 2.75
Very High Risk	1.19	0.10	3.30***	2.70 - 4.03
<b>Drug Misconduct</b>				
Security Level	-0.34	0.16	0.71	0.51 - 0.99
Population: capacity	-0.14	0.30	0.87	0.46 - 1.65
Moderate Risk <sup>b</sup>	0.46	0.07	1.60***	1.40 - 1.82
High Risk <sup>b</sup>	0.85	0.06	2.34***	2.06 - 2.65
Very High Risk <sup>b</sup>	1.02	0.09	2.78***	2.35 - 3.29
<b>Other Misconduct</b>				
Security Level	-0.09	0.12	0.91	0.71 - 1.18
Population: capacity	0.20	0.24	1.22	0.74 - 2.01
Moderate Risk	0.34	0.05	1.41***	1.28 - 1.55
High Risk	0.82	0.05	2.27***	2.07 - 2.49
Very High Risk	1.14	0.06	3.13***	2.77 - 3.54

\*  $p \leq 0.05$ , \*\*  $p \leq 0.01$ , \*\*\*  $p \leq 0.001$ .



### ***Summary of Q7***

- The binary logistic regression models predicting misconduct began with significant environmental factors (security level and crowding), but security level was no longer significant after controlling for the individual characteristics of the inmates in those facilities.
- The HLM analyses revealed no significant differences in rates of misconduct across security levels or prisons with varying level of crowding after controlling for the individual characteristics of the prisoners housed in those facilities.

### **Hybrid Tool Development for Men (Q8)**

At this stage of the dissertation an attempt was made to improve the ORAS-PIT's ability to predict misconduct by creating a hybrid assessment tool using the most predictive factors seen throughout the previous analyses. While most of these factors had positive correlations with misconduct in one setting or another, few of them were strong enough predictors to be considered viable candidates for improving the PIT. There was also a concern that too many individual variables would "water down" the predictive power of the items already contained in the ORAS-PIT. The first step in choosing the best items was to compare the predictive validity statistics of the ORAS-PIT domains to the additional measures that could potentially be included in a hybrid tool. Table 36 lists the AUC values for each domain of the male PIT and the other factors considered for inclusion in the hybrid tool. These are separate AUC estimation for each factor that do not control for any other influences. AUC scores that were significantly different from 0.50 are flagged. Significant values less than 0.50 indicate that the ratio of true positives to

false positives is “worse than a coin flip” because the item is likely to be a protective factor rather than a risk factor that helps to predict misconduct.

The PIT measure of “age at current admission” had an AUC of 0.58 ( $p < .001$ ) while the ODRC Bureau of Classification measure of “age at current admission” had an AUC of 0.64. In the PIT, prisoners between the ages of 18 and 23 are given a score of ‘1’ while older prisoners are given a ‘0’. The ODRC criteria gives a score of ‘2’ for any inmate 25 years or younger, a ‘1’ to any between ages 26 and 34, and a ‘0’ to any older than 34. The ODRC measure is preferable because of its higher AUC score, so it should replace the ORAS-PIT domain for age.

The ODRC classification measure for “adjustment risk” is based on the offender’s conviction offense type. The ORAS training manual discourages the use of risk factors based on conviction types, partially due to the tendency for practitioners to override low risk sex offenders. However, the current method of classification in the ODRC uses this factor and it has a relatively high AUC value for a single item. It is a dichotomous measure with ‘0’ indicating no adjustment risk and ‘1’ indicating high adjustment risk.

The ORAS-PIT domains for criminal history, school behavior/employment, family/social support, substance abuse/mental health, and criminal lifestyle can all be retained in the tool due to their wide coverage of areas related to the prisoner’s life, ranging from their conventional behavior prior to incarceration to their attitudes and beliefs toward violence. However, these categories can be supplemented with other available measures that serve as “weights” to the categories most predictive of misconduct. For example, the ORAS-PIT asks whether someone is a member of a gang and their answer is voluntary. The ODRC keeps official records on all known STG members and identifies their role in the gang. Some are identified as passive, active, or disruptive gang members. The ODRC does not use these “current” STG measures in the initial

classification, but they use a related historical measure (prior release as active or disruptive STG member). This historical measurement is not ideal because the comparison of AUC scores displayed in Table 36 shows that passive STG members have a greater association with misconduct than either active or disruptive STG members, although the difference is not significant, and inmates who are *currently* in a gang are more dangerous than those who were listed as gang members during a prior incarceration. Including all three STG measures with the same weight produced the greatest increase in AUC. Therefore, an inmate can receive a '1' in this category if they are a passive, active, *or* disruptive STG member in addition to the ORAS-PIT domain on criminal lifestyle.

One of the strongest and most consistent predictors of misconduct in this dissertation has been "sentence length." Whether this is because longer sentences offer more opportunities to offend or because more dangerous offenders receive longer sentences is unknown. It does capture the effects of "time served" prior to misconduct in this sample of inmates which is potentially inflating its value for predicting the future (a limitation of this approach), but the extent of this variable reaches beyond the time frame in this study window. For example, an inmate might spend two years in their initial placement and have more time to commit misconduct, but they can still receive a higher risk score depending on how much longer they have left to serve. The most efficient breakdown of sentence years to assess risk was '0' for less than one year to serve, '1' for more than one year to serve, '2' for more than two years, '3' for more than five years, '4' for more than ten years, '5' for more than 15 years, '6' for more than 20 years, and '7' for more than 25 years. These increasing values demonstrate that this measure of risk extends beyond the study window for the prisoners in this data and therefore it is still useful even if it is potentially confounded by "time served."

**Table 36:** Comparison of bivariate predictive validity of separate domains/items for male inmates predicting any misconduct (only those with full ORAS-PIT assessments, n = 24,062)

<b>ORAS-PIT Domains</b>	<b>AUC</b>	<b>s.e.</b>	<b>95% CI</b>
Age at current admission	0.58***	0.00	0.57 - 0.59
Criminal History	0.55***	0.00	0.55 - 0.56
School Behavior and Employment	0.56***	0.00	0.55 - 0.57
Family and Social Support	0.52***	0.00	0.51 - 0.53
Substance Abuse and Mental Health	0.53***	0.00	0.53 - 0.54
Criminal Lifestyle	0.59***	0.00	0.58 - 0.60
<b>Additional Measures</b>			
Age at current admission	0.64***	0.00	0.63 - 0.65
Adjustment risk	0.58***	0.00	0.57 - 0.59
Security level of last release	0.54***	0.00	0.54 - 0.55
Assault conviction history	0.51**	0.00	0.51 - 0.52
Prior release as STG member	0.51	0.00	0.50 - 0.52
Sex offender	0.49**	0.00	0.48 - 0.49
Kidnapping	0.50	0.00	0.48 - 0.51
High notoriety	0.50	0.00	0.49 - 0.51
Murder	0.50	0.00	0.50 - 0.51
Felony caused death of law enforcement	0.50	0.00	0.49 - 0.51
Former death row or life sentence	0.50	0.00	0.49 - 0.51
Documented escape from confinement	0.50	0.00	0.49 - 0.51
Awaiting hearing F1/2	0.50	0.00	0.49 - 0.51
Prior prison adjustment	0.51	0.00	0.50 - 0.51
Time to earliest hearing	0.50	0.00	0.50 - 0.51
Violence threat	0.50	0.00	0.50 - 0.51
Notoriety of case	0.50	0.00	0.50 - 0.51
Escape from supervision	0.50	0.00	0.49 - 0.51
Escape without details	0.50	0.00	0.49 - 0.51
Felony detainer	0.50	0.00	0.49 - 0.51
Time since prior incarceration	0.50	0.00	0.49 - 0.51
Sex offense consideration	0.49*	0.00	0.48 - 0.51
Security threat group consideration	0.50	0.00	0.49 - 0.51
Behavioral criteria	0.50	0.00	0.49 - 0.51
Number of prior incarcerations	0.49**	0.00	0.48 - 0.50
Disruptive STG	0.52***	0.00	0.51 - 0.53
Active STG	0.53***	0.00	0.52 - 0.54
Passive STG	0.55***	0.00	0.54 - 0.56
Non-serious mental illness	0.51*	0.00	0.50 - 0.52
Serious mental illness	0.51	0.00	0.50 - 0.52
Time left to serve (sentence length)	0.64***	0.00	0.63 - 0.65
Misconduct in reception center	0.51**	0.00	0.50 - 0.52
TCU Drug Screen (0-11)	0.58	0.09	0.41 - 0.75

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5

Regardless, the ORAS-PIT hybrid tool can harness the power of the sentence length measure to improve prediction. This measure captures the risk associated with some of the other additional measures (such as murder conviction) because inmates with longer sentences will have their risk represented in sentence length. It should also be noted that Ohio law does permit inmates to serve state prison sentences for terms less than one year, and many others are serving partial sentences after already serving some portion of their term before being transferred to the ODRC.

The Modified PIT for men therefore includes the following criteria:

- 1- Age at commitment \_\_\_\_\_
  - > 34 = 0
  - 26-34 = 1
  - < 25 = 2
- 2- Most serious current conviction offense \_\_\_\_\_
  - Low adjustment risk offenses = 0
  - High adjustment risk offenses = 1
- 3- ORAS-PIT Criminal History Domain \_\_\_\_\_
- 4- ORAS-PIT School Behavior and Employment Domain \_\_\_\_\_
- 5- ORAS-PIT Family and Social Support Domain \_\_\_\_\_
- 6- ORAS-PIT Substance Abuse and Mental Health Domain \_\_\_\_\_
- 7- ORAS-PIT Criminal Lifestyle Domain \_\_\_\_\_
- 8- Security Threat Group Membership \_\_\_\_\_
  - None = 0
  - Active, Passive, or Disruptive = 1

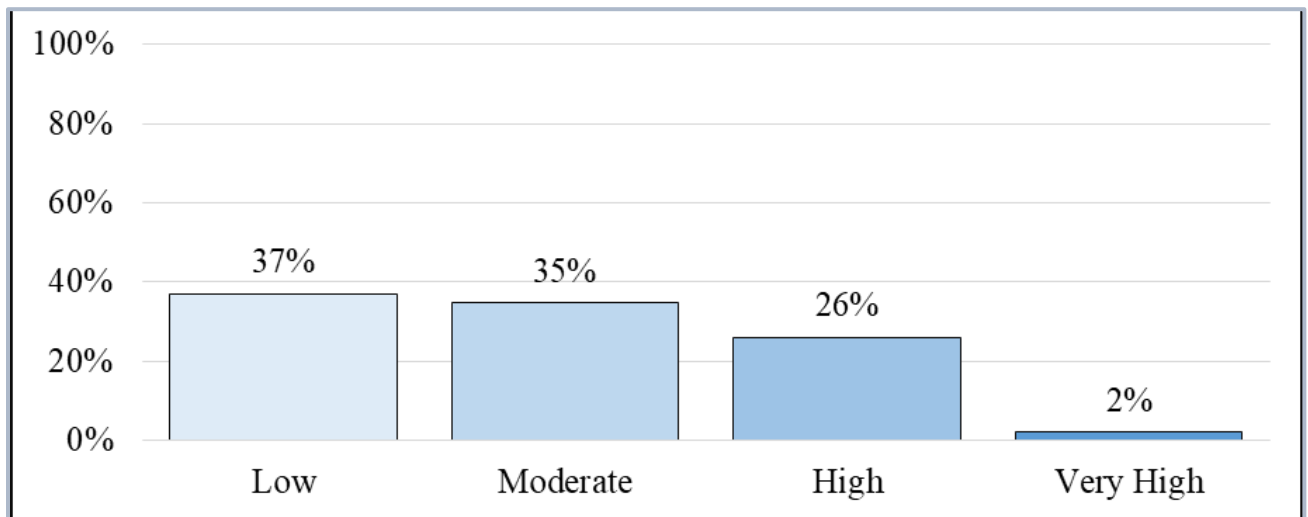
## 9- Sentence Length

<1 year = 0	>10 years = 4
>1 year = 1	>15 years = 5
>2 years = 2	>20 years = 6
>5 years = 3	>25 years = 7

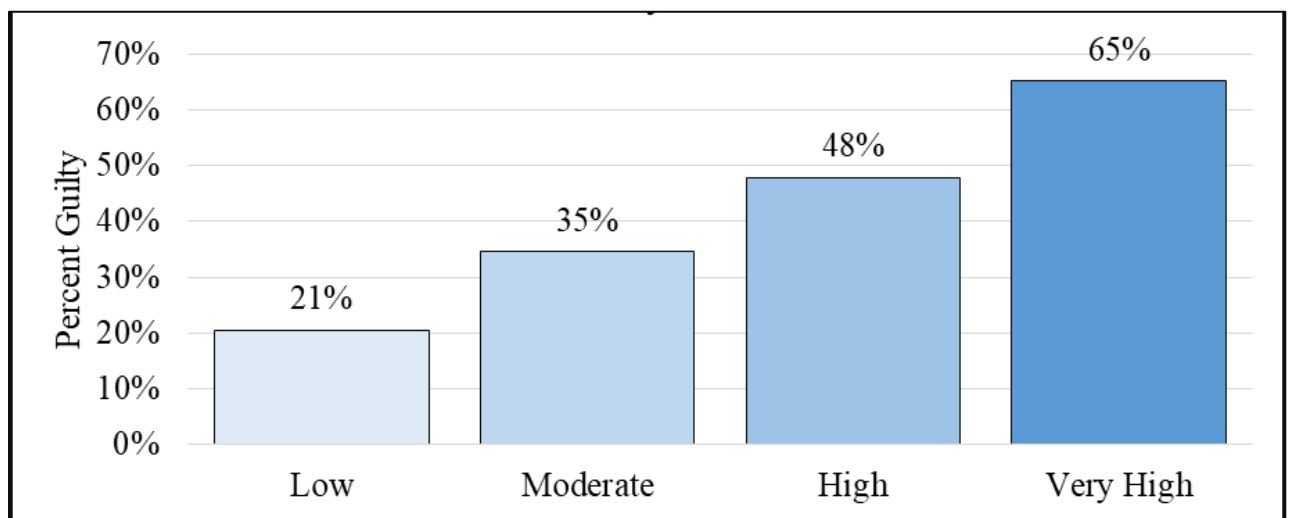
**Total** \_\_\_\_\_

The potential range of scores for this Modified PIT for men is 0 – 48. The optimal cutoff scores for classifying inmates according to risk level is 0 – 19 for “low risk”, 20 – 25 for “moderate risk”, 25-34 for “high risk”, and 35 or greater for “very high risk”. These cutoff scores were determined through repeated trials of different scores for each level. This scheme was found to be optimal because the increase in risk prediction was monotonic (increases in risk level corresponded with increasing percentage of prisoners who were found guilty of misconduct in each group), the scoring system had greater differences in misconduct rates between groups than the ORAS-PIT, and it was associated with a greater misconduct rate for the very high risk group than the ORAS-PIT. Figure 22 shows the prevalence of risk categories among male prisoners in this sample. Figure 23 shows the staircase feature that indicates basic discrimination among groups in terms of the percentage of each group who commit any misconduct. Figure 24 is a comparison of the ROC curve for the original ORAS-PIT total score and the Modified PIT total score. Table 37 specifies the exact AUC for both tools for each type of misconduct, as well as a test for statistically significant improvements in AUC. It can be seen that while the Modified PIT does not reach the industry standard of 0.71 for “excellent” it is better than the original ORAS-PIT and still meets the criteria for being a “good” prediction method. A major concern of this dissertation is the influence of environment on the predictive validity of risk assessment tools. To address this concern a ROC curve was produced for each security level. The results are presented in Table 38.

**Figure 22:** Prevalence of modified PIT levels among men



**Figure 23:** Modified PIT validity for men (outcome: any misconduct)

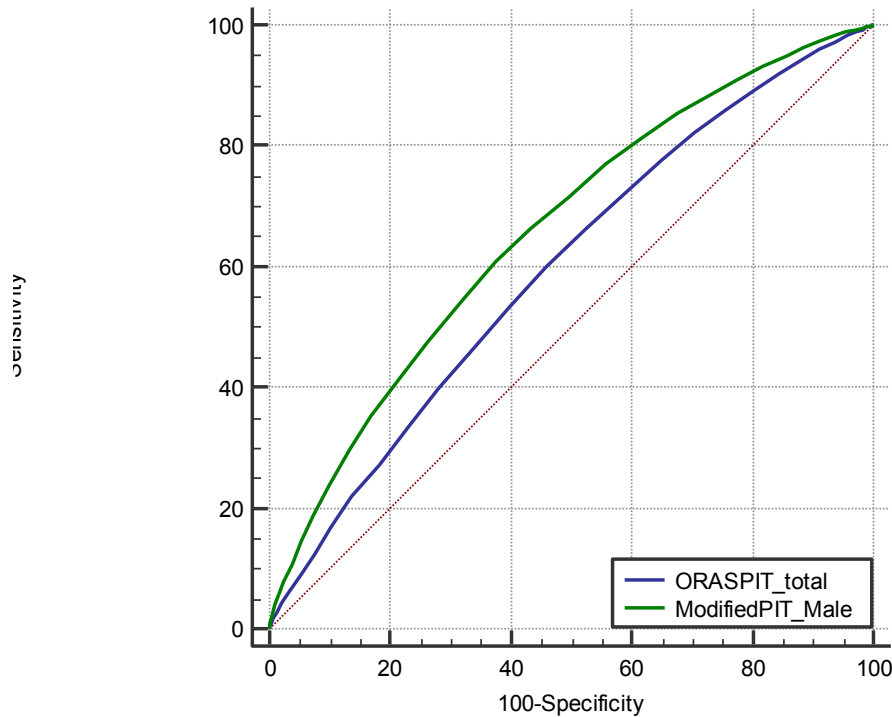


**Table 37:** Comparison of ROC curves for original ORAS-PIT for men and the modified PIT (n = 24,062)

	Original ORAS-PIT			Modified PIT			$\Delta$
	AUC	s.e.	95% CI	AUC	s.e.	95% CI	
Any							
Misconduct	0.60	0.00	0.59 - 0.60	0.66	0.00	0.65 - 0.67	0.06***
Serious	0.60	0.00	0.59 - 0.60	0.66	0.00	0.65 - 0.67	0.06***
Discretionary	0.59	0.00	0.58 - 0.60	0.65	0.00	0.64 - 0.66	0.06***
Violent	0.61	0.00	0.60 - 0.62	0.67	0.00	0.67 - 0.68	0.06***
Property	0.58	0.01	0.58 - 0.59	0.64	0.01	0.63 - 0.64	0.06***
Drug	0.56	0.01	0.55 - 0.56	0.61	0.01	0.60 - 0.61	0.05***
Other	0.60	0.01	0.60 - 0.61	0.66	0.01	0.66 - 0.67	0.06***

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

**Figure 24:** Comparison of ROC curves for original ORAS-PIT and Modified PIT for men predicting any misconduct



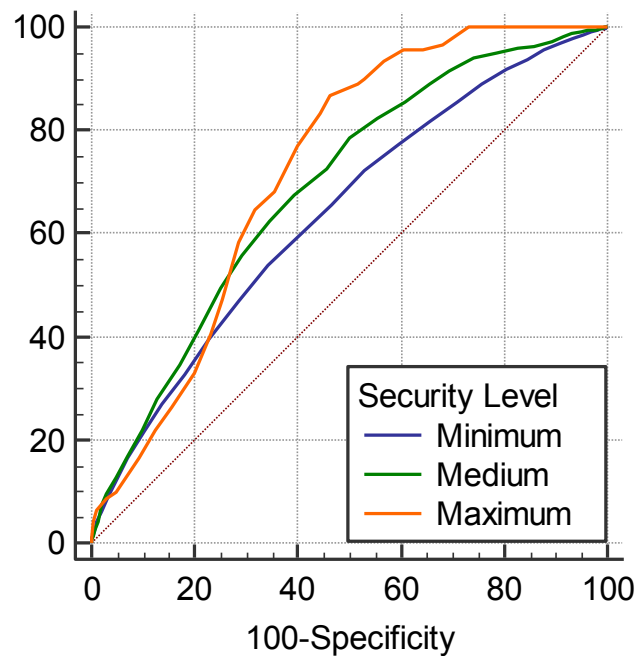


**Table 38:** Comparison of ROC curves for the Modified PIT in male security levels (n = 24,062)

	Minimum		Medium		Maximum		Min vs Med	Min vs Max	Med vs Max
	AUC	s.e.	AUC	s.e.	AUC	s.e.	$\Delta$	$\Delta$	$\Delta$
Any									
Misconduct	0.63	0.00	0.69	0.01	0.72	0.03	0.05***	0.08***	0.03
Serious	0.64	0.01	0.69	0.01	0.74	0.03	0.05***	0.10**	0.05
Discretionary	0.64	0.01	0.66	0.01	0.65	0.04	0.03*	0.01	0.01
Violent	0.65	0.01	0.70	0.01	0.72	0.03	0.04***	0.07***	0.03
Property	0.64	0.01	0.63	0.01	0.73	0.08	0.00	0.09	0.09
Drug	0.60	0.01	0.62	0.01	0.63	0.04	0.02	0.03	0.01
Other	0.64	0.01	0.68	0.01	0.71	0.03	0.04***	0.07***	0.03

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

**Figure 25:** Comparison of ROC curves of the Modified PIT for predicting any misconduct in different male security levels



This analysis shows that the predictive validity of the Modified PIT varies between inmates housed in different security levels, and also varies according to the type of outcome being predicted. The tool performs best when it is predicting serious misconduct in maximum security settings (AUC = 0.74,  $p < .001$ ), and it has the worst prediction for drug-related misconduct in minimum security settings (AUC = 0.60,  $p < .001$ ). The differences between minimum vs. medium security levels and minimum vs. maximum security levels are significant when comparing the AUC for any misconduct ( $p < .001$ ), serious misconduct ( $p < .01$ ), violent misconduct ( $p < .001$ ), and other misconduct ( $p < .001$ ), as well as predicting discretionary misconduct between minimum and medium security prisons ( $p < .05$ ). However, the tool is not a significantly better predictor for any outcome when comparing its AUC between medium and maximum security settings. The length of this tool may seem cost/time prohibitive, but the ORAS domains and other data are already collected by the ODRC. They can use available records to compute risk scores for each person currently incarcerated.

### **Hybrid Tool Development for Women (Q8)**

The same procedure was conducted for women, but once again the lack of data on discretionary override criteria limited the analysis to fewer potential risk factors that could be included in the hybrid tool. The full comparison of AUC scores for each ORAS-PIT domain and the available correlates of misconduct found very few items that could contribute to improving the predictive validity of the PIT. These statistics are presented in Table 39. The only criteria with significant AUC values were the ORAS-PIT domains for criminal history and criminal lifestyle, violent current admission offense, age at current admission, sentence length, and misconduct in the reception center. These significant categories were combined to develop a Modified PIT for women, but “misconduct in the reception center” was dropped due to a small

contribution to the final AUC value. Sentence length was operationalized the same for women as for men with identical cutoff scores. Women who score 9 or less with all of these criteria are considered low risk, those who score more than 9 but less than 15 were moderate, and those who score 15 or more are considered high risk.

A large number of women were classified as low risk using this criteria, but the same is true of the original ORAS-PIT criteria (see Figure 26). The ability of the tool to discriminate risk groups by percentage who commit misconduct is demonstrated in Figure 27.

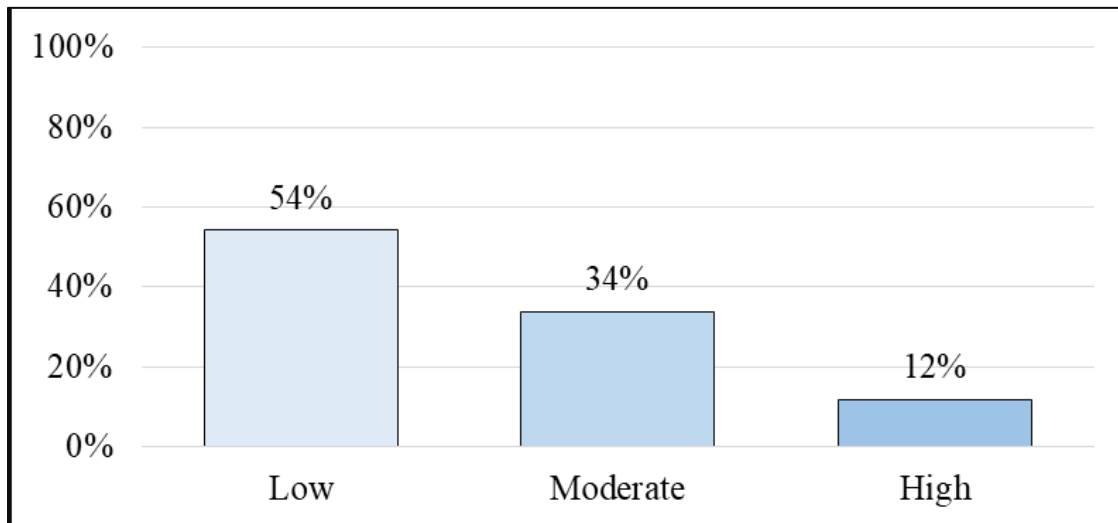
Figure 28 shows the ROC curve improvement in using the Modified PIT to predict misconduct rather than the original ORAS-PIT total score. The AUC statistics in Table 40 show that there was a significant improvement for predicting all outcomes except for property and drug related misconduct. Overall, the Modified Pit for women can be said to have “good to excellent” predictive validity based on these scores. Table 41 shows there was only one situation where the tool improved in prediction for certain outcomes in certain settings. This was when predicting serious misconduct between minimum and maximum security settings ( $p < .05$ ), but this is likely due to small sample size for women in these highly restricted settings. Figure 28 shows the different ROC curves for prediction in different female security restrictions. Overall, the tool works equally well for women at any level of security, but it does vary in predictive power depending on the type of misconduct. It performs particularly well when predicting violence, but not well in predicting drug-related misconduct.

**Table 39:** Comparison of bivariate predictive validity of separate domains/items for female inmates predicting any misconduct (only those with full ORAS-PIT assessments, n = 1,507)

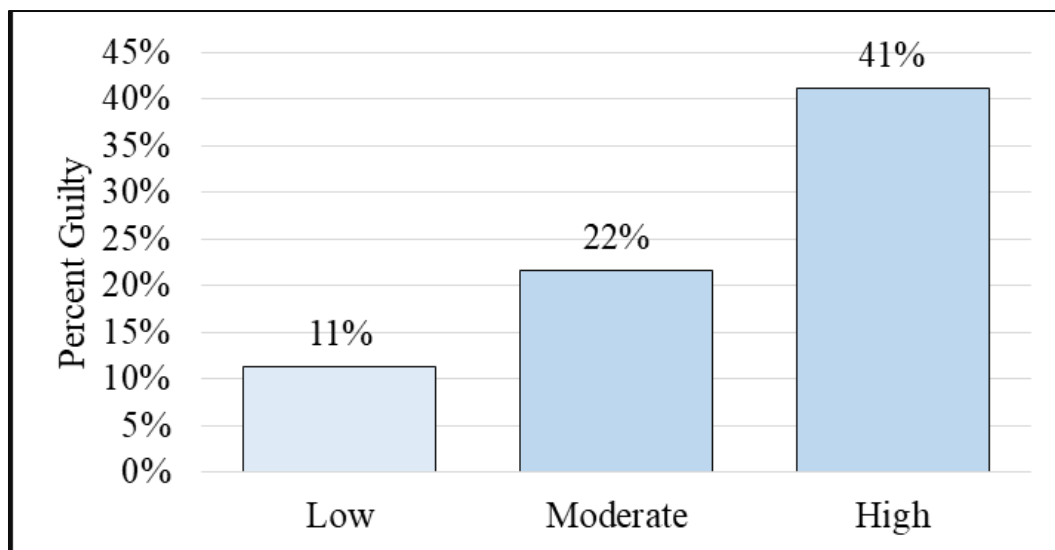
	<u>AUC</u>	<u>s.e.</u>	<u>95% CI</u>
<b>ORAS-PIT Domains</b>			
Age at current admission	0.54	0.02	0.50 - 0.58
Criminal History	0.61***	0.02	0.57 - 0.64
School Behavior and Employment	0.51	0.02	0.47 - 0.55
Family and Social Support	0.51	0.02	0.48 - 0.55
Substance Abuse and Mental Health	0.50	0.02	0.46 - 0.54
Criminal Lifestyle	0.58***	0.02	0.54 - 0.63
<b>Additional Measures</b>			
Violent current admission offense	0.57***	0.02	0.53 - 0.61
Adult felony conviction	0.51	0.02	0.47 - 0.55
Age at current admission	0.59*	0.02	0.55 - 0.63
Illegal drug use/offense in past year	0.47	0.02	0.42 - 0.51
Felony caused the death of a person	0.50	0.02	0.46 - 0.54
Felony caused death of law enforcement	0.50	0.02	0.46 - 0.54
Documented escape from confinement	0.49	0.02	0.45 - 0.53
High notoriety	0.51	0.02	0.47 - 0.55
Kidnapping	0.51	0.02	0.47 - 0.54
Murder	0.51	0.02	0.47 - 0.55
Number of prior incarcerations	0.50	0.02	0.46 - 0.54
Disruptive STG	0.50	0.02	0.46 - 0.54
Active STG	0.50	0.02	0.46 - 0.54
Passive STG	0.51	0.02	0.46 - 0.55
Non-serious mental illness	0.53	0.02	0.49 - 0.57
Serious mental illness	0.53	0.02	0.49 - 0.57
Time left to serve (sentence length)	0.60***	0.02	0.56 - 0.64
Misconduct in reception center	0.55*	0.02	0.51 - 0.59
TCU Drug Screen (0-11)	0.50	0.02	0.45 - 0.54

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5

**Figure 26:** Prevalence of Modified PIT categories among women



**Figure 27:** Modified PIT validity for women (outcome: any misconduct)

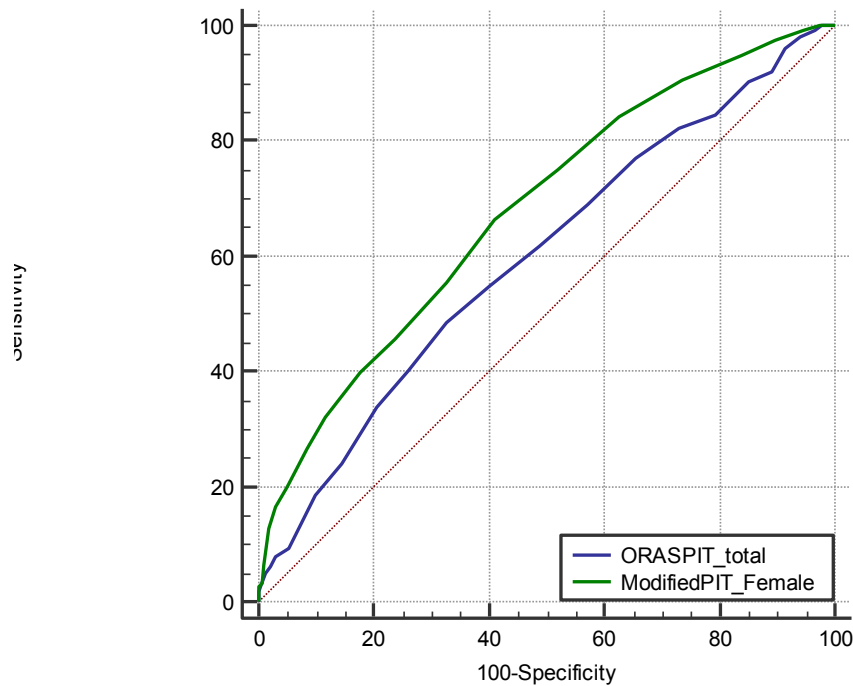


**Table 40:** Comparison of ROC curves for original ORAS-PIT for women and the modified PIT (n = 24,062)

	Original ORAS-PIT			Modified PIT			$\Delta$
	AUC	s.e.	95% CI	AUC	s.e.	95% CI	
Any							
Misconduct	0.60	0.02	0.57 - 0.62	0.68	0.02	0.66 - 0.70	0.08***
Serious	0.60	0.02	0.58 - 0.63	0.68	0.02	0.66 - 0.71	0.08***
Discretionary	0.62	0.03	0.60 - 0.65	0.71	0.02	0.69 - 0.73	0.09***
Violent	0.59	0.02	0.57 - 0.62	0.68	0.02	0.66 - 0.71	0.09***
Property	0.70	0.05	0.68 - 0.72	0.72	0.05	0.70 - 0.74	0.02
Drug	0.58	0.04	0.56 - 0.61	0.63	0.04	0.61 - 0.66	0.05
Other	0.61	0.02	0.58 - 0.63	0.68	0.02	0.66 - 0.71	0.08***

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

**Figure 28:** Comparison of ROC curves for original ORAS-PIT and Modified PIT for women predicting any misconduct

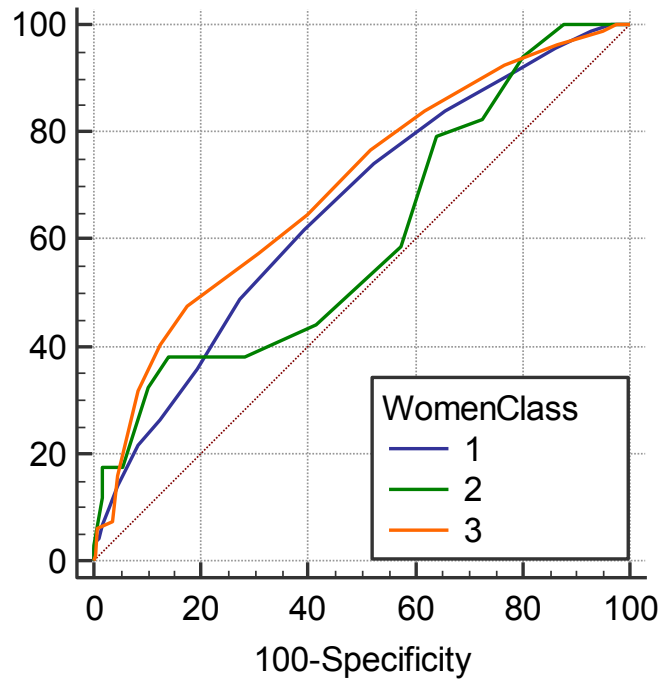


**Table 41:** Comparison of ROC curves for the modified PIT in female restriction levels (n = 1,507)

	Minimum		Medium		Maximum		Min vs Med	Min vs Max	Med vs Max
	AUC	s.e.	AUC	s.e.	AUC	s.e.	$\Delta$	$\Delta$	$\Delta$
Any									
Misconduct	0.66	0.02	0.60	0.06	0.70	0.03	0.05	0.04	0.10
Serious	0.63	0.03	0.63	0.06	0.72	0.04	0.01	0.09*	0.10
Discretionary	0.70	0.03	0.59	0.09	0.67	0.04	0.11	0.02	0.09
Violent	0.64	0.03	0.61	0.07	0.73	0.04	0.03	0.09	0.11
Property	0.66	0.08	0.75	0.19	0.69	0.07	0.09	0.03	0.06
Drug	0.61	0.05	0.68	0.11	0.60	0.08	0.06	0.02	0.08
Other	0.64	0.03	0.66	0.07	0.67	0.04	0.02	0.03	0.01

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; significant differences of pairwise comparisons of ROC curves using z statistic as recommended by DeLong et al., 1988.

**Figure 29:** Comparison of ROC curves the Modified PIT for predicting any misconduct in different female restriction levels



### *Summary of Q8*

- It is possible to significantly improve the predictive power of the ORAS-PIT for determining the risk for misconduct by including additional risk factors used in the ODRC classification criteria.
- The Modified PIT for men had significantly better AUC estimates for all types of misconduct and was a better predictor in maximum security settings than in minimum security facilities.
- The Modified PIT for men had AUC scores slightly lower than the current ODRC classification criteria and therefore it would not be beneficial to replace the current method of classification with the Modified PIT.
- The Modified PIT for women had significantly better AUC estimates for all types of misconduct but it was not significantly better at predicting misconduct in any particular level of restriction.



## **Chapter 5.**

### **Discussion**

In this chapter I offer an interpretation of the results presented in Chapter 4 as they relate to the research questions and discuss their place within the wider literature on prison misconduct. I also summarize the results in terms of the central focus of the dissertation, provide some possible policy recommendations, and offer suggestions for future research into prison classification policies. Finally, I acknowledge the limitations of the data and my analyses.

#### **Who is found guilty of misconduct in Ohio prisons?**

The underlying framework of this dissertation was the question of *who* commits misconduct. Is misconduct more prevalent among some inmates than others? Is it more common in some facility types than others? Can the ORAS-PIT discriminate prisoners according to their risk of misconduct? While the results varied, there were some important trends that should be discussed. A greater proportion of men were found guilty of misconduct than women, and there were a greater proportion of prisoners found guilty of misconduct in medium security facilities than minimum security facilities. One exception to this is drug-related misconduct, where minimum security facilities had slightly more guilty findings than medium security settings (one percent). The trends were more difficult to describe when comparing maximum security facilities to lower security facilities. Maximum security prisons had the same percentage of inmates with serious rule infractions as medium security prisons (30 percent), but a higher percentage of inmates found guilty of violent offenses (2 percent more) and property offenses (28 percent more). There were fewer discretionary guilty findings and drug-related guilty findings in maximum security settings than in any other male security level. This may indicate that there are fewer opportunities for these types of offenses in higher custody settings, but it could also reflect

that officers prioritize serious offenses that could lead to new criminal charges (e.g. fighting, assault, damaging property). Finally, it should be noted that the medical centers and reception centers had very low base rates for any type of misconduct, and given their mixed security environment they do not feature prominently in any of the subsequent discussions. These “base rate” proportions serve as a guide for understanding risk for misconduct across prison settings and for interpreting the other research findings. It is safe to say at this point that misconduct varied across security settings, but there was not a uniform trend for higher security prisons to suppress or amplify misconduct especially when the *type* of misconduct is disaggregated. Clearly, further investigation beyond these descriptive statistics is needed to understand the individual level factors that may be influencing these trends.

The second research question asked how misconduct was distributed across ORAS-PIT risk levels, but it was necessary to first determine how the different risk levels were dispersed across Ohio security levels. If the ODRC used the ORAS-PIT for all classification decisions and each risk level were isolated in separate security levels then it would not be possible to conduct comparisons within shared settings. This was not the case, however, and there was a fair distribution of low, moderate, high, and very high risk male offenders in each security setting. This information is valuable for demonstrating that the ODRC does not use a method of classification that corresponds to the ORAS-PIT criteria. This allows us to make comparisons of the ORAS-PIT prediction to the current method of classification. It is also worth noting that there were far more low risk female prisoners than any other risk group for women (73 percent) and most of them were so low risk that they did not require a full ORAS-PIT assessment (69 percent of women only received the screener tool).

The findings presented in Table 8 (and figures 3-5) show that there was a consistent trend for basic discrimination between categories among the risk levels of the ORAS-PIT for predicting misconduct. As risk level increased, so did the number of inmates who were found guilty of misconduct. This trend was seen for any misconduct, as well as serious, discretionary, violent, property, drug-related, and other offenses. The trends were still present when the sample was broken down by ORAS assessment type (PIT and PST) and by gender. This showed that the ORAS-PIT can discriminate prisoners on their prevalence of misconduct on a fundamental level. However, the ORAS-PIT was not the only viable method for separating inmates by their risk of future offending. The official ODRC classification criteria were able to discriminate by risk as well.

#### **Is the ORAS-PIT a valid method for predicting misconduct in different settings?**

Four major findings from the global validity estimates in this dissertation were 1) the ORAS-PIT was a “poor” to “fair” predictor of misconduct in prison, 2) the ORAS-PST brief screener was not a valid predictor for men or women, and 3) the official ODRC classification criteria was a superior predictor for almost every outcome (sometimes ranking as “good”) but was unable to predict any of the outcomes at the industry standard AUC of 0.71, and 4) the decision to override a recommended security level was associated with worse AUC values for men and women for most outcomes. This final point should be explored further as it relates to female prisoners. When a woman is given a recommended security level there was a “poor” to “fair” AUC value for each outcome, but when that security level was overridden the classification criteria lost all effectiveness and was only significantly associated with AUC values *below 0.50*. This information tells us that the ORAS-PIT *and* the ODRC classification criteria have room for improvement, and that the decision to override can interfere with the

prediction process. Also, the ODRC might consider abandoning the ORAS-PST as a short screener version of the full PIT. It did not predict risk very well, and it cannot guide case plans because it does not measure all of the PIT domains.

Next I examined the role of the custodial environment on the predictive validity of the ORAS-PIT and found that the tool performed better in some security settings than others. For example, the ORAS-PIT total score had a significant AUC of 0.61 for predicting violent misconduct among all male prisoners (see Table 18). When different placement settings were analyzed separately it was seen that the ORAS-PIT scores for men in minimum security settings had an AUC of 0.59, which was significantly lower than the AUC of 0.64 for men in medium security prisons ( $p < .01$ ). There were few differences that were statistically significant and substantial in magnitude across settings, but the differences offer some support for the research hypothesis that custodial settings influence risk assessment validation. This information is interesting for researchers who study risk assessment validation procedures, but the relatively small differences found here might not justify revisions to current assessment tools.

This validation analyses ended with an evaluation for validity across racial/ethnic groups, offense types, and a proxy measure of reliability (where the AUC scores were compared depending on the *location* of the initial assessment). The ORAS-PIT was found to have significantly lower predictive power for African American men (AUC = 0.57) than white men (0.61) when predicting *any* misconduct, but there were no significant differences between Hispanic and white prisoners or any other race and white prisoners. Similar results have been found in other assessments of the Ohio Risk Assessment System. In a validation of the community supervision tool in Texas, there was a 0.02 difference in ORAS AUC values between African Americans and whites (Lovins, Latessa, May, & Lux, 2018), and there were slight

differences between white and non-white offenders in a validation of a community tool in Massachusetts (Latessa, Lux, Lugo, & Long, 2017). However, the tool was effective for predicting misconduct for all racial categories in both of these previous studies. A recent (not yet published) validation report for prisons in Colorado examined the ORAS-PIT for predicting misconduct. The results for white prisoners were strikingly similar to those found in this dissertation (AUC = 0.61), but was lower for non-white prisoners (AUC = 0.60). The racial categories for contrast were “white” vs. “non-white” which interferes with a direct comparison of white and African-American prisoners used in this dissertation (Lux & Newsome, forthcoming).

What do the results of these validation studies imply about the predictive validity of the ORAS-PIT for different racial groups? It is unknown whether the racial difference in validity estimates is caused by flaws in the tool itself, or if it is due to poor implementation by the assessors in this sample of Ohio prisoners. A thorough reliability evaluation is recommended. It is also possible that African American prisoners were treated differently by staff in these prisons. Differential treatment of prisoners on the basis of race could interfere with the predictive validity of the ORAS-PIT by inflating their representation in the official misconduct measures used in this dissertation. They may be supervised more closely resulting in more detection of misconduct, staff may enforce the rules more frequently among African American inmates, and they may be more likely to be found guilty by the rule infraction board. These confounding factors may be inflating their rates of misconduct beyond the risk factors contained in the ORAS-PIT, resulting in poorer validity estimates.

The ORAS-PIT was significantly better at predicting misconduct for male sex offenders (AUC = 0.63) than non-sex offenders (AUC = 0.60), which is an interesting finding. The concern with sex offenders in any risk assessment is that they tend to score low and receive an

administrative override. The ORAS-PST was not a significant predictor of misconduct when used for sex offenders. Another surprising finding was that the ODRC classification criteria worked well for sex offenders and non-sex offenders, even when those with an override were analyzed separately.

Evaluating the inter-rater reliability of the assessors is usually the first step in a validation study, but since there were no data available on traditional measures of reliability this was a post-hoc assessment. My “inter-facility” reliability assessment has not been used in any other validation study that I know of, but it appears to be a plausible way to determine if the staff of one facility routinely differ in the quality of their assessments than the staff in another facility, generally speaking. The AUC for the ORAS-PIT was 0.60 when it was conducted in reception Facility “A”, 0.63 when it was conducted in reception Facility “B”, and was 0.58 when it was conducted in a non-reception facility. The only significant differences were between designated reception centers and non-reception centers, perhaps because the staff in those prisons do not perform as many assessments as the staff in reception centers. Overall, this attempt to measure quasi-reliability of the tool can never be as effective as an assessment of true inter-rater reliability, but it does help us to think about the low prediction values from a continual improvement perspective. If the tool has better prediction outcomes depending on the staff who conduct the assessment, then perhaps all staff could be trained to perform the assessment with the same degree of accuracy and inter-rater reliability. Then the overall estimates of predictive validity would improve.

When this same evaluation was performed using the ODRC classification criteria, reception Facility “A” performed significantly worse than reception Facility “B” when predicting misconduct, and this difference is substantial when looking at prisoners who were given an

override. The AUC in Facility “A” for overridden prisoners was 0.59, but in Facility “B” it was 0.68 ( $\Delta = 0.09$ ,  $p < .001$ ). A drop in the AUC value of 0.09 can be described as a drop from the high end of a “good” predictor to the middle range of “fair.” Perhaps the staff in Facility “A” are conducting unnecessary overrides or do not follow established guidelines. There may be some organizational reason why inmates processed through Facility “A” have worse classification prediction, but this question cannot be explored with these data. It does imply that inter-rater reliability is an issue for proper classification procedures as well as risk assessment tools.

### **Which prisoners receive an override to a higher security level?**

The fourth research question focused on *who* receives an override. Out of 26,677 men, only 2,683 (10 percent) were placed in a security level higher than their recommended level, and 1,059 out of 5,756 women received an upward override (18 percent). Perhaps women had higher override rates because they had fewer placement options. The results of the maximum likelihood analyses revealed that racial characteristics were not significant factors in upward overrides after controlling for the official override criteria approved by the state, but only for men. African American women *were* significantly more likely to receive an override than white women even after controlling for all of the mandatory override criteria ( $e^b = 2.30$ ,  $p < .001$ ). The ODRC does not record discretionary override criteria for women, so it cannot be determined whether legitimate concerns led to these override decisions. This question requires further investigation.

Male and female sex offenders were more likely to receive an override than non-sex offenders when using mandatory override criteria and discretionary criteria; once again highlighting the tendency for sex offenders to be given special consideration in risk prediction. Interestingly, the greatest single predictor of an upward override was the “notoriety of the case.” This is more intriguing when considering that less than one percent of overridden men but 9

percent of overridden women were recorded as having a high notoriety case. It is unknown how this seemingly subjective criterion is determined, but it appears to be more prevalent among women than men. This analysis provokes more questions about how women are assessed as requiring an override (especially African American women), but the lack of data on discretionary criteria makes it impossible to conduct a thorough analysis.

### **Does risk level significantly predict misconduct after controlling for other factors?**

The next set of analyses revealed that each risk level of the ORAS-PIT is associated with an increase in the likelihood of misconduct even after controlling for a wide variety of competing predictor variables. In the first model (with no other covariates) moderate risk male inmates, high risk inmates, and very high risk inmates were all more likely to be found guilty of any type of misconduct than low risk male inmates. When all of the control variables were included in the model, these associations increased in magnitude.

An interesting aspect of these models was the effect of including the covariates capturing program participation. It was noted in Chapter 3 that most risk and need assessment tools are built on dynamic/changeable risk factors. The tools are designed to guide treatment plans and *decrease* the likelihood of future offenses. Yet most assessment tool validation studies ignore the dynamic aspect and report the overall receiver operator characteristics of the tool without taking into account the potential impact of “addressing” the risk factors that are included in the tool. In other words, the tool may have better predictive value than is officially reported. For example, a prisoner is assessed as being high risk because of their educational and substance abuse needs, but they do not commit misconduct and the tool appears to have produced a false positive. However, the prisoner had already received educational programming and substance abuse treatment in the first few months of their sentence so these dynamic needs were “resolved.”



Would the tool have better predictive validity if the confounding effects of treatment were considered? There is some evidence to support this phenomenon in these models. There was a significant reduction in the likelihood of misconduct when the prisoner completed their GED during the study window ( $e^b = 0.94$ ,  $p < .05$ ) and when they participated in a recovery services program ( $e^b = 0.65$ ,  $p < .001$ ). This was after accounting for all other misconduct predictors, classification criteria, and override criteria. When these program variables were included in the model the ORAS-PIT risk levels had improved prediction estimates over the model without these covariates. This finding implies that programming might be a confounding factor in risk assessment validation.

There are other interesting findings among the covariates in these models, but one in particular is the *decrease* in the likelihood of misconduct when the prisoner was identified as a sex offender ( $e^b = 0.67$ ,  $p < .001$ ). Another is the lack of significance for Security Threat Group membership after all of the other covariates were accounted for. Overall, there was very little support for any of the ODRC override criteria in predicting misconduct for men when the outcome was any misconduct. Only murder convictions, the length of time before their earliest hearing, and “escape without details” were significant variables with effects in the hypothesized directions.

### **Do inmates with different risk levels behave the same in the same security settings?**

The multivariate models were replicated for each type of misconduct and across male security settings. The results were not as straightforward to interpret, but the overall conclusion was that *security level matters* and *outcome matters*, but not consistently. In minimum security male prisons the ORAS-PIT risk levels followed the same pattern as that described above (significant, substantial, incremental increases in the odds of misconduct according to risk level).

In medium security settings there was a tendency for the change in the odds ratio to decrease slightly after controlling for misconduct (for some outcomes), but for most situations the risk levels were significantly associated with increased odds of misconduct. The results of models for maximum security inmates were completely different than the other settings. The ORAS-PIT risk levels were no longer significant predictors of misconduct for this sample of inmates, perhaps due to the much smaller sample size of male prisoners initially classified into a maximum security prison ( $n = 305$ ). Still, the comparison of different settings and different outcomes is one justification for arguing that prison environment should be taken into account when exploring individualized risk assessment tools.

The logistic regression models predicting misconduct among women produced some interesting results. The ORAS-PIT moderate risk level had significantly greater odds of misconduct than the low risk group ( $e^b = 1.34$ ,  $p < .05$ ), and so did the high risk group ( $e^b = 2.19$ ,  $p < .001$ ) after controlling for all covariates. However, very few of the covariates were significant predictors. Participating in recovery services programs decreased the odds of misconduct ( $e^b = 0.58$ ,  $p < .001$ ), and being African American was associated with higher odds of being found guilty of misconduct. Illegal drug use or offense history was one of the “female-specific” classification criteria, but it was not found to be a significant predictor of misconduct ( $e^b = 1.01$ ). When results were broken down by female security level there were few significant findings that could be considered reliable. Minimum security women had results for each type of misconduct that were similar to the results described above, but the medium security and maximum security women had more volatile outcomes. Generally speaking, it appeared that there were very few situations where there was a significant difference between low risk and moderate risk women as defined by the ORAS-PIT, but there were differences between low risk

and high risk women (when they were housed in minimum or medium security units). Overall, there is not much to learn by disaggregating women in this manner because of the limited placement options and already low base rates of misconduct.

**Do inmates with the same risk level behave the same in different settings?**

The alternative approach to answering the sixth research question was to match male prisoners in different security levels according to their risk level and other covariates, and then examine significant differences in their rates of misconduct. Three propensity score matching procedures were conducted. The first compared matched prisoners who were housed in minimum or medium security facilities. It was found that there were significant differences in the proportion of inmates who were found guilty of any misconduct, serious, discretionary, violent, and other types of misconduct, but there were no significant differences between groups for drug-related or property misconduct. All of these significant differences showed that medium security inmates had more misconduct rulings than minimum security inmates after matching on personal characteristics. However, there were no significant differences in the second model that compared minimum and maximum security inmates, and only one significant difference in the model that compared medium and maximum security inmates. Maximum security inmates were significantly less likely to be found guilty of discretionary types of misconduct ( $t = -2.20$ ,  $p < .001$ ).

These mixed findings are interesting because they can be interpreted in different ways. The logistic regression models revealed that the ORAS-PIT risk levels were significant predictors of misconduct after controlling for potential confounders, and this implied that the prisoners with different risk levels behave differently in prison, no matter what security level they are placed in. However, the matching analysis found that prisoners with the *same* risk level

behaved differently in different security settings (at least when comparing minimum and medium security placements). This might suggest that the “endogeneity bias” or “facility level contamination” described by Shermer, Bierie, and Stock (2012) was also present in this sample of Ohio prisoners. In other words, a medium security prison environment could be *causing* low risk prisoners to commit more misconduct than they would in a lower security level.

There are at least four potential reasons for this: 1) the decision to place a “low risk” inmate in a higher security setting or a “high risk” inmate in a lower security setting was justified because their behavior was commensurate with their security level and not their risk level, 2) the prison regime influenced the documented rates of misconduct, 3) the inmate culture in higher security settings influenced misconduct, and 4) medium security prisons increase the likelihood of misconduct through criminogenic influences.

The first explanation reflects poor validity of the ORAS-PIT for predicting institutional misconduct. The tool can separate low, medium, and high risk prisoners that are housed together, but it does not measure everything that influences prison behavior. Therefore, when low risk inmates are sent to a minimum security prison they behave like other low risk inmates in that facility, but when other low risk prisoners are sent to a medium security facility they are significantly more likely to commit misconduct because of some unmeasured risk factor. This offers some support for the hypothesis put forth in this dissertation that security level should be taken into account when validating a risk assessment tool, but it could also be argued that the results are “mixed” because there was no difference between inmates with the same risk levels when comparing minimum to maximum security prisons.

The second explanation relates to how the prison staff detect and process incidents of misconduct. One of the purposes of classification is to reduce misconduct (DiIulio, 1987), so the

“prison regime” should respond differently at different security levels (Spark, Bottoms, & Hay, 1996). Increased supervision can lead to more detection and formal processing of misconduct. For example, officers and rule infraction boards in a medium security prison may be stricter than those in a minimum security prison (Petersilia, 2009; Santos, 2007). It is also possible that more guilty findings result from more correctional officers and cameras to provide stronger evidence against prisoners who engage in misconduct.

The third explanation implies that prisoners in medium security facilities had higher rates of misconduct because of environmental factors and not because of their criminal propensity. Perhaps there were criminogenic influences in these medium security prisons that caused low risk prisoners to commit more misconduct. This “cause” may originate in the inmate culture, consisting of shared values and norms held by prisoners sharing the same environment (see Clemmer, 1940; Sykes, 1958). This culture may encourage misconduct as a form of problem solving or as rebellion, depending on the prison environment.

There is more to prison classification than the initial placement decision explored in this dissertation. There is the process of “reclassification” where inmates are shuffled between security levels because of their behaviors during confinement. Those who commit misconduct can be transferred up in security level and those who do not commit misconduct can be transferred down in security level. The winnowing process allows low risk inmates to congregate in less secure prisons, while the high risk are increasingly congregated in higher security prisons (Wooldredge & Steiner, 2015). This could alter the inmate culture of the prison as more “dangerous” inmates develop shared values and norms that differ from the less dangerous prisoners in other facilities. For example, if medium security prisons receive more active gang members than minimum security prisons, then inmates may react in ways that comply with the

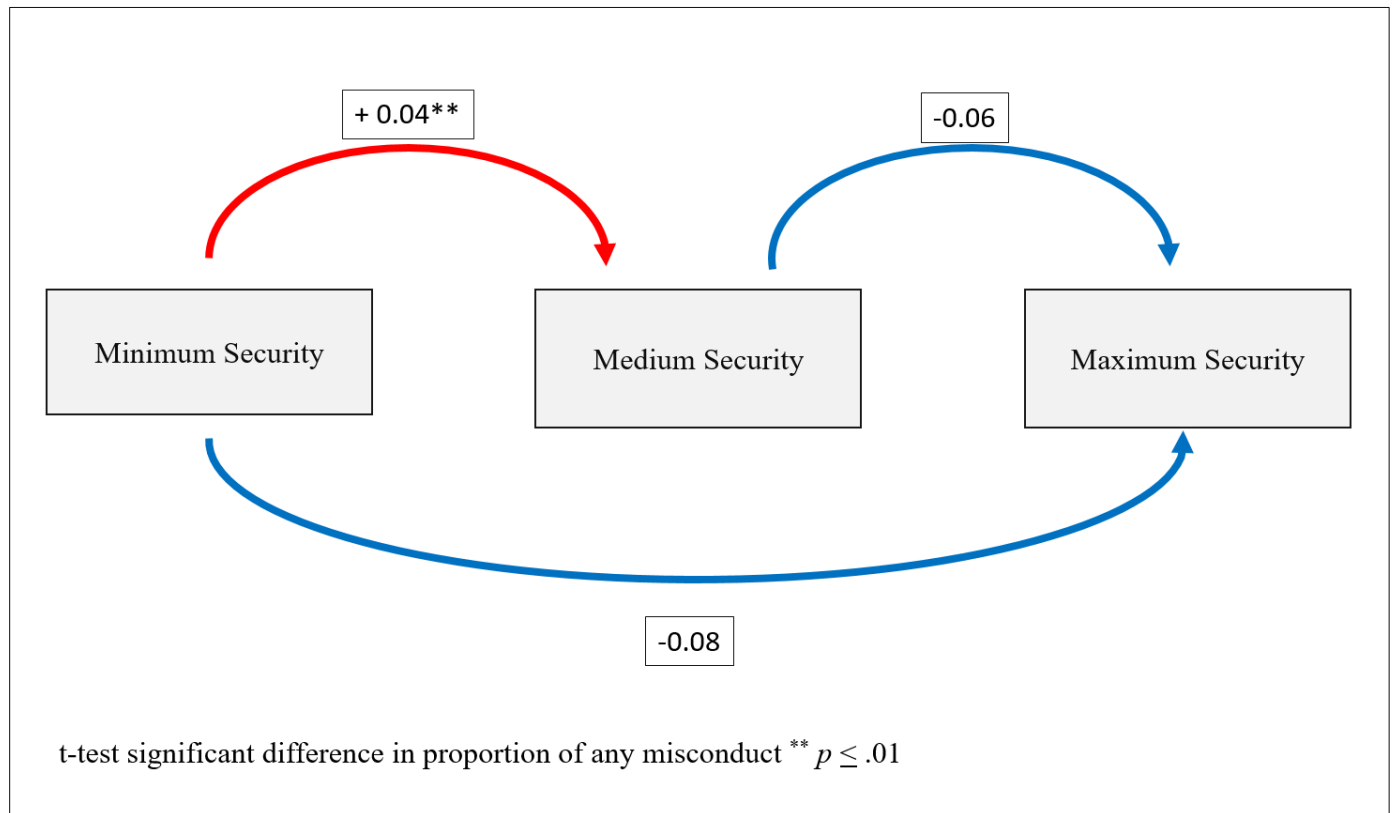
gang values and norms, and can even encourage more misconduct among “low risk” inmates who struggle to “survive” in these settings (Toch, 1977). The shared culture of the inmates who live together at the same security level can influence behavior (Bayer, Hjalmarsson, & Pozen, 2009; Chen & Shapiro, 2007; Mears, Stewart, Siennick, & Simmons, 2013).

If deprivation in prison is criminogenic then higher security settings might *cause* low risk prisoners to violate more rules than low risk prisoners in minimum security prisons (Chen & Shapiro, 2002). The same custodial environment that restricts privileges to reduce misconduct may also increase the “pains of imprisonment” (Clemmer, 1958; Johnson & Toch, 1982; Liebling & Arnold, 2004; Sykes 1958). The additional strain in higher security settings can lead to more misconduct as a product of increased emotional stress and fear (Agnew, 1992; Agnew & White, 1992; Blevins, Listwan, Cullen, & Jonson, 2010; DeLisi et al., 2010).

The ideas above fail to account for another interesting finding from the propensity score matching analyses. Why is it that *minimum* security prisons differ significantly from *medium* security prisons in terms of misconduct, but there were no significant differences for any type of misconduct when comparing *minimum* security to *maximum* security? Shouldn’t the differences between groups be even greater when the custodial restrictions and degrees of strain are also greater? See Figure 30 for an illustration of the differences between settings in their proportions of prisoners found guilty of misconduct (after matching).

This null finding between minimum and maximum security is similar to the results of the study by Camp and Gaes (2005) when they compared 561 “low risk” inmates that were housed in different security levels, only to find that they were equally likely to commit misconduct. It is worth noting that they compared low risk inmates housed in the lowest security setting to those

**Figure 30:** Differences in the proportion of prisoners found guilty of any misconduct between custodial settings after matching on all covariates listed in Table 28



in the second-to-highest security setting. Perhaps the extreme restrictions in a maximum security facility can suppress overall rates of misconduct even if there were criminogenic factors at work in higher security settings, and the net result was that inmates are detected for rule violations at rates similar to those of low risk inmates in a minimum security setting. This could also apply when considering the various levels of constraints in each facility type. Medium security prisons have a greater concentration of high risk prisoners than minimum security prisons, but not as many environmental constraints on their behavior as maximum security prisons, therefore misconduct is detected at similar rates in minimum and maximum security prisons but not in

medium security prisons. Another concern is the recurring volatility of effects associated with maximum security settings that may be caused by the relatively small sample size of prisoners initially classified there ( $n = 305$ ). These explanations cannot be tested with the official data provided for this dissertation, but it does inspire more questions about the competing theories of prison management. These mixed findings could be overlooked in a study that compared only two security levels, or the average differences between all security levels.

The “facility-level contamination” of prisoners (Shermer, Bierie & Stock, 2012) could be occurring in this sample of prisoners. The characteristics of medium security prisons may be amplifying misconduct and the conditions of extreme confinement in maximum security prisons may be suppressing misconduct, but the propensity score matching models cannot disentangle these possible effects. Therefore, the findings are mixed and vary depending on the groups being compared.

### **Is security level a significant predictor after controlling for individual level characteristics?**

The multi-level models were estimated to identify facility level factors and individual level factors that suppress or amplify misconduct. One method (the pooled approach) attempted to determine if the second level effects of prison security level and crowding in male prisons retained their significance after controlling for individual characteristics (e.g. ORAS-PIT risk level and the other covariates). The individual level factors explained enough of the variation in misconduct that security level was not a significant factor for decreasing or increasing any type of misconduct except for drug-related misconduct ( $e^b = 0.68$ ,  $p < .01$ ). The crowding measure was a significant factor for most types of misconduct even after controlling for the individual characteristics of the inmates.



The second approach involved the inclusion of environmental factors and individual factors in hierarchical linear models. This method controls for individual level effects and tests the relationships between security level, crowding, and misconduct. These models revealed no significant effects of prison security level and crowding on any type of misconduct for male prisoners. This may seem surprising given the “mixed” findings in the propensity score matching analyses and the pooled sample analyses, but the HLM approach looked at the overall difference between all three security levels. Rather than comparing minimum to medium, medium to maximum, and minimum to maximum separately (or each level in isolation), HLM assesses the average effect of moving up in security level across all three groups. The null findings suggest that increases in security level do not influence misconduct after controlling for the individual-level characteristics that resulted in their placement. This could explain the mixed results found prior to this stage of the analysis. Overall, there is not much of a difference in environmental effects on behavior when controlling for individual characteristics, but when each security level is dissected and compared it is possible to find significant differences that influence the ORAS-PIT validity tests. This is supported by other research that found no overall influence of security levels on misconduct (Bench & Allen, 2003; Berk, Kriegler, & Baek, 2006; Camp & Gaes, 2005; Wooldredge & Steiner, 2015).

Does the composition of a facility’s population in terms of assessed risk levels matter more than the security level of the prison? Wooldredge and Steiner (2015) examined data on 247 state prisons from across the United States and found that the risk composition of inmates in those facilities were a far better predictor of assaults than prison security or prison capacity. Further support for these findings was discovered when less punitive practices at the state level were significantly associated with lower assault levels. The use of coercive controls (such as

high populations of inmates in segregation) was a significant predictor of *more* violent misconduct in the facility. Similar effects were found for non-violent offenses as well, as it appeared that the congregation of higher risk inmates was the driving factor in non-violent misconduct and administrative controls were more common in those settings. These findings are supported by the findings in the multi-level models in this dissertation.

This does not mean that there are no criminogenic influences amplifying misconduct in higher security levels or that all custodial efforts fail to control inmate behavior and reduce misconduct. It is possible that these two processes balance each other to produce a net effect close to zero. However, there is no strong evidence in these models to support classification as a tool for managing behavior, just as Byrne and Hummer concluded in their review of the literature on violence in prison (2008).

An important takeaway from these models is the persistent significance of the individual level factors, including the dynamic ORAS-PIT risk levels. If we cannot effectively manage inmates with superior classification techniques, we can still use this information to target dynamic risk factors and address the individual criminogenic needs of offenders. This is a departure from the core purpose of this dissertation (to improve classification), but it does echo the conclusion made by Van Voorhis in her comparison of classification methods (1994b). The causes of misconduct are most likely the same factors that cause criminal behavior in the first place, and risk assessment should probably be used for allocating treatment resources rather than determining custodial resources.

### **Can the ORAS-PIT be improved to predict misconduct better?**

Despite the mixed findings from this dissertation and limited effectiveness of classification for reducing misconduct, it was possible to build a hybrid tool that would combine

all of the best predictors of misconduct into one Modified Prison Intake Tool. This also aids in summarizing the findings of each analytic approach in order to focus on what might be the most important factors in classification decisions. The first step in this process was to examine the AUC values for each ORAS-PIT domain, the individual items that made up the classification criteria, and alternative measures or additional information that might help tool development. The hybrid tool development section of Chapter 4 explains which factors were chosen and why they helped improve prediction. Ultimately, the Modified PIT for men was a hybrid of the ORAS-PIT domains, the ODRC classification criteria, some override criteria, and sentence length.

This Modified PIT for men had some advantages over the original ORAS-PIT. It was a significantly better predictor for all misconduct outcomes, and it did not require the ODRC to gather any more information than they already have for their regular classification procedures. However, the tool will not help the ODRC to make classification decisions because it does not perform significantly better than their current method of classification. It is only an improvement over the ORAS-PIT validity estimates. There are some lessons that the ODRC can learn from this analysis. Some of the criteria they use in classification decisions are not predictive of misconduct, and others could be improved. One interesting finding in this process was that STG membership was a significant predictor of misconduct but the difference between passive, active, or disruptive membership was not substantial, casting some doubt on the way these distinctions are made in the initial classification decision.

The Modified PIT for women was parsimonious and effective at predicting most types of misconduct. The new configuration of risk factors included the ORAS-PIT domains for criminal history and criminal lifestyle, along with the classification indicators for violent criminal history,

age at current admission, and sentence length. This new tool was a superior predictor over the original ORAS-PIT for all types of misconduct except drug and property offenses, and it even crossed over into the “excellent” prediction range based on its improved AUC values for certain types of misconduct. These findings are also interesting from the perspective that men and women have different risk factors for predicting misconduct (Celinska & Sung, 2014; Steiner & Wooldredge, 2014; Wright, Salisbury, & Van Voorhis, 2007), but these results should be tempered by the acknowledgment that women commit far less misconduct than men, they have few placement options so new information cannot substantially improve classification, and there are not as many documented override criteria for women to analyze as there are for men.

Ultimately, the Modified PIT methods of assessing risk were an interesting exercise in how to improve classification tools, but they do not have much potential for leading to actual reductions in misconduct. Regardless, the results of this exercise should prompt other researchers to include these variables in their own evaluations when they are developing risk assessment tools. Based only on this study, however, there is not enough value-added to justify changing the current ODRC classification procedures to include the Modified PIT described in this dissertation.

### **Summary of Core Focus**

This dissertation demonstrated that the original ORAS-PIT assessment scores were a “poor” to “fair” predictor of misconduct. This section provides some possible reasons why the tool demonstrated weaker prediction than the ODRC’s static classification criteria. Three possible reasons include 1) the prison environment modifies the predictive value of the tool and this suppresses its validity in typical statistical analyses, 2) the ORAS-PIT is a good method for

predicting misconduct but it is not being used properly by ODRC staff, and 3) the ORAS-PIT does not contain enough relevant criteria to predict misconduct.

The first explanation has been explored in several different ways throughout this dissertation. The results demonstrate that the ORAS-PIT has different AUC scores depending on which type of misconduct was being measured, and these differences are often statistically significant. These models are valuable because they demonstrated that differences exist, but there were few situations where the predictive power of the tool increased enough to guide misconduct reduction policies. It is probably sufficient for researchers to continue with the traditional validation approach of using “any misconduct” as the outcome variable, but perhaps other studies will find that the ORAS-PIT can predict serious, discretionary, and violent misconduct substantially better than other types of misconduct because these outcome variables tended to show relatively large differences in AUC scores in this dissertation. The categories for property, drug, and “other” misconducts were less useful because of the volatility of the AUC scores among different sub-samples of inmates. It was also seen that there are some differences in AUC values depending on the security level of the prison where the inmate is housed, however the differences are usually not substantial and there are some contradictory findings depending on which two security levels are being compared. It may be useful to disaggregate these locations in the future to determine how versatile the ORAS-PIT is in different settings. I also advise researchers to separate prisoners who are housed in medical centers in their validation studies because of their uniquely low rates of misconduct and the poor predictive validity of the ORAS-PIT among this sample of inmates.

The second explanation for the poor-to-fair results of the ORAS-PIT is that the tool is not being used properly by some of the ODRC staff. If the assessors did not consistently adhere to

the ORAS guidelines, they could undermine the validity of the tool in an outcome prediction analysis. A recent report for the Colorado Department of Corrections found that the ORAS-PIT had a weak to moderate AUC (0.60-0.61) for predicting misconduct in Colorado prisons, and also found that the assessment staff struggled to score all of the domains with a high degree of consistency (Lux & Newsome, forthcoming). Overall, their inter-rater reliability was acceptable but it is unknown whether greater adherence to the tool guidelines would result in greater predictive power. When these results are compared to a previous validation study in Ohio, the ORAS-PIT had an AUC of 0.73 for men and 0.76 for women when predicting misconduct (Makarios & Latessa, 2013). This begs the question of whether the ORAS-PIT *can* be an “excellent” predictor of misconduct when assessors follow the guidelines and inter-rater reliability is high. This dissertation used ORAS-PIT scores as determined by ODRC staff. These staff members may be trained to conduct the ORAS-PIT assessment but may not have a high level of adherence to the guidelines. Additional data might have enabled an evaluation of the accuracy and inter-rater reliability of the ODRC staff. At this point I can only speculate on the true predictive potential of the ORAS and must settle for a generalized statement about how these assessment scores perform for *this* sample.

Still, it is important to note that one major concern in risk assessment validation is that evaluations are often conducted by the researchers who invented the tool (Singh, Grann, & Fazel, 2013) and the assessment scores used for validation are gathered by the tool’s creators and research assistants during the tool’s development (Latessa, et al., 2010). Therefore, any validation studies with official data on day-to-day assessment practices are valuable for providing a more realistic understanding for how the tool works in system-wide, scaled-up settings. A decline in the AUC from 0.73 in a pilot study to a 0.61 in a practitioner evaluation

may seem catastrophic, but perhaps this is a realistic cost in accuracy when implementing a new program state-wide (see discussions of the “scale-up penalty” in other criminal justice policy evaluations: Welsh, Sullivan, & Olds, 2010; Sullivan, Welsh, & Ilchi, 2017; Yohros & Welsh, 2019). Optimistic researchers could see this “poor-to-fair” AUC as a baseline, and the “good-to-excellent” AUC as an achievable goal. Staff can then be trained to improve their use of the tool until it reaches its maximum potential, and the tool itself can be revised if necessary (Alexander & Austin, 1992b; Brennan, 1993; Sperber, Henderson-Hurley, & Hanley, 2005).

The third explanation for the poor-to-fair predictive power of the tool is that the ORAS-PIT is not a good tool for predicting misconduct because it focuses too much on dynamic criminogenic needs and ignores the overwhelming importance of static criminal history factors in predicting prison misconduct (Taxman & Blasko, 2018). The ODRC Bureau of Classification prioritizes criminal history in assessing risk, and it outperforms the ORAS-PIT. Does this mean that dynamic risk factors should be ignored? Weinrath and Coles (2003) found that static factors were the best predictors of institutional misconduct, and Makarios and Latessa (2013) found that tools with only static factors had validity estimates that fell within the confidence intervals of tools that included dynamic factors. My own efforts to build a Modified PIT revealed that some dynamic factors could be retained but that the strongest predictor was “sentence length.” This factor is just a proxy for their criminal history and seriousness of their offense, and it is a “time at risk” measure. More serious criminal histories and current offenses correspond with more time in prison. The more time spent in prison, in turn, the more opportunities to engage in misconduct. Perhaps dynamic factors are overrated for predicting prison misconduct.

It is also possible that the ODRC prefers static criminal history factors because they are legally justifiable. Chapter 2 discussed the legal impetus for prisons to classify prisoners using

rational, reasonable, objective, and uniform criteria rather than arbitrary or capricious criteria. If the ODRC starts classifying inmates to higher security levels because of their family relationship status, for example, they may open themselves to legal challenges. Perhaps it is safer and more justifiable to sort inmates according to their criminal record and leave their dynamic factors to the treatment staff.

At this point I should discuss the most important rationale for dynamic risk assessment tools: *guiding treatment plans*. If treatment staff know which inmates require treatment for their individual criminogenic needs, then they can allocate resources and help prepare the prisoner for release back into the community (Andrews & Bonta, 2017). As Van Voorhis concluded in her study of 272 inmates (1994b), many classification tools can help predict misconduct *some* of the time, but their real value is in helping to coordinate treatment services so that inmates can reintegrate back into their communities. Treatment can also be useful for reducing institutional misconduct (French & Gendreau, 2006; Langan & Pelissier, 2001), and this has been found in recent state-wide evaluations of some treatment programs in Ohio (Latessa, Lugo, Pompoco, Sullivan, & Wooldredge, 2015). If the findings in this dissertation cannot guide so-called “external classification” (initial security placement decisions) then perhaps it can help guide “internal classification” (Austin, 2003). The ORAS-PIT information should be used to *guide treatment plans* after a basic risk determination is made and the inmate is sent to their initial placement. If the ORAS-PIT is used properly then it may be possible to address prisoners’ criminogenic needs and permit them to move down to lower security levels after *re*-classification (Morris & Miller, 1985). This would help overcome the sinister Catch-22 identified in California supermax prisons where prisoners are trapped in higher security settings because there are many ways to be classified as “dangerous” and few ways to prove they have become less dangerous



(Reiter, 2016). Dynamic risk factors should play a role in re-classification so they can potentially reduce their risk level and be permitted to transfer to a lower security setting.

This line of thought raises another potential problem with using dynamic risk factors in classification decisions. If dynamic risk factors were used to classify inmates we would have to make sure that treatment resources were available in the higher security settings, but as it stands now most of the treatment programs are available in lower security settings. In other words, the ORAS might undermine its own goals by considering unresolved dynamic needs as “risk” factors because high risk inmates would remain in prisons where they cannot receive treatment. This consideration reveals a diametric opposition between the two models of corrections: administrative control and rehabilitation. The administrative control model uses “risk” as a method of controlling people who are the most dangerous (DiIulio, 1987), while the rehabilitation model uses “risk” to give the most treatment to those with the greatest need (Andrews & Bonta, 2017). These two definitions might not be compatible. The RNR model has been widely adopted by correctional professionals, and yet the reality of prison program allocation ensures that the lowest risk inmates receive access to the most treatment options rather than the highest need inmates. If the ODRC could change their rehabilitative priorities to offer more treatment in higher security prisons then incorporating a dynamic risk assessment tool may be helpful.

Given the low availability of prison treatment resources in the United States (see for example, Austin, 1998; Belenko & Peugh, 2005; Phelps, 2011) and in Ohio prisons (Long, Cochran, Wooldredge, & Anderson, 2019; Long, Sullivan, Wooldredge, Pompoco, & Lugo, 2019) it is unlikely that inmates will be able to participate in useful programs soon after classification. These services are usually reserved for inmates who are scheduled to be released

soon rather than inmates just beginning their sentences. In this sense, the ORAS can guide treatment allocation for helping to reduce post-release recidivism, but is unlikely to reduce misconduct in the facility due to resource constraints. Even if resources were available the prisoners would have to be willing to voluntarily participate (Austin 1998), and the best currently available programs might reduce undesirable behavior for only a small fraction of prisoners (Austin, 2017). But these are common limitations of any system of rehabilitation, and treatment programs have been encouraged as a promising method of reducing misconduct in prisons when it is available and it follows evidence-based programming (Byrne & Hummer, 2007; Byrne & Pattavina, 2007; French & Gendreau, 2006; Gibbons & Katzenback, 2006; Latessa, et al., 2015; Smith & Schweitzer, 2012). Optimistically speaking, it would be advisable to secure more resources for rehabilitative programming in prisons and to continually improve those programs as the best course of action to reduce misconduct and improve post-release outcomes (Byrne & Hummer, 2007).

After interpreting the results of the analyses presented here and considering the limitations of each model, ODRC should avoid using the ORAS-PIT or the Modified PIT to assign inmates to different security levels. Not because these tools are unable to improve classification under the right conditions, but because there is no clear evidence in these analyses that support the use of higher security levels as a method of reducing misconduct. Instead, ODRC should continue to classify men according to their current practices and use the ORAS-PIT to guide treatment plans, while making every effort to increase the availability of treatment to all inmates with identified needs. Regarding female inmates, ODRC classification criteria and the ORAS-PIT would be ineffective for assigning women to different security levels because of the low base rates of misconduct and the lack of predictive power for most of the female risk

factors. The ODRC might consider a complete redesign of initial security level classification policies for women.

### **Future Research Directions**

While the main focus of this dissertation was the ORAS-PIT and prison classification, the results of the various analyses revealed information on several topics of interest to researchers. I have chosen five of these ancillary subjects to discuss briefly in the hopes that it will spur further research in these areas: 1) sex offenders in prison; 2) classification of women; 3) race and gender responsive factors in classification; 3) transfers between prisons and security levels; 4) the role of treatment on dynamic risk factors; and 5) the organizational climate of different prison facilities in enforcing rule violations.

Sex offenders were consistently found to be less involved in misconduct regardless of the type of rule violation. Therefore, the decision to override sex offenders does not appear to be useful for reducing their likelihood of engaging in misconduct. It is possible that the ODRC decision to override sex offenders as part of their mandatory and discretionary regulations is meant to *protect* these offenders by placing them in protective custody, but more research on sex offenders is necessary to understand how they are processed through the prison system and what impact this may have on their post-release outcomes.

This dissertation briefly examined the effects of race and ethnicity on the decision to override a classification level. While no significant differences were found between African American men and white men, there were significant differences between African American women and white women. This topic should be explored in greater detail to determine if women's classification decisions are biased against African American women. It was also found that the ORAS-PIT had greater predictive validity for white men than African American men in

predicting misconduct, so it would be advisable to compare racial groups in future risk assessment validation studies to ensure that the risk factors are applicable to everyone who receives an assessment. Some of the research in this field has produced mixed results on racial differences in the effectiveness of risk assessment tools depending on whether the dependent variable was *any* misconduct or the *frequency* of misconduct (Chenane, Brennan, Steiner, & Ellison, 2014). This dissertation examined the “prevalence” of misconduct among inmates and not the “incidence” of misconduct, and more research is needed on these different outcomes for risk assessment validation.

As mentioned previously, it would be worthwhile to re-evaluate female classification in Ohio. The criteria for determining female security levels cannot be justified when almost all of the risk factors are non-significant. It also begs the question why women need initial classification at all when their rates of misconduct are relatively low and their housing options are limited. This area needs more investigation before we can draw useful conclusions.

This dissertation only examined initial placement decisions, not re-classification decisions. The initial placement is important, but many inmates transfer prisons throughout the course of their sentences. Some transfer *because* they committed misconduct, but others may commit misconduct *because* they transferred. Researchers should examine the effects of these transfers and describe their role in suppressing or amplifying misconduct.

An interesting finding in this dissertation was the influence of program participation on the relationship between the ORAS-PIT and misconduct. When prisoners completed their GED or enrolled in recovery services programs their risk for misconduct generally decreased. This means that a validation assessment of the ORAS-PIT would appear to have weaker predictive value because it uses their criminogenic needs in establishing their risk level. Researchers who

conduct risk and need assessment validation studies should re-examine their data by dividing their program participants into groups (those who received treatment and those who did not) to ensure that their prediction was not undermined by their own treatment recommendations.

Finally, researchers should always attempt to understand the role of the organizational climate in each prison if they want to understand misconduct (Steiner & Wooldredge, 2008). This study failed to account for the inmates' perceptions of correctional officers and the legitimacy of rule infraction boards. It also did not account for managerial differences in deciding which rules to enforce and which to ignore. I made an attempt to capture these differences by separating misconducts into "serious" and "discretionary," but it would be useful to interview the staff of each prison to understand how they make decisions to enforce some rules rather than others.

### **Limitations of the Analyses**

The data provided by the ODRC were expansive and useful for answering these research questions, but all data have limitations. These "misconduct" outcomes depended on the infraction being detected, recorded, and processed through official channels. It would have been preferable to have data on official *accusations* of guilt rather than only convictions, and it would have also been useful to have self-report data to compare with the official outcomes. This would have allowed a comparison of how well the ORAS-PIT predicts each form of measurement. However, research comparing self-reported misconduct and official prison records has found both methods to be valid (Kroner, Mills, & Morgan, 2007; Steiner & Wooldredge, 2012).

This dissertation made use of prison-level variables such as security level and measures of crowding, but there are many other unmeasured environmental effects that could be confounding factors in these models. There were no available data on prisoner attitudes toward

correctional officers in particular facilities, the organizational climate of these facilities, or the architectural designs of the prisons that could suppress or amplify misconduct rates (see Gaes et al., 2002; Camp, Gaes, Langan, & Saylor, 2003; Wooldredge & Steiner, 2009; Steiner, Butler, & Ellison, 2014; and McGuire, 2018 for a summary of environmental factors that may influence prisoner behavior).

This dissertation was also limited in scope to those inmates who spent at least 90 days in their initial placement. This decision was made to ensure that they had enough time to actually commit misconduct before being transferred to another prison. This decision could have resulted in the exclusion of prisoners who committed misconduct within those 90 days and were transferred to a higher security level as a result. Future research should attempt to follow inmates throughout the prison system to determine how much of an effect their behavior has on transfers, and how transfers may affect their behavior.

### **Conclusion**

This dissertation combined the lessons learned from different research approaches that have attempted to answer the same question: *who commits misconduct?* The application of several different analytic approaches revealed interesting information about how classification works in Ohio, weaknesses in those processes, and potential ways to improve them.

The final takeaway from this study is that there *are* significant differences between competing classification methods in terms of predicting misconduct, but this depends on the criteria used, the environmental context where the behavior occurs, and the type of outcome being predicted. However, none of these significant differences were truly groundbreaking in terms of their potential for substantially reducing misconduct. It may simply introduce more confusion about when to use one prediction tool instead of another. Some researchers may

believe that small improvements in prediction are worth the effort because these classification tools are used on thousands of prisoners every year and marginal gains can have wide-reaching benefits in terms of reducing misconduct and preserving resources. Pessimistic (or perhaps realistic) researchers would note that there is no clear evidence that security levels can actually reduce misconduct at all, so any attempt to improve classification decisions cannot be expected to achieve great results.

This dissertation began with a review of the classification practices in American prisons over the past century. How far has the field progressed since the heyday of classification research in the 80's and 90's? Prisons still rely on the same static criminal history factors to determine security level placement that have been used for decades, and they still lack the treatment resources to justify using dynamic criminogenic needs in placement decisions. The research has found "mixed results" on the effects of security levels on inmate behavior. Likewise, this dissertation found that *sometimes* there were significant differences in rates of misconduct between security levels, but it depended on the analytic method, the control variables, the comparison groups, and the outcome.

Realistically speaking, Ohio's prison system has a legal mandate to classify inmates according to rational, reasonable, objective, and uniform criteria regardless of whether certain security levels suppress, amplify, or have no effect on misconduct. This dissertation showed that the ODRC classification criteria is in fact a valid tool for predicting misconduct (in the fair-to-good range) and was only partially harmed by unnecessary override criteria. This implies that its continued use is "rational and reasonable." The criteria for men are all based on criminal history factors, legal status, and age, and these are "objective" criteria. Most of the analyses of male

prisoners presented here also revealed that these criteria were applied “uniformly” across racial categories.

The ODRC’s classification criteria for women is less rational, reasonable, objective, or uniform than the procedures for men. This critique is justified based on the analyses in this dissertation which found that the ODRC classification criteria for women is almost universally invalid (the only exceptions being a violent current admission offense and age at admission). Why do women receive a higher security level placement if they had illegal drug use or a drug offense in the twelve months prior to their arrest? This item is not predictive of misconduct and is not included in the male classification criteria. Does this information guide treatment plans? However, these questions may be irrelevant if the biggest problem with female classification is that almost all of the women are at “low risk” for misconduct compared to men. Why bother with the initial classification of women at all especially when there are so few placement options? More research focusing on female prisoners is necessary.

The title of this dissertation implies that a balance can be achieved between “prison safety” and the “least restrictive” placement of prisoners. I made an ambitious attempt to find this balance, but found that these goals are difficult to *define*. How low do misconduct rates need to be before “safety” is achieved? Can prisons for women be safer than they already are? How can the “least restrictive” placement be identified with imperfect prediction methods? I will once again quote John P. Conrad: “it is very hard to predict, especially the future” (1981, p.15), but I will also acknowledge Leslie Wilkins’ optimism that any evaluation of classification procedures can be useful because it helps administrators think about their policies in “operational terms” (1969 p. 63). We may never achieve the perfect balance between “safety” and the “least



restrictive” placement of prisoners, but these ill-defined goals are something to strive for and this can lead to some degree of accountability and effort in classification systems.

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## Appendix A

### List of Misconduct Types in the Ohio Department of Rehabilitation and Corrections'

#### Inmate Rules of Conduct Code (O.A.C. 5120-9-06)

<b>Rule Violation Description</b>	<b>Frequency Among the Full Sample (n = 32,433)</b>
(1) Causing, or attempting to cause, the death of another.	1
(2) Hostage taking, including any physical restraint of another.	1
(3) Causing, or attempting to cause, serious physical harm to another.	73
(4) Causing, or attempting to cause, physical harm to another.	935
(5) Causing, or attempting to cause, physical harm to another with a weapon.	45
(6) Throwing, expelling, or otherwise causing a bodily substance to come into contact with another.	100
(7) Throwing any other liquid or material on or at another.	118
(8) Threatening bodily harm to another (with or without a weapon.)	920
(9) Threatening harm to the property of another, including state property.	4
(10) Extortion by threat of violence or other means	80
(11) Non-consensual sexual conduct with another, whether compelled by force, threat of force, intimidation other than threat of force, or by any other circumstances evidencing a lack of consent by the victim.	3
(12) Non-consensual sexual contact with another, whether compelled by force, threat of force, intimidation other than threat of force, or by any other circumstances evidencing a lack of consent by the victim.	10
(13) Consensual physical contact for the purpose of sexually arousing or gratifying either person.	163
(14) Seductive or obscene acts, including indecent exposure or masturbation; including, but not limited, to any word, action, gesture or other behavior that is sexual in nature and would be offensive to a reasonable person.	514
(15) Rioting or encouraging others to riot.	1
(16) Engaging in or encouraging a group demonstration or work stoppage.	8
(17) Engaging in unauthorized group activities as set forth in paragraph (B) of rule 5120-9-37 of the Administrative Code.	711
(18) Encouraging or creating a disturbance.	315
(19) Fighting - with or without weapons, including instigation of, or perpetuating fighting.	4,795

<b>Rule Violation Description</b>	<b>Frequency Among the Full Sample (n = 32,433)</b>
(20) Physical resistance to a direct order.	511
(21) Disobedience of a direct order.	1,468
(22) Refusal to carry out work or other institutional assignments.	160
(23) Refusal to accept an assignment or classification action.	2,233
(24) Establishing or attempting to establish a personal relationship with an employee, without authorization from the managing officer.	270
(25) Intentionally grabbing, or touching a staff member or other person without the consent of such person in a way likely to harass, annoy or impede the movement of such person.	74
(26) Disrespect to an officer, staff member, visitor or other inmate.	555
(27) Giving false information or lying to departmental employees.	171
(28) Forging, possessing, or presenting forged or counterfeit documents.	8
(29) Escape from institution or outside custody (e.g. transport vehicle, department transport officer, other court officer or law enforcement officer, outside work crew, etc.) As used in this rule, escape means that the inmate has exited a building in which he was confined; crossed a secure institutional perimeter; or walked away from or broken away from custody while outside the facility.	0
(30) Removing or escaping from physical restraints (handcuffs, leg irons, etc.) or any confined area within an institution (cell, recreation area, strip cell, vehicle, etc.)	8
(31) Attempting or planning an escape.	3
(32) Tampering with locks, or locking devices, window bars; tampering with walls floors or ceilings in an effort to penetrate them.	31
(33) Possession of escape materials; including keys or lock picking devices (may include maps, tools, ropes, material for concealing identity or making dummies, etc.)	4
(34) Forging, possessing, or obtaining forged, or falsified documents which purport to effect release or reduction in sentence.	0
(35) Being out of place.	777
(36) Possession or manufacture of a weapon, ammunition, explosive or incendiary device.	190

<b>Rule Violation Description</b>	<b>Frequency Among the Full Sample (n = 32,433)</b>
(37) Procuring, or attempting to procure, a weapon, ammunition, explosive or incendiary device; aiding, soliciting or collaborating with another person to procure a weapon, ammunition, explosive or incendiary device or to introduce or convey a weapon, ammunition, explosive or incendiary device into a correctional facility.	0
(38) Possession of plans, instructions, or formula for making weapons or any explosive or incendiary device.	1
(39) Unauthorized possession, manufacture, or consumption of drugs or any intoxicating substance.	3,307
(40) Procuring or attempting to procure, unauthorized drugs; aiding, soliciting, or collaborating with another to procure unauthorized drugs or to introduce unauthorized drugs into a correctional facility.	260
(41) Unauthorized possession of drug paraphernalia.	21
(42) Misuse of authorized medication.	129
(43) Refusal to submit urine sample, or otherwise to cooperate with drug testing, or mandatory substance abuse sanctions.	235
(44) Gambling or possession of gambling paraphernalia.	12
(45) Dealing, conducting, facilitating, or participating in any transaction, occurring in whole or in part, within an institution, or involving an inmate, staff member or another for which payment of any kind is made, promised, or expected.	161
(46) Conducting business operations with any person or entity outside the institution, whether or not for profit, without specific permission in writing from the managing officer.	17
(47) Possession or use of money in the institution.	8
(48) Stealing or embezzlement of property, obtaining property by fraud or receiving stolen, embezzled, or fraudulently obtained property.	279
(49) Destruction, alteration, or misuse of property.	143
(50) Possession of property of another.	34
(51) Possession of contraband, including any article knowingly possessed which has been altered or for which permission has not been given.	725
(52) Setting a fire; any unauthorized burning.	13
(53) Tampering with fire alarms, sprinklers, or other fire suppression equipment.	9
(54) Unauthorized use of telephone or violation of mail and visiting rules.	123
(55) Use of telephone or mail to threaten, harass, intimidate, or annoy another.	8
(56) Use of telephone or mail in furtherance of any criminal activity.	4

<b>Rule Violation Description</b>	<b>Frequency Among the Full Sample (n = 32,433)</b>
(57) Self-mutilation, including tattooing.	995
(58) Possession of devices or material used for tattooing.	144
(59) Any act not otherwise set forth herein, knowingly done which constitutes a threat to the security of the institution, its staff, other inmates, or to the acting inmate.	15
(60) Attempting to commit; aiding another in the commission of; soliciting another to commit; or entering into an agreement with another to commit any of the above acts.	98
(61) Any violation of any published institutional rules, regulations or procedures.	128

## Appendix B

### OHIO RISK ASSESSMENT SYSTEM- PRISON INTAKE TOOL (ORAS-PIT)

Name: \_\_\_\_\_

Date of Assessment: \_\_\_\_\_

Case#: \_\_\_\_\_

Name of Assessor: \_\_\_\_\_

_____ Age at Time of Assessment	_____
0 = 24+	
1 = 18-23	

#### 1.0 CRIMINAL HISTORY

- 1.1 Most Serious Arrest Under Age 18 \_\_\_\_\_  
0 = None  
1 = Yes, Misdemeanor  
2 = Yes, Felony
- 1.2 Prior Commitment as a Juvenile to Department of Youth Services \_\_\_\_\_  
0 = No  
1 = Yes
- 1.3 Number of Prior Adult Felony Convictions \_\_\_\_\_  
0 = None  
1 = One or Two  
2 = Three or more
- 1.4 Arrests for Violent Offense as an Adult \_\_\_\_\_  
0 = No  
1 = Yes
- 1.5 Number of Prior Commitments to Prison \_\_\_\_\_  
0 = None  
1 = One  
2 = Two or More
- 1.6 Ever Received Official Misconduct while Incarcerated as an Adult \_\_\_\_\_  
0 = No  
1 = Yes
- 1.7 Ever Had Escape Attempts as Adult \_\_\_\_\_  
0 = No  
1 = Yes

**Total Score in Criminal History:** \_\_\_\_\_

---

**2.0 SCHOOL BEHAVIOR AND EMPLOYMENT**

- 2.1 Ever Expelled or Suspended from School \_\_\_\_\_  
0 = No  
1 = Yes
- 2.2 Employed at the Time of Arrest \_\_\_\_\_  
0 = Yes  
1 = No
- 2.3 Employed Just Prior to Incarceration \_\_\_\_\_  
0 = Yes, Full-time or Disabled  
1 = Not Employed or Employed Part-time
- 2.4 Attitudes toward Boss/Employer \_\_\_\_\_  
0 = Good Relationship  
1 = Poor Relationship
- 2.5 Longest Length of Employment Past Two Years \_\_\_\_\_  
0 = 18 Months or More  
1 = 1-17 Months  
1 = None
- 2.6 Better Use of Time \_\_\_\_\_  
0 = No, Most Time Structured  
1 = Yes, Lots of Free Time

**Total Score in School Behavior and Employment:** \_\_\_\_\_

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**3.0 FAMILY AND SOCIAL SUPPORT**

- 3.1 Current Marital Status \_\_\_\_\_  
0 = Married or Cohabiting  
1 = Single (Married but Separated), Divorced, Widowed
- 3.2 Living Situation Prior to Incarceration \_\_\_\_\_  
0 = Significant Other  
1 = Parents, Friends, or Other  
2 = Alone or Shelter
- 3.3 Stability of Residence Prior to Incarceration \_\_\_\_\_  
0 = Stable  
1 = Not Stable
- 3.4 Emotional and Personal Support Available from Family or Others \_\_\_\_\_  
0 = Strong Support  
1 = None or Weak Support
- 3.5 Level of Satisfaction with Current Level of Support from Family or Others \_\_\_\_\_  
0 = Very Satisfied  
1 = Not Satisfied

**Total Score for Family and Social Support:** \_\_\_\_\_

---

#### 4.0 SUBSTANCE ABUSE AND MENTAL HEALTH

- 4.1 Longest Period of Abstinence from Alcohol \_\_\_\_\_  
0 = Six Months or Longer  
1 = Less than Six Months
- 4.2 Age at First Illegal Drug Use \_\_\_\_\_  
0 = 16 or Older  
1 = Under 16
- 4.3 Problems with Employment due to Drug Use \_\_\_\_\_  
0 = No  
1 = Yes
- 4.4 Problems with Health due to Drug Use \_\_\_\_\_  
0 = No  
1 = Yes
- 4.5 Ever Diagnosed with Mental Illness/ Disorder \_\_\_\_\_  
0 = No  
1 = Yes

**Substance Abuse and Mental Health:** \_\_\_\_\_

---

#### 5.0 CRIMINAL LIFESTYLE

- 5.1 Criminal Activities \_\_\_\_\_  
0 = Prosocial  
1 = Mixture  
2 = Criminal Activities
- 5.2 Current Gang Membership \_\_\_\_\_  
0 = No, Never  
1 = Yes, but Not Current  
2 = Yes, Current
- 5.3 Ability to Control Anger \_\_\_\_\_  
0 = Good Control  
1 = Poor Control
- 5.4 Uses Anger to Intimidate Others \_\_\_\_\_  
0 = No  
1 = Yes
- 5.5 Acts Impulsively \_\_\_\_\_  
0 = No  
1 = Yes
- 5.6 Feels Lack of Control Over Events \_\_\_\_\_  
0 = Controls Events  
1 = Sometimes Lacks Control  
2 = Generally Lacks Control
- 5.7 Walks Away from a Fight \_\_\_\_\_  
0 = Yes  
1 = Sometimes  
2 = Rarely

**Total Score for Criminal Lifestyle:** \_\_\_\_\_  
**TOTAL SCORE:** \_\_\_\_\_



Risk Categories for Males			Risk Categories for Females		
Scores	Rating	Percent of Failures*	Scores	Rating	Percent of Failures*
0-8	Low	17%	0-12	Low	17%
9-16	Moderate	32%	13-18	Moderate	33%
17-24	High	58%	19+	High	63%
25+	Very High	71%			

### Domain Levels

#### 1.0 Criminal History

Score	Failure*
Low (0-3)	30%
Med (4-6)	47%
High (7-10)	57%

#### 2.0 School Behavior and Employment

Score	Failure*
Low (0-3)	29%
Med (4-5)	44%
High (6-7)	55%

#### 3.0 Family and Social Support

Score	Failure*
Low (0-2)	28%
Med (3-4)	45%
High (5-6)	60%

#### 4.0 Substance Abuse and Mental Health

Score	Failure*
Low (0-1)	33%
Med (2-3)	44%
High (4-5)	60%

#### 6.0 Criminal Lifestyle

Score	Failure*
Low (0-2)	29%
Med (3-5)	46%
High (6-11)	60%

### Professional Override:

**Reason for Override (note overrides should not be based solely on offense)**

#### Other Areas of Concern, Check all that Apply:

- ☐ Low Intelligence  
☐ Physical Handicap  
☐ Reading and Writing Limitations  
☐ Mental Health Issues  
☐ No Desire to Change/Participate in Programs  
☐ Language  
☐ Ethnicity  
☐ Cultural Barriers  
☐ History of Abuse/Neglect  
☐ Interpersonal Anxiety  
☐ Other \_\_\_\_\_

If these items are checked it is strongly recommended that further assessment be conducted to determine level or severity

*\*Failure in the original ORAS is defined as post-release recidivism, not institutional misconduct*

## Appendix C

### OHIO RISK ASSESSMENT SYSTEM- PRISON SCREENING TOOL (ORAS-PST)

Name: \_\_\_\_\_ Date of Assessment: \_\_\_\_\_

Case#: \_\_\_\_\_ Name of Assessor: \_\_\_\_\_

1. Employed at the Time of Arrest \_\_\_\_\_  
     0 = Yes  
     1 = No
2. Longest Length of Employment Past Two Years \_\_\_\_\_  
     0 = 18 Months or More  
     1 = 1 – 17 Months  
     2 = None
3. Living Situation Prior to Incarceration: \_\_\_\_\_  
     0 = Significant Other  
     1 = Parents, Friends, or Other  
     2 = Alone or Shelter
4. Stability of Residence Prior to Incarceration \_\_\_\_\_  
     0 = Stable  
     1 = Not Stable

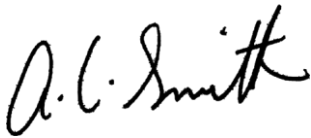
**TOTAL:** \_\_\_\_\_

Risk Categories for Males			Risk Categories for Females		
Scores	Rating	Percent of Failures*	Scores	Rating	Percent of Failures*
<b>0-1</b>	<b>Low</b>	<b>20%</b>	<b>0-3</b>	<b>Low</b>	<b>21%</b>
<b>2-6</b>	<b>Mod/High</b>	<b>47%</b>	<b>4-6</b>	<b>Mod/High</b>	<b>47%</b>

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## Appendix D



<b>SUBJECT:</b> <b>Security Classification for Incarcerated Persons Levels 1 Through 4</b>	PAGE <u>1</u> OF <u>17</u>
	NUMBER: <b>53-CLS-01</b>
<b>RULE/CODE REFERENCE:</b>	<b>SUPERSEDES:</b> 53-CLS-01 dated 01/07/19
<b>RELATED ACA STANDARDS:</b> 5-ACI-5B-01 (4295) thru 5-ACI-5B-04 (4298); 5-ACI-5B-06 (4300) thru 5-ACI-5B-09 (4303); 5-ACI-5F-03 (4444); 2-CO-4B-01, 2-CO-4B-03	<b>EFFECTIVE DATE:</b> <b>February 3, 2020</b>
	<b>APPROVED:</b> 

### I. AUTHORITY

Ohio Revised Code 5120.01 authorizes the Director of the Department of Rehabilitation and Correction, as the executive head of the department, to direct the total operations and management of the department by establishing procedures as set forth in this policy.

### II. PURPOSE

The purpose of this policy is to establish guidelines for the fair, uniform, and objective security classification of incarcerated individuals within the Ohio Department of Rehabilitation and Correction (ODRC). Appropriate classification is a means of protecting the public, ensuring staff safety, and achieving ODRC's rehabilitative goals.

### III. APPLICABILITY

This policy applies to all Ohio Department of Rehabilitation and Correction (ODRC) staff and incarcerated individuals involved in the classification process.

### IV. DEFINITIONS

Annual – A twelve (12) month period.

**Double Fence Designation** - All incarcerated individuals by default are required to be housed in double perimeter fence housing. Any individual placed into single perimeter fence housing must be approved using the provisions outlined in this policy.

**Double Perimeter Fence Housing** - Housing units located within a prison which have been identified by the appropriate regional director as having two (2) fences, including sufficient perimeter integrity as well as patrol, to qualify as double fenced. Regional directors shall, at least annually, review all their facilities to determine if they qualify as a single or double fence rated facility. Single fence perimeters may also be designated as double perimeter, when approved by the deputy director of Prisons if they have sufficient perimeter or security structures which equal, or exceed, double perimeter fencing. This includes, but is not limited to, stun fences and high security single fences supported by infrastructure and movement procedures which do not allow incarcerated individuals near the fence without direct supervision. The installation of a stun fence around a prison facility or unit with a single fence does not automatically make the facility double perimeter rated. The designated regional director and the deputy director of Prisons may, at their discretion, increase the rating of the prison/facility to double perimeter.

Current exceptions approved by the deputy director of Prisons:

- OSP Level 4/E compound
- Grafton Camp at managing officer's discretion only (based on stun fence)
- NERC (based on provisions listed in this policy)

**Extended Restrictive Housing (ERH)** - A security classification level represented as "E" in the Departmental Offender Tracking System (DOTS). ERH is the most restrictive security level in the ODRC reserved for incarcerated individuals who constitute the greatest threat to the safety and security of the community, staff, others, and/or the secure operations of a correctional facility.

**Extended Restrictive Housing- Enhanced Behavioral Health Monitoring (EM)** - A classification given to an incarcerated individual in ERH who is classified as C1 or IDD. Represented as "EM" in DOTS. An EM classified individual must be offered more than two hours out of cell time daily. EM is considered RH2 (special management) in accordance with the provisions in ODRC Policy 55-SPC-02, Restrictive Housing Procedures.

**Extended Restrictive Housing- Ineligible for Presumptive Release (EN)** - A classification given to an incarcerated individual in ERH who is ineligible for presumptive release. It is represented as "EN" in DOTS. EN inmates are the same security level as Level E incarcerated individuals.

**ERH Transitional (ET)** - A security level where the incarcerated individual is introduced to limited and small group congregate recreation and programming in preparation for release to general population. ET is considered RH2 (special management) in accordance with the provisions in ODRC Policy 55-SPC-02, Restrictive Housing Procedures.

**General Population** - A reference to all general population security levels (1-4). General population provides incremental increases in autonomy and freedom of movement with similar perimeter security, so all incarcerated individuals can be encouraged to engage in pro-social behavior and follow institutional rules. Level 3 and 4 are considered high security and are typified by greater controls on movement and a higher level of supervision. Privileges may vary between prisons, but all prisons are required to have demonstrably increased privileges as individuals decrease in security level.

**High Notoriety Case** - Any incarcerated individual whose offense and/or pattern of previous behavior gives rise to concerns because of its sensational, notorious, or heinous nature may be designated as high notoriety. High notoriety may be evidenced by intense ongoing community, victim, and/or media interest. High notoriety is subject to change over time and may be relative to a particular time or place.

**History of Escape/Escape Risk** - An incarcerated individual is considered to have a history of escape when they meet one (1) of the following criteria:

- 1) They have been convicted of escape in any jurisdiction.
- 2) They have been found guilty at RIB of attempting to escape, planning an escape, escaping, or possession of escape materials.
- 3) They have a documented history of escaping from a secure perimeter or walking away while on community release from a secured perimeter facility.
- 4) There is enough documentation from any correctional or law enforcement agency to indicate an individual has attempted to escape, planned to escape, or escaped from a secured correctional facility or secured behavioral health facility.

If an incarcerated individual qualifies under any of these provisions, they shall be flagged in the Departmental Offender Tracking System (DOTS Portal) as an “Escape Risk” and an ER flag will be placed on their file.

**Level 1** - The lowest security level in the classification system. Level 1 incarcerated individuals should be granted the highest amount of privilege and autonomy whenever possible (subject to operational needs/capabilities of the facility). Behavior at Level 1 is expected to be rule compliant and pro-social. All persons at Level 1 must be housed in double perimeter fence housing unless they are screened to be housed in a single perimeter fence. Level 1 individuals may also be screened to work outside of the fence or in the community under intermittent supervision. Individuals at Level 1 may be housed with Level 2 individuals with no special arrangements required.

**Level 2** - A security level for incarcerated individuals who are deemed in need of more supervision than Level 1, but less than Level 3. All persons at Level 2 must be housed in double perimeter fence housing as defined by this policy, exceptions can be approved by the deputy director of prisons. Housing may be dorm, rooms, or cells. Individuals at Level 2 tend to receive greater autonomy and freedom of movement during the day to encourage pro-social behavior and programming, and receive privileges greater than Level 3. Individuals at Level 2 may be housed with others at Level 1 with no special arrangements required. Individuals at Level 2 may also be housed with those at Level 3 with/without special arrangements at the discretion of the managing

officer. Level 3 individuals who have been reduced to level 2 security, but are pending transfer, may be housed with level 3 individuals until the transfer occurs.

**Level 3** - The security level that is the next degree higher than Level 2 and requires more security/supervision than Level 2 but less than Level 4. All incarcerated individuals at Level 3 must be housed in Double Perimeter Fence Housing as defined by this policy, exceptions can be approved by the deputy director of Prisons. Housing is generally celled apart from units specially designed to prepare rule compliant individuals for release. This exception is currently granted for the MaCI Zone A dormitory with the following provisions: Individuals will be screened by the unit team to determine suitability for housing in a more open environment. This unit is to prepare individuals in a Level 3 environment for release to the community or reduction to Level 2. Level 3 is considered general population but is designed for individuals who are more likely to, or have previously engage(d) in, disruptive prison behavior. Internal movement is under greater supervision and more controlled. Privileges shall be greater than Level 4, but less than Level 2. Individuals at Level 3 may be housed with individuals at Level 2 or Level 4 with/without special arrangements at the discretion of the managing officer. Level 3 individuals who have been reduced to Level 2 may be housed at the Level 3 supervision level until their transfer. Level 4 individuals who have been reduced to Level 3 but are pending transfer to a Level 3 facility may be housed at the Level 4 supervision level.

**Level 4** - Level 4 security is considered maximum security, but it is not restrictive housing and incarcerated individuals must be allowed more than 2 hours out of cell time daily as well as access to general population services. The physical security requirements for Level 4 may vary based on the overall physical structure of the facility. Double perimeter fences, or architectural equivalents where at least two independent barriers exist between an incarcerated individual and the outside, are required. The perimeter patrol is armed, with an alarmed perimeter intrusion detection system. The security at Level 4 is enhanced with controlled/supervised movement at all times as well as limited, and highly supervised, access to outside recreation/activities. Cells must be securable, and inmates must be single celled while at a parent institution unless there is approval from the deputy director of Prisons. Typically, individuals at Level 4 have established histories of violent and/or disruptive prison behavior or their prison and community history indicate there is a very high risk of escape. It is also a classification for those who are involved in, but not leading others to commit, violent, disruptive, predatory, or riotous actions, and/or pose a threat to the security of the institution. Individuals who have been assigned Level 4 security but are awaiting transfer do not automatically require single celling except at the discretion of the managing officer. Level 3 and level 4 individuals can be housed together at the discretion of the managing officer. Level 4 individuals who have received a reduction in security to Level 3, may be housed with Level 4 individuals while they are awaiting transfer.

**Limited Privilege Housing (LPH)** - Assignment of an incarcerated individual to a designated area for the purpose of reducing their privileges, controlling movement, and reducing their access to other inmates. LPH is considered general population and individuals shall have access to prison services, although that access can be reasonably limited as part of their privilege reduction. Designated out-of- cell time shall be more than two (2) hours daily.

**Multidisciplinary Services Team (MST)** - A group of unit, treatment, programming, and security staff who provide integrated services to incarcerated individuals in Specialized Units and Restrictive Housing. The team assesses inmate needs, integrating the treatment plan, and develops an individualized plan to ensure security measures support the delivery of treatment services and privileges.

**Multidisciplinary Treatment Team (MTT)** - Provides an integrated team approach to an incarcerated individual's care and treatment. The members meet to develop and provide necessary health and behavioral health care services and individualized treatment for individuals with emphasis on addressing needs during confinement in health and behavioral health care specialized units and for those on the mental health caseload in step-down programs, including restrictive housing settings. The team may include, but is not limited to, Mental Health professionals, psychiatric attendants, Medical and Recovery Services staff, Sex Offender Services, Custody and Unit Management staff.

**Restrictive Housing (RH)** - Housing that separates an incarcerated individual from the general population and restricts the individual to their cell twenty-two (22) hours or more per day.

**Single Perimeter Fence Housing** - Housing units with a single perimeter fence intended for the purpose of housing minimum level incarcerated individuals who have achieved Level 1 security status and have been screened for placement in a single fence rated facility. The following prisons are currently rated as single fence:

- BeCC
- FMC Zone B
- LeCC
- ManCC
- NERC- with certain provisions outlined in this policy
- TCC

## **V. POLICY**

It is the policy of the Ohio Department of Rehabilitation and Correction (ODRC) to maintain a classification level system that creates a process for the classification of incarcerated individuals according to their security risk. This process shall consider behavior and such other objective factors as are available and relevant when assessing an individual's institutional security needs. Factors considered include, but are not limited to:

- History of assaultive, violent, or disruptive behavior
- Age
- Escape history
- Enemies of record
- Gender identification
- Sex
- Medical status
- Mental and emotional stability
- Notoriety of offenses
- Criminal history

- Type of sentencing and release eligibility
- Programming and education history
- STG affiliation
- Previous adjustment at less restrictive security levels

Incarcerated individuals shall be placed at the lowest level of security possible that is still sufficient to ensure the safety and security of individuals, the institution, and the community. Individuals shall also be placed at institutions that are consistent with their security classification rating. For purposes of public safety, all incarcerated individuals are required to be housed in double perimeter fence housing unless specifically screened and approved to be housed in single perimeter fence housing in accordance with the provisions in this policy.

## **VI. PROCEDURES**

### **A. Initial Classification**

1. Initial security levels shall be identified using pre-commitment variables. Reception staff shall obtain information available, such as pre- and post-sentence investigations (PSI), FBI/BCI reports, Ohio Court Network reports, Ohio Risk Assessment Community Supervision Tool information, past reentry case management plans and past incarcerations, to assist in determining the incarcerated individual's needs. Upon objective determination of the individual's security level, utilizing the Security Designation (DRC2568/DRC2630) for males or Security Designation (DRC2690/DRC2691) for females, the classification specialist shall forward their recommendation and all pertinent documents to the reception coordinator. Separation orders or requests for such shall be included with the recommendation on the Separation Order form (DRC2456) pursuant to ODRC Policy 53-CLS-05, Inmate Separations. The Bureau of Classification and Reception (BOCR) shall monitor the process and serve as back-up to the process.

2. The reception coordinator shall review the information provided to them, along with any other pertinent information they possess, and assign the individual to an appropriate institution. Individuals shall be transferred to an institution equipped to supervise individuals of that security level. Except in unusual circumstances, the initial classification of newly incarcerated individuals should be completed within eight (8) weeks after admission.

3. Level 1 individuals who may be eligible for outside work details shall be sent to prisons with the greatest need for workers. It is the responsibility of the parent institutions to keep the reception coordinator apprised of their current worker needs so the appropriate number of individuals may be added to the transfer pools. Parent institutions with a need for workers may also contact the reception coordinator at their respective reception center in order to make arrangements to send recruiters and screeners to the reception center.

4. An incarcerated individual may be assigned at reception to any security level from 1-4 or E. No inmate shall be placed in Level E from reception without following the protocols in this policy and ODRC Policy 53-CLS-04, Extended Restrictive Housing Placement.



## **B. Annual Security Review Process**

1. Each incarcerated individual shall have a security review on no less than an annual basis. All individuals assigned to Security Levels 1-4 shall receive this review. Individuals who are in Level E are subject to reviews in compliance with ODR Policy 53-CLS-10, Review and Release of Extended Restrictive Housing Incarcerated Individuals.
2. Unless precluded for security or other substantial reasons, all incarcerated individuals shall have the opportunity to meet with at least one (1) member of the classification committee. Individuals are to be given written notice forty-eight (48) hours prior to their review hearing, unless such notice has been waived in writing on the Security Classification and Job Assignment form (DRC2099). An individual shall be allowed to submit a written statement to the committee which shall be entered into the official record.
3. The annual review for Level 1 incarcerated individuals shall not require the completion of the applicable Supervision Review Forms, nor shall it require a formal review hearing with the individual unless there is intent to increase the security supervision level. The specific requirements for Level 1 reviews are covered later in this section.
4. The classification review provides for involvement of representatives of relevant institutional programs and the incarcerated individual concerned. The classification committee shall include a minimum of two (2) staff, and may include members of the Mental Health department, Education, Unit Management, or any other institution program individual.
5. During the meeting with the representative of the classification committee, the incarcerated individual and the staff member shall discuss whether the incarcerated individual is currently enrolled in an earned credit program. If the security classification action will require a change in the individual's institutional location and they can complete the program within the next six (6) months, the classification shall proceed; however, the move shall be held in abeyance until the individual completes the program. The committee will document this in the classification notes and shall not submit a Transfer Authorization (DRC2003) or a Decrease Security Level List (DRC2622) with the individual's name until they complete the program.
6. A representative from the classification committee shall also review and discuss the individual's next of kin information and make updates in DOTS if there has been a change.
7. Supervision Review forms (DRC 2098/2094/2338) for male incarcerated individuals and Supervision Review forms (DRC2605/2606/2607) for female incarcerated individuals, along with a full review of the individual's behavioral history shall be used to determine if any changes to the security level are appropriate. The classification committee shall review post-commitment variables and any other pertinent information available, such as any statement the incarcerated individual has provided to draw an objective profile of the individual's adjustment to their current security level. The security review score is only a recommendation that the security level should be lowered, increased, or remain the same. The instrument is a tool to assist staff in making a good correctional decision regarding the security level at which the incarcerated

individual should be managed. The final recommendation shall be based on a holistic review of the individual's behavioral history using all the factors under section V in this policy.

8. The classification committee shall inform the incarcerated individual of their recommendation to the managing officer/designee. The individual shall also be notified of their right to send a written appeal to the managing officer/designee if they disagree with the committee's recommendation.

9. If the managing officer/designee determines that a security level change is appropriate it shall be forwarded to the BOCR under the following circumstances:

- a. The individual is being increased to Level 2 or Level 3;
- b. The individual is being decreased from Level 2, 3, or 4;
- c. The change in classification will necessitate a transfer.

10. If the managing officer/designee does not agree with the recommendation of the classification committee, the individual shall be notified in writing of the decision.

### **C. Annual Security Review Situational Rules**

#### **1. Level 1**

a. The classification committee is not required to complete a security instrument when reviewing Level 1 incarcerated individuals annually. However, they must still conduct a file review of the individual's behavior. If the review of a Level 1 individual indicates their level will not change a representative of the classification committee shall document the results of this review in the ORAS or RAP notes. A unit staff member must meet with the individual; however, a forty-eight (48) hour notice is not required. During special reviews, or situations where the committee is considering a security increase, all procedures and forms for regular security classification hearings must be followed and utilized.

b. Individuals who are classified as Level 1 and who are housed in a single fence perimeter must be checked during this review against the provisions in section VI.F and VI.G of this policy to ensure their status has not changed making them ineligible to be in a single fence perimeter.

c. No individual who has escaped from the secured perimeter of a correctional facility or attempted an escape whereby they breached the perimeter of a correctional facility, shall be placed at Level 1 security. Individuals who have such a history and are currently Level 1 are grandfathered under this clause only until such time they are released and returned, or they are increased in security. However, no incarcerated individual is grandfathered under this clause to remain in a single fence perimeter. Any individual with a perimeter escape history shall not be housed in a single fence environment.

d. Level 1 is the lowest security level in the ODRC, and the classification committee shall consider a multitude of factors to determine if the individual qualifies for this level. Individuals with a history of perimeter escape, non-perimeter escape(s), failure to comply, significant

amounts of time left to serve, high notoriety cases, wanted felony detainees, or extensive criminal histories may still be denied Level 1 security for these reasons at the discretion of the classification committee and the BOCR.

## **2. Level 2**

Since Level 1 security is the lowest level of supervision, managing officers are provided broad discretion in determining whether an individual at Level 2 is ready for reduction to Level 1. Individuals may be held at Level 2 for longer periods of time if they have a history of institutional misbehavior, have committed very serious crimes which threaten public safety, or have escaped from a secured facility. No individual has a right to a reduction to Level 1 security.

## **3. Level 3**

While at Level 3, any individual who has been in Level 4 security within the past two (2) years shall be meaningfully considered for a reduction each year, but the committee must review the entire history of the individual and ensure there are sufficient correctional reasons which indicate the individual has demonstrated enough stability to be housed at Level 2. The absence of conduct reports for a year is not the sole consideration and all items listed under section V of this policy must be considered before lowering the individual to Level 2.

## **4. Level 4**

a. Level 4 individuals shall have their complete history of violence, escape history, and disruption examined before reduction to Level 3. The committee shall provide significant weight to how the individual adjusted when previously managed at lower security when making the final recommendation.

b. No individual at Level 1-3 can be increased to Level 4 during a security review. If the behavior of the individual necessitates maximum security, the managing officer shall use the procedures outlined in ODR Policy 53-CLS-04, Extended Restrictive Housing Placement, to place the individual in Level E security.

## **5. General Rules**

a. If the individual is at security Level 2 or 3 and the security review score is to consider present supervision then the reviewer may serve them with the forty-eight (48) hour notice via the Security Classification and Job Assignment form (DRC2099), complete the hearing, and sign the security/supervision review form as the chair individual recommending continued placement at current level. The individual must still be provided an opportunity to submit written documents for consideration and to meet with a member of the committee.

b. During any security review, a recommendation for an increase shall be supported by recent RIB findings of guilt. In order to be increased in security, an individual must have at least one, or more, RIB finding(s) of guilt in the past twelve (12) months. These rule violations, in conjunction with all the factors listed under section V of this policy, must provide legitimate

correctional reason to conclude the individual requires a greater level of supervision in order to be safely managed.

c. Hearing officer level conduct reports may not be used to increase an individual's security level because they do not provide the same due process protections as RIB decisions. However, hearing officer level conduct reports may be considered by the committee conducting a security review when determining suitability for a decrease in security, as these reports are an indicator of adjustment at the current level. Hearing officer level conduct reports may also be considered for other classification actions (excepting security increases), including but not limited to, lateral movement for discipline, self-initiated transfers, and program transfers.

d. In some circumstances, an incarcerated individual may have their security level increased without a finding of guilt at RIB. This may occur if one of the following is true:

i. An error was found in a previous classification action and the individual's continued presence at the current security level could result in a potential danger to the community or the security of the prison.

ii. New information was obtained regarding the individual's previous criminal or institutional behavioral and this new information provides legitimate correctional reasons to house them in a more secure environment (e.g. escape, serious violence while incarcerated, etc.).

#### **D. Special Security Review**

1. Special security reviews, on dates other than the incarcerated individual's annual review due date, may occur at any time when recommended to the institutional classification committee through the disciplinary process, at the request of the incarcerated individual (subject to the approval of the managing officer/designee), or when otherwise deemed appropriate by the managing officer/designee and/or the BOCR. These special reviews shall follow the same procedures as an annual review.

2. Individuals may request a special security review of their progress and program status in writing, utilizing an institution Kite (DRC2005). The facility is not obligated to grant a special security review request and must notify the individual of their decision if such a request is denied.

3. Depending on the reason for the request for a special security review, institution staff may utilize the following factors in determining an individual's eligibility to be considered for a special security review:

- a. Length of time until the next scheduled security review;
- b. Parole Board recommendations;
- c. Recent conduct and/or attitude;
- d. Length of time since last placement in disciplinary status;
- e. Original reason for current security level, including the seriousness of any related conduct report(s);

- f. Length of time since the last reduction/increase in status;
- g. Program completion since last review; and
- h. The amount of time remaining on the individual's sentence.

4. Any security review, either annual or special, which increases or decreases an incarcerated individual's security level changes the annual review anniversary date. The new anniversary date shall be twelve (12) months from the BOCR's approval date of the increase or decrease. A special security review that does not result in a change in security level does not alter the individual's anniversary date and they shall receive an additional security review within twelve (12) months from the previous annual review.

#### **E. Overrides to the Classification Instrument**

1. In every step of the classification process, the human element shall be considered. Each of the objective phases has latitude for overrides if a condition exists where an exception should be made. In the initial process, the institution reception center staff may recommend higher or lower security levels based on knowledge of the individual. The BOCR has the authority to increase or decrease an initial security level or make a placement based on information they may have concerning an individual.

2. During the annual review process, the managing officer/designee may override the review recommendation for the individual if circumstances warrant or the individual has adjusted to incarceration better or worse than the actual security instrument may indicate. Justification/basis for any override shall be documented on the instrument. Consideration shall also be given to the individual's compliance with their case management plan. (Refer to ODRC Policy 02-REN-01, Prison Reentry Assessment and Planning.)

#### **F. Single Perimeter Fence Housing**

All incarcerated individuals in the ODRC are required to be housed in double perimeter fence housing unless they are screened and approved for placement in single perimeter fence housing.

1. Individuals may be considered for placement into single perimeter fence housing using Single Fence Screening form (DRC4028). They may be screened at reception or during anytime in their incarceration.

2. Once approved for single fence housing, the status should be reviewed annually during the annual security review to ensure there have been no changes in the individual's profile which would necessitate placement back in double perimeter fence housing. This includes, but is not limited to, a change in their sentence, misbehavior, or getting new information which reveals a history of escape or a wanted felony detainer. A review may also be prompted at any time when new information is obtained, or an individual violates a rule. No individual has the right to be housed in a single fence environment and may be removed from this environment at any time at the discretion of the managing officer.

3. The following are the minimum criteria for placement in single perimeter fence housing. The managing officer of a facility shall reserve the right to deny any individual single perimeter fence placement, above and beyond the criteria listed herein, if there is a legitimate correctional reason for the denial.

- a. No more than six (6) years left to serve to maximum release date (no life sentences);
- b. No history of escape as defined by this policy;
- c. No former death row inmates;
- d. No felony or out- of-state wanted detainees;
- e. High notoriety incarcerated individuals who are also convicted of violent offenses (sex offenses and crimes against individuals) may only be approved after consultation with the Office of Victims Services;
- f. No history of causing the death of a law enforcement officer/correctional staff individual (includes attempted);
- g. No history of taking a hostage (includes attempted).

4. The managing officer of the single perimeter fence facility may recommend an exemption to this policy based on objective criteria which justifies the action. All these exemptions must be approved by the regional director and added to this policy. Currently, the exemptions to this policy are as follows:

- a. NERC is designated for Level 1 female incarcerated individuals. All Level 1 females are eligible to be housed at NERC except for:
  - i. Any former death row individual who has had their sentence commuted to life;
  - ii. Any individual serving a life without the chance of parole sentence, or a sentence which is the equivalent;
  - iii. Any individual serving life with more than six (6) years to the parole board; and
  - iv. Any individual who has a documented history of escape from a secure perimeter.

b. Incarcerated females who are ineligible under these rules may be approved to remain Level 1 at NERC after a review of their behavioral history, length of incarceration, age, programmatic involvement and medical condition. In these cases, the managing officer and the BOCR chief shall both review the reasons for the exceptions to the rules and must both concur the individual may stay. This shall be documented in the individual's classification notes in DOTS Portal.

## **G. Appeal Process**

1. As is consistent with all classification actions, the incarcerated individual has the right to appeal the recommendation of the classification committee to the managing officer/designee using the Notice of Appeal Supervision/Security Level Recommendation (DRC2680)

2. A Level 1, 2, 3 or 4 decision must be appealed to the managing officer/designee within seventy-two (72) hours following notification of the recommendation of the classification committee.

3. Individuals may further appeal the managing officer/designee's decision to the BOCR for all security classification actions within fifteen (15) calendar days following notification of the managing officer's decision.

## **H. Death Sentenced Individuals**

1. An incarcerated individual who is sentenced to death shall generally be housed in an area designated as "death row" pursuant to Administrative Rule 5120-9-12, Inmates Sentenced to Death. Death row is not a security classification, and individuals assigned to this status are not subject to security classification procedures as long as they remain in this status.

2. Death row is a general population assignment and has unique security practices which are a hybrid of Level 3 and Level 4 practices. An individual assigned to death row status who presents a threat to security may be subject to assignment to a Level 4 or Level E security

classification and a prison assignment off death row that is appropriate for the security risk. In the event of a potential security classification assignment for a death row individual, the security classification procedures for the proposed security level shall be followed. Once the individual no longer poses a threat to security in death row, they may be returned to that status.

## **I. Reception and Classification of High Notoriety Individuals**

1. Incarcerated individuals who have received abnormally high levels of media attention, or whose crimes may elicit extraordinary reactions from other incarcerated individuals or the general public, shall be designated as high notoriety upon arrival at reception.

2. It is the responsibility of the managing officer of the reception center to notify the BOCR chief and the BHS director upon the arrival of any individual who they believe qualifies as High Notoriety.

3. The reception center shall have a full mental health, medical, classification, and ORAS risk assessment completed within seven (7) calendar days of arrival.

4. Upon notification, the BHS director shall schedule a high notoriety incarcerated individual review within fourteen (14) calendar days of arrival.

5. The high notoriety review shall have the following representatives in attendance. Designees shall only be used when the absence of the primary individual precludes attendance:

- a. BOCR chief/designee;
- b. BHS director/designee;
- c. Program directors for specialized criminogenic needs (i.e., sex offender or recovery when

- applicable);
  - d. Reception Unit Team designee;
  - e. Reception Mental Health representative, preferably the clinician who conducted the assessment;
  - f. Reception Medical representative;
  - g. Reception coordinator/designee;
  - h. Reception managing officer/designee;
  - i. Any other staff deemed necessary by the reception managing officer.
6. Minutes of the high notoriety meeting shall be maintained by the reception center and distributed to all attendees as well as the parent institution's managing officer.
7. The team shall discuss the mental health needs, medical needs, programmatic needs, and classification of the individual identified as high notoriety.
8. The final recommendations of the committee shall be forwarded to the deputy director of Prisons/designee who shall have final oversight over all action plans.
9. All decisions of the team shall be contained in the "must read" red flagged notes in the Classification section of DOTS Portal.
10. Whenever a high notoriety individual is moved, the receiving managing officer must be notified in advance by the sending facility.

## **J. General Provisions**

All forms referred to in this policy shall be completed according to guidelines established in the Administrative Regulations 5120-9-52, Initial Classification of Inmates and 5120-9-53, Classification Committees.

## **K. Classification of Incarcerated Individuals in Correctional Healthcare Specialized Units**

Office of Correctional Health Care (OCHC) specialized residential treatment units include, but are not limited to, Residential Treatment Units, Dementia Units, Intellectual/Developmental Disability Units, Assisted Living Units, Day Treatment Programs, or any other unit identified and approved by the deputy director of Holistic Services, the deputy director of Prisons, and the regional director.

These units shall balance the security needs of the individual with the treatment needs. The multi-disciplinary services team (MST) shall ensure incarcerated individuals of all security levels have access to higher levels of care when determined necessary by the multi-disciplinary treatment team (MTT).



1. No individual shall be prevented from receiving a security review, or a reduction in security, solely because they are in one of these units. All individuals must be reviewed at least annually. Individuals who show positive adjustment to treatment and a cessation of their negative behavior after admission and treatment shall be considered for a lower security level.
2. Individuals housed in these units shall be managed in accordance with the policies and/or protocols guiding the operation of those units. Although security and safety are always a high priority, the treatment and care of the individual in this unit is also a high priority.
3. While in these units, the security measures used to supervise the individuals (e.g., escort procedures, extent of restraints, unrestrained access to other, etc.) shall be guided by the security level and any additional measures as determined necessary by the chief of security.
4. All prisons with at least one specialized unit shall assign a security supervisor (i.e., lieutenant, captain, or chief of security) as a member of the MST. The MST shall also include a unit corrections officer, a member of the unit staff, and a correctional healthcare staff member.
5. The MTT shall determine the treatment plan for the individual. The MST shall develop an individualized plan to ensure the individual has access to the treatment prescribed by the MTT in a safe and secure manner.
6. The MST shall meet whenever a treatment plan change could affect the security measures needed to safely manage an individual.
7. At no time shall access to treatment be denied because of an incarcerated individual's security level. The treatment must be provided although additional security measures, supervision, restraints, individualized settings, or other methods to ensure safety may be used to ensure the safety of staff and other individuals.
8. The MST may adjust the security measures taken for an individual if they are not actively violent and there is evidence to indicate the treatment plan has been successful in reducing the individual's likelihood of violent behavior. These adjustments do not need to result in a change in security. They shall be specifically tailored to the individual and the MST shall approve all changes and ensure they are followed by the security staff on the unit. If the MST disapproves a request for a change in the security measures which is recommended by the MTT to properly treat the individual, the MST shall forward their decision to the managing officer, including a rationale for the denial. The managing officer shall make a final decision on the request. The actions of the MST as well as the decisions of the managing officer shall be documented on the Request for Review of Security Measures by the Multi-Disciplinary Services Team (DRC4040).
9. The MST may also recommend a special review to change the security classification of the individual to further their treatment when either one of these three conditions have been met:
  - a. The individual's violent and disruptive behavior which necessitated the need for higher security has abated because the individual has been receiving treatment.

b. The individual's medical/mental health condition was a contributing factor causing the violent/disruptive behavior and the individual is now in a housing condition that provides adequate safety and security to safely deal with the condition causing the negative behavior.

c. The individual is ready to be discharged from the treatment unit, they have demonstrated positive adjustment to treatment, they are not currently violating institutional rules, and there is reason to conclude they can be safely managed at a lower security level.

#### **L. Transfer 30 Day Review**

Whenever a classification action results in the transfer of an incarcerated individual, including initial classification, the managing officer/designee of the receiving prison shall review their security level and status within thirty (30) calendar days of arrival at the new facility. This review does not require the completion of a security instrument nor a meeting with the individual. If there are any concerns about the security level or reason for the transfer, the individual may be referred to the unit classification committee for reconsideration of their placement by using the special review procedures set forth in this policy.

#### **M. Transfers of Incarcerated Individuals in Limited Privilege Housing (LPH)**

1. If an incarcerated individual is transferred while they are assigned to LPH status based on a ruling of the RIB, the receiving prison shall review the individual upon arrival to determine if continued placement at LPH is required. In these circumstances, the receiving prison may place the individual in LPH for as much time that is remaining on the RIB disposition, providing credit for all time served while pending transfer.

2. If an individual is increased in security to a new general population assignment, the managing officer of the receiving prison may place them into LPH for up to ninety (90) calendar days for an initial assessment and orientation period as outlined in AR 5120-9- 09, Limited Privilege Housing Assignments.

3. If an individual is laterally transferred from a Level 3 prison to another Level 3 prison for disciplinary reasons, or as the result of a release from Level E, the managing officer of the receiving prison may, at their discretion, place the individual into LPH for up to ninety (90) calendar days in order to transition them back to general population.

4. An individual in an LPH status shall not be decreased in security level without approval from the BOCR chief, nor are they eligible to request a transfer as outlined in ODRC Policy 53-CLS-09, Inmate Initiated Transfer.

#### **N. Movement of Incarcerated Individuals for Changes in Missions, Emergencies, or for Security Reasons**

1. In accordance with AR 5120-9-21, Inter-institutional Transfer of Inmates, section E, whenever an emergency, threat to security, or change in mission requires the movement of large

numbers of incarcerated individuals, the managing officer of the facility may request a waiver for the classification hearing procedures outlined in this policy, as long as all of the following conditions are met:

- a. The individuals effected will not have their security level change;
  - b. The individuals effected are being moved to an institution which houses the same security classification level(s).
2. All requests must be approved by the BOCR chief.
  3. Once approved, the individuals shall be notified of their transfer using the Notice of Inter- Institutional Transfer (DRC2446) and offered an opportunity to express safety concerns about the proposed move prior to any move taking place. In cases where a safety risk is identified, the individual shall not be moved prior to the safety concern being investigated and addressed. This notification should occur at least forty-eight (48) hours in advance of the move unless security concerns dictate otherwise. In cases where the managing officer concludes the notice would likely lead to a security concern or disruption among the population, the notice may be provided with less than forty-eight (48) hours. However, the requirement to investigate and address all safety concerns prior to moving shall not be waived.
  4. All individuals moved under this provision retain the right to appeal the new classification assignment and must file that appeal using the Notice of Appeal Supervision/Security Level Recommend (DRC2680) within fifteen (15) calendar days of arrival at their new facility.

#### Related Department Forms:

Transfer Authorization Form  
DRC2003


Kite DRC2005

Supervision Review-Male (Page 2)	DRC2094
Supervision Review–Male (Page 1)	DRC2098
Security Classification and Job Assignment	DRC2099
Supervision Review-Male (Page 3)	DRC2338
Notice of Inter-Institutional Transfer	DRC2446
Separation Order	DRC2456
Security Designation-(Long Form Page 1)	DRC2568
Supervision Review–Female (Page 1)	DRC2605
Supervision Review-Female (Page 2)	DRC2606
Supervision Review-Female (Page 3)	DRC2607
Decrease Security Level List	DRC2622

Security Designation (Long Form Page 2)	DRC2630
Notice of Appeal Supervision/Security Levels Recommendation	DRC2680
Security Designation-Female (Page 1)	DRC2690
Security Designation-Female (Page 2)	DRC2691
Single Fence Approval Form	DRC4028
Request for Review of Security Measures by the MST	DRC4040

## Appendix E



SUBJECT: <b>Level E Placement (ERH)</b>	PAGE <u>1</u> OF <u>13</u>
	NUMBER: <b>53-CLS-04</b>
RULE/CODE REFERENCE:	SUPERSEDES: 53-CLS-04 dated 12/04/18
RELATED ACA STANDARDS: 5-ACI-4B-31 (new), 5-ACI-5B-01 (4295) thru 5-ACI-5B-03 (4297), 5-ACI-5B-06 (4300) thru 5-ACI-5B-08 (4302), 5-ACI-5F-03 (4444)	EFFECTIVE DATE:  <b>February 3, 2020</b>
	APPROVED: 

### I. AUTHORITY

Ohio Revised Code 5120.01 authorizes the Director of the Department of Rehabilitation and Correction, as the executive head of the department, to direct the total operations and management of the department by establishing procedures as set forth in this policy.

### II. PURPOSE

The purpose of this policy is to define the procedures for classifying incarcerated individuals into Level E (ERH) Security Status.

### III. APPLICABILITY

This policy applies to all Ohio Department of Rehabilitation and Correction (ODRC) staff involved in the classification process.

### IV. DEFINITIONS

**Annual** - A twelve (12) month period

**Extended Restrictive Housing (ERH)** - A security classification level represented as “E” in the Departmental Offender Tracking System (DOTS). ERH is the most restrictive security level in the ODRC reserved for incarcerated individuals who constitute the greatest threat to the safety and security of the community, staff, others, and/or the secure operations of a correctional facility.

**Extended Restrictive Housing- Enhanced Behavioral Health Monitoring (EM)** - A classification given to an individual in ERH who is classified as C1 or IDD. Represented as “EM” in DOTS. An EM classified individual must be offered more than two (2) hours out of cell time daily. EM is considered RH2 (special management) in accordance with ODRC Policy 55-SPC-02, Restrictive Housing Procedures.

**Extended Restrictive Housing- Ineligible for Presumptive Release (EN)** - A classification given to an individual in ERH who is ineligible for presumptive release. It is represented as “EN” in DOTS. EN individuals are the same security level as other Level E individuals.

**ERH Transitional (ET)** - A security level where the individual is introduced to limited and small group congregate recreation and programming in preparation for release to general population. ET is considered RH2 (special management) in accordance with ODRC Policy 55-SPC-02, Restrictive Housing Procedures.

**Individual Adjustment Plan (IAP)** - A case plan which specifically outlines expected behaviors for an incarcerated individual placed in Level E. The IAP is comprised of behavioral and programmatic requirements which the individual must follow to be reduced from Level E.

**Limited Privilege Housing (LPH)** - Assignment of an individual to a designated area for the purpose of reducing their privileges, controlling movement, and reducing their access to other incarcerated individuals. LPH is considered general population and those assigned to this status shall have access to prison services, although that access can be reasonably limited as part of their privilege reduction. Designated out of cell time shall be more than two (2) hours daily.

**Multidisciplinary Services Team (MST)** - A group of unit, treatment, programming, and security staff who provide integrated services to incarcerated individuals in Specialized Units and Restrictive Housing. The team assesses individual needs, integrating the treatment plan, and develops an individualized plan to ensure security measures support the delivery of treatment services and privileges.

**Multidisciplinary Treatment Team (MTT)** - Provides an integrated team approach to an incarcerated individual’s care and treatment. The members meet to develop and provide necessary health and behavioral health care services and individualized treatment with emphasis on addressing needs during confinement in health and behavioral health care specialized units and for those on the mental health caseload in step-down programs, including restrictive housing settings. The team may include, but is not limited to, Mental Health professionals, psychiatric attendants, Medical and Recovery Services staff, Sex Offender Services, Custody and Unit Management staff.

**Residential Treatment Unit (RTU)** - A specialized housing unit within the institution that facilitates a secure treatment environment and on-site care from a multidisciplinary team consisting of psychiatrists, nurse practitioners, psychologists, social workers, nurses and other specialized mental health professionals.

**Restrictive Housing (RH)** - Housing that separates an individual from the general population and restricts them to their cell twenty-two (22) hours or more per day.

**Serious Misconduct Panel (SMP)** - A panel of two (2), or more, members of the unit classification committee who are authorized by the managing officer to conduct a Level E (ERH) placement hearing. The committee makes a recommendation to the managing officer whether Level E placement is required.

## **V. POLICY**

It is the policy of the Ohio Department of Rehabilitation and Correction (ODRC) to limit the use of Extended Restrictive Housing (ERH) to only those individuals who pose the greatest threat to the safety and security of a correctional facility and cannot be managed safely in general population. ERH is not to be used for punishment and is reserved for those whose violent, disruptive, predatory, riotous or other serious misbehavior poses a serious threat to other incarcerated individuals, staff, the orderly operation of the institution, or the general public. Therefore, any individual placed into ERH through the Serious Misconduct Panel (SMP) shall receive regular reviews and shall be released from ERH as soon as they can be safely managed in a less restrictive environment.

No youthful offender or pregnant female shall be housed in ERH.

An individual diagnosed with a serious mental illness (C1) or who is diagnosed as Intellectually/Developmentally Disabled (IDD) may be designated as security level E, but they shall not be subjected to Restrictive Housing conditions of confinement for more than twenty-nine (29) continuous calendar days.

Level E males are primarily housed at SOCF, OSP, and TOCI. Level E females may be housed at DCI or OSP (with special arrangements). In circumstances where Level E individuals require special medical or mental health care, they may also be housed in an appropriately secure specialized unit.

## **VI. PROCEDURES**

### **A. Referral for Placement in ERH**

#### **1. At Reception**

Incarcerated individuals may be referred to ERH from reception if one, or more, of the following conditions are met:

- a. They were released from ODRC custody while in ERH within the past twelve (12) months and were eligible for presumptive release from ERH. In these circumstances, they may be returned to ERH or ET for up to six (6) months. The reception coordinator is authorized to not place an individual back into the ERH security level upon their return if after a full assessment of

all intake instruments and assessments there is reason to believe the individual can be safely managed in a less restrictive security level.

b. The individual was released from an Ohio prison while in any ERH status and was ineligible for presumptive release from ERH. Those who meet this criterion will be placed back into Level EN. They shall be reviewed within thirty (30) calendar days of arrival to their parent institution to determine if ERH placement shall continue and to determine if they shall remain ineligible for presumptive release from ERH according to procedures outlined in ODRC Policy 53-CLS-10, Review and Release of Extended Restrictive Housing Incarcerated Individuals.

c. The nature of the individual's criminal offense, including documented behavior in another correctional agency, committed prior to incarceration with the ODRC constitutes a current threat to the security and orderly operation of the institution and to the safety of others. For example, serious assaults against law enforcement, participation in organized criminal activity, serious violent acts in other correctional jurisdictions or actions indicating a serious escape risk. In these circumstances, a SMP hearing shall be conducted and the individual shall be presented with the information, excepting confidential information, used to justify the recommendation of placement into ERH. They shall be provided the opportunity to present written and oral statements challenging any of the documentation justifying the placement, or the appropriateness of the placement, into ERH. They shall be provided with a written explanation of the justification for their placement and shall retain the right to appeal the decision to the regional director overseeing the reception center where the hearing is conducted.

2. Individuals who meet one of these criteria can be referred to ERH using the Serious Misconduct Panel form (DRC4043) and forwarding the form to the managing officer.

3. The managing officer of the reception facility shall review all placements and either approve or disapprove the placement documenting their actions on the Serious Misconduct Panel form (DRC4043). If they approve the placement, the managing officer shall ensure the classification is changed in the Departmental Offender Tracking System (DOTS) to the appropriate Level E designation and the incarcerated individual is provided a copy of the decision. The incarcerated individual shall have a right to appeal the managing officer's decision to the regional director overseeing the prison where the decision was made.

4. While pending transfer to a permanent ERH facility, the conditions of confinement shall be guided by ODRC Policy 55-SPC-02, Restrictive Housing Procedures.

5. While in ERH at reception, the individual shall be reviewed at least weekly by the unit team in compliance with ODRC Policy 55-SPC-02, Restrictive Housing Procedures, and may be released from ERH during any of those reviews if their behavior indicates there is reason to believe they could be managed safely in a less restrictive security level. All procedures associated with ERH reviews and release, as outlined in ODRC Policy 53-CLS-10, Review and Release of Extended Restrictive Housing Incarcerated Individuals, must be followed in these circumstances.



6. If an ERH individual at reception is approaching their presumptive release date, or the prison chooses to release them from ERH early, the reception center's unit management chief (UMC) shall ensure a review is completed in compliance with ODRC Policy 53- CLS-10, Review and Release of ERH Incarcerated Individuals. In these circumstances, the incarcerated individual is not required to be placed into ERH Transition (ET) and shall be given a security designation of 1-4 and subsequently transferred to the appropriately secure facility where the managing officer of the receiving prison has the option of using LPH as a transitional phase.

#### 7. Following Reception

After the security designation procedures have been completed and an individual is assigned a security level of 1-4, they may only be placed in ERH by using the procedures outlined in this policy.

#### 8. Criteria for all ERH Placements

In all circumstances, an individual may only be considered for placement in ERH if they satisfy both an administrative and a behavioral criterion listed below.

### **B. Administrative Criteria for Placement in ERH**

An individual may not be considered for placement in ERH unless one (1) of the following administrative criteria are met:

1. The individual has been found guilty in the past twelve (12) months by the Rules Infraction Board (RIB) for violating at least one (1) rule which qualifies as an approved behavioral criterion and the SMP recommended they be considered for placement in ERH; or
2. The individual is guilty of a criminal offense that is described under the behavioral criteria listed in this policy, and has been sentenced and committed to the custody of the ODRC; or
3. The individual has committed a criminal or institutional offense in another jurisdiction that would qualify for placement in ERH and there is enough documentation from the other jurisdiction to justify placement in ERH; or
4. The individual was previously held under the custody of the ODRC and was held in ERH prior to their release.

### **C. Behavioral Criteria Governing Placement in ERH**

Incarcerated individuals may not be placed in ERH unless they demonstrate behavior meeting one (1) or more of the following behavioral criteria. These criteria guide the exercise of discretion, but do not mandate the outcome.

#### **1. Assault and Related Acts**

- a. The individual caused or attempted to cause physical harm or death to another individual including all assault related rules;
- b. The individual compelled or attempted to compel another individual without consent to engage in sexual conduct or sexual contact;
- c. The individual compelled or coerced another individual, by force or the threat of serious physical harm or death, to provide anything of value, to perform any act, or to violate any rule;
- d. Extortion or intimidation of staff or other individuals.

For all placements involving assault related acts, the seriousness of the offense as well as the individual's history of assaultive behavior shall be considered in determining whether a placement in ERH is warranted, as well as the length of the placement. The seriousness of the offense may include factors such as the amount of harm (or attempted harm), the intensity/duration of the assault and the motivation/intent of the aggressor(s).

#### **2. The nature of the criminal offense or offenses in other correctional jurisdictions, committed prior to incarceration constitutes a current threat to the security and orderly**

operation of the institution and to the safety of others, for example, serious assaults against law enforcement/corrections officers, participation in organized criminal activity/riot, or actions indicating a serious escape risk.

#### **3. The individual has led, organized, participated in, or incited a serious disturbance or riot, or attempted to commit any of these acts, that resulted in, or was planned/intended to result in, the taking of a hostage, significant property damage, physical harm, interruption of vital institutional services, loss of control of a facility or part thereof, or loss of life.**

#### **4. The individual has conveyed, introduced, or possessed major contraband (including conspiring or attempting these acts) which poses a serious threat or danger to the security of the institution. This includes without limitation:**

- a. **Deadly weapons.** "Deadly weapon" means any instrument, device, or thing capable of inflicting death, and designated or specially adapted for use as a weapon, or possessed, carried, or used as a weapon.
- b. **Ammunition.** "Ammunition" means anything hurled by a weapon or exploded as a weapon, such as bullets, gunpowder, shots, shells, bombs, grenades, rockets, etc.
- c. **Escape Instruments.** "Escape instruments" include any substance, device, instrument, or article designed or specially adapted for criminal use in an escape attempt; or possession or

control of any substance, device, instrument, or article commonly used for criminal purposes, under circumstances indicating the item is intended for criminal use in an escape attempt.

- d. Drugs or Intoxicating Substances.
- e. Cellular phones or other unauthorized communication devices.

For all placements involving contraband related acts, the seriousness of the offense, as well as the individual's overall history of behavior, shall be considered in determining whether a placement in ERH is warranted, as well as the length of the placement. The seriousness of the offense may include factors such as the amount of contraband, the danger associated with the specific type of contraband, the method the individual used to possess (attempt) the contraband, and previous attempts to house the individual in less restrictive environments.

- 5. The individual functions as a leader, enforcer, or recruiter of a security threat group.
- 6. The individual was involved in group violence or a serious disruption to orderly prison operations and their involvement was motivated by their membership in, or identifying with, a security threat group.
- 7. The individual is classified as Level 3 or 4 security and engages in violence or serious disruption to orderly operations.

For all placements involving violent and disruptive activities at Level 3 and 4, the seriousness of the offense, frequency of violence/disruption, as well as the individual's overall history of violent and disruptive behavior shall be considered in determining whether a placement in ERH is warranted. The managing officer shall also explain why the use of Local Control (up to 180 calendar days of Restrictive Housing for a single serious offense) is insufficient to safely manage the individual.

- 8. Escape and related acts:
  - a. The individual escaped from the custody of a correctional agency or aided another in the successful escape from a correctional agency.
  - b. The individual attempted to escape from the custody of a correctional agency by taking significant actions to further their plan.

For all placements involving escape and related acts, the decision to place, as well as the length of the placement, shall be based upon the overall circumstances related to the escape. These include, but are not limited to: the type of institution the individual escaped from, the totality of the circumstances related to the escape, the individual's previous escape history, and the amount of time the individual has left to serve or other factors which could affect their motivation to try and escape again.

- 9. The individual has demonstrated an ability to compromise the integrity of staff which resulted in a threat to the security of the institution or the general public.

10. The individual knowingly exposed others to the risk of contracting a dangerous disease, including without limitation HIV or hepatitis.
11. The individual has engaged in repeated obscene, sexually harassing, and/or indecent acts and less restrictive means of addressing the behavior have been unsuccessful in preventing future behaviors.
12. The individual has a history of assault against others while in prison which would qualify for ERH placement and makes threats to repeat the assaultive behavior.
13. The individual has committed an offense which constitutes a serious threat to the safety and security of a correctional facility or the greater community; or, they have committed an offense which constitutes a criminal act against a member of the greater community, and:
  - a. Less restrictive means would not be able to prevent the individual's behavior again; or
  - b. The individual has engaged in the behavior on more than one occasion and less restrictive measures have been unsuccessful in deterring the behavior.

For criterion 13, approval from the deputy director of Prisons is required prior to placement into ERH.

#### **D. Seriously Mentally Ill (SMI) and Intellectual Developmental Disability (IDD) and ERH**

1. Prior to placing an individual with a C1/IDD diagnosis into ERH, the managing officer shall consult with the chief of the Behavioral Health Services (BHS), or their designee. BHS shall review the case and in cooperation with the managing officer, determine if the individual requires placement into a Residential Treatment Unit (RTU) or if they can be safely diverted from ERH using some other management solution.
2. If an SMI or IDD individual must be placed in ERH, there must be an active individualized treatment plan that includes weekly monitoring by Mental Health staff, treatment as necessary, and steps to facilitate the transition of the individual back into general population. The individual shall also be provided more than two (2) hours out-of- cell time daily.
3. The deputy warden of special services (DWSS), in conjunction with the chiefs of Security and Unit Management, are responsible for identifying all C1 and IDD individuals designated as ERH at their facility. The DWSS shall identify all C1 and IDD individuals in ERH status, communicate this information to the UMC and chief of Security, and ensure the individual receives a treatment plan which specifically addresses their needs in ERH. The UMC shall ensure the DOTS designator "EM" is applied to any of these identified individuals. The UMC shall also be responsible for removing the tag if the individual is no longer classified as C1 or IDD. The chief of Security shall ensure the individual is provided more than two (2) hours out-of-cell time daily and is provided access to Mental Health programming and services as prescribed in the treatment plan.

## **E. Serious Misconduct Panel Procedures**

1. An incarcerated individual may be recommended for a SMP by the RIB, a member of the unit classification committee, or an executive staff member from the prison where they are being held. They shall forward this recommendation to the managing officer who shall approve or a deny the recommendation. This may be in a memo or an electronic record.
2. The incarcerated individual shall be provided at least 48-hour notice of the hearing using the Security Classification and Job Assignment form (DRC2099). The notice shall clearly state the hearing is a “Level E (ERH) placement hearing” and the 48-hour notice may not be waived under any circumstances.
3. The committee shall be comprised of at least two (2) members and in circumstances where the individual is designated as C1 or IDD, a third member from Mental Health shall attend the hearing.
4. During the hearing, the individual being considered for ERH placement shall be allowed to review the information used in consideration of their placement, as well as submit any written/verbal statements or documents they may have.
  - a. Any verbal statements made by the incarcerated individual shall be summarized on the Serious Misconduct Panel form (DRC4043) and any documentation or written statements provided shall be listed and summarized on the Security Classification and Job Assignment form (DRC2099) in the “documentation provided by inmate” section.
  - b. During the hearing, the incarcerated individual may request a 7-day (calendar) continuance if they need additional time to rebut any of the information or documentation presented by the committee if they had not been provided with the information prior to the hearing. This request shall be made in writing and shall be granted by the SMP unless there is evidence to indicate the individual had been provided the information prior to the hearing. The committee shall notify the incarcerated individual of this right after they have presented all the information they will consider when making their recommendation. The committee will document whether the individual requested a continuance on the Serious Misconduct Panel form (DRC4043).
  - c. The SMP hearing is not a replacement for the RIB process or the legal appeal process. Furthermore, it is not a finder of fact regarding whether the incarcerated individual committed any particular rule violation. The committee is required to use the RIB record which exists at the time of the hearing. Therefore, in most cases, the RIB decisions and conduct reports, as well as the individual’s overall RIB history, will be the bulk of the information used for a placement.
  - d. During the hearing, the committee shall complete the Security Classification and Job Assignment form (DRC2099) documenting their recommendation and all members of the panel.

5. The committee shall complete the first part of the Serious Misconduct Panel form (DRC4043). The committee shall, at a minimum, provide the following information on the form:

- a. All the criterion used to justify the ERH placement;
- b. A summary of all the behaviors by the incarcerated individual which qualify under the criterion used to justify placement;
- c. The sources of all information used and considered during the hearing;
- d. A summary of the incarcerated individual's statements and any information they provided;
- e. A recommendation for whether the individual should be placed in ERH;
- f. A rationale for the recommendation which shall include, at a minimum, a response to any mitigation raised by the incarcerated individual during the hearing as well as an explanation as to why less restrictive means would not be adequate to address the behaviors exhibited by the individual. The rationale need not be lengthy, but must include every basis for the recommendation, and may not be merely conclusory.

6. Once completed, a copy of the Serious Misconduct Panel form (DRC4043) shall be served on the incarcerated individual prior to submission to the managing officer. When notifying the individual of the recommendation, the staff member shall also notify them of the right to appeal the committee's recommendation to the managing officer within seven (7) calendar days and provide them a Notice of Objection – ERH Placement/Review (DRC2596). The incarcerated individual shall sign indicating they received a copy of the recommendation. If the individual refuses service, the staff member shall indicate such and sign and print their name, as well as the date and time, on the bottom of the form.

7. The signed Serious Misconduct Panel form (DRC4043) shall then be forwarded, along with the entire packet documenting the hearing, to the managing officer.

#### **F. Managing Officer Procedures for Placing an Incarcerated Individual into ERH**

1. The managing officer/designee shall not render a final decision on any recommendation for placement into ERH until at least seven (7) calendar days after the date the Serious Misconduct Panel form (DRC4043) was served upon the incarcerated individual to allow the individual being recommended for placement an opportunity to file any objections. However, the final decision shall be made within twenty-one (21) calendar days of the service of the Serious Misconduct Panel form (DRC4043). The only exception to the 21- day (calendar) deadline is if more time is needed to consult with BHS, or if additional Mental Health testing or assessments are needed.

2. The managing officer/designee shall, at a minimum, consider the following prior to making a final decision:

- a. The recommendation of the SMP;
- b. The summary of all information provided by staff;
- c. The summary of the incarcerated individual's statements (written and oral) and any documentation they submitted;
- d. Any relevant Medical and Mental Health reports, including the recommendation of BHS for all IDD and C1 individuals;
- e. Any appeal submitted by the incarcerated individual.

Special Note: If the managing officer considers any additional information not previously presented to the incarcerated individual during the hearing, they shall send the Serious Misconduct Panel form (DRC4043) back to the SMP for a rehearing. The hearing process will start over with the new information.

3. If the managing officer/designee decides not to place the individual into ERH, the SMP is a replacement for a standard security review, so the managing officer may leave the individual in their current status, change their security level, or recommend a lateral transfer. Their decision, along with their rationale, shall be documented on the Serious Misconduct Panel form (DRC4043).

- a. If a new security level is recommended, or if a transfer is recommended, the managing officer/designee shall submit a Request for Transfer (DRC2003) to the Bureau of Classification and Reception (BOCR) and attach the full packet of information to the request. No individual shall be placed directly into Level 4 security from Level 1, 2, or 3.

- b. If no change in status or prison assignment is recommended, then the process terminates, and no further action is needed. The incarcerated individual shall receive a copy of the managing officer's decision to not place them into ERH.

4. If the managing officer/designee determines an ERH placement is warranted, they shall determine whether the length of the placement will be:

- a. 2 years or less;
- b. Up to 5 years;
- c. Up to 10 years; or
- d. An indefinite length.

5. In order to assign any length more than '2 years or less', the managing officer shall be required to obtain the written approval of the deputy director of Prisons. Any placement longer than 2 years shall be reserved for the most violent, dangerous, and predatory individuals who pose the highest risk to the safety and security of a correctional facility or the community.

6. The managing officer's decision, along with their rationale, shall be documented on the Serious Misconduct Panel form (DRC4043). If the incarcerated individual submitted an appeal, the managing officer shall address the concerns contained in the appeal in their rationale. If the contents of the appeal are not addressed in the rationale, the managing officer shall be required to respond to the appeal in a separate written document.

7. If the individual is already in ERH when a new placement is recommended by the SMP, the managing officer/designee shall make a length of stay determination using the same rules as noted previously, but this shall not be consecutive to the previous placement.

Example: An individual is currently in Level E (ERH) serving up to 2 years. The individual then seriously assaults a staff member. The managing officer orders a new SMP hearing and places the individual into Level E for up to 5 years. The up to 5 years is now the commanding record and the previous placement is closed. They do not get stacked on top of each other.

8. Except in circumstances where the individual was in ERH at the time of the SMP hearing as noted previously, the effective date of the individual's placement into ERH shall be the date the individual was originally placed in RH for the last offense which resulted in their referral to the SMP. In all cases, the individual shall receive credit for time served in RH.

9. A copy of the managing officer's final decision as contained on the Serious Misconduct Panel form (DRC4043) shall be served on the incarcerated individual. When notifying the individual of the decision, the staff member shall also notify them of the right to appeal the decision of the managing officer to the regional director within 15 calendar days and provide them a Notice of Objection – ERH Placement/Review form (DRC2596). The incarcerated individual shall sign indicating they received a copy of the managing officer's decision. If the individual refuses service, the staff member shall indicate such and sign and print their name, as well as the date and time, on the bottom of the form.

10. If the managing officer places the incarcerated individual in ERH, they shall change the individual's security level in DOTS to the appropriate Level E designation.

7. If the assignment requires a transfer, the managing officer/designee shall submit a Request for Transfer (DRC2003) to the BOCR attaching the Serious Misconduct Panel form (DRC4043).

b. If the assignment does not require a transfer, the managing officer/designee shall scan and email a copy of the Serious Misconduct Panel form (DRC4043) to the BOCR chief for tracking purposes.

11. In all cases, the managing officer shall ensure the entirety of the information presented during the SMP hearing, as well as all forms and documents used in the decision-making process, is placed into the "ERH Placement" folder of the incarcerated individual's electronic classification file in OnBase.



12. The incarcerated individual may appeal the decision of the managing officer to the regional director. The regional director/designee shall hear all appeals and respond to the individual within thirty (30) calendar days of receipt. If no appeal is received within thirty (30) calendar days, the managing officer's decision is standing and finalized. In circumstances where the deputy director of Prisons approved a placement over two (2) years, the appeal shall be heard by the Director/designee.

13. At any time during this placement process, or any time during an individual's time in ERH, if a RIB decision used to justify the placement into ERH is overturned by Legal Services, all decisions or recommendations made prior to the Legal Services decision shall be moot. The incarcerated individual shall receive a new SMP hearing to determine if continued placement in ERH is justified and, if so, for what length of time.

#### **G. Individual Adjustment Plan (IAP) and Thirty (30) Day Transfer Review**

7. After the managing officer places an individual in ERH, they shall be given an IAP as well as a presumptive release date (a presumptive release date is not provided for individuals assigned to an indefinite ERH placement- EN). The IAP and presumptive release date shall be documented on the ERH Placement: Orientation, Review, and IAP (DRC4036).

2. The following are the processes to be used according to the circumstances of the placement.

7. The incarcerated individual is placed in ERH and then transferred to a Level 4/E facility: The IAP will be created by the receiving Level 4/E managing officer who will also assign the presumptive release date for any individual given up to 2, 5, and 10 years.

b. The incarcerated individual is placed in ERH and no transfer will be requested because they are already in a Level 4/E prison or a High Security Specialized Unit: The IAP will be created by the managing officer who made the original placement decision and they shall assign the presumptive release date for any individual given up to 2, 5, and 10 years.

3. The presumptive release date is the maximum amount of time an individual can spend in ERH for the reasons provided in the original placement. When the managing officer assigns a presumptive release date, it shall be uniquely tailored to the particular individual and shall consider their behavior before and after the SMP hearing as well as other factors including, but not limited to, the severity of behavior which resulted in placement in Level E.

4. The managing officer may not assign a presumptive release date longer than the length noted on the ERH Placement: Orientation, Review, and IAP (DRC4036) during the original placement. If the managing officer of a receiving prison believes an error occurred and the length of time was not long enough to safely ensure the individual could be managed in general population, they may request written authorization from the regional director to assign a longer presumptive release date.

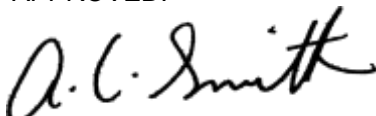
5. An individual may only be held in ERH longer than their presumptive release date as a result of additional misbehavior, unless there is substantial cause and the action is approved by the regional director in writing.
6. Individuals who are compliant with their IAP shall be considered for a release from ERH prior to their presumptive release date.
7. The managing officer shall ensure all IAPs are placed in the Classification Section of the individual's OnBase file as well as sending a copy of the IAP to the BOCR chief for tracking purposes.

#### Related Department Forms

Request for Transfer	DRC2003
Security Classification and Job Assignment	DRC2099
Individual Appeal of ERH level placement/review to Bureau Chief	DRC2596
ERH Placement: Orientation, Review, and IAP	DRC4036
Serious Misconduct Panel	DRC4043

## Appendix F



SUBJECT: <b>Inmate Security Classification Level 4 and Protective Control at OSP</b>	PAGE <u>1</u> OF <u>3</u>
	NUMBER: <b>53-CLS-06</b>
RULE/CODE REFERENCE:	SUPERSEDES: 53-CLS-06 dated 02/05/17
RELATED ACA STANDARDS:	EFFECTIVE DATE: <b>April 1, 2019</b>
	APPROVED: 

### I. AUTHORITY

This policy is issued in compliance with Ohio Revised Code 5120.01 which delegates to the Director of the Department of Rehabilitation and Correction the authority to manage and direct the total operations of the Department and to establish such rules and regulations as the Director prescribes.

### II. PURPOSE

The purpose of this policy is to state the guidelines representing the operation of Level 4 Classification and Protective Control processes at the Ohio State Penitentiary (OSP).

### III. APPLICABILITY

This policy applies to all Level 4 and protective control inmates at the Ohio State Penitentiary (OSP) and all staff involved in the security classification process.

### IV. DEFINITIONS

**Extended Restrictive Housing (ERH)** - A security classification level represented as “E” in the Departmental Offender Tracking System (DOTS). ERH is the most restrictive security level in the ODRC reserved for inmates who constitute the greatest threat to the safety and security of the community, staff, others, and/or the secure operations of a correctional facility.

**Serious Mental Illness (SMI)** - Adults with a serious mental illness are persons who are age eighteen

(18) and over, who currently or at any time during the past year, have a diagnosable mental, behavioral, or emotional disorder of sufficient duration to meet diagnostic criteria specified within the most current Diagnostic and Statistical Manual of Mental Disorders and that has resulted in functional impairment which substantially interferes with or limits one or more major life activities. These disorders have episodic, recurrent, or persistent features; however, they vary in terms of severity and disabling effects.

## **V. POLICY**

It is the policy of the Ohio Department of Rehabilitation and Correction (ODRC) to create an informal, non-adversarial process for the classification of inmates according to their security risk. This process shall consider behavior and such other objective factors as are available and relevant when assessing an inmate's institutional security needs. Factors considered include, but are not limited to:

- History of assaultive, violent, or disruptive behavior;
- Age;
- Escape history;
- Enemies of record;
- Gender;
- Sex;
- Medical status;
- Mental and emotional stability;
- Notoriety of offenses;
- Criminal history;
- Type of sentencing and release eligibility;
- Programming and education history;
- STG affiliation;
- Previous adjustment at less restrictive security levels.

The goal of the classification process is to place inmates in the lowest security level deemed necessary to ensure the safety and security of persons, the institution, and the community. Inmates shall be placed at institutions consistent with their security classification rating.

## **VI. PROCEDURES**

### **A. Reasons for Placement of Classification Level 4 Inmates at the Ohio State Penitentiary (OSP)**

1. An inmate may be placed at classification Level 4 at the OSP for the following reasons:
  - a. An inmate held in security level E at the OSP is placed in classification Level 4. No inmate has the right to stay at OSP and the basis for retention at OSP is solely for institutional and operational need.

- b. An inmate who is already security Level 4 may be transferred to OSP when it has been determined OSP is the most suitable placement for the inmate.
- c. An inmate who requires protective control and is also Level 4 security may be placed at OSP under the following conditions:
  - i. The inmate cannot be safely housed at any other institution which houses Level 4 protective control inmates.
  - ii. The inmate is not SMI as indicated by a mental health classification level of C1.
- 2. The inmate is not seriously mentally ill (SMI) as indicated by a Mental Health classification of C1. If while an inmate is at OSP his diagnosis changes to SMI (C1), the inmate shall be removed from OSP. Exceptions to this rule may only be approved by the chief psychiatrist of the ODRC.
- 3. An inmate who is reduced from E to Level 4 at OSP or an inmate already at Level 4 who is transferred to the OSP will be provided with an orientation meeting with a member of the unit staff within fourteen (14) calendar days of placement at Level 4 at the OSP.

**B. Procedural Requirements Governing Annual Security Review for Classification Level 4 Inmates at the OSP.**

Level 4 inmates at OSP shall receive a security review no less than annually and all reviews shall be guided by the provisions outlined in ODRC policy 53-CLS-01, Inmate Security Classification Levels 1 through 4.

## Appendix G

Predictive validity estimates produced by full ORAS-PIT total scores for Serious Misconduct

	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.60***	0.15***	0.08***	1.06***
Male Only (n = 22,251)	0.60***	0.16***	0.08***	1.06***
Women Only (n = 1,577)	0.60***	0.12***	0.05***	1.08***
Men's Minimum (16,710)	0.58***	0.12***	0.06***	1.05***
Men's Medium (n = 4,543)	0.64***	0.23***	0.13***	1.09***
Men's Maximum (n = 275)	0.68***	0.30***	0.17***	1.12***
Medical (n = 255)	0.57	0.06	0.17	1.06
Reception (n = 708)	0.63***	0.13***	0.05***	1.08***

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

Significant differences in AUC found between:

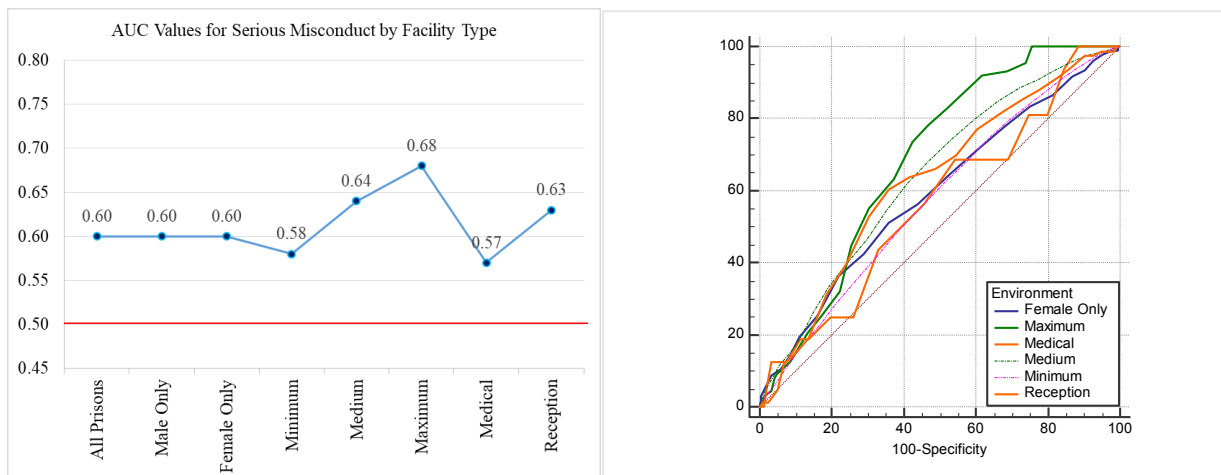
Women Only vs. Men's Medium\*

Women Only vs. Men's Maximum\*

Men's Minimum vs. Men's Medium\*\*\*

Men's Minimum vs. Men's Maximum\*\*\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.



## Appendix H

Predictive validity estimates produced by full ORAS-PIT total scores for Discretionary Misconduct

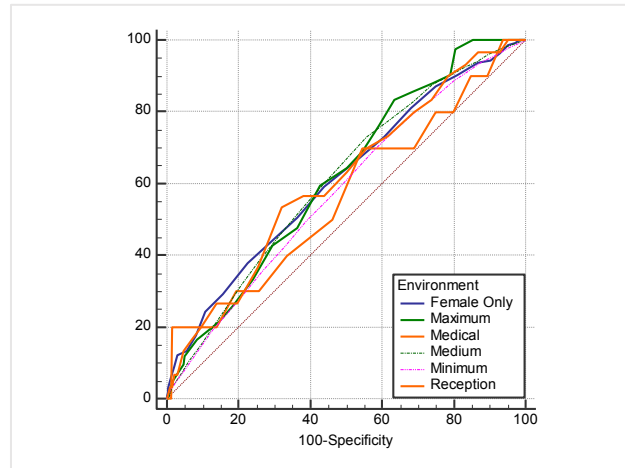
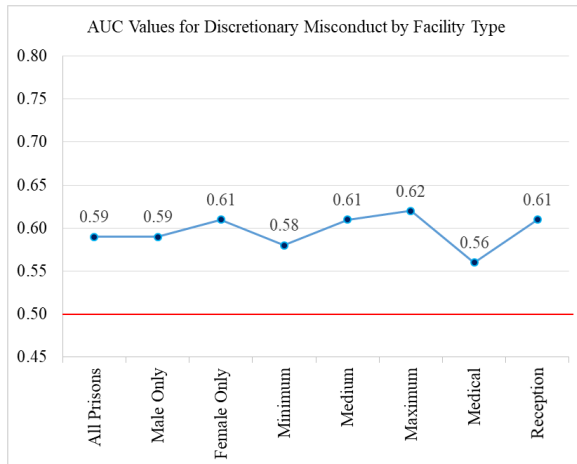
	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.59***	0.13***	0.06***	1.06***
Male Only (n = 22,251)	0.59***	0.13***	0.06***	1.06***
Women Only (n = 1,577)	0.61***	0.13***	0.05***	1.10***
Men's Minimum (16,710)	0.58***	0.11***	0.05***	1.05***
Men's Medium (n = 4,543)	0.61***	0.17***	0.09***	1.07***
Men's Maximum (n = 275)	0.62*	0.15**	0.06**	1.08***
Medical (n = 255)	0.56	0.06	0.01	1.07
Reception (n = 708)	0.61***	0.08***	0.02***	1.08***

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

Significant differences in AUC found between:

Men's Minimum vs. Men's Medium\*\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.



## Appendix I

Predictive validity estimates produced by full ORAS-PIT total scores for Violent Misconduct

	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.61***	0.15***	0.07***	1.07***
Male Only (n = 22,251)	0.61***	0.15***	0.07***	1.07***
Women Only (n = 1,577)	0.60***	0.12***	0.05***	1.06***
Men's Minimum (16,710)	0.59***	0.12***	0.05***	1.06***
Men's Medium (n = 4,543)	0.64***	0.22***	0.11***	1.09***
Men's Maximum (n = 275)	0.66***	0.25***	0.13***	1.11***
Medical (n = 255)	0.55	0.04	0.01	1.04
Reception (n = 708)	0.64***	0.13***	0.05***	1.08***

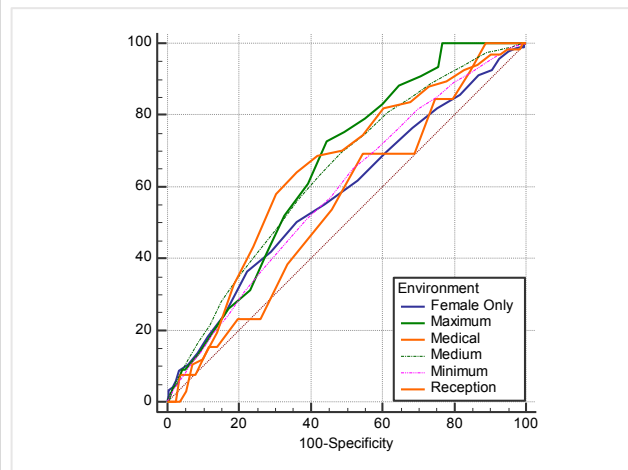
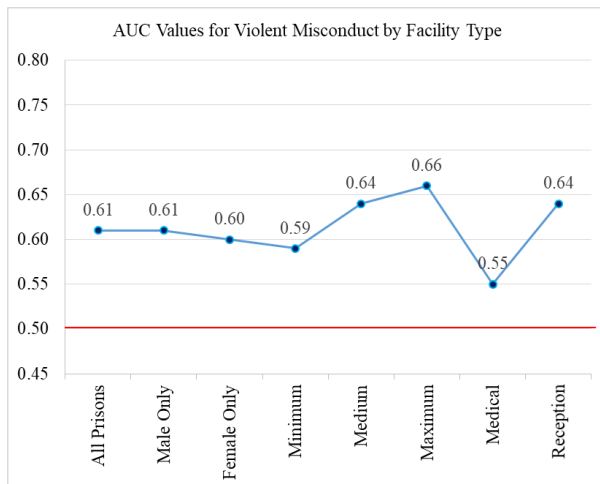
Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

Significant differences in AUC found between:

Women Only vs. Men's Medium\*

Men's Minimum vs. Men's Medium\*\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.





## Appendix J

Predictive validity estimates produced by full ORAS-PIT total scores for Property Misconduct

	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.59***	0.08***	0.02***	1.05***
Male Only (n = 22,251)	0.58***	0.07***	0.02***	1.05***
Women Only (n = 1,577)	0.71***	0.14***	0.03***	1.19***
Men's Minimum (16,710)	0.57***	0.07***	0.02***	1.04***
Men's Medium (n = 4,543)	0.64***	0.22***	0.11***	1.09***
Men's Maximum (n = 275)	0.63	0.08	0.02	1.08
Medical (n = 255)	0.60	0.02	0.00	1.06
Reception (n = 708)	0.72*	0.10*	0.00*	1.16*

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

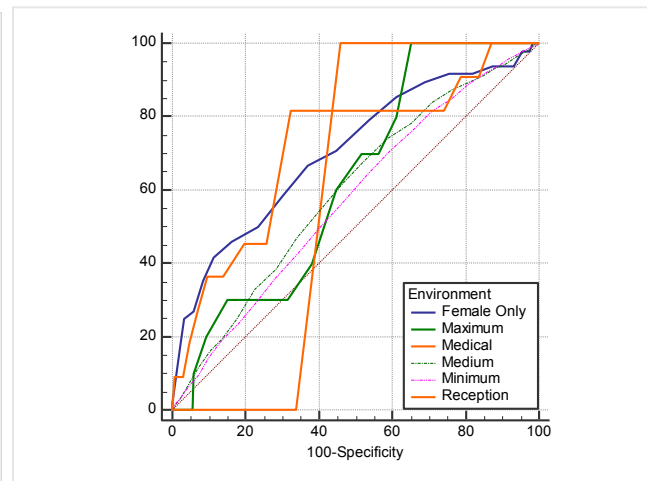
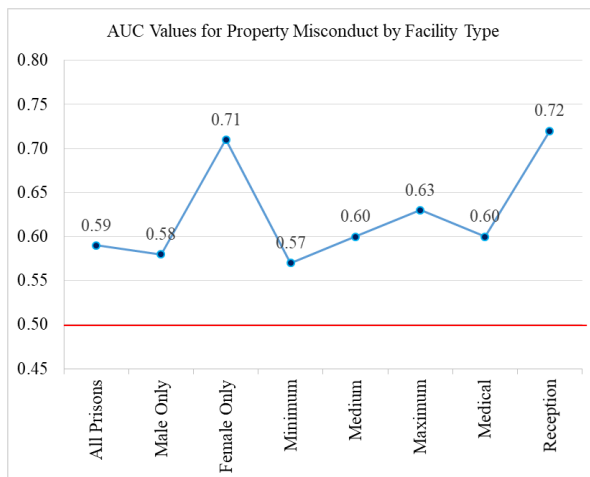
Significant differences in AUC found between:

Women Only vs. Men's Minimum\*\*

Women Only vs. Men's Medium\*

Men's Minimum vs. Men's Medium\*\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.



## Appendix K

### Predictive validity estimates produced by full ORAS-PIT total scores for Drug Misconduct

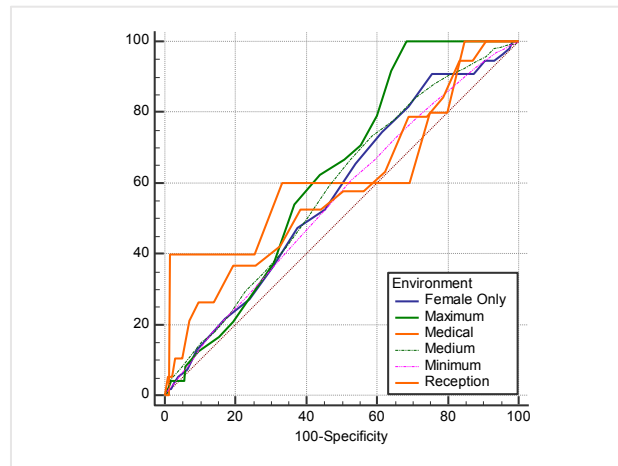
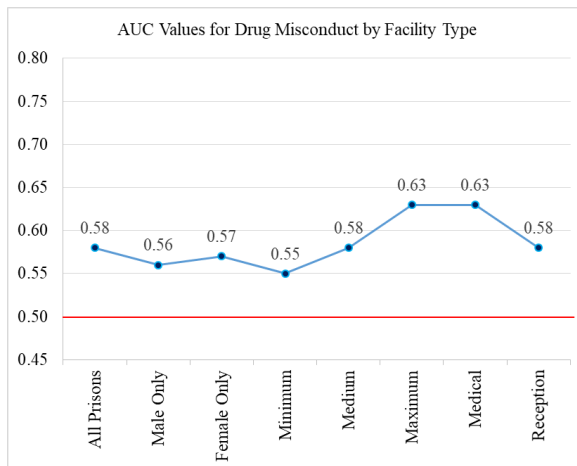
	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.58***	0.06***	0.02***	1.04***
Male Only (n = 22,251)	0.56***	0.07***	0.03***	1.04***
Women Only (n = 1,577)	0.57	0.04	0.01	1.05
Men's Minimum (16,710)	0.55***	0.06***	0.02***	1.03***
Men's Medium (n = 4,543)	0.58***	0.09***	0.03***	1.05***
Men's Maximum (n = 275)	0.63*	0.13*	0.04*	1.08*
Medical (n = 255)	0.63	0.08	0.01	1.14
Reception (n = 708)	0.58	0.06	0.01	1.07

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

Significant differences in AUC found between:

Men's Minimum vs. Men's Medium\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.



## Appendix L

Predictive validity estimates produced by full ORAS-PIT total scores for Other Misconduct

	AUC	$r_{pb}$	Somers' $d$	$e^b$
All Prisons (n = 24,062)	0.60***	0.15***	0.08***	1.06***
Male Only (n = 22,251)	0.60***	0.16***	0.08***	1.06***
Women Only (n = 1,577)	0.60***	0.13***	0.05***	1.08***
Men's Minimum (16,710)	0.58***	0.12***	0.06***	1.05***
Men's Medium (n = 4,543)	0.64***	0.22***	0.12***	1.09***
Men's Maximum (n = 275)	0.67***	0.27***	0.15***	1.11***
Medical (n = 255)	0.54	0.03	0.01	1.03
Reception (n = 708)	0.65***	0.14***	0.05***	1.10***

Note: AUC = area under the curve;  $e^b$  = change in odds ratio for outcome associated with one point increase in total risk score; these inmates all received the full PIT because the scale for the PST is different.

Significant differences in AUC found between:

Men's Minimum vs. Men's Medium\*\*\*

Men's Minimum vs. Men's Maximum\*\*

\*  $p \leq .05$ , \*\*  $p \leq .01$ , \*\*\*  $p < .001$ ; for AUC the null hypothesis is a true area of 0.5.

