PROBLEM GAMBLING AMONG INCARCERATED ADULTS ENTERING OREGON PRISONS

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EXECUTIVE SUMMARY

This study examines the prevalence of problem gambling in incarcerated female and male adults in custody. During an 11-week period, all Oregon Department of Corrections (DOC) adults in custody, aged 18 and over, passing through the DOC's centralized intake center were asked to anonymously complete an 18-item questionnaire that included the Problem Gambling Severity Index (PGSI). The questionnaire, including response choices, were read aloud to adults in custody in English and Spanish languages. Of the 1,015 adults in custody that consecutively entered the intake center, completed PGSIs were obtained from 110 females and 872 males resulting in a 96.7% response rate. Among this population, 50% of females and 28.7 % of males measured as high-risk for problem gambling using PGSI revised interpretive scoring recommended by Williams and Volberg (2014). Non-Hispanics had significantly higher rates of problem gambling (33.6%) compared to participants identifying as Hispanic (22.3%). About eight percent of incarcerated adults report gambling as a primary (1.7%) or partial (6.6%) cause of their current incarceration. Demographic groups reporting above average rates of incarceration related to gambling were women (10.8%), Hispanics (9.6%), and Native Americans (11%). Implications for policy, future research, and the treatment of problem gambling in this group are discussed.

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INTRODUCTION

Gambling, when taken to its extreme, can lead to a host of negative life consequences. Problems related to gambling include mental health concerns (Lorains et al., 2011), financial problems (Grant et al., 2010), intimate partner violence (Dowling et al., 2016), and criminal activity (Laursen et al., 2015). A recent review found that problematic gambling rates among incarcerated individuals across various countries ranges between 5-73% (Banks et al., 2019). Internationally, problematic gambling rates among incarcerated populations are vast as the review suggests. In New Zealand, roughly 21% of adults in custody at some point in their lifetime engaged in problem gambling (Abbott et al., 2005); in the UK, prison population problematic gambling rates are estimated at approximately 12% (May-Chahal et al., 2017); in Australia, one study reported as many as 60% of incarcerated males had problematic gambling at some point in their life (Riley et al., 2018). Though these studies range in sample size and other methodological considerations, they all consistently report rates higher than what is found in their general populations (Dowling et al., 2015a; Ministry of Health, 2009; Wardle et al., 2011).

Within the United States specifically, a review by William and colleagues (2005) placed the range of pathological gambling among incarcerated individuals between 11-73%, with an average of 33%. To date, to the authors knowledge, no systematic prevalence rate analysis has been conducted for the United States since the 2005 article. These numbers (average of 33%) are much higher than what is seen in the general population. Among the general population in the United States, problem gambling prevalence is estimated at 5.6% for men and 2.7% for women (Welte et al., 2015), a much lower proportion than what is witnessed among incarcerated populations.

Within Oregon specifically, a recent gambling prevalence survey was conducted among the public. Of the 1,500 individuals recruited to participate in the general population survey, approximately 2.6% of the adult population within Oregon experiences some level of problematic gambling (Moore & Volberg, 2016).

The Oregon Department of Corrections (DOC) has custody of adults sentenced to prison for more than 12 months, housing approximately 14,900 adults in 14 state prisons throughout Oregon. Intake and assessment for the Oregon Department of Corrections (DOC) takes place at the Coffee Creek Intake Center (CCIC) located at Coffee Creek Correctional Facility (CCCF) in Wilsonville, Oregon. All individuals sentenced to serve time with Oregon DOC enter through this facility except when determined to be inappropriate for safety and security reasons. In 2020, each month there was an average of 331 intakes and assessments completed with the process lasting roughly 30 days to complete. During this time, adults in custody take part in several assessments. At the end of the intake process, male adults in custody are scheduled for transfer to their assigned long-term facility and female adults in custody are removed from intake status but remain at CCCF.

The mission of the Oregon Department of Corrections is to promote public safety by holding adults in custody accountable for their actions and reducing the risk of future criminal behavior. To support this mission, the DOC created the Oregon Accountability Model. This business strategy is designed to change criminal behavior – during incarceration and post-prison supervision – using evaluation, education, treatment, work, family engagement, and evidence-based community supervision practices. It begins at the assessment phase during intake and impacts individuals throughout incarceration, reintegration, and community supervision. An example of this strategy can be seen in the way the DOC screens for and address substance use disorders. The intake and assessment process has determined that in 2020, approximately 52% of individuals entering the

DOC were classified as having severe drug-related problems, likely to meet diagnostic criteria for a substance use disorder, and an additional 13% classified as having moderate drug-related problems (Oregon Department of Corrections, 2021). These individuals are offered opportunities to participate in recovery groups with some receiving specialized addictions treatment. One addiction that has not been systematically screened for with the DOC has been gambling disorder. To better understand the need for formalized gambling disorder assessment and intervention programs, a necessary step is better understanding the prevalence of gambling disorder within adults in custody and determining the extent to which gambling disorder contributes to incarceration within the DOC. Just as addressing substance use disorders has decreased the DOC recidivism rate, the result of an effort to better understand the role of gambling disorder among DOC adults in custody can lead to programs and services that may further reduce recidivism, incarceration costs, and ultimately enhance the quality of life for all Oregonians.

Purpose

The purpose of the current manuscript is to report on an exploratory investigation into gambling behaviors among persons entering the DOC. Topics of exploration include the problem gambling prevalence rates of men and women entering the DOC, demographic variables correlated with increased problem gambling risk, and the extent to which adults in custody reported their gambling behaviors as a contributor to their current incarceration.

METHOD

Participants

Participants were adults in custody entering the Coffee Creek Intake Center (CCIC) which is a facility that processes all male and female adults entering the Oregon Department of Corrections (ODOC). A total of 1,007 adults entering ODOC were included in the study.

Materials

A survey tool was designed consisting of three sections totaling 18 questions. The sections included, in order of appearance, a standardized problem gambling assessment tool, a section on the respondents gambling patterns and incarceration attribution, and lastly a section on demographic information about the participant. Surveys were completed in pencil-and-paper format.

Demographics

Participant demographics were collected on their; year of birth, gender, and race/ethnicity.

Gambling Information

General information on gambling was collected including primary gambling activity (cards, slots, etc.), location of play (casino, bar, etc.), how often they gambled (daily, weekly, monthly, etc.), and if gambling was responsible and/or related to their current incarceration.

Problem Gambling Severity Index (PGSI)

The Problem Gambling Severity Index (PGSI) is one of the most widely used instruments for the assessment of problem gambling. The 2016 Oregon Adult Gambling Behavior Study used this 9-item instrument for assessing problem gambling rates in Oregon's general adult population. The present study used the same instrument to allow for problem gambling comparison rates with Oregon's general population. A total score on the PGSI is achieved by adding each item which are

scored on a 4-point Likert scale ranging from 0 (never) to 3 (almost always). Though the measure was originally developed and normed with the general population (Ferris & Wynne, 2001), it has been deemed an appropriate measure to be used in other contexts (Holtgraves, 2009). The PGSI has more recently been used within clinical contexts (Merkouris et al., 2020) albeit clinical cut-off scores differ significantly (high classification is a score of 19 or greater) among this population. The measure has undergone several scoring revisions when being considered for use in the general population. Consistent with the 2016 Oregon Adult Gambling Behavior Study, both the original scoring method proposed by Ferris and Wynne (2001) and the most recent scoring method proposed by William and Volberg (2014) are used for the purposes of this manuscript. The original scoring method proposed by Ferris and Wynne (2001) using the following classifications: a score of 0 places an individual in the "non-problem" group, scores of 1-2 consists of the "low" group, scores of 3-7 are the "moderate" group, and scores of 8 or above are "high" or "problem gamblers." The original scoring method (Ferris & Wynne, 2001) was widely used and accepted among epidemiological research; however, the utility and cut-off scores of the PGSI have been brought into question (Williams & Volberg, 2014; Ladouceur, Jacques, Chevalier, Se´vigny, & Hamel, 2005). To improve the classification accuracy of the PGSI, Williams and Volberg (2014) reassessed the PGSI scoring criteria and found that when using a PGSI cut-off score of 5, the instrument had exceptionally good correspondence to the "problem gambler" clinician designation (combining the older nomenclature of problem and pathological gambling). The cut-off score of 5 also has significantly higher (p, 0.05) specificity, positive predictive power and diagnostic efficiency compared to using the original cut-off score of 3 (William and Volberg, 2014). The result of the scoring method proposed by William and Volberg (2014) study was classifying scores as follows: a score of 0 is "non-problem", scores of 1-4 are "low" or at-risk and scores of 5 or greater are "high" or "problem gambler".

Procedures

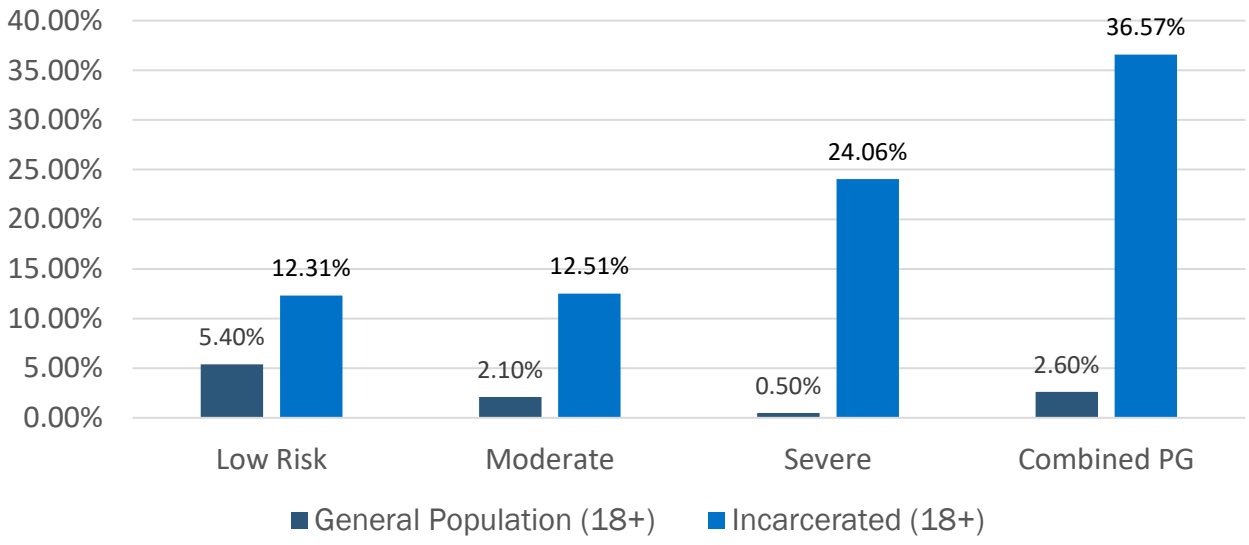
During an eleven-week survey period in April 2019 to June 2019, a gambling assessment survey was administered to 1,015 consecutive individuals entering the Coffee Creek Intake Center. In Oregon, adult males and females entering the Oregon Department of Corrections (DOC) pass through the Coffee Creek Intake Center. On the first day of the Assessment and Orientation Class, adults in custody were invited to anonymously complete a problem gambling questionnaire. Each class held a maximum of 23 adults in custody and was facilitated by a DOC assessment coordinator. The assessment coordinators introduced adults in custody to the current study, in which they were informed that participation was optional, and their responses were entirely anonymous. Once the survey had been explained, the assessment coordinator handed out the survey to those interested in taking it, then read aloud the survey questions and response items for each question. Each participant was able to read along with the assessment coordinator and mark their responses. Participants were asked to place their confidential completed survey in an envelope that was passed around the class then collected and mailed to a research firm. So long as the survey had all nine PGSI questions answered, they were entered into the statistical database. The survey was offered in English and Spanish. Of the 1015 individuals invited to participate, four refused participation and an additional eight surveys were not used due to incompleteness, resulting in a 96.7% response rate.

RESULTS

As can be seen in Table 1, problematic gambling rates are much higher among individuals entering DOC compared with the Oregon adult general population, when using the original scoring method for the PGSI. Low-risk problem gambling among incarcerated individuals is approximately 12.3%, compared to just over 5% in the general population. Moderate problematic gambling among incarcerated individuals is at 12.5% and severe is just over 24%; compared with the general population in which moderate problem gambling is only 2.1% and severe is <1%. Combined problematic gambling rests at 36.5% of the incarcerated population, compared with only 2.6% of Oregon's at-large adults in the public.

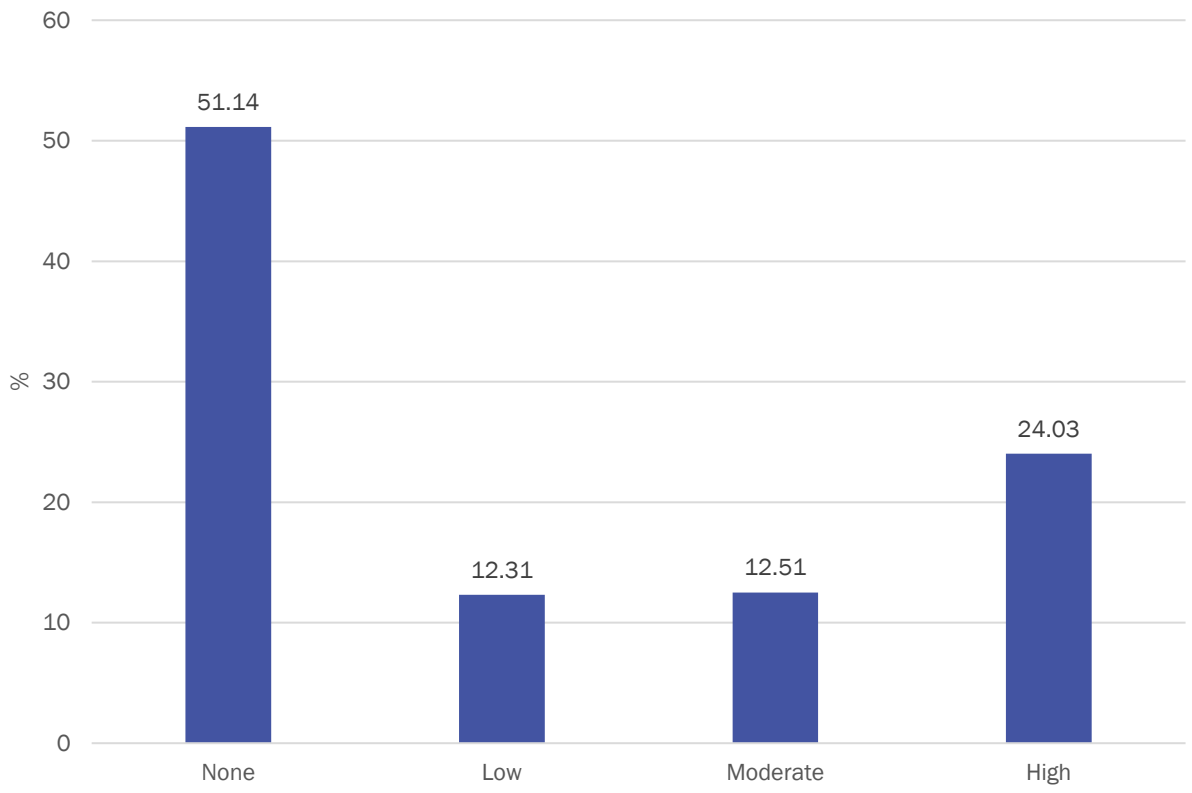
Table 1. Problem Gambling Prevalence in Oregon General Adult Population Compared to Incarcerated Adults

As Measured by the Problem Gambling Severity Index



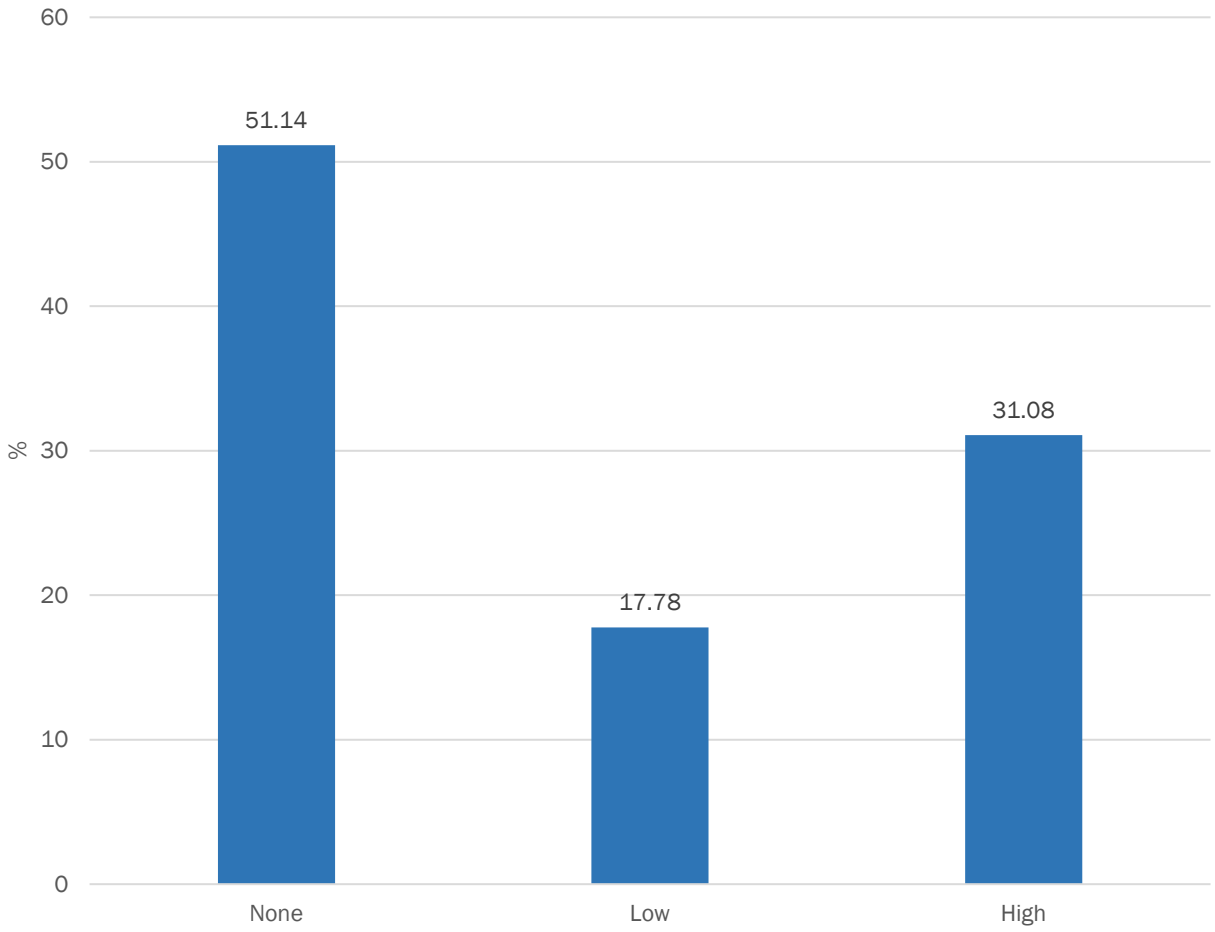
Seen in Table 2, 37% of incarcerated adults entering DOC measure as moderate to high-risk problematic gambling, using original scoring of the PGSI. With this estimate, approximately 1 in 3 adults entering DOC are within the problematic gambling range. The risk of having a gambling problem is 14 times higher among those entering the DOC compared to adults in the Oregon public.

Table 2. PGSI Classification Rates, Original Scoring (N = 1,007)



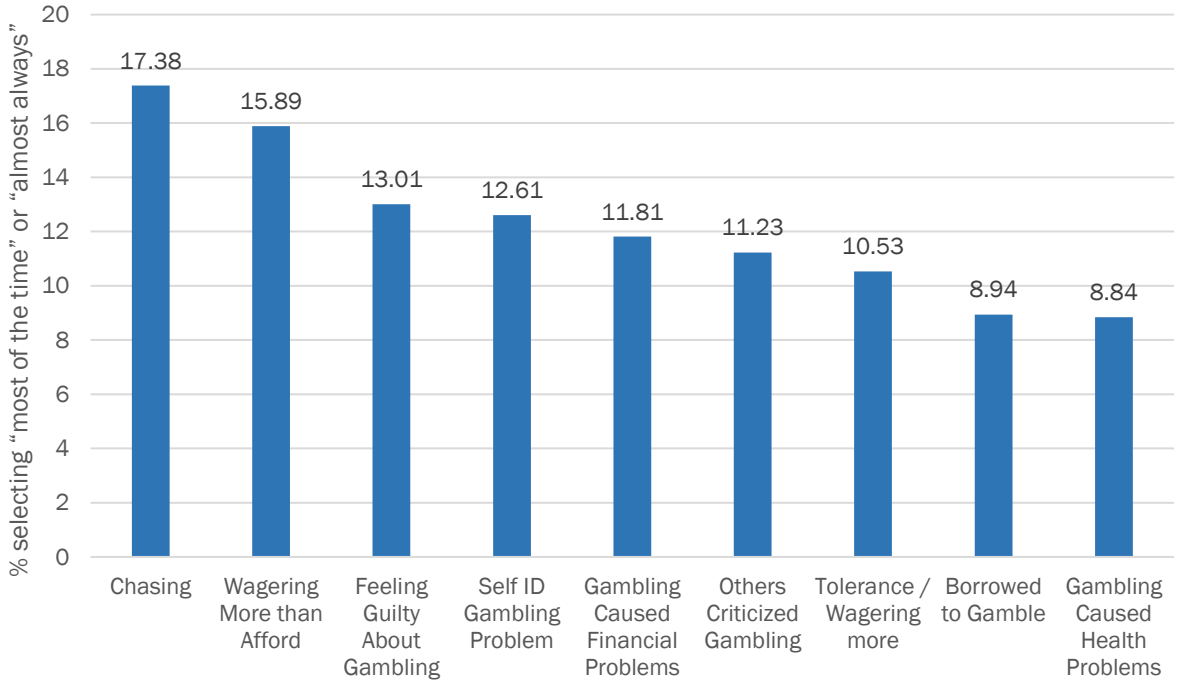
Using the revised scoring method of the PGSI, as suggested by William & Volberg (2014), individuals within the high-risk classification drop by 6%, so that 31% of adults entering ODOC measure at high-risk problem gambling.

Table 3. PGSI Classification Rates, Revised Scoring (N = 1,007)



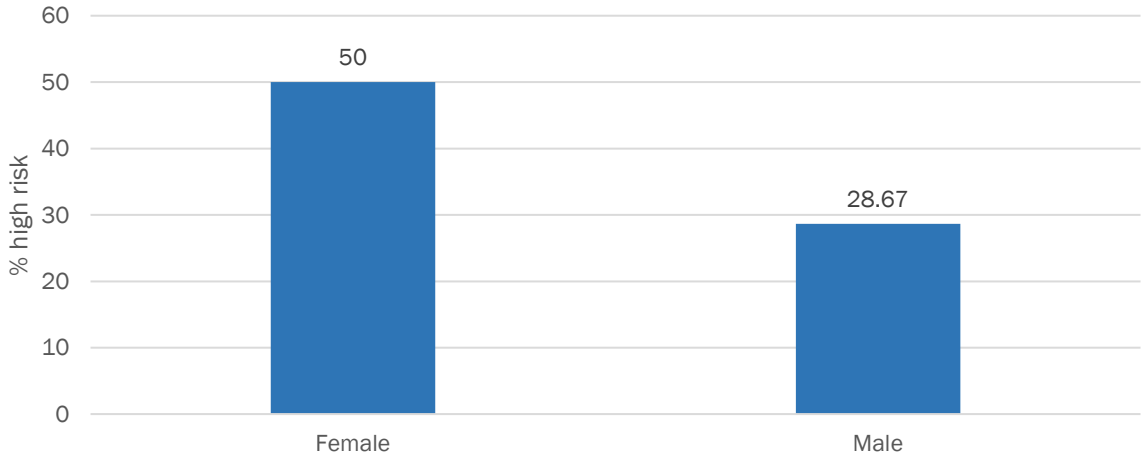
Though 31% of adults in custody scored within the problem gambling range, only 13% reported that they felt they may have a gambling problem, as can be seen in Table 4. This indicates that many individuals with a gambling problem do not self-identify as having engaged in problematic gambling behavior. The most endorsed items on the PGSI were "chasing" – that is, attempting to win back money that they lost with 17% and wagering more than an individual could afford at 16%. The least endorsed items on the PGSI were borrowing money to gamble and gambling having caused health problems, both just shy of 9% endorsement.

Table 4. PGSI Items (N = 1,007)



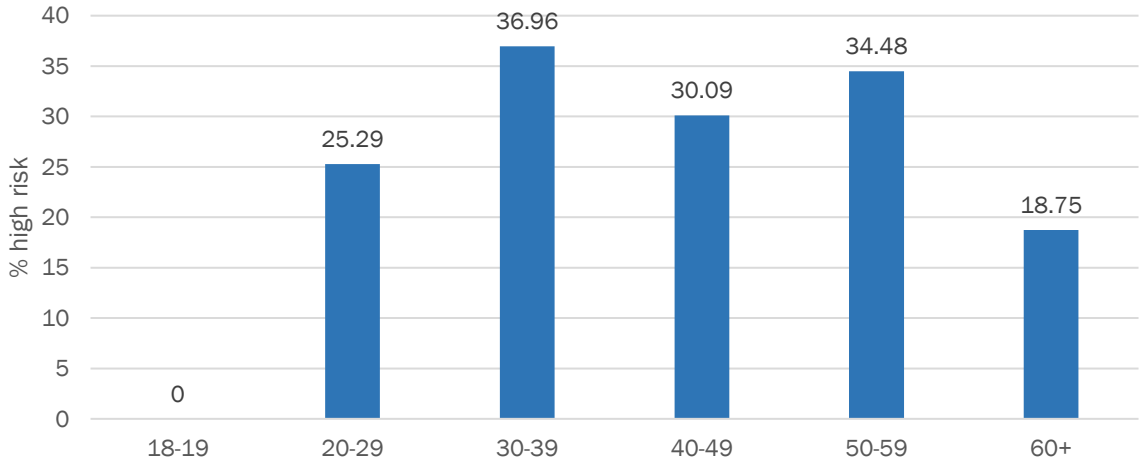
Taking a closer look at problematic gambling by demographic factors, some interesting trends emerge. When using the revised scoring method of the PGSI, of the 110 females included in the analysis, 50% of them (n = 55) were in the high-risk classification of problem gambling. While among the 872 males, just over 28% were in the high-risk group.

Table 5. Gender



Age is another important demographic to consider. Age grouping samples included, 18-19 (n = 5), 20-29 (n = 261), 30-39 (n = 368), 40-49 (n = 216), 50-59 (n = 87), and 60 years and older (n = 32). As can be seen from Table 6, the age grouping with the largest proportion in the high-risk problem gambling group was the 30-39 age group with 36.9% followed by the 50-59 age group at 34.5%. Trend analysis failed to find a significant age effect associated with problem gambling classification, this is inconsistent with findings from general population research that demonstrates as age increases the likelihood of risky behavior associated with problem gambling declines (Moore, 2006).

Table 6. Age



When examining ethnicity (Hispanic v. Non), it is clear that the Non-Hispanic group (n = 791) has a larger proportion that falls within the high-risk problem gambling classification with 33.6%, compared with the Hispanic (n= 197) group at 22.3%.

Table 7. Ethnicity

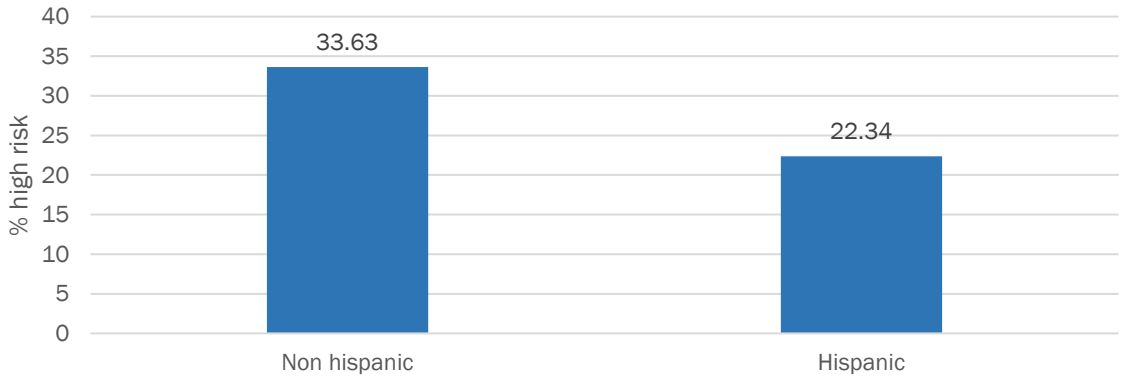
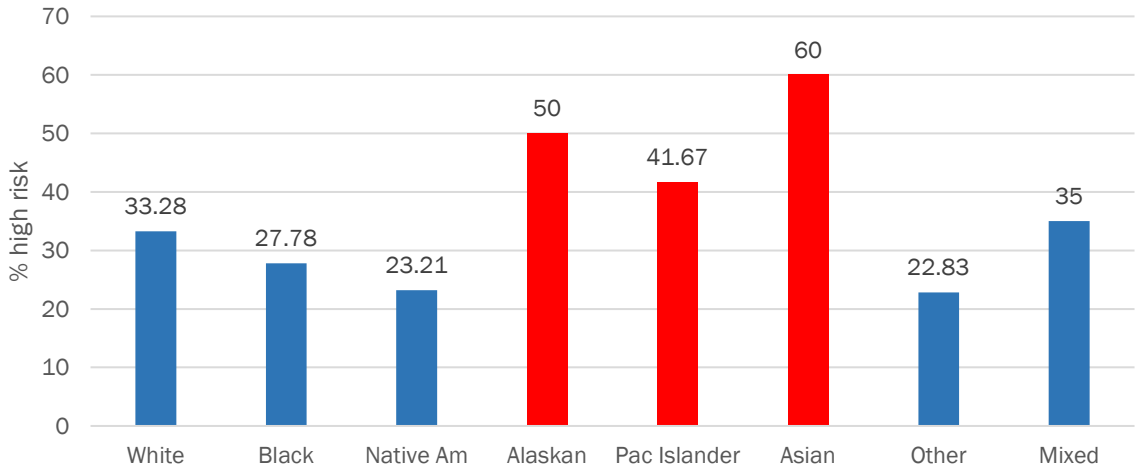


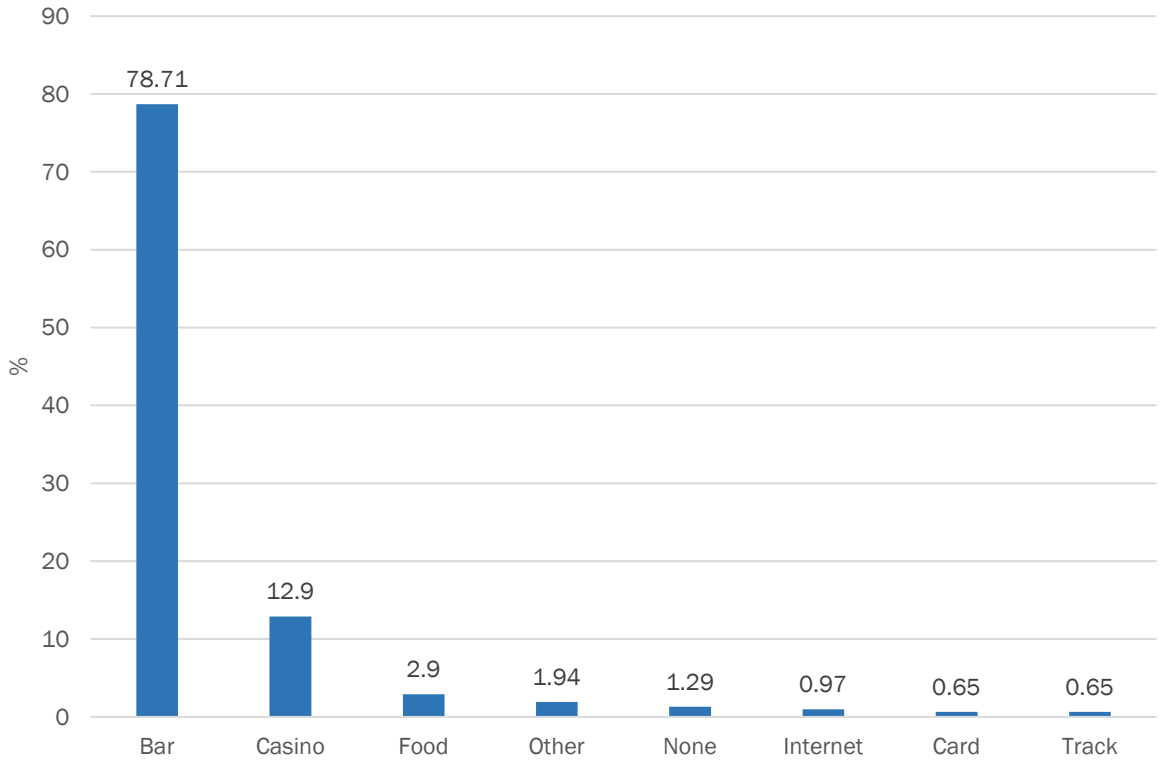
Table 8 provides a breakdown of high-risk problem gambling rates by racial group. Racial grouping samples included White (n = 619), Black (n= 72), Native American (n= 56), Alaskan (n = 2), Pacific Islanders (n = 12), Asian (n = 10), Other (n = 92), Mixed (n = 60). The bars in red contain sample sizes less than 30, which are difficult to derive inferences from. White individuals made up the majority of the sample (n = 619) and just over 33% of them fell within the high-risk problem gambling range.

Table 8. Race



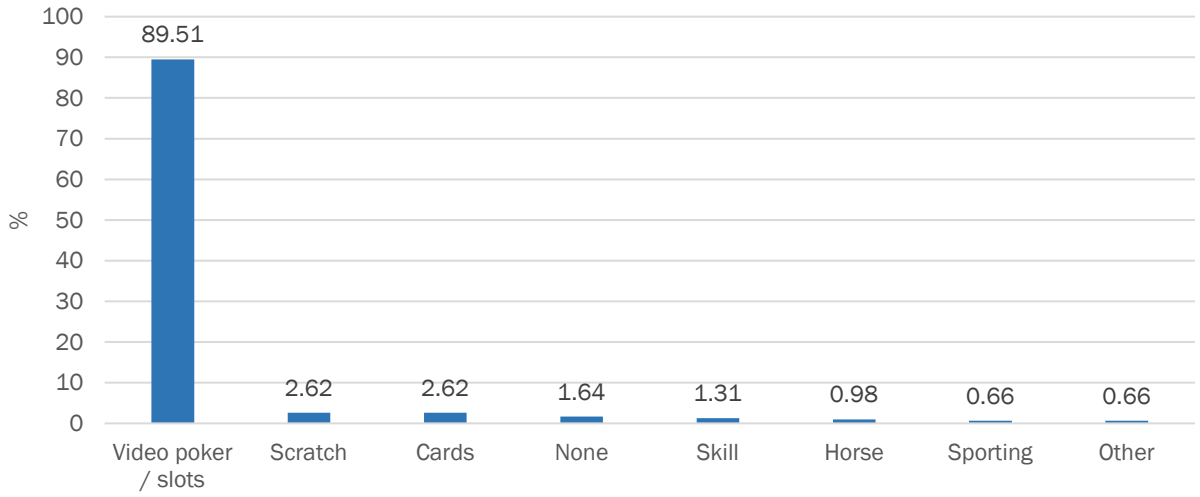
As can be seen in Table 9, the majority of individuals who fell within either the moderate or high-risk problem gambling classification (n = 310), endorsed “bar, pub, restaurant” as their favorite location(s) to gamble, with 78% endorsing this item. The second most common endorsement was the casino at 12.9%.

Table 9. Preferred Gambling Venue(s) of Problem Gamblers (n = 310)



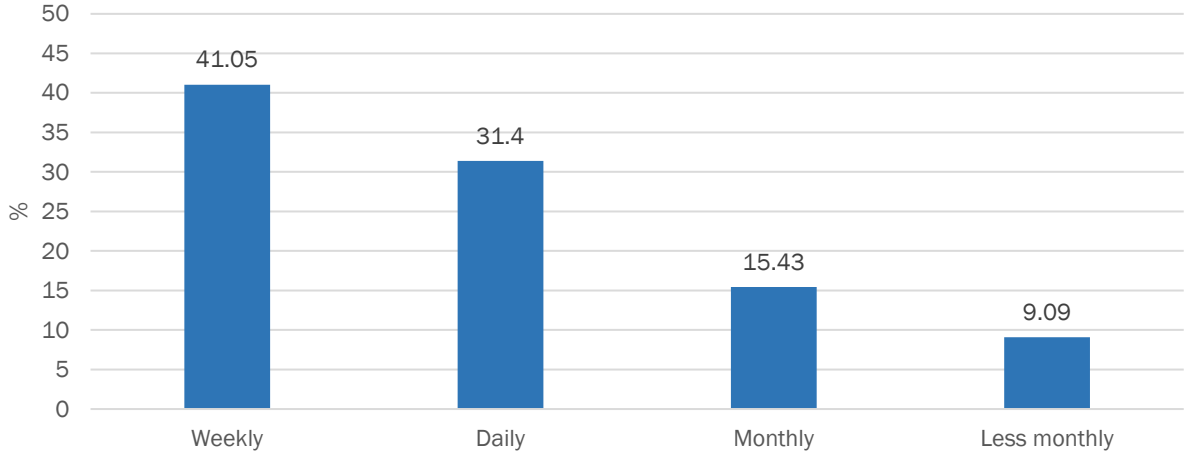
Of all forms of gambling, video poker and/or slots were by far the preferred method of individuals within the moderate to high-risk problem gambling range, with almost 90% endorsing them as their preferring gambling activity, as can be seen in Table 10. This finding is consistent with the endorsement of bars and casinos as the preferred gambling venue. In Oregon, video lottery terminals, offering video poker, line games, and slot machine style games are in over 2,000 bars and taverns across the state.

Table 10. Preferred Gambling Method(s) (n = 305)



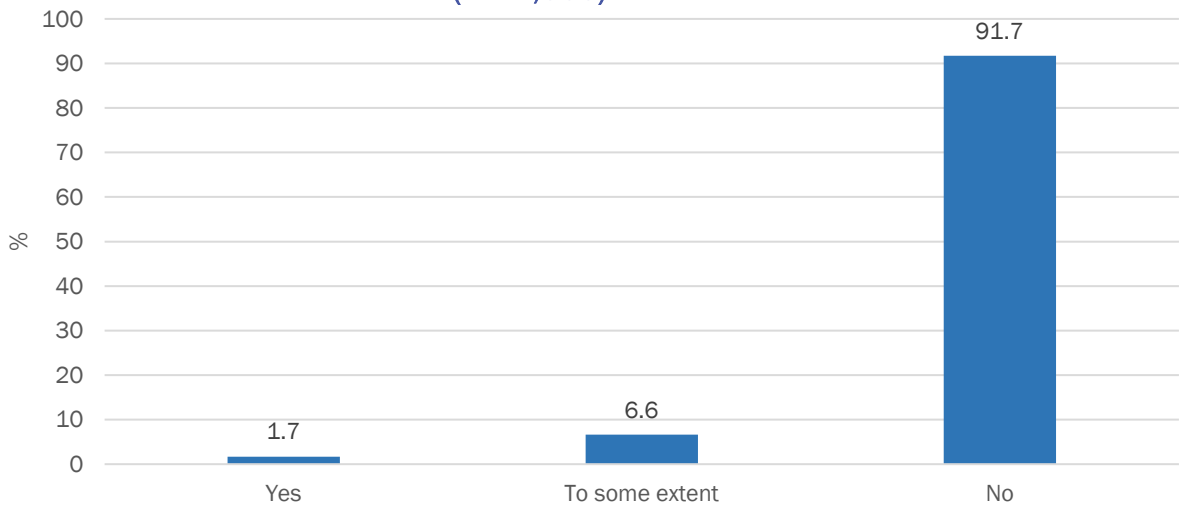
The most endorsed frequency of gambling among moderate to high-risk gamblers was weekly at 41%, followed by daily at 31.4%, monthly at 15.4%, and less than monthly at 9%. This finding demonstrates that one does not need to gamble daily to have a gambling problem.

Table 11. Gambling Frequency (n = 908)



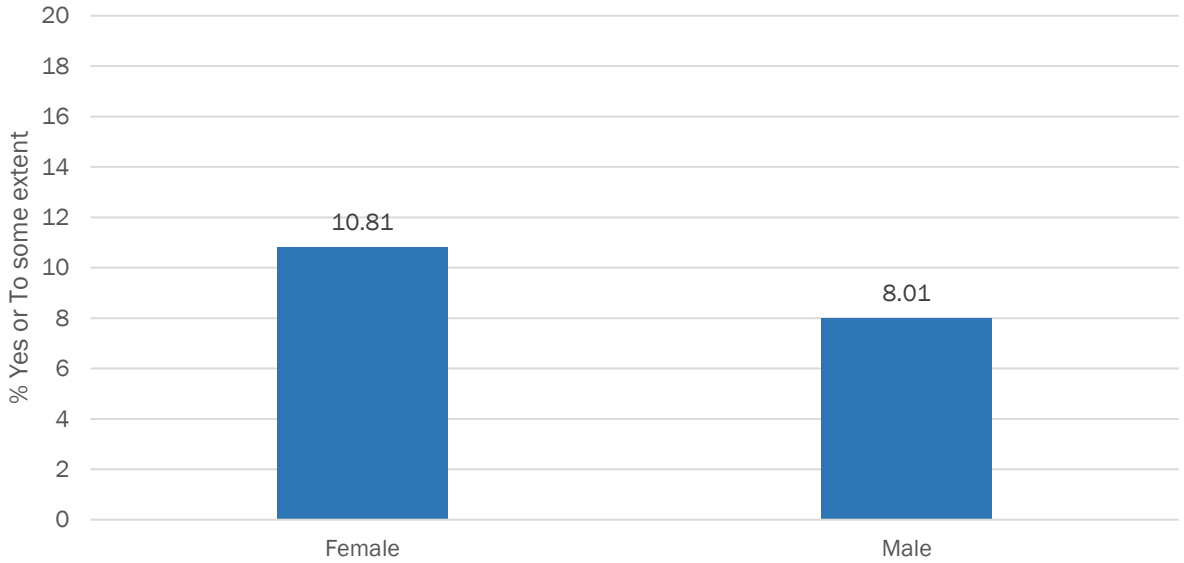
Approximately 8.3% of adults entering DOC reported that gambling was a primary or partial cause of their incarceration, as Table 12 shows. This suggests that problem gambling is associated with 1 out of 12 adult incarcerations in Oregon.

Table 12. Incarceration and/or Crime due to Gambling
(n = 1,000)



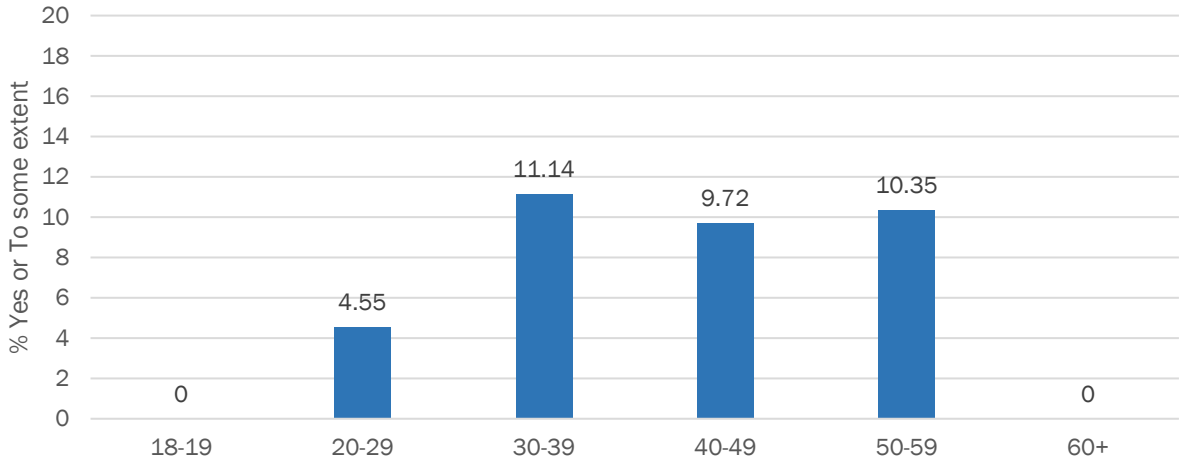
Females are more likely to be incarcerated for a crime related to gambling than males as Table 13 indicates. Of all females included in analyses (n = 111) 10.8% reported that their current incarceration was at least in part due to gambling, whereas the rate for males (n = 874) was approximately 8%.

Table 13. Incarceration Related to Gambling by Gender



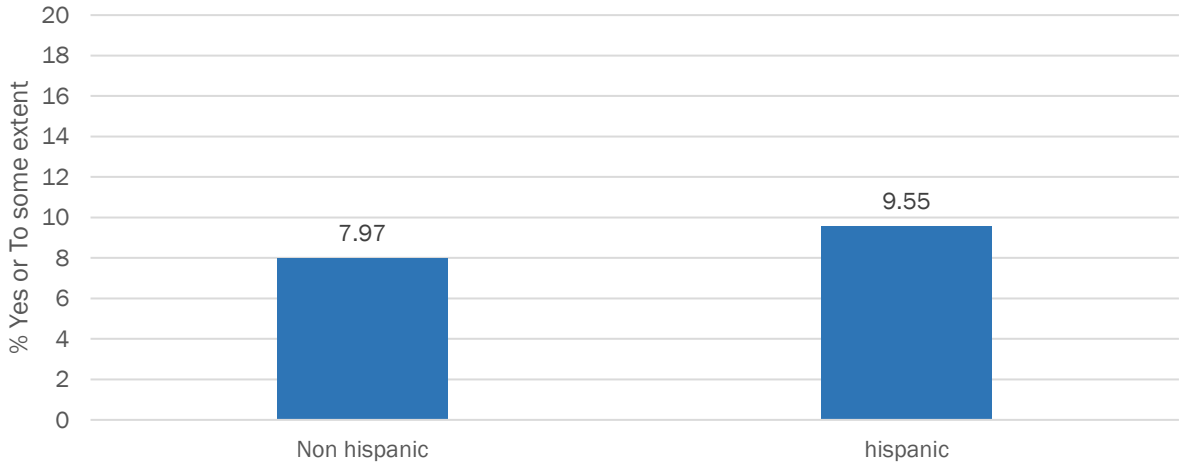
When looking at age groups, individuals between the age of 30 and 59 all have approximately a 10% likelihood of being incarcerated due to gambling related incidents. Though individuals age 30-39 have the highest prevalence at 11.1%.

Table 14. Incarceration Related to Gambling by Age



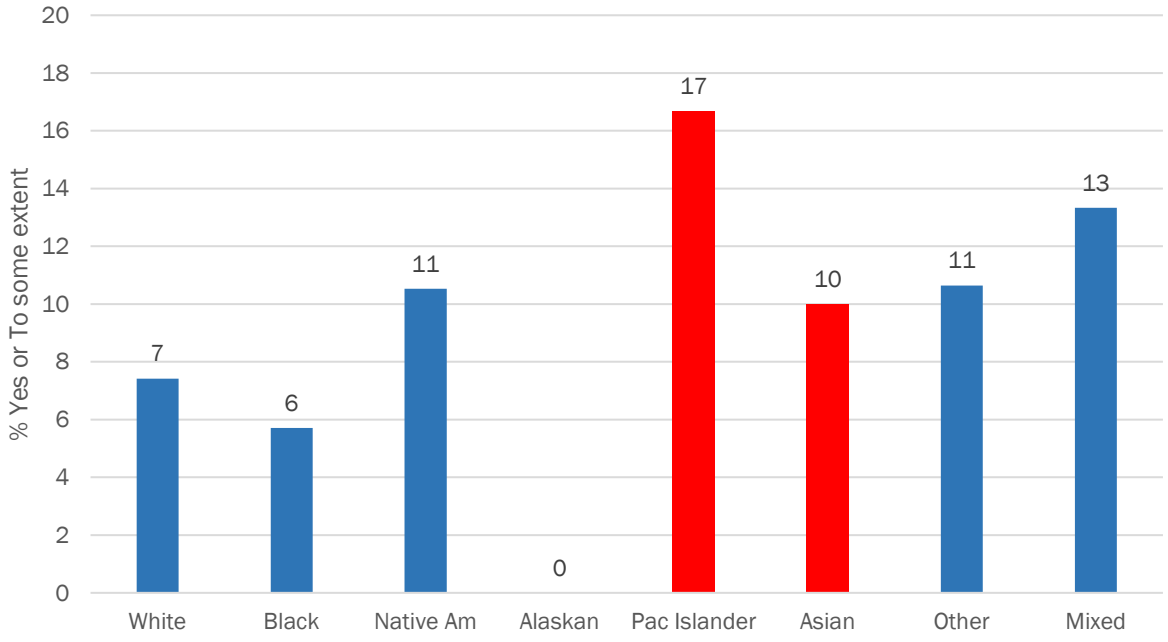
As Table 15 shows, individuals of Hispanic decent (n = 199) reported 9.5% incident rate of being incarcerated at least in part due to gambling related behaviors, while non-Hispanics (n = 791) reported a 7.9% incident rate.

Table 15. Incarceration Related to Gambling by Ethnicity



Racial groups consisted of, White (n = 620), Black (n = 70), Native American (n = 57), Alaskan (n = 2), Pacific Islander (n = 12), Asian (n = 10), Other (n = 94), Mixed (n = 60). Though the sample size is too small to draw inferences from, the highest reported incident rate of gambling being related to current incarceration is among Pacific Islanders at 17%, followed by Mixed (13%) and Native American and Other at 11%.

Table 16. Incarceration Related to Gambling by Race



DISCUSSION

The present study produced several interesting observations with three top line findings:

- This study established the existence of high levels of gambling problems among persons entering the Oregon Department of Corrections (31%).
- Problem gambling is associated with many adult incarcerations in Oregon (8.3%).
- The population with the highest problem gambling rates in Oregon is incarcerated females (50%).

Approximately one out of every ten women entering the Oregon Department of Corrections reported their incarceration was related to gambling.

High Levels of Problem Gambling Among Incarcerated

The current study provided evidence that problem gambling rates among inmates entering the Oregon Department of Corrections are 14 times greater than Oregon's general adult population.

Thirty-one percent of adults in custody (nearly 1 out of every 3 adults entering DOC) scored within the problem gambling range on the PGSI using the scoring classification recommended by Williams and Volberg (2014). This finding is consistent with a review conducted by William and colleagues (2005) where they reported the average prevalence of problem gambling within United States prisons was 33%. A more recent review by Banks et al. (2019), encompassing studies from Australia, Canada, New Zealand, the United Kingdom, and the United States, identified significant variation in the prevalence of problem and pathological gambling among adults in custody across the studies surveyed, with rates ranging from 5.9 to 73%. The authors attributed the variation as "likely a consequence of studies using different screening tools over different timeframes to assess problem gambling" (p.15). In the Banks et al (2019) review, three studies were reported that used the PGSI as the primary measure to assess for problem gambling. Among those prison studies that used the PGSI, the average prevalence of problem gambling was 12.4%, a figure much lower than that found in the present study.

Incarcerated Females

One of the strengths of the present study was the ability to collect survey data from incarcerated females. The literature on problem gambling among adults in custody contains relatively few studies reporting on females and among those studies screening instruments, sample sizes, and other methodological considerations varied, making comparisons problematic. Three studies of incarcerated females were found in the literature whose methodology closely resembled the present study (May-Chahal et al., 2012 & 2017; Rodis et al., 2018). These three comparative studies shared the present study's use of the PGSI, all contained sample sizes greater than 100, used the same 12-months prior to incarceration reporting timeframe, and all had exceptionally good response rates. Two were conducted in the United Kingdom (May-Chahal et al., 2012 & 2017) and one in the United States (Rodis et al., 2018). The primary difference was these three comparative studies found much lower problem gambling prevalence among incarcerated females (5.9% in 2012, 12.1% in 2017, and 8.8% in 2018, compared to 50% in the present study). A difference between the comparative studies and the present study was the PGSI cut-off scores used. The previous three studies used a PGSI cut-off score of 8 for a problem gambling classification whereas the present study used the Williams and Volberg (2014) recommended cut-off score of 5. When increasing the PGSI cut-off to 8 for a problem gambling classification, the problem gambling prevalence rate for Oregon female adults in

custody reduced to 39.1%, a rate that remained higher than that found in other jurisdictions. It is unclear why the rate of problem gambling among adult females within the DOC was three times that found in the most recent U.K. study and four times that found in the most recent U.S. study, although it may have to do with Oregon's legalized gambling environment. Oregon is known as a jurisdiction with legalized convenience gambling. Convenience gambling was defined by the National Gambling Impact Study Commission (1999) as the placement of slot machines or video poker terminals in restaurants, bars, and other businesses to attract local residents rather than tourists. In Oregon, there are over 2000 video lottery retailers in dine-in establishments where alcoholic beverages are available. Each Oregon video lottery retailer can license up to six video lottery terminals (VLTs). The Oregon Lottery provides the following description of VLTs on their website: "*If you're into Las Vegas-style slot games, Video Lottery might be just the thrill for you! Explore dozens of imaginative worlds as you choose from more than 60 games. Spin the reels and hold your breath. Will you win the spin? Hit a bonus? Or simply try again? Find Video Lottery at a location near you — no trip to Vegas required*" (Oregon Lottery, 2021). Approximately 81% of the DOC female's scoring in the problem gambling range indicated "bar, pub, restaurant" as the place where they did most of their gambling suggesting Video Lottery was the largest contributor to their gambling problem. Some observers have noted that many of Oregon's video lottery retailers are chains that "caters to women aged 35 and older" (Mayes, 1996). In the present study, 60% of females scoring in the problem gambling range were over the age of 35. These findings suggest Oregon's gambling polices, supporting ease of access to VLTs, disproportionally impact Oregon's adult female population.

Incarcerated Due to Gambling

> 1 out of every 22 females and 1 out of every 71 males who are arrested and housed at an Oregon DOC facility are there **primarily** due to crimes committed in relation to a gambling disorder.

To better understand how problem gambling was related to incarceration, the survey asked the question; "Was your current incarceration/crime due to gambling?" Approximately 8% of all adults in custody considered that their current offense was linked to gambling "to some extent". Further, an additional 4.5% of all females and 1.4% of all male adults in custody indicated that their current incarceration was "primarily" due to their gambling. These figures suggest that 1 out of every 22 females and 1 out of every 71 males who are arrested and housed at an Oregon DOC facility are there primarily due to crimes committed in relation to a gambling disorder.

High rates of gambling disorder among Oregon's DOC inmate population have important implications to Oregon's economy, criminal justice system, and overall public health. From an economic perspective, problem gambling is contributing to millions of dollars in criminal justice costs. For example, using average bed day costs ($108.26 in 2017) and population statistics (14,923 in 2018) provided by the Oregon Department of Corrections (2021), combined with estimated rates of DOC incarcerations primarily attributed to gambling (1.7%), leads to an estimated cost of incarcerating gambling disordered criminal adults in custody within DOC facilities at approximately $10 million annually. In addition to incarceration costs, further costs

are incurred by police departments, courts, parole, and probation departments. Other costs are in the form of harms to victims, harms to families, harms to individuals with gambling disorder, and broader harms and costs to our public health.

> The estimated cost of incarcerating gambling disordered criminal offenders within DOC facilities are approximately $10 million annually.

Given high levels of problem gambling within our prisons and overall low rates of help-seeking (Slutske, 2006), the criminal justice system, including courts and prisons, presents an opportunity to engage this high-risk population with treatment and recovery supports. Investing in treatment and recover supports for adults in custody with gambling disorder is further supported by research findings linking gambling severity as a significant predictor of increased recidivism risk (April & Weinstock, 2018; Lloyd, Chadwick, & Serin, 2014).

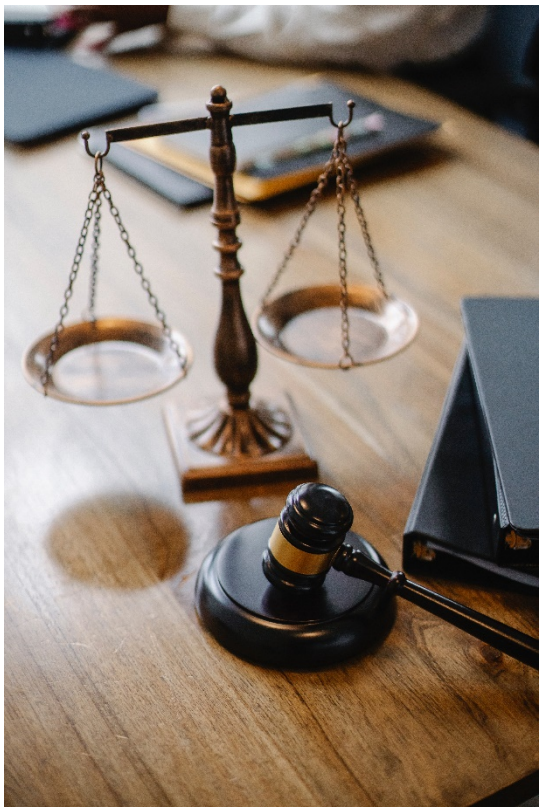
Limitations

As with all survey research, this study had limitations. The data was based on self-reports and while measures were taken to reduce respondent biases, such as assuring anonymity and asking for truthfulness, there are risks related to recall accuracy and introspective ability. Further, although the Problem Gambling Severity Index is a well validated and supported measure there are also ongoing debates about the cut off points for the PGSI (Stone et al., 2015) and follow up for false positives and false negative scores were not part of the present study.

RECOMMENDATIONS

Findings regarding gambling behavior and consequences in this study have implications for criminal justice systems. A significant proportion of the Oregon prison populations have serious gambling problems. For a portion of those adults in custody, their gambling disorder can be linked to the crimes for which they have been incarcerated. Furthermore, studies elsewhere suggest problem gambling is a significant predictor of increased recidivism risk (April & Weinstock, 2018; Lloyd, Chadwick, & Serin, 2014), problem gambling is well established as being related to poorer mental health (Lorains et al., 2011) which also places individuals at a greater likelihood of recidivism (Wallace & Wang, 2020). Together, these findings strongly point to the need to address problem gambling within the criminal justice system.

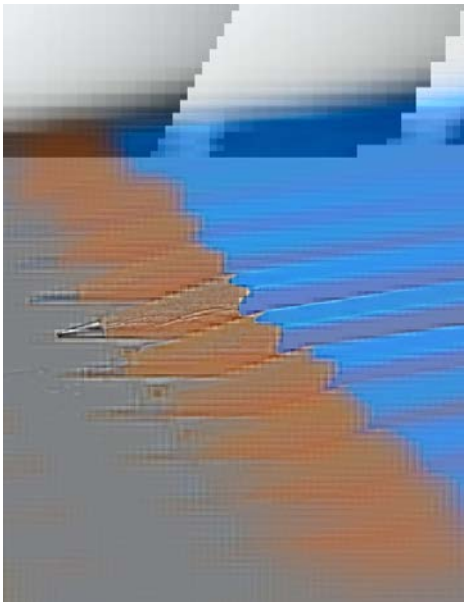
Pre-Incarceration: Therapeutic Justice for Gambling Disordered Criminal Adults in Custody



There are several points of intervention that can be implemented to address problem gambling among adults accused of criminal offenses. Pre-conviction, investigators can do more to explore if the accused person's crime is related to gambling involvement, document existing links, and flag cases that are gambling related. Prosecutors and defense attorneys would benefit from increased problem gambling awareness in order to explore if a defendant's criminal behavior was gambling related and request problem gambling screening and evaluation. Individuals with non-violent gambling related crimes, determined as manifesting a gambling disorder, could then be assigned to a therapeutic justice specialty court, such as a treatment court, drug court, or mental health court. Specialty courts often take judicial approaches that address the offender's behavior as a problem requiring non-traditional sanctions and/or social services in addition to traditional sanctions. Offering individuals with a gambling disorder the opportunity to address their gambling related criminality through engaging treatment and recovery programs in lieu of imprisonment will reduce incarceration costs, enable victim restitution payments to begin sooner, and should reduce rates of re-offending (Laux, 2019).

Gambling Disorder Screening

With problematic gambling rates estimated at 31% among adults in custody entering the Oregon DOC, routine screening for gambling problems is highly recommended to be implemented as part of DOC's intake process. The current study employed the PGSI, which is widely used and accepted and may serve as a brief screener as part of DOC's intake process. Should an individual screen positive (a score of 5 or more), further examination of the issue can be conducted and assessed.



Access to Gamblers Anonymous

Increasing awareness of problem gambling's presence in correctional setting may allow for greater support among DOC staff to implement programs such as Gamblers Anonymous (GA). GA evidence of effectiveness within the community is mixed (Schuler et al., 2016); however, individuals who attend GA in the community derive satisfaction from GA and see it as a means by which they can achieve abstinence from gambling (McGrath et al., 2018). GA and other mutual aid fellowship programs (AA, NA) are easily implemented as they are commonly peer run and led.

Integration of Problem Gambling Education and Treatment within Alcohol and Drug Treatment Programs

In Oregon, an alternative incarceration program (AIP) is an intensive prison program for select adults in custody to address criminal risk factors. Alternative incarceration was established by the 1993 Legislature with House Bill 2481, creating the Summit program. Ten years later, the 2003 Oregon Legislature authorized the Department of Corrections (DOC) to establish residential AIPs that emphasize intensive alcohol and drug treatment (House Bill 2647). In addition to the AIP, the DOC has developed several other programs for individuals who have a substance use disorder (SUD). Individuals who have a SUD are at a greater likelihood of having and/or developing a gambling problem (Dowling et al., 2015b), additionally, evidence suggests that problem gambling is associated with poorer response to substance misuse treatment (Ledgerwood & Downey, 2002). Building on this knowledge and foundation, in FY2015-16, in coordination with OHA, the DOC launched the GRIP Program (Gambling Reduction and Recovery for Incarcerated Populations) at Columbia River Correctional Institution (CRCI) and Coffee Creek Correctional Facility (CCCF). GRIP is a 12- session closed group-based psycho-educational treatment model focusing on increasing motivation for change; skill building and relapse prevention; identifying connections between substance, criminality, and gambling; and, developing a wellness plan and connecting participants with recovery resources in the community before release. In FY17-18, OHA began contracting for services with an addiction treatment contractor within Oregon State Correctional Institute (OSCI) and in FY 18-19, supported the incorporation of problem gambling education and treatment within the Powder River Correctional Facility (PRCF). The four DOC facilities mentioned represented all those providing SUD specific treatment. With the emergence of the COVID-19 pandemic, these programs aimed at including problem gambling education and treatment into SUD treatment

were disrupted and at the time of this report's writing were inactive. Efforts to restore problem gambling education and/or treatment as part of all DOC substance use disorder programs deserves consideration.

Access to Gambling Disorder Treatment

The DOC offers substance use disorder (SUD) intervention programs as part of their alternative incarceration program (AIP) and to individuals in need that are not associated with AIP. These interventions include screening and offering substance use disorder treatment (SUD) to adults in custody. However, many individuals with a gambling disorder do not have a co-occurring SUD, rendering them ineligible for many DOC sponsored addiction treatment services. Programs should be offered for those who do not qualify for a SUD-based program but need focused treatment around a gambling disorder. Though SUDs and gambling disorder operate on similar mechanisms, they are uniquely distinct with their own separate needs and treatment targets (Grant & Chamberlain, 2020). Though the cost effectiveness of incorporating gambling treatment into SUD treatment is present, separate programs (or additional treatment options) should be offered to those who present with a gambling addiction.

Pre-release Gambling Education

Corrections professionals are aware that pre-release/transition programs are necessary and an integral part of correctional programming. The Oregon DOC offers transition programs for persons within 6-months to their release date. Beginning in 2004, a course entitled Gambling Education And Reduction Program (GEAR) was offered within the Oregon DOC facilities as part of their pre-release program that continued for several years. Evaluation findings from this program suggested promising outcomes (Marotta, 2007). The program has since been discontinued and should be considered for reinstatement.

CONCLUSION

This study's findings coincide with other research that has found significantly higher levels of problem gambling in offending populations compared to general population prevalence. Given the high rates of problem gambling among persons entering Oregon's DOC, investments in problem gambling education, screening, and treatment are needed to address problem gambling within the criminal justice system.

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