

Measuring Recidivism at Belize Central Prison

Terrence Alladin¹

Abstract

This study measures three-year recidivism among individuals released from Belize Central Prison (BCP) in 2019–2021 and situates the findings within international correctional models, with particular attention to Scandinavian and German approaches. Using a mixed-methods design, we analyzed official reincarceration data ($n = 2,197$ release events across 2019–2021) and conducted in-depth interviews with more than 250 formerly and currently incarcerated people and 45 corrections personnel. Logistic regression examined predictors of reincarceration, and thematic analysis explored perceived drivers of reoffending and reintegration challenges. Results indicate three-year reincarceration rates of 26% (2019 cohort), 44% (2020—pandemic cohort), and 24% (2021 cohort as of August 15, 2024). Odds of reincarceration were modestly higher for individuals with non-violent index offenses ($OR \approx 1.10$) and for those identified as Creole ($OR \approx 1.20$), controlling for other factors. A sizeable share of returns involved minor infractions that, in other jurisdictions, would be classified as violations rather than crimes; excluding these would reduce estimated reincarceration for 2019 to roughly 16%. Despite comparatively austere resources, BCP's community-embedded, restorative-leaning practices align with peacemaking criminology and may provide cost-effective lessons for U.S. jurisdictions. Policy implications include calibrating legal codes to de-criminalize poverty-linked behaviors, expanding community-based supports, and prioritizing reintegration services over punitive responses.

Keywords: Recidivism; Belize Central Prison; peacemaking criminology; restorative justice; Scandinavian corrections; cost of incarceration

¹ Corresponding Author: Terrence Alladin, talladin@gmail.com

Introduction

This study of recidivism at Belize Central Prison (BCP) aims to determine the accuracy of recidivism rates at BCP using official data collected over a 3-year period. It will also conduct a literature review of the correctional approaches of Germany, the United States, and Scandinavian countries such as Norway, Finland, and Denmark to compare with those of Belize. This comparison is essential to understanding the effectiveness and efficiency of BCP's correctional philosophy.

The effectiveness of a nation's correctional system is often measured by its ability to rehabilitate offenders and reduce recidivism. While Scandinavian countries such as Finland, Norway, and Denmark, along with Germany, have garnered attention for their progressive and humane approaches to corrections. I argue that Belize's simpler, more community-based model may offer more practical lessons for the United States. A comparison of these Scandinavian countries' correctional approaches with Belize's system will support the argument that the U.S. may benefit more from studying Belize's methods.

Belize operates a much simpler correctional system rooted in community-based rehabilitation and restorative justice principles, offering an alternative to the Scandinavian model. Belize's approach is heavily influenced by local culture and economic realities, necessitating a more cost-effective and socially integrated model. It incorporates concepts such as caring, mindfulness, and connectedness from peacemaking criminology, coupled with a strong religious and spiritual focus (Kolbe Foundation, 2024). While this approach works well for the Belizean population, there is evidence to suggest that it could be adapted and fine-tuned for the American correctional system. For example, Pennsylvania is currently experimenting with a form of the Scandinavian approach, referred to as "Little Scandinavia." However, the costs remain high, and it is too early to assess the success of this initiative (Griffith, 2025). Thus, Belize's less costly approach may be the catalyst for US correctional systems.

Belize Central Prison, managed by the Kolbe Foundation, emphasizes rehabilitation through education, vocational training, and religious programs—similar to Scandinavian systems. Moreover, community involvement plays a significant role in the reintegration process, with local organizations assisting inmates in preparing for their return to society. The system is built on the belief that inmates are part of the community and should be rehabilitated as responsible citizens.

Belize provides a more affordable and flexible system compared to the bureaucratic and costly Scandinavian models, making it suitable for countries with limited resources. The success of Belize's model lies in its simplicity and emphasis on community support, fostering a sense of responsibility and belonging among offenders. This is evidence in its employment of former offenders (Whiteacre, 2017).

Scandinavian Philosophies

Scandinavian countries are often hailed as exemplars of humane and effective correctional systems. The correctional philosophy in these nations focuses on rehabilitation over punishment, emphasizing respect, dignity, and reintegration into society. In Norway, for instance, the incarceration rate is low, and the conditions of confinement are designed to mirror the outside world as closely as possible. Inmates have access to education, vocational training, and mental health services, all aimed at preparing them for a successful return to society (Valenta 2023).

Finland and Denmark similarly prioritize rehabilitation, with prison environments that emphasize normalcy and reintegration. The underlying principle is that the loss of freedom is the punishment itself, and the role of the correctional system is to support offenders in becoming law-abiding citizens (Lappi-Seppälä, 2012). Germany also follows a similar model, focusing on rehabilitation by minimizing the detrimental effects of institutionalization by making prison as close as possible to life outside (Brennan Center for Justice, 2021).

This study is not only important for understanding recidivism rates, but it is also necessary because it will provide practitioners with a new approach to offender rehabilitation—one that can be applied to correctional systems in the United States and other nations to improve efficiency and effectiveness. Since most Scandinavian and United States prisons are plagued by high costs, the Belizean system can provide a pathway to lower cost.

Belize Central Prison, located in Hattieville, Belize, is the country's only prison facility. It is managed by the Kolbe Foundation, a nonprofit Christian organization that took over operations from the Belizean government in 2002. The prison houses inmates of various security levels, including those awaiting trial, convicted individuals, immigration detainees, juveniles, and high-risk offenders (Kolbe, 2024)

Unlike many prisons in the region, Belize Central Prison emphasizes rehabilitation and reintegration rather than strict punitive measures. The Kolbe Foundation has implemented programs focused on vocational training, education, spiritual guidance, and psychological counseling to help inmates prepare for life after incarceration. Some of the available programs include farming, woodworking, and literacy classes.

Despite these efforts, the prison has faced criticism for overcrowding and poor living conditions (Whiteacre 2017). These are common issues in many correctional facilities in developing nations. However, compared to other Central American prisons, Belize Central Prison has been noted for its relatively humane treatment of inmates.

The objective of this study is to investigate the true recidivism rates of offenders released from BCP. Numerous studies (Whiteacre, 2017; Jones, 2014; Asmann, 2019) have reported varying recidivism rates at BCP. However, these studies have employed differing methods of evaluation to determine and support their conclusions. Therefore, this study will employ a more robust research design and data collection methodology to provide a more accurate assessment of the recidivism rate at BCP. A three-year data collection period along with interviews of current and former offenders, and prison personnel vastly improves the methodology of this study over previous conclusions.

The research questions that this study will investigate are as follows:

1. What is the recidivism rate of offenders released from BCP between 2019 and 2021?
2. How efficient and effective are the current rehabilitation efforts at BCP?

Literature Review

Studies of offender recidivism rates should include a range of demographic, criminogenic, and post-release factors to accurately measure what contributes to reoffending. The cost of incarceration has also been identified as an important variable in studying offender recidivism. Scholars (Gaes et al., 2004; Van Ginneken, 2022) explain that conditions of confinement are also a significant factor in recidivism studies. This study includes demographic data, the cost of incarceration, and conditions of confinement as its independent variables.

Demographic characteristics such as age, gender, education level, and socioeconomic status play a crucial role in understanding recidivism patterns. Research has shown that younger offenders, those with lower education levels, and individuals from disadvantaged backgrounds are at a higher risk of reoffending (Mallicoat, 2024). Including demographic data in the analysis allows for the identification of high-risk groups and informs targeted intervention strategies.

The financial burden of incarceration is a critical factor in criminal justice policy. Studies indicate that the high cost of confinement places significant strain on correctional budgets, often leading to inadequate rehabilitation programs and limited post-release support (Pew Center on the States, 2011). Understanding these costs helps policymakers assess the effectiveness of incarceration versus alternative interventions such as community-based programs.

The quality of prison conditions, including access to education, vocational training, mental health services, and rehabilitation programs, significantly impacts an offender's likelihood of successful reintegration. Harsh or inhumane conditions have been linked to higher recidivism rates, as they may contribute to further criminal behavior rather than rehabilitation (Gaes et al., 2004). By examining prison conditions, this study aims to highlight areas for improvement in correctional policies.

In summary, this study will measure the recidivism rates of offenders released from BCP between 2019 and 2021 by analyzing official demographic data, the cost of incarceration, and conditions of confinement.

Cost of Incarceration

The cost of incarceration varies across nations, typically including housing, food, healthcare, security, rehabilitation programs, and administrative expenses. In the United States, these costs fluctuate between federal and state governments. For example, California's cost of incarceration is approximately \$130,000 per inmate per year, while Louisiana's is \$31,000. The national average is about \$64,000, accounting for both federal and state prisons.

A comparison of incarceration rates shows the following:

1. United States
 - The cost of incarceration in the U.S. varies widely depending on the state and facility type (federal, state, or private prisons). On average, it is approximately \$64,000 per inmate per year, with high-cost states like Massachusetts and California exceeding \$130,000 annually (USAFacts, 2023; Vera Institute of Justice, 2017).
2. Norway
 - Norway is known for its high investment in rehabilitation and humane prison conditions. The cost per inmate is estimated to be about \$129,000 per year (Berkeley Political Review, 2022). This high cost reflects the focus on rehabilitation, vocational training, and reintegration programs.
3. Finland
 - Finland, with a similar emphasis on rehabilitation, has an estimated cost of about \$89,000 per inmate per year (Yle, 2023). Finland's approach also involves alternatives to incarceration and emphasizes social reintegration.
4. Germany
 - In Germany, the cost is slightly lower than in Scandinavian countries, at \$49,000 per inmate per year (Prison Insider, 2023). Germany also focuses on rehabilitation, education, and vocational training, though with some variations in facility conditions.
5. Denmark
 - Denmark's cost of incarceration is estimated to be around \$70,000 to \$90,000 per inmate per year (Prison Insider, 2023). The system, similar to its Nordic neighbors, prioritizes humane conditions and rehabilitation efforts.
6. Belize
 - The cost of incarceration in Belize is significantly lower than in the United States, Norway, Finland, Germany, and Denmark. Belize Central Prison's cost of incarceration is \$3,650 per inmate per year (Kolbe, 2024). While this cost reflects the economic conditions of the country, it demonstrates that the prison manages to maintain a secure, safe, and rehabilitative environment for its inmates.

Table 1. Annual Cost of Incarceration per Offender

<u>Country</u>	<u>Cost Per Offender (Average Annual)</u>
United States (Federal)	\$48,000
United States (State)	\$64,000
Norway	\$127,671
Finland	\$92,000
Denmark	\$89,000
Germany	\$49,000
Belize	\$3,650

While high incarceration costs in Norway, Finland, Denmark, and Germany correlate with a focus on rehabilitation and lower recidivism rates, the U.S., despite its higher costs, continues to experience some of the highest recidivism rates in the world. Thus, higher costs do not necessarily equate to lower recidivism. Belize has a significantly lower costs, however since its recidivism rates are currently inconclusive, it is difficult to project the efficiency or effectiveness of its correctional approach. Thus, the importance of this study is to determine how the Belizean system achieves both lower recidivism and lower costs.

Condition of Confinement

Conditions of confinement refer to the living and environmental circumstances under which inmates are held in correctional facilities, including factors such as cell size, access to medical care, the availability of educational and vocational programs, sanitation, safety, and overall quality of life. The conditions of confinement can significantly affect inmates' physical and mental well-being, their likelihood of rehabilitation, and their chances of recidivism upon release.

Many reasons underscore the importance of considering conditions of confinement when measuring recidivism:

1. *Rehabilitation Opportunities:* Prisons with better conditions often provide more comprehensive rehabilitation programs, including education, vocational training, and psychological counseling. These programs are crucial in equipping inmates with the skills and coping mechanisms needed to reintegrate into society and reduce the likelihood of reoffending (Morris & Worrall, 2014).
2. *Mental and Physical Health:* Poor conditions of confinement, such as overcrowding, inadequate medical care, and limited access to mental health services, can exacerbate existing health issues or lead to new ones. Inmates with untreated mental health conditions are more likely to recidivate (Schnittker et al., 2012).
3. *Behavioral Impact:* Harsh conditions, such as solitary confinement or a violent environment, can lead to increased aggression, antisocial behavior, and a lack of trust in authority. These behaviors are often carried into post-release life, increasing the risk of recidivism (Gendreau & Labrecque, 2016).
4. *Social Integration:* Facilities that foster a more humane environment, where inmates are treated with dignity and respect, are more likely to facilitate positive socialization and improve interpersonal skills, which are vital for successful reintegration into society (Cullen et al., 2014).

Thus, understanding the conditions of confinement is essential for accurately measuring recidivism rates and developing effective policies aimed at reducing reoffending. Poor conditions can create a cycle of incarceration, where individuals are more likely to return to prison, whereas better conditions can facilitate rehabilitation and successful reentry into society. It is, therefore, important to compare the conditions of confinement among Scandinavian countries, the United States, and Belize to gain a more comprehensive

perspective on Belize's successes. The following comparison provides insight into the correctional environments:

United States

- The conditions of confinement in the U.S. vary widely across federal, state, and private prisons. Generally, U.S. prisons are characterized by overcrowding, limited access to quality healthcare, and a lack of comprehensive rehabilitation programs. Many facilities are outdated and in poor repair, and solitary confinement is commonly used as a disciplinary measure (Goffman, 2014; ACLU, 2019). The U.S. prison system is often criticized for its punitive approach, with less emphasis on rehabilitation and more focus on punishment and containment (Clear & Frost, 2014).

Norway

- Norway is renowned for its humane and rehabilitative prison conditions. Prisons like Halden Fængsel provide a stark contrast to the U.S. model, focusing on rehabilitation and reintegration into society (Borgen Project, 2020). Norwegian prisons emphasize creating a normal environment; inmates have access to private rooms, educational and vocational training, psychological counseling, and recreational activities (Sterbenz, 2014; Pratt, 2008). The goal is to prepare inmates for a successful return to society, reducing the likelihood of reoffending.

Finland

- Finland's prisons are similar to Norway's, focusing on rehabilitation and humane treatment. Finnish prisons often have open facilities where inmates have more freedom to move around and participate in community activities. Education and vocational training are integral parts of the prison system, and there is a strong emphasis on mental health care and social support (Lappi-Seppälä, 2012; Moore, 2021). The Finnish system aims to balance security with rehabilitation, maintaining a humane approach to incarceration.

Germany

- In Germany, the conditions of confinement focus on resocialization and reintegration. Prisons offer educational programs, vocational training, and work opportunities to help inmates develop skills for employment after release. Offenders are often housed in small units with more personal space and have access to healthcare and psychological services (Jones, 2016; Weigend, 2001). Germany also uses a system of progressive privileges, where inmates can earn more freedom based on good behavior.

Denmark

- Denmark's prison system is similar to those in Norway and Finland, with a focus on rehabilitation and humane treatment. Danish prisons offer programs aimed at education, employment, and social reintegration. The conditions are designed to mimic life outside prison as closely as possible, reducing the shock of reintegration into society (Smith, 2012). Danish prisons are generally less crowded than those in the U.S., with better living conditions and more opportunities for social interaction and personal development.

Belize

- The conditions of confinement at Belize Central Prison are considerably harsher and less sanitary than those in the U.S., Germany, Norway, and other Scandinavian countries. Overcrowding, limited healthcare, and scarce rehabilitative programs are ongoing challenges. However, despite these

conditions, the prison maximizes its limited resources to provide vocational training, spiritual guidance, psychological treatment, and other rehabilitative services. While the quality of services does not match those offered in the U.S. and other developed countries, their effectiveness is equal to or better.

The conditions of confinement in Germany, Norway, and other Scandinavian countries are among the best globally, with a strong emphasis on humane treatment and rehabilitation. Prisons in these countries focus on preparing inmates for reintegration into society by providing access to education, vocational training, mental health services, and recreational activities (Sterbenz, 2014; Lappi-Seppälä, 2012; Smith, 2012). These conditions contribute to lower recidivism rates and better outcomes for former inmates.

The U.S. prison system is often criticized for its harsh conditions, including overcrowding, poor healthcare, and limited rehabilitative programs. These criticisms are usually based on comparisons with the conditions in Germany and other Scandinavian countries. However, many U.S. prisons, such as Pennsylvania's SCI Chester, and California's San Quentin State Prison, provide services similar to those in Europe, including humane treatment, rehabilitation, education, vocational training, and mental health services, with the goal of reducing recidivism.

The conditions of confinement at Belize Central Prison are poor compared to those in the United States and Scandinavian countries. However, given the economic conditions in many of the offenders' home communities, the living conditions at BCP may be similar or slightly better. Therefore, despite the extremely poor conditions at BCP, they may not significantly impact recidivism rates, as many offenders come from similar environments.

A comparison with other countries such as Guatemala, El Salvador, Honduras, and other Central American nations found that the conditions of confinement in Belize are similar to or better than those in these countries (Asman, 2019). Thus, this study concludes that measuring conditions of confinement based on U.S., Scandinavian, and European standards would be inappropriate. While conditions of confinement are a significant factor in predicting and measuring recidivism, in the case of BCP, they may not hold the same level of importance since many offenders are accustomed to similar living conditions.

The literature supports that demographic data, the cost of incarceration, and conditions of confinement are critical variables that must be considered when examining recidivism rates. As a result, this study has incorporated these variables in its analysis of recidivism rates at BCP.

Recidivism

Recidivism rates in the United States tend to be much higher than in other developed countries like Canada, England, and Germany (Yukhnenko, et.al., 2023). One of the most comprehensive studies on recidivism was conducted by the Bureau of Justice Statistics (BJS, 2021), which found that approximately 82% of released prisoners were rearrested within 10 years and 66% within 3 years. In contrast, recidivism rates in European and Scandinavian countries tend to be lower due to rehabilitative prison systems and alternative sanctions such as community service. For example, in Norway, where a restorative justice approach is prioritized, the recidivism rate is around 18%.

A comparison of recidivism rates shows the following:

United States

- The recidivism rate in the United States is relatively high, with about 66% of released state prisoners being rearrested within three years and 82% within 10 years, with approximately 62% being reincarcerated (BJS, 2021; *Prison Legal News*, 2022). The high recidivism rate in the U.S. reflects a more punitive approach to incarceration, with less emphasis on rehabilitation and reintegration.

Norway

- Norway has one of the lowest recidivism rates globally, estimated at around 18% within two years of release (Yukhnenko et al., 2023). This low rate is attributed to Norway's focus on rehabilitation, humane prison conditions, and comprehensive reintegration programs that emphasize education and vocational training, employment, mental health and well-being (Bleicher, 2021; Esplaguera, 2024). support.

Finland

- Finland also boasts a relatively low recidivism rate, approximately 33% within two years of release (Yukhnenko et al., 2023). Similar to Norway, Finland emphasizes rehabilitation, alternatives to incarceration, and extensive social support systems to help former inmates reintegrate into society.

Germany

- Germany's recidivism rate is around 46% within four years of release (Yukhnenko et al., 2023). Germany's correctional system combines rehabilitation efforts with a structured approach to reintegration, including vocational training and educational opportunities for inmates.

Denmark

- Denmark has a recidivism rate of about 32% within two years (Yukhnenko et al., 2023). Denmark's criminal justice system, similar to its Nordic neighbors, emphasizes rehabilitation, humane treatment, and reintegration programs.

Belize

- The recidivism rate in Belize remains inconclusive. Reports have suggested rates ranging between 12% and 25%; however, there is no conclusive evidence to support these claims. Some studies (Whiteacre, 2017; Samuel, 2020) have reported varying recidivism rates. Therefore, this study will be conducted to accurately determine recidivism rates at BCP and address the gap in the literature on recidivism in Belize.

Table 2: Recidivism Rates by Country

<u>Country</u>	<u>Recidivism Rate</u>
United States	62% (3-year reincarceration)
Norway	18% (2-year reconviction)
Finland	33% (2-year reconviction)
Denmark	32% (2-year reconviction)
Germany	46% (4-year reconviction)
Belize	?? (3-year reincarceration)

Theoretical framework

This study is rooted in the principles of peacemaking criminology. Peacemaking criminology is founded on the principle that crime stems from social injustices, economic deprivation, and systemic oppression (Pepinsky & Quinney, 1991; Moloney 2009). Unlike punitive models that emphasize deterrence and incapacitation, peacemaking criminology promotes reconciliation, rehabilitation, and community

engagement as solutions to criminal behavior (Zernova, 2007). This perspective aligns with critical criminology and restorative justice, advocating for nonviolent conflict resolution and social harmony. Belize Central Prison (BCP), which integrates rehabilitation, spiritual growth, and community-based interventions is an example of the successful application of this philosophy. For example, Belize has a significantly lower rate of violence in its prison than other Central American countries (Asman, 2019). Such an approach reflects the broader philosophy that justice should be restorative rather than retributive, focusing on addressing root causes of crime rather than simply punishing offenders.

The principles of peacemaking criminology have been increasingly applied in correctional practices, shaping policies that emphasize rehabilitation, reintegration, and humane treatment of incarcerated individuals. Restorative justice programs, such as victim-offender mediation and community conferencing, have been shown to reduce recidivism and improve victim satisfaction (Zehr, 2002; Latimer et al., 2005). Correctional institutions that implement educational, vocational, and therapeutic interventions also align with these principles, as such programs foster personal growth and reduce reoffending rates (Cullen et al., 2017). Furthermore, Scandinavian prison systems exemplify peacemaking criminology by prioritizing rehabilitation over punishment, leading to significantly lower recidivism rates compared to more punitive systems (Pratt, 2008). By addressing systemic inequalities through community-based interventions and diversion programs, peacemaking criminology challenges traditional punitive corrections and offers a more sustainable approach to justice (Braithwaite, 2002).

Despite its potential benefits, peacemaking criminology faces several challenges in correctional settings. The deeply ingrained punitive nature of many criminal justice systems presents institutional resistance to adopting restorative and rehabilitative approaches. Public perception remains another obstacle, as many individuals believe that punishment is necessary to achieve justice, making it difficult to gain widespread support for non-punitive correctional reforms. Additionally, while restorative justice and rehabilitation programs have demonstrated effectiveness, their success depends on proper implementation and participant engagement (Sherman & Strang, 2007). Nonetheless, the application of peacemaking criminology in correctional settings offers a transformative approach by emphasizing healing, nonviolence, and reintegration, ultimately contributing to more just and effective correctional practices.

Methodology

This study employed a mixed-methods approach to examine recidivism at Belize Central Prison, integrating both quantitative and qualitative data to provide a comprehensive understanding of factors contributing to reoffending. The mixed-methods design allowed for statistical analysis of recidivism patterns while also capturing the perspectives of key stakeholders, including offenders and corrections personnel.

Data Collection

The quantitative component of the study was based on reincarceration data of adult offenders who were released from Belize Central Prison between 2019 and 2021. Recidivism was operationalized as the reincarceration of offenders who were convicted of a crime and released from BCP after serving their required length of incarceration. Only offenders who were reincarcerated for any new offense within a three-year period after release were included in the data. Offenders who were reincarcerated for parole violations were excluded. Official data were obtained from the prison's administrative records, including demographic characteristics, offense history, sentence length, and post-release outcomes.

Logistic regression was employed to analyze the quantitative data, assessing the relationship between individual, institutional, and social factors and the likelihood of recidivism. Logistic regression is a statistical classification method used to predict binary outcomes, that is, there can be only two possible outcomes. In this study, it is used to predict whether an offender will be reincarcerated (yes or no). Logistic regression is the most appropriate type of analysis for binary data or a dependent variable that is dichotomous or categorical. It is also well-suited for variables that are continuous or discrete, making it an ideal choice for this study's analysis.

The logistic regression equation is: $y = e^{(b_0 + b_1x)} / (1 + e^{(b_0 + b_1x)})$.

Where:

- Y = predicted probability of the outcome (e.g., probability of reoffending)
- e = mathematical constant (~2.718)
- β_0 = beta intercept (baseline level)
- β_1, β_2, \dots = weights (influence of each predictor variable)
- X_1, X_2, \dots = predictor variables (age, income, prior arrests, etc.)
- Each coefficient (β) tells us how a one-unit increase in a predictor changes the **log-odds** of the outcome.

To complement the quantitative findings, qualitative data were collected through in-depth interviews with over 250 offenders and 45 correctional staff, including correction officers, mid-level managers, and senior executive staff. Both offenders and staff were randomly selected from the population at BCP. They were asked by the investigators to participate and were informed that they can refuse to participate without any penalty. The interviews explored perceptions of reintegration challenges, rehabilitation effectiveness, institutional policies, and socio-economic factors influencing reoffending. A questionnaire was developed and implemented as an interview guide to ensure consistency while allowing participants to share personal experiences and insights. A thematic analytical approach was employed to facilitate the organization and interpretation of qualitative data, ensuring a rigorous and systematic methodology. This included identifying, analyzing, and interpreting patterns within the data.

Institutional Review Board (IRB) approval was obtained from relevant review boards, including Lebanon Valley College and BCP, ensuring compliance with ethical guidelines for research involving human subjects. Informed consent was obtained from all participants before data collection. Confidentiality and anonymity were maintained throughout the study, with all personal identifiers removed from reported findings.

Limitations

While this study provides valuable insights into recidivism at Belize Central Prison, several limitations should be acknowledged. The reliance on official data may introduce data accuracy concerns, and self-reported qualitative data may be subject to recall bias. Additionally, findings may not be generalizable beyond the Belizean context due to unique socio-economic and legal factors influencing recidivism in the country. For example, the methodology applied to operationalizing conditions of confinement at BCP could influence the outcome of this study.

By employing a mixed-methods approach, this study offers a comprehensive analysis of recidivism trends and contributing factors at BCP. The integration of quantitative and qualitative data provides a nuanced understanding of reoffending behaviors and informs policy recommendations aimed at reducing recidivism rates and improving reintegration outcomes.

Measuring Recidivism

According to the National Institute of Justice (2008, 2023), recidivism is a fundamental concept in criminal justice. It refers to an offender's relapse into criminality after being released from some form of sanction, including incarceration, community corrections, probation, or parole for a previous crime. Recidivism is generally measured by an offender's involvement in criminal acts that result in rearrest, reincarceration, or conviction for a new crime within a three-year period (NIJ, 2008, 2023).

The Bureau of Justice Statistics (BJS, 2014, 2021) defines recidivism as the tendency of individuals previously convicted of a crime to reoffend after release. It is a critical metric for assessing the effectiveness of criminal justice interventions. The level of recidivism within a correctional system serves as an evaluation

tool for measuring the efficiency and effectiveness of rehabilitation programs, prison systems, and crime prevention strategies. A high recidivism rate is an indicator of ineffective rehabilitative programs and weak intervention strategies.

Measuring recidivism helps policymakers assess which interventions successfully reduce repeat offenses and promote public safety. While there is no universally agreed-upon method for measuring recidivism, it is commonly assessed based on the following key factors:

1. **Re-arrest Rate:** The percentage of individuals who are re-arrested after being released from incarceration.
2. **Reconviction Rate:** The percentage of individuals who are convicted of a new crime after release.
3. **Reincarceration Rate:** The percentage of individuals who are sent back to prison due to either a new crime or a parole/probation violation.
4. **Time Frame:** Recidivism rates are usually tracked over specific periods, such as 6 months, 1 year, 3 years, or 5 years post-release.
5. **Types of Offenses:** Some measurements differentiate between categories of crimes, such as violent offenses vs. non-violent offenses.

There are significant challenges in measuring recidivism, particularly regarding the time frame used. Different studies may measure recidivism over 6 months, 1 year, 3 years, or 5 years post-release, leading to varying recidivism rates. The chosen time frame can significantly impact results; for example, a one-year period may suggest a lower recidivism rate than a three-year period, potentially leading to misleading interpretations of the data.

Another challenge is determining which measure (rearrest, reincarceration, or reconviction) is the most appropriate indicator of recidivism.

- **Rearrest:** While many ex-offenders are rearrested based on suspicion of committing a crime, some may ultimately be found not guilty. Including innocent individuals in recidivism data based solely on rearrest could lead to inaccurate conclusions.
- **Reincarceration & Reconviction:** These appear to be the most accurate measures of recidivism. While it is possible that some offenders may be wrongfully reincarcerated or reconvicted, this number is significantly lower compared to those who are rearrested but not convicted.
- **Legal Due Process:** Offenders who are reincarcerated or reconvicted have gone through legal proceedings, reducing the likelihood of wrongful inclusion in recidivism data.

As a result, using reincarceration and reconviction as primary indicators of recidivism provides a more reliable measure of the effectiveness of correctional interventions and rehabilitation programs.

Analysis

The study of recidivism at BCP began in May 2019 and is the most comprehensive study of recidivism ever conducted at BCP. This five-year research project involved interviews with over 250 offenders and 45 staff members, including correction officers, middle managers, and senior managers. All participants were voluntary and provided with informed consent regarding the study. There were some minor instances of language barriers, and a native student assistant was present to provide clarity and answer questions. The student received training in research methods at Galen University.

Two questionnaires were developed for the study: one for offenders and another, slightly different, for correction officers and staff. The questionnaires were approved by Lebanon Valley College Institutional Review Board and Belize Central Prison. The questionnaires were distributed to offenders and staff, who completed them with a pencil. There was no identifying information on the questionnaires. Offenders who had difficulty completing the questionnaire were allowed to ask for assistance from the student assistant.

Anonymity and confidentiality were guaranteed, with offenders and staff submitting their completed questionnaires by placing them randomly into a designated box.

Official data on recidivism for offenders released in 2019, 2020, and 2021 were provided by BCP. The data were reviewed, coded, and entered into Statistical Packages for the Social Sciences (SPSS) for analysis. The dataset included information such as offender identification number, date of birth, age, type of crime committed, length of sentence, race, criminal history, education, and citizenship. Gender was not used in this study since the number of female offenders over the five-year study period was minimal.

As stated previously, a statistical analysis of the variables was conducted using logistic regression. The analysis provided insightful results regarding recidivism rates at BCP.

Results

The logistic regression analysis concluded that type of crime and offender's race were predictors of reincarceration. The probability of an offender being reincarcerated was 1.1 times. That is non-violent offenders were 1.1 times more likely to be reincarcerated than violent offenders. The race of an offender was also a determinant in reincarceration. Creoles were 1.2 times more likely of reincarceration than other races. Table 3 below shows the summary of the logistic regression

<u>Table 3. Summary of Logistic Regression</u>			
Model Summary			
Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	937.359 ^a	.130	.190
a. Estimation terminated at iteration number 5 because parameter estimates changed by less than .001.			

The table 3. presents the model summary for the logistic regression analysis. This statistic is used to compare different models, with smaller values indicating better predictive performance. The Cox & Snell R Square value is 0.130, and the Nagelkerke R Square value is 0.190. These values represent pseudo R-squared measures, which provide an indication of the proportion of variance explained by the model. The Cox & Snell R Square is a conservative estimate, while the Nagelkerke R Square adjusts the Cox & Snell value to provide a more interpretable measure similar to the traditional R-squared in linear regression. In this case, the Nagelkerke R Square of 0.190 suggests that approximately 19% of the variation in the dependent variable is explained by the independent variables in the model. Overall, while the model does explain some variability in the outcome, the relatively low pseudo R-squared values suggest that other factors may contribute to the prediction of the dependent variable (recidivism).

This study of recidivism rates among convicted offenders at Belize Central Prison who were released in 2019, 2020, and 2021 found that recidivism rates in Belize were comparable to or lower than those in many Scandinavian countries. This study found that of the 931 convicted offenders released in 2019, only 243 were reincarcerated, resulting in a recidivism rate of 26%.

The COVID-19 pandemic year saw a sharp rise in recidivism, as was the case in many other nations. In 2020, Belize Central Prison released 682 convicted offenders, and 300 were reincarcerated, yielding a recidivism rate of 44%. However, of the 584 convicted offenders released in 2021, only 141 had been reincarcerated as of August 15, 2024, for a recidivism rate of 24%.

Table 4 below shows that of the 931 offenders released in 2019, 243 (26%) were reincarcerated. However, only 38 were reincarcerated for violent crimes, while 205 were reincarcerated for non-violent crimes, including more than 89 minor offenses. Therefore, the variable "type of crime committed" was significant

to offender recidivism. More offenders were reincarcerated for non-violent crimes. Thus, offenders committing non-violent crime were 1.1 times more likely to be reincarcerated.

Table 4: Type of Crime Committed by Reincarcerated Offenders

<u>Offender Reincarcerated</u>	<u>Non-Violent</u>	<u>Violent</u>	<u>Total</u>
No	626 (67%)	62 (7%)	688 (74%)
Yes	205 (22%)	38 (4%)	243 (26%)
Total	831 (89%)	100 (11%)	931 (100%)

The same pattern of reincarceration was found for offenders released in 2020 and 2021. In 2020, the COVID-19 pandemic resulted in a higher reincarceration rate (42%). However, many of these reincarcerations were for COVID-related violations. As of August 2024, the reincarceration rate for offenders released in 2021 stood at 24%, with more than 101 cases involving minor offenses.

Many studies on criminality that have included age as a variable have concluded that younger adults are significantly more involved in criminal activities. Schmalleger and Marcum (2020) explain the age-crime curve, which shows that juvenile offending peaks at around ages 18–19 and then begins to decrease around age 20. However, in Belize, the peak occurs around age 25. The average age of recidivists was 34 years, which is similar to the average age of offenders in the U.S.

According to the U.S. Sentencing Commission (2022), the average age of incarcerated federal offenders is 37 years (USSC, 2022), while the average age for state offenders is 39 years (PPI, 2022). Overall, this study found that age was not a significant variable in predicting recidivism among offenders released from BCP between 2019 and 2021.

Race was found to be a significant variable in predicting recidivism. More than 45% of Creoles released in 2019 were reincarcerated. However, more than 80% of all reincarcerated offenders were convicted of non-violent crimes. The logistic regression showed that Creoles were 1.2 times more likely to be reincarcerated.

Table 5 below shows that of the 242 Creole offenders released, more than 110 were reincarcerated.

Table 5. Race of Reincarcerated Offenders

<u>Offender Reincarcerated</u>	<u>Mestizo</u>	<u>Creole</u>	<u>Hispanic</u>	<u>Garifuna</u>	<u>Other</u>	<u>Total</u>
No	67	132	427	18	44	688 (74%)
Yes	47	110	54	14	18	243 (26%)
Total	114 (12%)	242 (26%)	481 (52%)	32 (3%)	62 (7%)	931 (100%)

Impact of Minor Infractions on Recidivism Rates

It is important to note that Belize's recidivism rate would be even lower if not for the conviction of offenders for minor infractions that would be considered violations rather than criminal offenses in the United States. Approximately 87 convictions were for extremely minor infractions, such as riding a bicycle without a bell. Without these traffic infractions and minor convictions, Belize's recidivism rate would be around 16%. Even in the COVID-19 year of 2020, there were over 100 violations that resulted in convictions for not wearing a mask.

Discussion

Whiteacre (2017) explains that BCP underwent a transformation through "a shift in mindset, programming, and practices despite limited resources." Although the Scandinavian models are commendable, they may be difficult to replicate in the U.S. due to significant cultural, economic, and systemic differences. The U.S. correctional system is vast, complex, and expensive, with high incarceration and recidivism rates. Implementing Scandinavian-style reforms would require substantial financial investments, cultural shifts, and structural changes, these are challenges that may be insurmountable in the current political climate.

In contrast, the Belizean approach offers a more practical and cost-effective alternative. The U.S. can draw valuable lessons from Belize's emphasis on community involvement, restorative justice, and culturally relevant rehabilitation programs. By focusing on these elements, the U.S. could develop a more sustainable and effective correctional system, addressing the root causes of criminal behavior without the extensive resources needed to replicate the Scandinavian model.

While Scandinavian countries provide valuable insights into the potential for humane and rehabilitative correctional systems, Belize's model offers a simpler, more adaptable approach that may be better suited to the U.S. context. By focusing on community-based rehabilitation, restorative justice, and practical reintegration strategies, the U.S. could achieve significant improvements in its correctional system without the need for large-scale structural changes or prohibitive costs.

However, Belize also needs to address its law enforcement policies. This study uncovered that law enforcement in Belize focuses on the apprehension and detention of its most vulnerable citizens, a process that this study coined "crimpenury." This term refers to the intertwining of poverty and crime, which often leads to a feedback loop where poverty increases the likelihood of criminal behavior, and involvement in the criminal justice system further deepens poverty. Peacemaking criminology emphasizes the importance of addressing these socio-economic injustices to prevent crime, rather than merely punishing those who fall victim to these systemic conditions.

This phenomenon highlights how individuals in poverty are disproportionately criminalized and how punitive measures, rather than social support, exacerbate cycles of deprivation. Instead of aggressive policing and punitive measures, peacemaking criminology advocates for policies that focus on social inclusion, economic opportunity, and conflict resolution to prevent crime at its root.

Elements of Crimpenury:

1. **Criminalization of Poverty-Related Behaviors**

Laws that penalize survival strategies associated with poverty—such as loitering, homelessness, or petty theft—disproportionately affect poor communities. Peacemaking criminology argues that rather than criminalizing these behaviors, societies should address the structural inequalities that create them.

2. **Poverty as a Driver of Crime**

Economic deprivation often pushes individuals toward theft, drug trafficking, or other illicit means of survival. A peacemaking approach emphasizes economic empowerment and support programs instead of punitive sanctions.

3. **Barriers to Reintegration**

Individuals from impoverished backgrounds face systemic obstacles after contact with the criminal justice system. Criminal records restrict access to employment, housing, and education, reinforcing cycles of poverty and recidivism. Peacemaking criminology advocates for reintegration initiatives, expanded educational opportunities, and restorative justice practices.

4. **Disproportionate Policing in Poor Communities**

Law enforcement efforts frequently concentrate on low-income areas, resulting in over-policing and disproportionately high incarceration rates. From a peacemaking perspective, policing should prioritize building trust and collaboration rather than relying on excessive force or punitive crackdowns.

5. Poverty as a Consequence of Criminalization

Fines and fees tied to low-level offenses disproportionately burden the poor, trapping individuals in cycles of debt and ongoing legal trouble. A peacemaking criminology response would favor community service alternatives and economic assistance over punitive financial penalties.

Conclusion

The strict enforcement of archaic laws in Belize has contributed to a large portion of its offender population. Many of these offenders are poor, and the enforcement of such laws makes them more likely to be arrested. Despite this, it is remarkable that Belize still maintains a significantly low recidivism rate compared to other developed countries.

This success is largely due to BCP's flexibility and creativity in engaging various stakeholders, including community groups, religious organizations, and businesses, while promoting a culture of mindfulness, care, and connectedness in its rehabilitation programs. Furthermore, Belize's low cost of incarceration and low recidivism rate should serve as a model for other correctional agencies, demonstrating that creativity and commitment can lead to efficiency and effectiveness.

This study highlights the impact of different approaches to incarceration on offender outcomes and underscores the potential benefits of adopting rehabilitative models seen in Scandinavian countries and Germany. Belize experiences lower incarceration costs and enjoys lower recidivism rates; therefore, its approach should be applauded for its effectiveness. This phenomenon is unique in corrections and should be further evaluated.

Moreover, the success of Belize's model affirms the principles of peacemaking criminology—that rehabilitation, social inclusion, and restorative justice are more effective in reducing crime than punitive approaches. By adopting policies that focus on community support, rehabilitation, and economic empowerment, correctional systems can break cycles of crime and poverty, leading to lasting reductions in recidivism and more humane approaches to justice.

References

- ACLU. (2019). Solitary confinement: Torture in your backyard. American Civil Liberties Union.
<https://www.aclu.org>
- Asman, P. (2019). Belize offers softer touch than Latin American counterparts. InSight Crime.
<https://insightcrime.org/news/belize-alternative-latam-mano-dura-prison/>
- Berkley Political Review. (2022). What can we learn from the Norwegian prison system. Berkley Political Review. <https://bpr.studentorg.berkeley.edu/>
- Bleicher, A. (2021). Norway's humane approach to prison can work here too. University of California San Francisco. <https://magazine.ucsf.edu/norways-humane-approach-prisons-can-work-here-too>
- Borgen Project. (2020). Prison conditions in Norway: International model of reform. The Borgen Project.
<https://borgenproject.org>
- Braithwaite, J. (2002). Restorative justice & responsive regulation. Oxford University Press.
- Bureau of Justice Statistics. (2021). Recidivism of prisoners released in 24 states in 2008: A 10-year follow-up period (2008–2018). U.S. Department of Justice, Office of Justice Programs.
<https://ojp.gov>
- Clear, T. R., & Frost, N. A. (2014). The punishment imperative: The rise and failure of mass incarceration in America. New York University Press.
- Cullen, F. T., Jonson, C. L., & Nagin, D. S. (2014). Prisons do not reduce recidivism: The high cost of ignoring science. *The Prison Journal*, 94(1), 48–65. <https://doi.org/10.1177/0032885513511958>
- Durose, M. R., Cooper, A. D., & Snyder, H. N. (2014). Recidivism of prisoners released in 30 states in 2005: Patterns from 2005 to 2010. Bureau of Justice Statistics.
- Esplaguera, S. (2024). Norwegian prison system: A model for rehabilitation.
<https://marites.net/norwegian-prison-system-a-model-for-rehabilitation/>

- Gaes, G. G., Camp, S. D., Nelson, J. R., & Saylor, W. G. (2004). The influence of prison gang affiliation on violence and other prison misconduct. *The Prison Journal*, 84(3), 339–356.
<https://doi.org/10.1177/0032885504265070>
- Gendreau, P., & Labrecque, R. M. (2016). The effects of prison sentences and intermediate sanctions on recidivism: General effects and individual differences. In *Handbook on recidivism risk/needs assessment tools*. <https://www.prisonpolicy.org/scans/gendreau.pdf>
- Goffman, A. (2014). *On the run: Fugitive life in an American city*. University of Chicago Press.
- Griffith, C. (2025, April 14). “Little Scandinavia” gets a boost. *The Philadelphia Citizen*.
<https://thephiladelphiacitizen.org/author/christina-griffith/>
- Jones, P. (2014). The Kolbe Foundation and the Belize Central Prison: A model for correctional reform. *International Journal of Prisoner Health*, 10(2), 97–105. <https://doi.org/10.1108/IJPH-03-2014-0010>
- Jones, T. (2016). German prison system: An overview. *Penal Reform International*.
- Lappi-Seppälä, T. (2012). Penal policies in the Nordic countries 1960–2010. *Journal of Scandinavian Studies in Criminology and Crime Prevention*, 13(1), 85–111.
<https://doi.org/10.1080/14043858.2012.676548>
- Latimer, J., Dowden, C., & Muise, D. (2005). The effectiveness of restorative justice practices: A meta-analysis. *The Prison Journal*, 85(2), 127–144. <https://doi.org/10.1177/0032885505276969>
- Mallicoat, S. (2024). *Crime and criminal justice: Concepts and controversies* (3rd ed.). Sage.
- Moloney, J. (2009). Peacemaking criminology. *Undergraduate Review*, 5, 78–83.
https://vc.bridgew.edu/undergrad_rev/vol5/iss1/16
- Moore, N. (2021, November 23). What I learned from visiting Finland’s open prisons: No bars, no chains, no locks. Pulitzer Center. <https://pulitzercenter.org/stories/commentary-what-i-learned-visiting-finlands-open-prisons>
- Morris, R. G., & Worrall, J. L. (2014). Prison architecture and inmate misconduct: A multilevel assessment. *Crime & Delinquency*, 60(7), 1083–1109. <https://doi.org/10.1177/001128712446057>

- National Institute of Justice. (2008/2023). Recidivism. U.S. Department of Justice. <https://ojp.gov>
- National Institute of Justice. (2019). Recidivism. U.S. Department of Justice. <https://ojp.gov>
- Pepinsky, H. E., & Quinney, R. (1991). *Criminology as peace-making*. Indiana University Press.
- Pew Center on the States. (2011). State of recidivism: The revolving door of America's prisons. The Pew Charitable Trusts. <https://www.pewtrusts.org/en/research-and-analysis/reports/2011/04/12/state-of-recidivism-the-revolving-door-of-americas-prisons>
- Prison Insider. (2023). Germany country profile. Prison Insider. <https://www.prison-insider.com/en/countryprofile/allemagne-2023>
- Prison Legal News. (2022). Justice Department releases ten-year recidivism study. Prison Legal News. <https://www.prisonlegalnews.org>
- Prison Policy Initiative. (2022). Beyond the count: A deep dive into state prison populations. <https://www.prisonpolicy.org>
- Schmallegger, F., & Marcum, C. D. (2020). *Juvenile justice: An active learning approach*. Sage.
- Schnittker, J., Massoglia, M., & Uggen, J. (2012). Out and down: Incarceration and psychiatric disorders. *Journal of Health and Social Behavior*, 53(4), 448–464. <https://doi.org/10.1177/0022146512454887>
- Sherman, L. W., & Strang, H. (2007). *Restorative justice: The evidence*. The Smith Institute.
- Smith, P. S. (2012). *When the innocent are punished: The children of imprisoned parents*. Springer.
- Sterbenz, C. (2014, December 11). Norway's prisons are unlike any other in the world. Business Insider. <https://www.businessinsider.com/norways-prison-system-2014>
- Subramanian, R. (2021, November 29). How some European prisons are based on dignity instead of dehumanization. Brennan Center for Justice. <https://www.brennancenter.org/our-work/analysis-opinion/how-some-european-prisons-are-based-dignity-instead-of-dehumanization>

- United States Sentencing Commission. (2022). Older offenders in the federal system.
<https://www.ussc.gov/research/research-reports/older-offenders-federal-system>
- USA Facts. (2023). How much do states spend on prisoners? USA Facts. <https://usafacts.org>
- Valenta, E. (2023). Imitation is the sincerest form of flattery: How Scandinavian prisons are inspiring reform in the U.S. Penn State Justice Leadership in Action.
<https://sites.psu.edu/jlia/scandinavian-incarceration-practices/>
- Van Ginneken, E. F. J. C., & Palmen, H. (2022). Is there a relationship between prison conditions and recidivism? *Justice Quarterly*, 40(1), 106–128. <https://doi.org/10.1080/07418825.2022.2040576>
- Vera Institute of Justice. (2017). The price of prisons: Examining state spending trends, 2010–2015. Vera Institute of Justice.
- Weigend, T. (2001). Germany. In M. Tonry & R. S. Frase (Eds.), *Sentencing and sanctions in Western countries* (pp. 58–94). Oxford University Press.
<https://doi.org/10.1093/oso/9780195130539.001.0001>
- Whiteacre. (2017). Oral history of Belize.
https://www.academia.edu/35370170/Oral_History_in_Belize_Central_Prison
- YLE. (2023). High cost of incarceration spurs more alternatives to prison. Yle News. <https://yle.fi>
- Yukhnenko, D., Farouki, L., & Fazel, S. (2023). Criminal recidivism rates globally: A 6-year systematic update. *Journal of Criminal Justice*, 88, 1–12. <https://doi.org/10.1016/j.jcrimjus.2023.102049>
- Zehr, H. (2002). *The little book of restorative justice*. Good Books.
- Zernova, M. (2008). *Restorative justice: Ideals and realities*. Routledge.