



Position Paper

“Behind bars: Understanding prisoner perception of penitentiary rehabilitation in Kazakhstan”

Dalida Mukasheva^{a,*}, Nurlan Tulkinbayev^b, Mariya Prilutskaya^{c,**},
Dinara Yessimova^a, Heino Stöver^d

^a Eurasian National University Named After L.N.Gumilyov, Kazakhstan, Astana, 010008, Satpayev 2

^b Kostanay Academy of the Ministry of Internal Affairs Republic of Kazakhstan, Named After Shrakbek Kabylbayev, Kostanay, 110000, Abay Avenue, 38, Kazakhstan

^c Pavlodar Branch of Semey Medical University, Pavlodar, 140000, 83 Torajgyrov Apt39, Kazakhstan

^d Frankfurt University of Applied Science, Frankfurt Am Main, 60318, Nibelungenpl. 1, Germany

ARTICLE INFO

Keywords:

Prison
Central asia
People living in prisons
Penitentiary rehabilitation
Infectious diseases
Social work

ABSTRACT

This study focuses on identifying factors that, from the perspective of prisoners, contribute to positive perceptions of rehabilitation (correction) in prison. A survey was conducted of 645 soon-to-be-released inmates (530 males and 115 females) in five institutions, with questions covering demographics, incarceration details, access to social services, and personal values. The research revealed that male inmates tended to hold more positive views on penitentiary rehabilitation than female inmates. However, it was observed that the rigidity of the prison regime and the existence of chronic illnesses among inmates negatively influenced these positive perceptions towards rehabilitation. Furthermore, the implementation of diverse rehabilitation-focused initiatives by non-governmental organisations (NGOs), coupled with an awareness of rights and responsibilities and the presence of strong family values, has been linked to fostering positive perceptions of rehabilitation. These findings highlight the critical need for enhanced cooperation between non-governmental organisations and prison facilities, as well as the introduction of social work practices within Kazakhstan's prison system. Policymakers should consider these factors when designing evidence-based rehabilitation strategies, emphasising the utilization of social work technologies.

1. Introduction

The social rehabilitation of prisoners is a pertinent and complex problem that affects not only the individuals involved but also society as a whole. The high rates of recidivism among ex-offenders, where they reoffend and return to the criminal justice system, not only cause economic losses but also contribute to a reduction in the quality of life for prisoners and their families (Petersilia, 2003a,b). For example, the cost of incarcerating prisoners has increased significantly over the years, with an estimated US\$182 billion spent annually in the United States alone (Prison Policy Initiative, 2017). According to a recent report by Kazakhstan's weekly national

* Corresponding author.

** Corresponding author.

E-mail addresses: dalida.mukasheva@mail.ru (D. Mukasheva), nurlan_tulkinbai@mail.ru (N. Tulkinbayev), mariyapril2407@gmail.com (M. Prilutskaya), 777777dina@mail.ru (D. Yessimova), hstoever@fb4.fra-uas.de (H. Stöver).

<https://doi.org/10.1016/j.ijlcj.2024.100669>

Received 1 October 2023; Received in revised form 15 March 2024; Accepted 22 April 2024

Available online 11 May 2024

1756-0616/© 2024 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

business newspaper *Kursiv* (2022), the number of individuals held in rehabilitation facilities in the Republic of Kazakhstan as of 1 August exceeded 34,000, including over 3000 individuals who are under investigative arrest. It has been observed that an estimated US \$131,000 is expended daily to maintain all detainees, based on a daily cost of US\$4 per prisoner. The allocated expenses encompass several categories, such as food, medications, clothing, bedding, hygiene products, utilities, inmate transportation, and travel arrangements for released convicts. In 2021 alone, the maintenance of prisoners in Kazakhstan accounted for the substantial sum of US \$98 million (*Kursiv*, 2022). Therefore, finding effective methods of rehabilitating and correcting prisoners is crucial for reducing recidivism rates, improving the lives of prisoners and their families, and, ultimately, benefiting society.

Although the importance of prisoner rehabilitation is recognised, it remains a complex and challenging issue to address. It is important to note that prisons are expected to fulfil four main tasks: protection, punishment, rehabilitation, and integration (*Davis, 2013*). Of these four key roles that prisons play – protection, punishment, rehabilitation, and integration – it is primarily through punishment (as restriction) that they effectively fulfil their role in protecting society from individuals who present a risk to public safety. Two other pivotal roles—rehabilitation and reintegration—suggest that beyond creating a safe environment, addressing an individual's need for skill development and support in transitioning back into society are critical. Rehabilitation focuses on transforming behaviors through educational and therapeutic interventions, aiming to reduce recidivism by equipping individuals with the tools needed for a law-abiding life post-release. Reintegration, on the other hand, emphasises the importance of community support, stable employment, and housing in ensuring a successful return to society. Research by the RAND Corporation and the Mackinac Centre for Public Policy has confirmed the benefits of prison vocational training and community engagement programs. These studies reveal that such initiatives significantly lower recidivism rates and boost employment prospects for ex-inmates, highlighting the cost-effectiveness of educational investments in corrections, with substantial savings on incarceration costs and notable societal and economic returns (*Davis et al., 2013; Wetzel, 2023*).

In countries with a strong emphasis on rehabilitation, such as Norway and Sweden, recidivism rates were found to be significantly lower, around 20%–30%, compared to the global average of 50%–60%. Analysis of a rehabilitation-focused facility showed a 40% increase in post-release employment rates, compared to a 20% increase in a conventional prison. Educational programmes in prisons correlated with a 25% reduction in violent behaviour among inmates.

Prisons should focus on rehabilitation programmes, including education, vocational training, therapy, and reintegration efforts, to address the root causes of criminal behaviour and aid sustainable societal re-entry.

As a result, the question arises as to whether a prison is a suitable and effective environment for rehabilitation. Prisons separate offenders from their families and communities, promoting antisocial behaviour and limiting coping methods, factors that are generally not conducive to successful rehabilitation (*Petersilia, 2003a,b; Sykes, 2007*).

Prisoners' perceptions of rehabilitation play a crucial role in achieving effective rehabilitation, better behaviour within institutions, and favourable outcomes after release (*Stacer, 2022*). In our survey, we referred to the prisoners' attitudes towards prison rehabilitation as a general process, not their individual rehabilitation plans. This distinction aimed to gauge overall perceptions of the rehabilitation system within the prison context. Research indicates that inmates' outlook on their correctional environment and the availability of rehabilitative programmes greatly influence their experiences and the eventual results of serving the custodial sentence (*Edwards, 2021; Kjelsberg et al., 2007; Lambert et al., 2009*). If an inmate has a negative perception of the prison setting, including being critical of the presence of social hierarchies, insufficient physical space, and a lack of engaging activities, it can impede the success of rehabilitation initiatives. Comprehending inmates' perspectives on rehabilitation is essential for formulating strategies that foster a pro-social prison atmosphere, eliminate obstacles to programme access, and enhance the overall efficacy of rehabilitation initiatives.

In this regard, it is important to understand how prisoners themselves view the concept of rehabilitation and how this fits into procedural criminal justice. This can be explored through theoretical analysis and investigation in an empirical study with a sample of prisoners in their pre-released period (up to one year before release). Proponents of penitentiary rehabilitation, characterised by their positive and supportive perceptions of rehabilitation, play a crucial role in shaping the discourse surrounding rehabilitation practices (*Wright, 1980*). Their perspectives emphasise the potential for change and successful reintegration, providing valuable insights for policy interventions and reform efforts. By understanding the factors influencing positive perceptions among inmates, we can draw upon relevant theories to gain a deeper understanding of the underlying mechanisms and processes at play in the formation and maintenance of these viewpoints.

1.1.1. Importance of the study

Past research on the prison environment has predominantly centred around scales for assessing inmates' perceptions of their surroundings in prison (*Ross et al., 2008; Saylor, 1984; Tonkin, 2015; Wright, 1985*) or has taken place in countries other than Kazakhstan, such as Germany, Canada, and the UK (*Allison and Ireland, 2010; Ireland et al., 2016; Molleman and van Ginneken, 2015; Stasch et al., 2018; Woessner and Schwedler, 2014*).

Studies have indicated that constructive therapeutic relationships can lead to favourable outcomes in treatment, including lower rates of reoffending (*Dowden and Andrews, 2000; Stasch et al., 2018*), and that a positive prison environment can diminish pro-offending attitudes (*Woessner and Schwedler, 2014*).

Since prisoners are the primary actors in prison life, their perspectives offer crucial insights into the real conditions and efficacy of correctional programmes. In our study, we delve into the nuanced perceptions that prisoners have of penitentiary rehabilitation. We aim to understand the myriad factors influencing these perceptions, recognising that they are not merely surface-level views but are shaped by a complex interplay of experiences within the penitentiary system. Our focus is on exploring how different elements, such as

the existence of infectious diseases, family support, the possibility of a paid job, access to NGOs, an individual's experience of detention, etc., contribute to shaping inmates' attitudes towards rehabilitation. This understanding is crucial in assessing the effectiveness of current rehabilitation efforts and in identifying areas for improvement to make these programmes more responsive to the needs and perspectives of those they are designed to rehabilitate (Anderson and Gröning, 2016; Houston, 2013; Uche et al., 2015).

2. Background and theoretical framework

2.1. Perceptions of penitentiary rehabilitation through the prism of people living in prisons

The present study intended to investigate the factors associated with rehabilitation perception among prisoners in Kazakhstan. "Factors" refers to various aspects that may influence prisoners' perceptions of rehabilitation, such as personal rights and duties and awareness of NGO social support. These factors can be both internal and external.

Internal factors may include individual perceptions, beliefs, and values that influence prisoners' attitudes towards the rehabilitation system and their motivation to engage in rehabilitation. These factors may be related to personal experiences, cultural background, or education level (O'Connor, Perreyclear, 2013).

External factors may include broader societal issues such as the political climate, public opinion about crime and punishment, and the availability of resources for rehabilitation programmes. These factors may affect the policies and practices of the rehabilitation system and shape prisoners' experiences of incarceration (Clear et al., 2020).

Psychological factors may include prisoners' mental health status, coping mechanisms, and self-esteem. These factors may affect prisoners' ability to engage in rehabilitation programmes and their overall success in reintegrating into society after release. Overall, understanding the various factors that influence prisoners' perceptions of rehabilitation can inform the development of effective interventions and policies aimed at promoting positive behaviour change and reducing recidivism rates (McMurran et al., 2008).

One topic that especially intrigues scholars is the way that prison inmates perceive the time they spend in incarceration. This interest stems from the understanding that the prison setting can shape individuals' adaptation and behaviours within that context, potentially impacting their conduct even upon release (Wright, 1985). Researchers are more likely to delve into understanding the factors that shape officers' attitudes towards rehabilitation than focus on prisoners' perspectives. The expectation is that insights into the perspective of officers may contribute to improving the overall organisation of correctional systems (Farkas, 2001).

Previous research suggests that prisoners' perceptions and beliefs can have a significant impact on their behaviour and outcomes both during and after incarceration. For example, a study by Rungreangkulkij et al. (2021) found that prisoners with positive perceptions of rehabilitation had better mental and physical health outcomes upon release. Additionally, a study by Barkworth, 2018 entitled "Prisons, procedural justice and motivational posturing: Examining prisoners' well-being and compliance behaviour" found that prisoners who felt that they were treated with respect and dignity were more likely to comply with rules and regulations, leading to improved outcomes upon release. These findings suggest that addressing prisoners' perceptions and beliefs towards the rehabilitation system is an important aspect of promoting positive behaviour change and successful reintegration into society.

According to the procedural justice theory, people care about not only the outcome of a decision but also about the process by which the decision was made (Rawls et al., 2005). This theory emphasises the importance of fair and transparent procedures as they help to ensure individuals perceive decisions as legitimate, even if they disagree with the outcome. In the context of rehabilitation facilities, prisoners are more likely to comply with rules and regulations if they perceive them as fair and legitimate (Ryan and Bergin, 2022).

For example, providing prisoners with opportunities to voice their opinions and concerns about the rehabilitation system can help to ensure that their perspectives are considered and that procedures are viewed as transparent and fair. Ensuring that rehabilitation procedures are consistent and applied equally to all prisoners can help to reduce perceptions of unfairness and increase compliance with rules and regulations (Freudenberg et al., 2005; Binswanger et al., 2007; Lipsey and Cullen, 2007; Clear and Austin, 2017). Pickett and Ryon (2017) propose in their article a dialogic approach to legitimacy in criminal justice systems. The article argues that involving individuals in meaningful interactions and dialogues within the rehabilitation context can build more positive relationships between officers and prisoners.

A growing body of research has highlighted the importance of considering the perspectives of prisoners in shaping policies and programmes aimed at promoting positive behaviour change and reducing recidivism rates (Bales and Mears, 2008; Clear and Frost, 2014; Dowden and Andrews, 2000; Petersilia, 2003(a)). This research suggests that involving prisoners in the design and implementation of programmes can increase their sense of ownership and investment in the process, ultimately leading to greater success in achieving positive outcomes (such as reducing recidivism, improving educational and vocational skills, enhancing psychological well-being).

Previous research has highlighted the benefits of educational and vocational training programmes for prisoners. For example, a study conducted by Davis (2013) found that prisoners who participated in educational programmes during their incarceration had a 43% reduction in their odds of recidivism compared to those who did not participate. Similarly, a study by Aos et al. (2006) found that prisoners who participated in vocational training programmes had a 28% reduction in their odds of recidivism compared to those who did not participate. These findings suggest that providing prisoners with opportunities for education and skill-building can have a positive impact on their motivation and empowerment, ultimately leading to a reduction in recidivism rates.

Several studies have found that the dehumanising and oppressive nature of the prison system can lead to negative psychological effects for prisoners, including a loss of identity and a sense of helplessness (Akhona Sinefu, 2014; Schnittker, 2014). Haney (2016) also researched the psychological impact of incarceration and found that it can lead to feelings of powerlessness and a loss of autonomy. In

addition, [Lambie and Randell \(2013\)](#) conducted a review of the literature on the impact of incarceration on mental health and found that a lack of access to resources and support can exacerbate mental health issues in prisoners.

It is important to address the power dynamics and inequalities within the prison system in order to promote a more humane and rehabilitative approach to rehabilitation. By prioritising the well-being and dignity of prisoners, authorities can work towards creating a system that is truly focused on rehabilitation and reducing recidivism ([Travis et al., 2014](#)).

It's crucial to underscore the existing deficit in comprehensive data concerning prisoners' experiences. Furthermore, there is a profound necessity for ongoing research to delve into and comprehend key factors that mold prisoners' perceptions of the rehabilitation system.

For example, one study ([Johnsen et al., 2011](#)) found that the quality of relationships between prisoners and rehabilitation officers had a significant impact on prisoners' perceptions of the prison environment. Prisoners who reported positive relationships with officers were more likely to view the prison environment as supportive and conducive to rehabilitation. A study by Jolenes's investigated the impact of prisoner treatment on compliance and outcomes upon release. The study was conducted in several prisons in the UK and focused on the perceptions of prisoners regarding their treatment by staff ([van der Kaap-Deeder et al., 2019](#)).

The study by [Crewe et al. \(2011\)](#), "Staff culture, use of authority and prisoner quality of life in public and private sector prisons", delves into the viewpoints of incarcerated individuals within British prisons, placing particular focus on their quality of life. The study found that the primary determinant of quality of life in prisons was the demeanour of prison staff towards the inmates.

Additionally, while there are separate publications on social work within the prison system, such as [Visser and Travis \(2003\)](#), [Mallik-Kane and Visser \(2008\)](#), and [Binswanger et al. \(2007\)](#), more research is needed into how these services are perceived by prisoners themselves. This includes examining the ways in which social workers can support prisoners in navigating the complex and challenging environment of the rehabilitational system, as well as how social work interventions can be tailored to meet the specific needs and experiences of different groups of prisoners.

It is important to note that the topic of how people in prisons perceive social rehabilitation has not been fully explored and requires further research and attention. It is essential to continue exploring the perspectives of prisoners and how they themselves view the impact of different rehabilitation policies and programmes on their well-being and ability to successfully reintegrate into society upon release. Only by taking into account the perspectives and experiences of prisoners is it possible to create a more effective and humane rehabilitation system.

In Kazakhstan, like in many other countries, there is an ongoing effort towards prison reform and humanisation. The government has taken steps to ratify international treaties and conventions on human rights and has implemented various programmes aimed at improving the conditions of incarceration and reducing recidivism rates ([Bastemiyeu, 2009](#)). However, despite these efforts, there remains a significant deficit of research into prisoners' perspectives and experiences of the rehabilitation processes in Kazakhstan's penitentiary institutions.

2.2. Brief overview of penitentiary rehabilitation in Kazakhstan

The legislation governing penal enforcement in Kazakhstan is comprised of the Penal Enforcement Code, along with other legal statutes of the Republic of Kazakhstan, and normative legal acts that set out the procedures and conditions for implementing and serving sentences, as well as other forms of criminal legal actions directed at convicts.

The execution of criminal sanctions is tailored to each individual case, based on a variety of crucial aspects: the type of penalty (ranging from imprisonment, pre-trial detention, and security directives to rehabilitative initiatives), gender distinctions (with male and female offenders accommodated separately), age considerations (keeping young offenders apart from adult ones), and the requisite security level, including minimum-, medium-, maximum-, emergency- and total-security facilities. This approach ensures a more humane and effective penal system.

Over the past two decades, the prison population in Kazakhstan has decreased by two-thirds. As of the start of July 2022, the prison rate in Kazakhstan stood at 184 inmates per 100,000 individuals, demonstrating a decline from the 2000 figure of 520 inmates per 100,000 individuals. Experts in criminal justice consider a prison rate of 150 inmates for every 100,000 individuals to be acceptable. To contextualize these figures, let's first examine regional comparisons. In comparison, Tajikistan, a Central Asian nation in close geographical and cultural proximity to Kazakhstan, exhibits a much lower incarceration rate of around 118 prisoners per 100,000 people. Similarly, the Russian Federation, another neighboring state, records a prison population rate of about 418 inmates per 100,000 individuals.

Moving beyond regional comparisons to the international arena, it is crucial to note the stark contrasts. The United States, as the world leader in incarceration rates, reports a prison population rate of approximately 639 prisoners per 100,000 population, underscoring a notably higher incarceration rate. Conversely, Finland is among the countries with the lowest rates, approximately 51 prisoners per 100,000 people.

This comparative analysis highlights the substantial decrease in Kazakhstan's prison population over the past two decades, positioning its current rate in a broader regional and global context. Such a decline underscores the significance of penal reforms in Kazakhstan and invites further exploration into the factors contributing to this positive trend ([World Prison Brief, 2022](#)).

The prison system in Kazakhstan has undergone a number of substantial transformations since the early 2000s, reflecting the country's commitment to human rights and rehabilitation. This shift began in 2002, when prison control was transferred from the Ministry of Internal Affairs to the Ministry of Justice, addressing issues inherited from the Soviet era ([Kazakhstan, 2004](#)). The momentum continued in 2004, when pre-trial detention institutions were also shifted to the jurisdiction of the Ministry of Justice, underscoring a sustained dedication to legal reform and human rights. In 2011, the responsibilities and authority of the Ministry of

Justice regarding penal enforcement activities were reassigned to the Ministry of Internal Affairs of the Republic of Kazakhstan (henceforth referred to as the MIA).

From 2010 to 2020, Kazakhstan's government implemented the Concept of Legal Policy, with the goal of aligning the criminal penal system with international standards. This period witnessed significant reforms initiated in 2011 through a presidential decree, laying the foundation for the modernisation of the prison system (Kazakhstan, 2004). Launched in 2013, the "10 Measures to Reduce the Prison Population" initiative significantly lowered the number of inmates in Kazakhstan's prisons, leading to a notable change in the country's prison index rating, dropping from the third-ranked country globally in 2000 to the 71st by 2015 (World Prison Brief, 2022).

Legal changes that have been implemented since 2015, such as the new Criminal Code and Criminal Procedural Code, have underscored judicial actions in torture cases and the establishment of specialised investigative courts. Kazakhstan's participation in the UN-EU global initiative from 2018 to 2022 reflects its commitment to preventing violent extremism in prisons (Nurgaliyev et al., 2020).

In November 2021, the Kostanay Training Academy, a prison staff training academy, established a Research and Training Centre focused on the United Nations Standard Minimum Rules for the Treatment of Prisoners, also known as the Mandela Rules, a significant step complemented by Kazakhstan becoming a member of the Group of Friends of the Nelson Mandela Rules in July 2022. This positions Kazakhstan as a leader in prison reform in Central Asia (United Nations Office on Drugs and Crime UNODC, 2023). Additionally, the integration of medical services into the public health system has improved healthcare for prisoners. The emphasis on reducing mass incarceration, as discussed by Slade et al. (2023) further underscores Kazakhstan's commitment to enhancing human rights in its penal system.

Since 2015, Kazakhstan has been actively implementing an alternative sentencing system by reducing the severity of penalties for several provisions of the Criminal Code (Criminal Executive Code, 2014). The contemporary penal system in Kazakhstan includes various alternatives to incarceration in the form of criminal-legal sanctions, such as fines, community service, correctional labour, and restrictions on freedom.

Previously, 60% of convicted persons received custodial sentences, whereas today only 30% receive such sentences. The remaining 70% of sentences are related to alternative punishments and non-punitive measures.

In Kazakhstan, the rate of post-penitentiary recidivism is 70%, which means that out of 100 released prisoners, 70 return to prison. Due to the absence of proper rehabilitation opportunities, the penitentiary system works on a revolving door principle. As of March 2022, social and legal assistance issues have been transferred from the probation authorities to the local executive bodies. Kazakhstan's penal enforcement system comprises 16 remand prisons and 63 penitentiary institutions, of which some buildings are completely worn out and some are in a state of emergency (Kazakhstanskaya Pravda, 2023).

According to the MIA, prisons in Kazakhstan offer various rehabilitation programmes for inmates. For our study, it's critical to note that the task of monitoring prisons falls under the MIA, not the Ministry of Justice. This organisational structure is significant, as it may reflect a more punitive approach to incarceration, potentially indicative of a less rehabilitative and more disciplinary stance towards prisoners. The fact that prisons are controlled by a ministry primarily focused on law enforcement rather than legal processes and rehabilitation raises questions about the prioritisation of punishment over reform in the penitentiary system. In the criminal legislation of the Republic of Kazakhstan (Criminal Executive Code of the Republic of Kazakhstan, 2014), rehabilitation within penitentiary institutions is defined as the process of correcting convicted individuals by helping them fully reintegrate into society. This includes facilitating their return to independent life, guided by the principles of law and generally accepted behavioural norms. Educational programmes, such as courses focused on basic education or professional skills, and vocational training play an important role in this process. In addition, the prisons provide mental health services, such as psychotherapy sessions and group therapy (Nakipov, 2009). It is important to highlight that within detention facilities, the responsibility for educational programmes and the creation of personalised programmes lies with the unit's educators. Additionally, the psychologists employed in these institutions are not civilians but rather part of the military. This can be problematic as inmates often lack trust in uniformed personnel, including psychologists. Starting in 2022, the Ministry of Health has assumed responsibility for the healthcare services in the penitentiary system.

Upon an inmate's approaching release, the institution's administration informs the relevant local executive bodies and law enforcement agencies at the inmate's chosen place of residence about their impending release and enquires about the availability of housing and potential job opportunities based on the individual's skills. Simultaneously, the institution prepares a personalised programme for each convicted person, outlining the scope of social and legal assistance required for successful social adaptation after release. This programme is then transmitted to the local executive body at the inmate's chosen place of residence.

The number of inmates in prisons has reduced, but the fundamental aspects of the prison system remain unaltered. The prison service's leadership concentrates on fragmentary reforms, emphasising measurable indicators of penal performance, such as rankings in the World Prison Brief (2022), while neglecting qualitative changes to the service's identity and structure. According to Slade et al. (2023), the prison's criminal culture continues to persist and influence the prison environment.

With Order No. 577, dated August 22, 2017, the MIA amended the Model Regulations on the advisory committee under local executive bodies. The changes include the following: expanding the tasks of the advisory body to include assisting with allocating state social orders for NGOs that help individuals released from detention and involving NGO representatives in the advisory committee. Notably, NGOs focus on providing psychological and legal support to convicts, including offering assistance with legal aspects such as drafting appeals or complaints (Order of the Ministry, 2017).

Social adaptation and rehabilitation programmes for convicts in detention facilities align with the current penal enforcement legislation, particularly Article 125 of the Penal Enforcement Code of the Republic of Kazakhstan. These initiatives involve: the development of individual programmes for working with convicts; the creation, organisation, and implementation of programmes

providing social and legal assistance to inmates; collaboration with state bodies, local executive bodies, and the public in offering social and legal aid to inmates; the promotion of positive social connections among inmates; and the provision of assistance to released individuals in their professional and daily lives.

An analysis of the current situation indicates that the state has established conditions to enhance social rehabilitation mechanisms for citizens released from detention through improving state activities, involving NGOs, and promoting interagency cooperation. However, the study by [Mukasheva et al. \(2023\)](#) reveals that NGOs are not adequately prioritising rehabilitation services. For instance, in 2021, only three applications were submitted to the national provider of social project funding (the Centre for Support of Civic Initiatives) for the social support of released citizens. Moreover, NGOs implemented 4297 social projects in the same year, of which only 23 projects focused on probation service recipients released from prison. Additionally, the analysis highlights that the primary funding for NGO social projects comes from the state budget, with limited support for development in this area. In practice, most funding in the field originates from international organisations, not from the state ([Mukasheva et al., 2023](#)).

The rehabilitation programmes implemented in Kazakhstan aim to comprehensively support the social reintegration of individuals released from places of deprivation of liberty. These initiatives cover a diverse range of activities to facilitate a successful transition back into society.

One key aspect involves the organisation of socialisation and adaptation programmes. These efforts include regular meetings, round-table discussions, and joint sessions with convicts and individuals on probation. The goal is to address challenges, provide guidance, and encourage positive interactions between individuals and the probation services, fostering a smoother reintegration process.

Legal and psychological assistance is a vital component of these programmes. Representatives of NGOs and public associations conduct regular visits to correctional institutions, offering support to individuals by addressing legal concerns and providing psychological counselling to aid in the rehabilitation process.

Awareness campaigns also play a significant role in certain regions. Some programmes are dedicated to developing and implementing information campaigns to educate the public about “comprehensive strategies” focused on social adaptation issues and the provision of special social services for individuals who have been released from places of deprivation of liberty.

Some programmes focus specifically on the establishment of rehabilitation centres. These centres play a crucial role in the resocialisation and rehabilitation of individuals, offering a range of services to support their physical, mental, and social well-being as they transition back into society.

Community engagement is another integral part of rehabilitation programmes, such as actively involving the families of individuals released from places of deprivation of liberty. This engagement aims to strengthen familial bonds, address social issues, and provide a holistic support system for those transitioning back into society.

In summary, these programmes adopt a holistic approach, combining legal, psychological, and social services to support the successful reintegration of individuals into society. The initiatives reflect a commitment to addressing the diverse challenges associated with rehabilitation and promoting the overall well-being of those who have experienced incarceration.

In conclusion, Kazakhstan’s prison system has experienced significant changes in recent years, moving towards a higher proportion of alternative punishments and non-punitive measures. However, challenges remain in tackling recidivism and improving the infrastructure and conditions within the institutions to meet international standards ([Kystaubayeva and Filipets, 2017](#)).

Bridging the perception gap between the prison administration’s view of reforms and the inmates’ actual experiences is crucial. This alignment is key to effectively implementing reforms that prisoners perceive as meaningful and beneficial, thereby enhancing the overall effectiveness of the rehabilitation process.

3. Methodology

The observational cross-sectional study based on a survey of 645 people in prison was conducted from February to March 2022 in five penitentiary institutions in Kazakhstan (in the Almaty, Karaganda, Aktobe, Kostanay, and East Kazakhstan regions). The study population consisted of prisoners committed to various criminal sentences who had a year to go before their release and were supposed to receive standard social counselling services. The study was conducted by a working group from the Department of Organisation of Social Work in Internal Affairs Bodies of the Kostanay Academy of the MIA, named after Shrakbek Kabylbayev, and representatives from the Eurasian National University, named after L. N. Gumilyov.

Participants who were unable to provide informed consent or were unwilling to participate in the study were excluded from the enrolment process. Initially, 700 questionnaires were distributed, out of which 52 people refused to participate in the survey and three questionnaires were not accepted due to the substantial lack of the data in the forms. As regards the respondent allocation techniques, the sampling was non-random (convenience sampling). To elaborate, within the scope of our study, the term “convenience” pertains to choosing inmates in the final year of their sentence, since rehabilitation initiatives target this cohort in particular in anticipation of their imminent return to the community.

While briefing the prisoners on the survey, we communicated the study’s goals and highlighted the importance of gauging their views on rehabilitation in general, rather than focusing on their specific rehabilitative programmes. We adopted this approach because we anticipated that respondents would be more forthright when responding to questions that were less personal in nature.

The questionnaire covered various topics related to the incarceration experiences and needs of people in prison, including their basic socio-demographic characteristics (their level of education and work experience); the characteristics of their incarceration (prison types and regimes, their current sentence duration, and any previous incarceration episodes); their access to and awareness of social services in prisons; and their personal values, such as family and money.

The questionnaire was developed by one of the authors of this article but due to the closed nature of the penal system in Kazakhstan, we encountered challenges that made it necessary to adapt and edit the questionnaire in accordance with the recommendations of the MIA. Regrettably, at their request, some questions (such as those concerning substance use, infectious diseases, relationships between staff and inmates, and the prison environment) were either deleted or modified to bring them into alignment with the MIA's requirements.

To specifically gauge participants' positive perceptions regarding the potential for the rehabilitation of convicts in Kazakhstan's penitentiary institutions, we included a direct question: "Do you believe that prison rehabilitation in Kazakhstan is effective?". We were interested in perceptions of rehabilitation in general. The positive outlook on rehabilitation, despite limited direct experience with specific rehabilitative services, may reflect a broader conceptual belief in the potential of rehabilitation or the rehabilitative intent of the prison system itself. It suggests that inmates may hold a hopeful view of rehabilitation as an ideal or a principle, rather than basing their opinions solely on personal participation in such programs. This dichotomous question was posed to align with the study's objective, which was not merely to explore inmates' perceptions but to try to determine what objective and subjective factors influence positive perceptions of rehabilitation (correction) in prison. Due to the lack of internet access in the places of detention, printed questionnaires were used. The heads of the penitentiary institutions were contacted by one of the research team, who enabled and supervised the process of distributing the questionnaires to and collecting the questionnaires from the institutions.

The questionnaire was divided into three parts. The first part encompassed demographic questions; the second part focused on indicators of imprisonment; and the third part dealt with potential subjective factors that could contribute to an individual's perception of rehabilitation. We included a section on personal values, which comprised a series of targeted questions that asked inmates to rate the importance of various aspects of their prison experience, such as family connections, personal dignity, and access to rehabilitative programmes. Respondents were also asked about what they value most in life and were provided with dichotomous (yes/no) answer choices. The questions focused on different life values, such as the importance of family, the significance of having a job, and the value of having a place to live. This approach allowed us to gain insight into the personal priorities and values of the respondents within the context of their current circumstances. We asked participants to assess how crucial they consider family support and stable accommodation for the overall rehabilitation process, intending to explore if and in what way prisoners feel that these elements contribute to the rehabilitation journey.

"Family" and "accommodation" are considered personal values for prisoners because they directly relate to basic human needs and emotional well-being, which is crucial for both prisoners' mental health and for effective rehabilitation. Family ties, for example, provide emotional support and a sense of belonging, crucial for maintaining personal identity and the motivation to implement positive changes. These elements are fundamentally linked with a prisoner's sense of self and are pivotal in their rehabilitation journey. Asking questions about prisoners' personal values allowed us to quantify and analyse the impact of these individual values on their overall perception of prison life.

The heads of the participating institutions received instructions from one of the research team, and a training session was provided for the 25 interviewers involved in the study to ensure they were familiar with the survey questions and knew how to administer the survey consistently across all participants, approach participants, record their responses, and deal with any issues that may arise during the survey. Our study employed prison officers as interviewers, which entailed significant ethical constraints, a requirement mandated by the MIA to authorise the research. This approach was a necessary concession to facilitate the study's execution within the permitted guidelines.

To ensure clarity and transparency, potential participants were provided with informational booklets about the survey and its purpose. In parallel, prison authorities organised meetings to inform prisoners collectively about the survey and the opportunity to participate. Informed consent was obtained from prisoners prior to their participation in the survey.

The printed questionnaires were distributed to the respondents individually in separate, secured rooms. To minimise interviewer effects, interviewers offered help only at a respondent's request. Having completed the questionnaire, respondents put them in opaque envelopes, sealed them, and returned them to the interviewers.

The protocol of the study was observed and approved by the Department of Organisation of Social Work in Internal Affairs Bodies of the Kostanay Academy of the MIA, named after Shrakbek Kabylbayev.

Data analysis was performed using SPSS 20.0 (SPSS Inc., Chicago, IL, USA) for Windows. The respondents' ages and the duration of their sentences were presented in a scale mode. The other variables were coded as categorical. Scale and categorical variables were presented in percentages. For comparative statistical procedures, we used the chi-square test (χ^2), dividing the whole sample into two groups: those who believed in Kazakhstan's penitentiary rehabilitation ("participants with a positive/supportive perception of penitentiary rehabilitation") and those who denied the positive impact of state penitentiary rehabilitation ("participants with a negative/non-supportive perception of penitentiary rehabilitation"). To identify factors that are associated with positive perceptions of rehabilitation (dependent variables), we applied logistic regression analysis with several prognostic variables with a step-wise input. The independent variables included gender, age group, education, history of sentences, sentence term, prison types, rehabilitation regime, presence of chronic infectious diseases, access to social support in prison, awareness of NGO social support, awareness of rights and duties, and personal values. Adjusted odd ratios (ORs) were retrieved for the final model with their 95% confidence intervals (95% CI). $P < 0.05$ was considered statistically significant.

4. Results

Table 1 presents the demographic characteristics of the participants in the sample. The majority of participants in the sample were male, comprising 82.2% ($n = 530$) of the total sample. Among participants with a positive/supportive perception of penitentiary

rehabilitation, 87.0% (n = 322) were male, while among participants with a negative/non-supportive perception of penitentiary rehabilitation, the rate of males was significantly lower at 75.6% (n = 208) ($\chi^2 = 13.97$, $p < 0.001$) (Table 1).

Among participants with a positive/supportive perception of penitentiary rehabilitation, 12.2% (n = 45) fell within the 18–25 age group, 67.3% (n = 249) were in the 26–45 age group, 20.3% (n = 75) were in the 46–60 age group, and 0.3% (n = 1) were over 60. For participants with a negative/non-supportive perception of penitentiary rehabilitation, 7.3% (n = 20) were in the 18–25 age group, 69.1% (n = 190) were in the 26–45 age group, 23.3% (n = 64) were in the 46–60 age group, and 0.4% (n = 1) were over 60.

Among the 629 participants for whom education data was available, the majority held a high school diploma (83.0%, n = 522). Within the group of participants with a positive/supportive perception of penitentiary rehabilitation, 87.1% (n = 316) possessed a high school diploma, while among participants with a negative/non-supportive perception of penitentiary rehabilitation, 77.4% (n = 206) had a high school diploma. It is noteworthy that the latter group was more likely to have a completed or incomplete university degree ($\chi^2 = 11.49$, $p = 0.003$).

Table 2 presents characteristics of participants relating to their imprisonment for the whole surveyed sample, focusing on the differences between the two subgroups of prisoners, namely those with a positive and those with a negative perception of penitentiary rehabilitation.

Overall, 39.2% (n = 253) of surveyed prisoners had no history of sentences, while more than half of the respondents (n = 392) had been previously committed to penitentiary institutions. No statistically significant difference was found between the two groups in terms of this characteristic ($\chi^2 = 1.65$, $p = 1.99$).

When examining the length of sentences, a statistically significant difference was observed between participants with a positive/supportive perception of penitentiary rehabilitation and participants with a negative/non-supportive perception of penitentiary rehabilitation ($\chi^2 = 19.81$, $p = 0.001$). It was revealed that long sentences (over ten years) were more likely to be associated with a non – supportive sceptical perception of penitentiary rehabilitation.

Programmes for the rehabilitation of inmates in detention facilities are implemented in accordance with the current penal legislation of the Republic of Kazakhstan. Prisons are typically categorised into different security levels based on the severity of offenses committed by prisoners, their criminal records, and the potential risks they pose to themselves and others.

In the context of rehabilitation, minimum-security prisons can actively engage with local communities and NGOs, offering a variety of community-based programmes. These may include training, employment, and support programmes aimed at successfully reintegrating prisoners into society. On the other hand, total security prisons, which are more closed to external structures, may focus on internal, intensive rehabilitation methods.

Therefore, the prison's security level influences the types of rehabilitation programmes that can be implemented in institutions.

Preferential regime: This regime provides certain privileges and benefits to prisoners who demonstrate good behaviour and show potential for rehabilitation. It may include opportunities for education, vocational training, and participation in various programmes aimed at reintegrating them into society.

Special regime: The special regime is designed for prisoners who require extra security measures due to the severity of their crimes or their potential to pose a risk to others. It involves stricter supervision, restricted movement, and limited privileges compared to other regimes.

Normal regime: The normal regime is the standard regime in the prison system. It provides a balance between security measures and opportunities for rehabilitation. Compared to the other regimes, prisoners have more freedom of movement and access to educational and vocational programmes.

Strict regime: The strict regime is characterised by stringent security measures and limited freedom of movement for prisoners. It is typically imposed on individuals who pose a significant risk to others or have a history of violent behaviour. Prisoners under this regime are closely monitored and have limited access to educational and vocational programmes.

Table 1
Baseline demographic characteristics of the sample.

Participant characteristics	Total sample (n = 645)	Participants with a positive perception of penitentiary rehabilitation (n = 370)	Participants with a non-supportive perception of penitentiary rehabilitation (n = 275)	Criterion, p
Male, n (%)	530 (82.2%)	322 (87.0%)	208 (75.6%)	13.97, p < 0.001
Age groups				4.52, p = 0.21
18–25	65 (10.1%)	45 (12.2%)	20 (7.3%)	
26–45	439 (68.1%)	249 (67.3%)	190 (69.1%)	
46–60	139 (21.6%)	75 (20.3%)	64 (23.3%)	
Over 60	2 (0.3%)	1 (0.3%)	1 (0.4%)	
Education	(n = 629)	(n = 363)	(n = 266)	11.49, p=0.003
High school diploma	522 (83.0%)	316 (87.1%)	206 (77.4%)	
University degree	78 (12.4%)	37 (10.2%)	41 (15.4%)	
Incomplete university degree	29 (4.6%)	10 (2.8%)	19 (7.1%)	
Chronic infectious diseases (HIV, hepatitis, TB)	70 (10.9%)	28 (7.6%)	42 (15.3%)	9.68 p=0.002

Table 2
Characteristics of participants relating to their imprisonment.

Participant characteristics	Total sample (n = 645)	Participants with a positive perception of penitentiary rehabilitation (n = 370)	Participants with a non-supportive perception of penitentiary rehabilitation (n = 275)	Criterion, p
History of previous sentences				1.65, p = 1.99
No	253 (39.2%)	153 (41.4%)	100 (36.4%)	
Yes	392 (60.8%)	217 (58.6%)	175 (63.6%)	
Sentence term				19.81, p=0.001
Less than 2 years	97 (15%)	59 (15.9%)	38 (13.8%)	
From 2 to 5 years	255 (39.5%)	152 (41.1%)	103 (37.5%)	
From 5 to 7 years	125 (19.4%)	59 (15.9%)	66 (24.0%)	
From 7 to 10 years	109 (16.9%)	76 (20.5%)	33 (12.0%)	
Over 10 years	59 (9.1%)	24 (6.5%)	35 (12.7%)	
Prison types				33.06, p < 0.001
Minimal security	95 (14.7%)	70 (18.9%)	25 (9.1%)	
Medium security	240 (37.2%)	123 (33.2%)	117 (42.5%)	
Maximum security	158 (24.5%)	108 (29.2%)	50 (18.2%)	
Emergency security	115 (17.8%)	55 (14.9%)	60 (21.8%)	
Total security	12 (1.9%)	3 (0.8%)	9 (3.3%)	
Miscellaneous security	25 (3.9%)	11 (3.0%)	14 (5.1%)	
Rehabilitation regimes*	(n = 625)	(n = 359)	(n = 266)	3.16, p = 0.37
Preferential	22 (3.5%)	9 (2.5%)	13 (4.9%)	
Special	303 (48.5%)	172 (47.9%)	131 (49.2%)	
Normal	265 (42.4%)	156 (43.5%)	109 (41.0%)	
Strict	35 (5.6%)	22 (6.1%)	13 (4.9%)	

Note: * Prison regimes in Kazakhstan.

Those participants who had a non-supportive perception of penitentiary rehabilitation were more likely to serve their sentences in prisons with higher levels of security ($\chi^2 = 33.06$, $p < 0.001$). Meanwhile, in terms of the rehabilitation regime, no statistically significant difference was found between the two subgroups compared ($\chi^2 = 3.16$, $p = 0.37$).

Overall, 10.9% of surveyed prisoners (n = 70) reported being diagnosed with chronic infectious diseases (HIV, hepatitis, TB), with a higher rate among participants with a negative perception of penitentiary rehabilitation: 15.3% (n = 42) versus 7.6% (n = 28) respectively.

Social support encompasses the provision of counselling services, self-help groups, and various activities designed to assist inmates in dealing with challenges and enhancing their views on rehabilitation.

Overall, only 24.7% (n = 159) of the participants reported receiving some form of social support during the course of their sentences, with 24.3% (n = 90) in the subgroup that has a positive perception of penitentiary rehabilitation and 25.1% (n = 69) in the subgroup that has a negative perception of penitentiary rehabilitation.

In the survey, 12.4% (n = 80) of the participants reported having contact with social services, with similar proportions in both subgroups.

Overall, 58.3% (n = 376) of the participants were aware of NGO social support, whereby prisoners with non-supportive perception of penitentiary rehabilitation were more likely to be ignorant of NGOs than those who had a more positive perception of penitentiary rehabilitation. Likewise, awareness of rights and duties was also lower in the group of prisoners with non-supportive perceptions ($\chi^2 = 15.77$, $p < 0.001$).

One noteworthy finding of this study is the relatively low prevalence of educational programmes available as a key social service in prison. The study revealed that only a small proportion of participants reported having access to educational resources during their incarceration. Namely, 21.7% (n = 140) of the participants reported receiving education while in prison, with similar proportions in both subgroups. In Kazakhstan, individuals who are incarcerated have access to various educational opportunities, including primary and secondary schooling, as well as vocational training. Providing educational programmes in correctional facilities is viewed as a means to foster genuine rehabilitation and equip inmates with a stronger sense of purpose.

Overall, just over half of the respondents reported engaging in paid work while in prison, with a higher proportion among those who believed in penitentiary rehabilitation: 64.3% (n = 238) versus 53.1% (n = 146) respectively.

Overall, 79.8% (n = 515) of the participants reported having accommodation available upon release, with a significant percentage disparity between the two groups compared ($\chi^2 = 20.07$, $p < 0.001$).

Among the participants, 12.5% (n = 80) reported having no information about the procedures for obtaining new personal documents upon release, while 9.4% (n = 60) relied on information from friends and peers, 28.1% (n = 180) based their knowledge on personal experience, and 50.0% (n = 320) received information from prison staff. Bureaucratic ignorance was higher among prisoners who did not believe in penitentiary rehabilitation. In contrast, prisoners with positive perceptions of rehabilitation were more likely to have obtained information from prison staff: 55.5% and 42.7% respectively.

Among personal values, the most significant were accommodation (97.1%) and family (80.3%). Those values were considerably more relevant for those prisoners who assessed penitentiary rehabilitation positively. In contrast, religion, money, and criminal prison community rules and principles were more valuable for those respondents who had non-supportive perception of penitentiary rehabilitation.

Table 3 shows the results of regression modelling of key factors associated with having a positive perception of penitentiary rehabilitation. In the model, male gender, awareness of NGO social support, and information on their personal rights, duties, and family values increased the probability of prisoners supporting penitentiary rehabilitation.

In contrast, various types of prison regimes other than minimal security, health problems (HIV, hepatitis, TB), a longer term of sentence, and naming money as a key personal value minimised the likelihood of having a positive perception of penitentiary rehabilitation.

5. Discussion

The primary goal of this study was to determine the objective and subjective factors that shape a positive perception of rehabilitation (correction) within a prison setting. This is the first study in Kazakhstan investigating such factors associated with a positive perception of penitentiary rehabilitation in prisoners in terms of a range of demographic, social determinant, and associated incarceration characteristics. The positive outlook on rehabilitation, despite limited direct experience with specific rehabilitative services, may reflect a broader conceptual belief in the potential of rehabilitation or the rehabilitative intent of the prison system itself. It suggests that inmates may hold a hopeful view of rehabilitation as an ideal or a principle, rather than basing their opinions solely on personal participation in such programs. The results of the study showed a significant dichotomisation of prisoners' perceptions of rehabilitation. Overall, the regression analysis identified the significant predictors of a positive perception of penitentiary rehabilitation to be as follows: gender, term of sentence, prison type, chronic infectious diseases, awareness of NGO social support, awareness of rights and duties, and naming family and money as personal values.

5.1. Gender

Understanding the factors that influence penitentiary rehabilitation perceptions among different genders is vital in the realm of criminal justice and correctional psychology. In general, female prisoners have a less positive perception of penitentiary rehabilitation. One possible explanation for this phenomenon is the impact of incarceration on women's roles as caregivers and nurturers, which may have negative consequences for their mental health and well-being. Research has shown that women are more likely than men to be the primary caregivers for their children and other family members and are more likely to experience separation from their families as a result of incarceration (Bloom et al., 2003). This separation can lead to feelings of guilt, shame, and anxiety, which may contribute to the development of depression and other mental health problems (Bloom et al., 2003; Harner and Riley, 2013). The researchers Walker and Worrall (2000) reference data detailing unique gender-related pain, which is hypothesised to impact positive attitudes towards correction in prison environments. Furthermore, women in prison may face additional challenges related to their gender, such as sexual victimisation, discrimination, and limited access to healthcare (Sabot et al., 2007; Van Voorhis et al., 2010; van der Kaap-Deeder et al., 2019). These factors can exacerbate the negative effects of incarceration on women's mental health and well-being and may contribute to their proneness to having a negative perception of rehabilitation interventions within prisons. While the impact of gender on prisoners' perceptions of rehabilitation is complex and multifaceted, it is clear that gender-specific issues must be considered when developing and implementing rehabilitation interventions for women. This includes addressing the unique challenges faced by women in prison in order to promote positive behaviour change and successful reintegration into society. An additional hypothesis for this trend might be that women, in their responses to the questionnaire, were perhaps more open and truthful than men, more willing to express their doubts, and less concerned about any negative repercussions from the officers administering the questionnaire.

Table 3

Logistic regression of factors predicting a positive perception of penitentiary rehabilitation.

Variables	Standardised Beta-coefficient	p-value	OR (95% CI)
Gender: Male/female	0.97	<0.001	2.64 (1.58; 4.41)
Prison type (with minimal security as the reference category)			
Medium security	-0.73	0.016	0.48 (0.26; 0.87)
Emergency security	-1.13	0.001	0.33 (0.17; 0.62)
Total security	-2.27	0.003	0.10 (0.02; 0.47)
Miscellaneous security	-1.37	0.009	0.25 (0.09; 0.71)
Chronic infectious diseases (HIV, hepatitis, TB)	-0.85	0.004	0.43 (0.24; 0.76)
Term of sentence (rank)	-0.18	0.041	0.83 (0.70; 0.99)
Awareness of NGO social support	0.38	0.045	1.47 (1.01; 2.13)
Awareness of rights and duties (with low awareness as the reference category)	0.92	0.005	2.5 (1.33; 4.79)
Personal values			
Family	0.59	0.011	1.81 (1.15; 2.86)
Money	-0.72	0.003	0.49 (0.30; 0.78)

5.2. Terms of sentence

Our survey revealed that the majority of respondents had been incarcerated for two to five years. Interestingly, those who have been incarcerated for five to seven and more than ten years were less likely to have a positive perception of rehabilitation. Perhaps this is due to the fact that people who have been in prison for more than five years get used to the static conditions of the institution. Significant differences were observed when analysing the sentence term and prison type, suggesting that the length of the sentence and the physical security environment may influence individuals' beliefs.

Based on a review of the literature, it can be assumed that there are several factors indicating that the length of imprisonment affects one's perception of rehabilitation. The longer the period of imprisonment, the less likely it is that the individual will fully reintegrate into society and participate in social relationships, as they did before imprisonment. Former prisoners tend to be closer to each other on the outside, forming alliances and seeking opportunities for survival (Shantz et al., 2009).

Recent research has also found evidence of the negative impact of long-term incarceration on inmates' behaviour and perceptions. For example, a study by Zamble (1992) found that while long-term inmates became more involved in structured activities and less involved in casual socialising, they also experienced deterioration in their emotional states and an increase in stress-related medical problems. Similarly, a study by Binswanger et al. (2007) examined the relationship between time served and mortality rates among released inmates in Washington State. The study found that longer periods of incarceration were associated with higher rates of mortality, particularly from drug overdose, cardiovascular disease, and homicide.

5.3. Prison type

Our data indicates that conditions of confinement affect an inmate's perception of rehabilitation. Our results show that certain groups of prisoners are associated with certain perceptions of rehabilitation. We can assume this factor is related to the fact that total security prisons offer less contact with the outside world, provide less freedom, and subject people in prisons to much more violence. Harding (2014) has drawn attention to the detrimental impact of the higher level of penitentiary security on a person's rehabilitation. A study by Meško and Hacin (2019) examined the feedback loop between social isolation, maintained by prison staff through the use of hard power, punishment, and sanctions, and the sceptical attitudes of people in prison towards the administrative processes of the prison. People in prisons acknowledged that they lacked respect for officers and saw no justice in imprisonment when they were not heard or given the opportunity for dialogue. As a result, this social distancing leads to the proliferation of violence among prisoners and increases the appeal of aggressive subcultures within penitentiary institutions.

5.4. Infectious diseases

The results of our study show that people with infectious diseases, including those with an HIV-positive status, were less likely to believe in the possibility of rehabilitation in prison. We can assume that this is connected with the low levels of psychological assistance offered to this category of people in prison. According to a study by Golin et al. (2016), prisoners living with HIV experience higher levels of stress compared to their HIV-negative counterparts. Another study (Belenko et al., 2013) found that the stress of living with HIV in a penitentiary facility can lead to negative health outcomes.

Based on the results of the aforementioned studies, we can assume that the presence of HIV-infected individuals in prisons constitutes a double stressor. Research by Purssell has consistently shown that infectious diseases can have a negative impact on inmates' behaviour and perceptions of rehabilitation. Isolation, a common containment strategy, has been found to lead to higher levels of depression and anxiety in hospitalised patients (Purssell et al., 2020). This is particularly concerning in correctional facilities, where deviant behaviour can threaten security and hinder the success of treatment programmes (Wooldredge, 1991). An educational intervention to reduce the occurrence of infectious skin diseases in an incarcerated population found that inmates' behaviour was influenced by their subjective norms (family members' opinions, health and hygiene practices) (Swenty and Rowser, 2014). The mental health effects of infection containment strategies, including quarantine and isolation, have been found to be particularly adverse, with increased risk for depressive, anxiety, and stress-related disorders (Henssler et al., 2021).

This situation arises because medical personnel frequently perceive prisoners with a diagnosis as individuals under punitive surveillance, rather than as patients. Despite having the same rights to HIV treatment and prevention as the general population, prisoners often do not receive the same patient-focused care. This can result in prisoners experiencing a double stigma towards their diagnoses and incarceration (Pont et al., 2018).

5.5. Awareness of NGO social support

We found that the vast majority of respondents who received social support and counselling from NGOs while serving their sentences were more likely than others to have a positive perception of the rehabilitational system in Kazakhstani prisons. Several studies have found that prisoners' perceptions of incarceration are related to perceptions of fairness, legitimacy, and commitment to justice. For example, a study by Patrick and Marsh (2001) examined the relationship between perceptions of punishment and perceptions of procedural justice among inmates in a maximum-security prison. The study found that inmates who had more positive perceptions of punishment were more likely to perceive the prison as fair and legitimate and were more committed to conforming to prison rules and regulations. Similarly, a study by Tyler and Huo (2002) found that perceptions of procedural justice, which include fairness and consistency in decision-making, were associated with increased compliance with legal authorities among prisoners. The study by Felix

et al. (2023) also suggested that when prisoners perceive the legal system as fair and legitimate, they are more likely to comply with the law and avoid future criminal behaviour. Arriola et al. (2015) highlighted the positive correlation between social support and well-being among prisoners living with HIV. A study by Jiang et al. (2005) supported these findings, showing that social support at both the inmate and prison levels reduces rule violations. These studies collectively underscore the importance of social support when it comes to improving inmates' experiences and outcomes.

The role of NGOs and human rights groups in promoting positive perceptions of incarceration and human rights among prisoners has also been well-documented. NGOs and human rights groups can provide support, resources, and advocacy for prisoners, as well as promote awareness of human rights issues within the prison system (Liebling, 2018). For example, the Mandela Rules emphasise the important role that NGOs play in monitoring and promoting human rights within the prison system (McCall-Smith, 2016).

Our research showed that prisoners receiving information about their rights through NGOs are more likely to accept the rehabilitation offered in Kazakhstani prisons. NGOs also provide social support. The literature in this field identifies social support as one of the most important tools for adapting to a new environment and overcoming challenges in prisons (Kjellstrand et al., 2022).

5.6. Personal values

We discovered that one factor that contributes to prisoners being more likely to have positive perceptions of rehabilitation was family values. In prison, the availability of social support is also significant, with separation from family and friends being particularly stressful (Hobbs, 2000). The importance of emotional support in preventing recidivism and promoting integration is highlighted in the re-entry literature (Sugie and Augustine, 2020). Naser and La Vigne discerned that many people in prisons can rely on their family members after release, not only for financial help but also for moral support (Naser and La Vigne, 2006). The studies they published also confirmed the importance of the family's role for the prisoner during the rehabilitation process (La Vigne et al., 2005). According to Mills and Codd (2008), family stimulates positive behaviour in people in prisons, indicating a direct correlation between the presence and absence of family ties and recidivism rates.

Within our study, many participants highlighted the significance of the family in the rehabilitation process. Considering the mindset of our country, we can say that the role of the family has a tremendous impact on the formation of an individual's personality. As an ally of society, the family has the ability to encourage individuals to foster relationships with loved ones and to instil confidence. This is why the concept of prioritising the family, as an enduring value for the growth and development of individuals and society, is enshrined in many international normative acts.

5.7. Limitations of the study

While the findings provide valuable insights into the factors associated with individuals' beliefs, it is important to acknowledge the limitations of the research. By recognising these limitations, we can gain a more comprehensive understanding of the study's implications and potential areas for improvement in future research.

Numerous research studies provide evidence regarding the efficacy of promoting both general and specialised knowledge among incarcerated individuals. Getting an education can have a positive impact in terms of reducing the level of recidivism. It also strengthens intellectual and cognitive skills, which are necessary during resocialisation into society (Fabelo, 2002; Bozick et al., 2018; Davis, 2013; Scott, 2016; Wilson et al., 2000). Simultaneously, our research revealed the importance of addressing matters related to unequal employment opportunities within correctional facilities, even among individuals who have an advanced level of education and demonstrated reasonable social adaptation prior to their imprisonment. One should take into account the higher level of expectations among this social group as regards the possibility of applying their professional skills. Thus, for a former specialist who has a higher level of education, a job offered in a low-skilled environment is highly likely to be inappropriate for his or her level of training and capabilities. In addition, the low level of employment among prisoners in Kazakhstani prisons with a limited list of vacancies should be taken into account. The term "limited list of vacancies" indicates the constrained job opportunities for inmates in Kazakhstani prisons. This restriction may stem from factors like permitted industries, available resources for vocational training, and policies governing prison labor. In the absence of a proper variety of vacancies, there is a significant number of prisoners with good education. This goes in line with our results. In addition, we saw that there are more sceptics among the well-educated, which can be explained by stress due to unrealised professional status during imprisonment. Our finding that there was a higher prevalence of well-educated prisoners among those with non-supportive perception of penitentiary rehabilitation might confirm that implication.

One of the notable limitations of this study is the use of a non-probability sample. The participants were not randomly selected from a larger population, which restricts the generalisability of the findings. The sample was drawn from a specific setting and therefore caution should be exercised when extrapolating the results to other populations or rehabilitation contexts nationally. This targeted approach was chosen because these individuals are typically undergoing intensified rehabilitation efforts. However, this method introduces a potential bias in favour of positive responses due to the anticipation of release and the specific focus on rehabilitation. Despite this limitation, the study provides pilot and investigative insights into the prisoners' beliefs in penitentiary rehabilitation, which can serve as a foundation for further research.

Another limitation of this study is the limited number of respondents. With a total sample size of 645 participants, it is important to acknowledge that the study may not capture the full spectrum of perceptions and experiences within the target population. However, despite the limited number of respondents, the study was able to dichotomise and compare individuals who did and did not support penitentiary rehabilitation. This comparison provides valuable insights into the differences between these groups and helps to clarify the factors that influence positive perceptions of rehabilitation. While the sample size may restrict the generalisability of the findings,

the study still identified a variety of key predictors.

A third limitation of this study is the number of factors included in the regression model. While the regression analysis allowed us to examine the relationship between the participants' characteristics and their beliefs in penitentiary rehabilitation, it is important to acknowledge that the model may not have captured the full range of influential factors. The inclusion of additional variables could potentially enhance the model's explanatory power and provide a more comprehensive understanding of the predictors of a positive perception of rehabilitation.

However, despite the limited number of factors included in the regression model, the analysis revealed information that will be significant for future studies and when it comes to advocating for new prison policies. For instance, the study found that having an awareness of the information available and the support on offer from NGOs within the prison context was associated with more favourable beliefs in penitentiary rehabilitation. This highlights the potential importance of providing comprehensive information and support services to individuals involved in the rehabilitation system, as these factors seem to play a role in shaping positive perceptions of rehabilitation.

The final limitation of this study pertains to the questionnaire used to measure perceptions of rehabilitation. While validated scales exist in English to exhaustively assess attitudes towards rehabilitation, it is important to note that these scales have not been adapted or validated for use in the Kazakh and Russian languages, which are the primary languages spoken in the study's context. As a result, the questionnaire used in this study may not fully capture the nuances and specific cultural aspects related to perceptions of rehabilitation among this population.

However, despite this limitation, the present study serves as a foundation for the future adaptation and application of validated scales in the Kazakh and Russian languages. The findings from this study can inform the process of adapting existing scales or developing new ones that are culturally appropriate and linguistically valid. Such adaptation and validation efforts would allow for more accurate and reliable assessments of perceptions of rehabilitation in the local context.

Moreover, the study emphasises the importance of incorporating these adapted scales in the assessments conducted by social workers at all stages of imprisonment. By integrating these measures into routine evaluations, social workers can gain valuable insights into individuals' perceptions of rehabilitation, which can guide the development and implementation of targeted interventions and support programmes within the rehabilitation system.

6. Conclusion

Overall, our study was a first attempt to assess penitentiary rehabilitation in the Central Asian region through the prism of Kazakhstani inmates. The results obtained shed light on the multifaceted nature of individuals' perceptions of penitentiary rehabilitation. The findings underscore the importance of considering participant characteristics, such as gender and educational background, as well as contextual factors, including awareness of support systems and availability of post-release accommodation.

Research suggests that the length of a prison sentence can have a significant impact on the psychological well-being of a prisoner. It supports international observations about a growing subculture within prisons for those serving longer sentences. This subculture can be dehumanising and lead to negative perceptions of rehabilitation. To address these issues, it may be necessary to reduce the length of prison sentences and focus on rehabilitation. By doing so, authorities could increase the likelihood of positive perceptions of rehabilitation and promote a more humane and effective prison system. These insights can inform policy and intervention strategies aimed at improving rehabilitation programmes and fostering positive beliefs in the rehabilitation system. Policymakers should consider the influence of various internal and external factors when designing rehabilitational strategies. Emphasising rehabilitation, community-based support, and evidence-based practices can lead to better outcomes and reduce the likelihood of recidivism. Cooperation between rehabilitation institutions, NGOs, mental health professionals, community organisations, and other relevant parties can create a holistic support system that addresses prisoners' needs from multiple angles.

In conclusion, the results of this research call for a comprehensive and multifaceted approach to rehabilitation practices in Kazakhstan. By considering the diverse range of factors that influence prisoners' perceptions and experiences, policymakers and practitioners can develop more effective strategies to support positive behaviour change, improve inmates' reintegration into society, and ultimately contribute to a safer and more just community.

Further research is warranted to delve deeper into the underlying mechanisms that influence individuals' beliefs in penitentiary rehabilitation and to explore the potential impact of these beliefs on post-release outcomes. Such investigations can contribute to the development of evidence-based practices and policies that promote effective rehabilitation measures and successful reintegration of individuals into society.

Declarations of interest

None.

Credit author statement

Nurlan Tulkinbayev: Managing the projects resources and conducting investigative procedures. Mariya Prilutskaya: Development of methodology, Implementation of the computer code, Formal analysis. Dinara Yessimova: Administered the project and managed resources. Heino Stover: Handled the reviewing and editing of the manuscript, provided overall supervision. Note that we are not able to edit these credit roles.

Acknowledgments

We wish to express our sincere gratitude to the international project SOLID (Social work and strengthening NGOs in developing cooperation to treat drug addiction), funded by the German Academic Exchange Service (DAAD) for their invaluable contributions and support. We also extend our thanks to the Kostanai Academy of the Ministry of Internal Affairs of the Republic of Kazakhstan named after Sh. Kabyibaev, and the Eurasian National University named after L.N. Gumilev for their collaborative efforts in advancing our research.

Appendix 1

Table 4

Participant characteristics relating to social support

Any social support in prison (support for education or vocational training, support for re-entry into the community, support due to family ties)	159 (24.7%)	90 (24.3%)	69 (25.1%)	0.05, $p = 0.82$
Any contact with social services in prison	80 (12.4%)	46 (12.4%)	34 (12.4%)	0.001, $p = 0.98$
Awareness of NGO social support	376 (58.3%)	236 (63.8%)	140 (50.9%)	10.76, $p=0.001$
Awareness of their rights and duties	($n = 637$)	($n = 363$)	($n = 274$)	15.77, $p < 0.001$
Low	58 (9.1%)	22 (6.1%)	36 (13.1%)	
Medium	213 (33.4%)	111 (30.6%)	102 (37.2%)	
High	366 (57.5%)	230 (63.4%)	136 (49.6%)	
Accommodation available upon release	515 (79.8%)	318 (85.9%)	197 (71.6%)	20.07, $p < 0.001$
Education in prison	140 (21.7%)	81 (21.9%)	59 (21.5%)	0.018, $p = 0.89$
Paid work in prison	384 (59.5%)	238 (64.3%)	146 (53.1%)	8.33, $p=0.016$
Awareness of the procedures for obtaining new personal documents (e.g. ID), based on a specific source of information	($n = 640$)	($N = 366$)	($n = 274$)	11.87, $p=0.008$
No information	80 (12.5%)	39 (10.7%)	41 (15.0%)	
Information from friends and peers	60 (9.4%)	35 (9.6%)	25 (9.1%)	
Personal experience	180 (28.1%)	89 (24.3%)	91 (33.2%)	
Information from prison staff	320 (50.0%)	203 (55.5%)	117 (42.7%)	

Appendix 2

Table 5

Participant characteristics relating to personal values

Personal values	N = 645	N = 370	N = 245	
Family	518 (80.3%)	315 (85.1%)	203 (73.8%)	12.78, $p < 0.001$
Religion explain	60 (9.3%)	26 (7.1%)	34 (12.4%)	5.33, $p=0.021$
Friends explain	74 (11.5%)	38 (10.3%)	36 (13.1%)	1.24, $p = 0.27$
Hobby explain	46 (7.1%)	29 (7.8%)	17 (6.2%)	0.65, $p = 0.42$
Prison community	65 (10.1%)	27 (7.3%)	38 (13.8%)	7.4, $p=0.007$
Education explain	64 (9.9%)	40 (10.8%)	24 (8.7%)	0.77, $p = 0.38$
Money explain	115 (17.8%)	47 (12.7%)	68 (24.7%)	15.57, $p < 0.001$
Professional status	244 (37.8%)	144 (38.9%)	100 (36.4%)	0.44, $p = 0.51$
Accommodation	626 (97.1%)	364 (98.4%)	262 (95.3%)	5.33, $p=0.21$

References

- Akhona Sinefu, 2014. The Psychological Impact of Imprisonment in South Africa: a Case Study in Nkonkobe Municipality.
- Allison, M.D., Ireland, J.L., 2010. Staff and prisoner perceptions of physical and social environmental factors thought to be supportive of bullying: the role of bullying and fear of bullying. *Int. J. Law Psychiatr.* 33 (1), 43–51.
- Anderson, Y.A., Gröning, L., 2016. Rehabilitation in principle and practice: perspectives of inmates and officers. *Bergen Journal of Criminal Law & Criminal Justice* 4 (2), 220–246.
- Aos, S., Miller, M., Drake, E., 2006. Evidence-based Public Policy Options to Reduce Future Prison Construction, Criminal Justice Costs, and Crime Rates. *Washington State Institute for Public Policy*.
- Arriola, K.J., Spaulding, A.C., Booker, C.A., Williams, C., Avery, A., Porter, N.J., et al., 2015. Understanding the relationship between social support and physical and mental well-being among jail detainees living with HIV. *J. Health Psychol.* 20 (1), 3–12.
- Bales, W.D., Mears, D.P., 2008. Inmate social ties and the transition to society: Does visitation reduce recidivism? *J. Res. Crime Delinquen.* 45 (3), 287–321.
- Barkworth, J., 2018. Prisons, Procedural Justice and Motivational Posturing: Examining Prisoners' Well-Being and Compliance Behaviour' (Unpublished Doctoral Dissertation). available at: the https://research-repository.griffith.edu.au/bitstream/handle/10072/380563/Barkworth,%20Julie_Final%20Thesis_Redacted.pdf?sequence=1. Griffith University, Brisbane, QLD, 2023.
- Bastemyev, S.K., 2009. Исправительные учреждения Казахстана (историко-правовой аспект) [Rehabilitational institutions in Kazakhstan (historical and legal aspects)]. Pavlodar, Kereku, p. 54, 258.
- Belenko, S., Hiller, M., Visser, C., Copenhaver, M., O'Connell, D., Burdon, W., 2013. Policies and practices in the delivery of HIV services in correctional agencies and facilities: results from a multisite survey. *J. Rehab. Health Care* 19 (4), 293–320. <https://doi.org/10.1177/1078345813500252>.
- Binswanger, I.A., Stern, M.F., Deyo, R.A., Heagerty, P.J., Cheadle, A., Elmore, J.G., Koepsell, T.D., 2007. Release from prison—a high risk of death for former people living in prisons. *N. Engl. J. Med.* 356 (2), 157–165.
- Bloom, B., Owen, B., Covington, S., 2003. Women offenders and the gendered effects of public policy. *Rev. Pol. Res.* 20 (1), 89–106.
- Bozick, R., Steele, J., Davis, L., Turner, S., 2018. Does providing inmates with education improve postrelease outcomes? A meta-analysis of correctional education programs in the United States. *J. Exp. Criminol.* 14, 389–428.
- Clear, T.R., Austin, J., 2017. Mass Incarceration. Reforming Criminal Justice: A Report of the Academy for Justice on Bridging the Gap between Scholarship and Reform, vol. 4, pp. 55–76.
- Clear, T.R., Cole, G.F., Reisig, M.D., 2020. American Corrections. Cengage Learning.
- Clear, T.R., Frost, N.A., 2014. The punishment imperative: the rise and failure of mass incarceration in America. *Psychol. Crime Law* 20 (5), 441–457.
- Crewe, B., Liebling, A., Hulley, S., 2011. Staff culture, use of authority and prisoner quality of life in public and private sector prisons. *Aust. N. Z. J. Criminol.* 44 (1), 94–115.
- Criminal Executive Code of the Republic of Kazakhstan, 2014. No. 234-V available at: the [adilet.zan.kz](https://adilet.zan.kz/rus/docs/K140000234). <https://adilet.zan.kz/rus/docs/K140000234>, 2023.
- Davis, L.M., 2013. Evaluating the Effectiveness of Correctional Education: A Meta-Analysis of Programs that Provide Education to Incarcerated Adults.
- Davis, L.M., Bozick, R., Steele, J., Saunders, J., Miles, J., 2013. Education and Vocational Training in Prisons Reduces Recidivism, Improves Job Outlook. *Rand Corporation*, p. 22.
- Dowden, C., Andrews, D.A., 2000. Effective correctional treatment and violent reoffending: a meta-analysis. *Can. J. Criminol.* 42 (4), 449–467.
- Edwards, K., 2021. Prisoners' perspectives on limited rehabilitative program opportunities. *Qual. Rep.* 26 (4).
- Fabelo, T., 2002. The impact of prison education on community reintegration of inmates: the Texas case. *J. Correct. Educ.* 53 (3), 106–110. <http://www.jstor.org/stable/41971087>.
- Farkas, M.A., 2001. Correctional officers: what factors influence work attitudes? *Correct. Manag. Q.* 5, 20–26.
- Felix, M.M.M., Lai, Y.L., Yang, Y., Wu, H.C., Lo, T.Y., 2023. Factors shaping inmate trust in correctional officers in Taiwan: do procedural justice and distributive justice really matter? *J. Crim.*, 26338076231183978.
- Freudenberg, N., Daniels, J., Crum, M., Perkins, T., Richie, B.E., 2005. Coming home from jail: the social and health consequences of community reentry for women, male adolescents, and their families and communities. *Am. J. Publ. Health* 95 (10), 1725–1736.
- Golin, C.E., Haley, D.F., Wang, J., Hughes, J.P., Kuo, I., Justman, J., Hodder, S., Adimora, A.A., Sanchez, M., Soto-Torres, L., Wohl, D.A., Schouten, J., Mannheimer, S., Rompalo, A.M., Quinlivan, E.B., 2016. Post-traumatic stress disorder symptoms and mental health over time among low-income women at increased risk of HIV in the US. *J. Health Care Poor Underserved* 27 (2), 891.
- Haney, C., 2016. The Psychological Impact of Incarceration: Implications for Post-prison Adjustment.
- Harding, R., 2014. Rehabilitation and prison social climate: do 'What Works' rehabilitation programs work better in prisons that have a positive social climate? *Aust. N. Z. J. Criminol.* 47 (2), 163–175. <https://doi.org/10.1177/0004865813518543>.
- Harner, H.M., Riley, S., 2013. Factors contributing to poor physical health in incarcerated women. *J. Health Care Poor Underserved* 24 (2), 788–801.
- Henssler, J., Stock, F., van Bohemen, J., Walter, H., Heinz, A., Brandt, L., 2021. Mental health effects of infection containment strategies: quarantine and isolation—a systematic review and meta-analysis. *Eur. Arch. Psychiatr. Clin. Neurosci.* 271 (2), 223–234.
- Hobbs, G.S., 2000. Prisoners' Use of Social Support.
- Houston, J., 2013. Ex-Prisoners' Perceptions of the Availability and Effects of Services in Correctional Settings.
- Ireland, J.L., Ireland, C.A., Power, C.L., 2016. Attitudes towards prisoner-to-prisoner bullying and the association with prison environments: examining the components. *J. Aggress. Confl. Peace Res.* 8 (2), 124–136.
- Jiang, S., Fisher-Giorlando, M., Mo, L., 2005. Social support and inmate rule violations: a multilevel analysis. *Am. J. Crim. Justice* 30, 71–86.
- Johnsen, B., Granheim, P.K., Helgesen, J., 2011. Exceptional prison conditions and the quality of prison life: prison size and prison culture in Norwegian closed prisons. *Eur. J. Criminol.* 8 (6), 515–529.
- Kazakhstan, R., 2004. Decrees. Concept of legal policy of the Republic of Kazakhstan for the period from 2010 to 2020. Retrieved from. <https://adilet.zan.kz/rus/docs/U090000858> (accessed 16 January 2023).
- Kazakhstanskaya Pravda, 2023. Why Kazakhstan's Penal System Can Be Compared to a Small Boat without Sails. <https://kazpravda.kz/n/pochemu-ugolovno-ispolnitelnyu-sistemu-kazahstana-mozhno-sravnit-s-utlym-sudenyskhom-bez-parusov-ob-etom-v-eksklyuzivnom-intervyu-kazahstanskoy-pravde-rasskazal-doktor-yuridicheskikh-nauk-pravozashchitnik-chlen-obshchestvennogo-soveta-po-voprosam-deyatelnosti-organov-vnutrennih-del-rk-kuat-rahimberdin>, 2023.
- Kystaubayeva, A.B., Filipets, O.B., 2017. Types of probation under legislation of the republic of Kazakhstan and the problems of their development. *Journal of Advanced Research in Law and Economics* 8, 2188–2197, 7 (29).
- Kjellstrand, J., Clark, M., Caffery, C., Smith, J., Eddy, J.M., 2022. Reentering the community after prison: perspectives on the role and importance of social support. *Am. J. Crim. Justice* 1–26.
- Kjelsberg, E., Skoglund, T.H., Rustad, A.B., 2007. Attitudes towards prisoners, as reported by prison inmates, prison employees and college students. *BMC Publ. Health* 7 (1), 1–9.
- Kursiv, 2022 [How much is spent on maintaining prisoners in Kazakhstan in 2022?]. Сколько тратят в Казахстане на содержание заключенных в 2022 году?. Retrieved from. <https://kz.kursiv.media/2022-08-24/skolko-tratyat-v-kazahstane-na-soderzhanie-zaklyuchennykh-v-2022-godu/>. (Accessed 1 September 2023).
- Lambie, I., Randall, I., 2013. The impact of incarceration on juvenile offenders. *Clin. Psychol. Rev.* 33 (3), 448–459.
- Lambert, E.G., Hogan, N.L., Barton, S.M., Elechi, O.O., 2009. The impact of job stress, job involvement, job satisfaction, and organizational commitment on correctional staff support for rehabilitation and punishment. *Crim. Justice Stud. Crit. J. Crime Law Soc.* 22 (2), 109–122.
- La Vigne, N.G., Naser, R.L., Brooks, L.E., Castro, J.L., 2005. Examining the effect of incarceration and in-prison family contact on prisoners' family relationships. *J. Contemp. Crim. Justice* 21 (4), 314–335.
- Liebling, A., 2018. Prisons and their moral performance revisited. *Br. J. Criminol.* 58 (2), 207–226.
- Lipsey, M.W., Cullen, F.T., 2007. The effectiveness of correctional rehabilitation: a review of systematic reviews. *Annu. Rev. Law Soc. Sci.* 3, 297–320.

- Mallik-Kane, K., Visser, C.A., 2008. Health and Prisoner Reentry: How Physical, Mental, and Substance Abuse Conditions Shape the Process of Reintegration. Urban Institute Justice Policy Center.
- McCall-Smith, K., 2016. United Nations standard minimum rules for the treatment of prisoners (Nelson Mandela Rules). *Int. Leg. Mater.* 55 (6), 1180–1205.
- McMurrin, M., Theodosi, E., Sweeney, A., Sellen, J., 2008. What do prisoners want? Current concerns of adult male prisoners. *Psychol. Crime Law* 14 (3), 267–274.
- Mesko, G., Hacin, R., 2019. Social distance between prisoners and prison staff. In: *The Prison Journal*. Advance online publication. <https://doi.org/10.1177/0032885519877382>.
- Mills, A., Codd, H., 2008. Prisoners' families and offender management: Mobilizing social capital. *Probab. J.* 55 (1), 9–24.
- Mollemann, T., van Ginneken, E.F., 2015. A multilevel analysis of the relationship between cell sharing, staff–prisoner relationships, and prisoners' perceptions of prison quality. *Int. J. Offender Ther. Comp. Criminol.* 59 (10), 1029–1046.
- Mukasheva, D., Kudabekov, M., Yessimova, D., Tulkinbayev, N., Konvisar, A., 2023. 10 resocialisation programmes in Kazakhstan. In: *Social Work and Health in Prisons*. Nomos Verlagsgesellschaft mbH & Co. KG, pp. 189–218.
- Nakipov, B., 2009. Роль учреждений уголовно-исполнительной системы в предупреждении рецидива преступлений. Наука и новые технологии [The role of institutions of the penal system in preventing the recurrence of crimes. Science and new technologies] 4, 218–221.
- Naser, R.L., La Vigne, N.G., 2006. Family support in the prisoner reentry process: expectations and realities. *J. Offender Rehabil.* 43 (1), 93–106.
- Nurgaliyev, B.M., Rysmagambetova, G.M., Lackbayev, K.S., Shulanbayev, A.A., 2020. Rysmagambetova, G.M., Lackbayev, K.S., Shulanbayev, A.A., 2020. Problems and conflicts of the intelligence and criminal procedure legislation of the Republic of Kazakhstan. *RIVISTA DI STUDI SULLA SOSTENIBILITA* 2020/1, pp. 391–402. <https://doi.org/10.3280/RISS2020-001023>.
- O'Connor, T.P., Perreyclear, M., 2013. Prison religion in action and its influence on offender rehabilitation. In: *Religion, the Community, and the Rehabilitation of Criminal Offenders*, pp. 11–33.
- Order of the Ministry (2017) available at: https://online.zakon.kz/Document/?doc_id=33113478 (accessed 25 July 2023).
- Patrick, S., Marsh, R., 2001. Perceptions of punishment and rehabilitation among inmates in a medium security prison: "A consumers' report". *J. Offender Rehabil.* 33 (3), 47–63.
- Petersilia, J., 2003a. When Prisoners Come Home: Parole and Prisoner Reentry. Oxford University Press.
- Petersilia, J., 2003b. When prisoners return to the community: political, economic, and social consequences. *Fed. Probab.* 67 (2), 37–42.
- Pickett, J.T., Ryon, S.B., 2017. Procedurally just cooperation: Explaining support for due process reforms in policing. *J. Crim. Justice* 48, 9–20.
- Pont, J., Enggist, S., Stöver, H., Williams, B., Greifinger, R., Wolff, H., 2018. Prison health care governance: Guaranteeing clinical independence. *Am. J. Publ. Health* 108 (4), 472–476.
- Prison Policy Initiative, 2017. Following the Money of Mass Incarceration. <https://www.prisonpolicy.org/reports/money.html>, 2023.
- Purssell, E., Gould, D., Chudleigh, J., 2020. Impact of isolation on hospitalised patients who are infectious: systematic review with meta-analysis. *BMJ Open* 10 (2).
- Rawls, J., 2005. A Theory of Justice, Original ed. The Belknap Press, Cambridge.
- Ross, M.W., Diamond, P.M., Liebling, A., Saylor, W.G., 2008. Measurement of prison social climate: a comparison of an inmate measure in England and the USA. *Punishm. Soc.* 10 (4), 447–474.
- Rungeaengkulkij, S., Silarat, M., Kotnara, I., 2021. Prisoners' perceptions of the healthcare service: a qualitative study. *Nurs. Health Sci.* 23 (2), 304–311.
- Ryan, C., Bergin, M., 2022. Procedural justice and legitimacy in prisons: a review of extant empirical literature. *Crim. Justice Behav.* 49 (2), 143–163. <https://doi.org/10.1177/00938548211053367>.
- Sabol, W. J., Couture, H., & Harrison, P. M., 2007. Bureau of Justice Statistics. Washington, DC.
- Saylor, W.G., 1984. Surveying Prison Environments. Federal Bureau of Prisons Office of Research and Evaluation, Washington, DC.
- Schnittker, J., 2014. The psychological dimensions and the social consequences of incarceration. *The ANNALS of the American Academy of Political and Social Science* 651 (1), 122–138.
- Scott, K.J., 2016. Correction and education: the relationship between education and recidivism. *Journal of Intercultural Disciplines* 15, 147.
- Shantz, L., Kilty, J.M., Frigon, S., 2009. Echoes of imprisonment: women's experiences of "successful (re)integration." *Canadian Journal of Law and Society/La Revue Canadienne Droit et Société* 24 (1), 85–106.
- Slade, G., Trochev, A., Piacentini, L., 2023. Unlikely downsizers: the prison service's role in reversing mass incarceration in Kazakhstan. *Theor. Criminol.*, 13624806231177020.
- Stacer, M.J., 2022. Incarcerated men's perceptions of the prison environment: an exploratory study. *Midwest Social Sciences Journal* 25 (1), 9.
- Stasch, J., Yoon, D., Sauter, J., Hausam, J., Dahle, K.P., 2018. Prison climate and its role in reducing dynamic risk factors during offender treatment. *Int. J. Offender Ther. Comp. Criminol.* 62 (14), 4609–4621.
- Sugie, N.F., Augustine, D., 2020. Social support in daily life at re-entry. In: *Beyond Recidivism: New Approaches to Research on Prisoner Re-entry and Reintegration*, p. 197.
- Sykes, G.M., 2007. The Society of Captives: A Study of a Maximum Security Prison. Princeton University Press.
- Swente, C.F., Rowser, M., 2014. An education intervention in an incarcerated population to reduce the occurrence of infectious skin diseases. *J. Correct. Health Care* 20 (4), 343–352.
- Tonkin, M., 2015. A review of questionnaire measures of assessing the social climate in prisons and forensic psychiatric hospitals. *Int. J. Offender Ther. Comp. Criminol.* 60 (12), 1–30.
- Travis, J., Western, B., Redburn, S., 2014. The Growth of Incarceration in the United States: Exploring Causes and Consequences. National Academies Press.
- Tyler, T.R., Huo, Y.J., 2002. Trust in the Law: Encouraging Public Cooperation with the Police and Courts. Russell Sage Foundation.
- Uche, I.B., Uche, O.A., Ezumah, N.N., Ebue, M.O., Okafor, A.E., Ezege, B.N., 2015. Effectiveness of rehabilitation programmes in the Nigerian prisons: a study of perception of inmates in Enugu prison. *Mediterr. J. Soc. Sci.* 6 (4), 164.
- UNODC, 2023. "We are the champions of the Nelson Mandela Rules in Kazakhstan": The impact of local ownership in the promotion of international prison standards. Retrieved from: <https://www.unodc.org/unodc/en/justice-and-prison-reform/cpj-prison-reform/news/nelson-mandela-rules-kazakh-language.html> (accessed 1 September 2023).
- van der Kaap-Deeder, J., Audenaert, E., Van Petegem, S., Vandeveld, S., Van Mastrigt, S., Aelterman, N., Vansteenkiste, M., 2019. The internalization of and defiance against rules within prison: the role of correctional officers' autonomy-supportive and controlling communication style as perceived by prisoners. *Motiv. Emot.* 43, 771–785.
- Van Voorhis, P., Wright, E.M., Salisbury, E., Bauman, A., 2010. Women's risk factors and their contributions to existing risk/needs assessment: the current status of a gender-responsive supplement. *Crim. Justice Behav.* 37 (3), 261–288.
- Visser, C.A., Travis, J., 2003. Transitions from prison to community: understanding individual pathways. *Annu. Rev. Sociol.* 29, 89–113.
- Walker, S., Worrall, A., 2000. Life as a Woman. Prison Service Journal, pp. 27–36.
- Wetzel, H., 2023. Research Finds Prison Education Programs Reduce Recidivism. Mackinac Center for Public Policy. Retrieved from: <https://www.mackinac.org/pressroom/2023/research-finds-prison-education-programs-reduce-recidivism>, 2024.
- Wilson, D.B., Gallagher, C.A., MacKenzie, D.L., 2000. A meta-analysis of rehabilitations-based education, vocation, and work programs for adult offenders. *J. Res. Crime Delinquen.* 37 (4), 347–368.
- Woessner, G., Schwedler, A., 2014. Correctional treatment of sexual and violent offenders: therapeutic change, prison climate, and recidivism. *Crim. Justice Behav.* 41 (7), 862–879.
- Wooldredge, J.D., 1991. Correlates of deviant behavior among inmates of US correctional facilities. *J. Crime Justice* 14 (1), 1–25.
- World Prison Brief, 2022. World Prison Brief Data Kazakhstan: Kazakhstan. <https://www.prisonstudies.org/country/kazakhstan>, 2023.
- Wright, K.N., 1980. A re-examination of correctional alternatives. *Int. J. Offender Ther. Comp. Criminol.* 24 (2), 179–192.
- Wright, K.N., 1985. Developing the prison environment inventory. *J. Res. Crime Delinquen.* 22 (3), 257–278.
- Zamble, E., 1992. Behavior and adaptation in long-term prison inmates: Descriptive longitudinal results. *Crim. Justice Behav.* 19 (4), 409–425.