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Dirkzwager, J.E.; Nieuwbeerta, P.; Laan, P.H. van der

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## November's Feature Article

### **The Prison project: A longitudinal study on the effects of imprisonment in the Netherlands**

**Anja J.E. Dirkzwager, Paul Nieuwbeerta & Peter H. van der Laan**



The Prison Project - a nationwide and longitudinal research project - was established to increase our knowledge on the intended and unintended consequences of imprisonment on the further life course of offenders and their families. A representative group of adult male prisoners who were put in pre-trial

detention was followed for a number of years, and questioned repeatedly regarding their lives both during imprisonment and after their release from prison. A team of multi-disciplinary scholars from different organizations has joint efforts and resources, and developed the Prison Project. Anja Dirkzwager (Netherlands Institute for the Study of Crime and Law Enforcement) and Paul Nieuwbeerta (Leiden University) were principal investigators and initiated and established the project. (accessed March 2015)

#### **INTRODUCTION**

Worldwide, more than ten million people are being held in penal institutions. Leading the world in imprisonment rates, the United States has an incarceration rate of more than 700 per 100.000 U.S. residents (Walmsley, 2011). In the Netherlands, each year about 35.000 persons are incarcerated, which relates to an imprisonment rate of about 90 per 100.000 residents. Imprisonment is a severe sanction as it interferes with the human right of liberty, and in most democratic countries imprisonment is the most severe governmental sanction that can be imposed on criminal offenders. Incarcerating people is an expensive punishment as well, both in terms of money, time and manpower. For instance, it has been estimated that in 2008 American federal, state and local governments spent about 75 billion dollars on corrections, of which a large part was dedicated to imprisonment (Schmitt et al., 2010). The costs of imprisoning adult offenders in the Netherlands amount to over one billion Euros a year.

Imprisonment is intended to prevent crime, either by incapacitation, deterrence or rehabilitation. However, criminological literature suggests that imprisonment may also have unintended collateral consequences on other life domains, like employment, earnings, or the wellbeing of prisoners' children. Despite the severity of the sanction, the large numbers of prisoners, the high costs associated



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with imprisonment, and its manifest importance in crime prevention, rigorous scientific knowledge regarding the actual effects of imprisonment on the further life course of offenders and their families is surprisingly limited. While a small literature is informative about the crime prevention effects of imprisonment (e.g. Nagin et al., 2009), even less is known about the effects of criminal justice sanctions on more conventional domains, like socio-economic status (employment, housing situation), family formation and disruption, social integration, and health. Moreover, most prior studies do not address potential mechanisms through which imprisonment may affect life-course circumstances. One of the reasons for this limited knowledge is a lack of well-designed longitudinal studies that follow prisoners over a long period of time, including following them after their release from prison, and collect information simultaneously on a variety of life domains in one and the same group of prisoners.

A lack of detailed knowledge on the effects of imprisonment is particularly problematic because prior research has suggested that conventional post-prison life circumstances are important keys to successful community reentry and desistance from crime. For instance, in an American study, prisoners identified having a job and a place to live as the two most important factors that might help them to stay out of prison (Visher et al., 2004). Indeed a number of studies have linked labor market success - in the form of employment, high wages and job stability -, a stable housing situation, and stable marriages to reduced criminal involvement (e.g. Apel et al., 2010; Sampson & Laub, 1993). If imprisonment is detrimental to such conventional life circumstances, imprisonment may indirectly increase criminal behavior and thus generate precisely what it aims to prevent.

In an attempt to fill this gap in knowledge, a team of multi-disciplinary scholars from different organizations has joint efforts and resources, and developed the Prison Project. Anja Dirkzwager (Netherlands Institute for the Study of Crime and Law Enforcement) and Paul Nieuwbeerta (Leiden University) were principal investigators and initiated and established the project. The Prison Project - a nationwide and longitudinal research project - was established to increase our knowledge on the intended and unintended consequences of imprisonment on the further life course of offenders and their families. A representative group of adult male prisoners who were put in pre-trial detention was followed for a number of years, and questioned repeatedly regarding their lives both during imprisonment and after their release from prison.

The project has four overarching aims. The first aim was to examine in detail the conditions of confinement and how prisoners experience the conditions of confinement in the Netherlands. The second aim was to examine the effects of imprisonment on the following life domains:

- Prisoners' social economic status
- Prisoners' relationship formation and dissolution
- Prisoners' health
- Prisoners' social networks
- Wellbeing of prisoners' partners
- Wellbeing of prisoners' children



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Third, we aimed to examine the effects of imprisonment on prisoners' future criminal behavior, either directly or indirectly through changes in the above mentioned life domains. Finally, an important aim was to explore intermediate factors that may explain any effect of imprisonment.

## **SAMPLE AND DESIGN OF THE PRISON PROJECT**

As mentioned before, the Prison Project is a nationwide and longitudinal study examining the effects of imprisonment in the Netherlands.

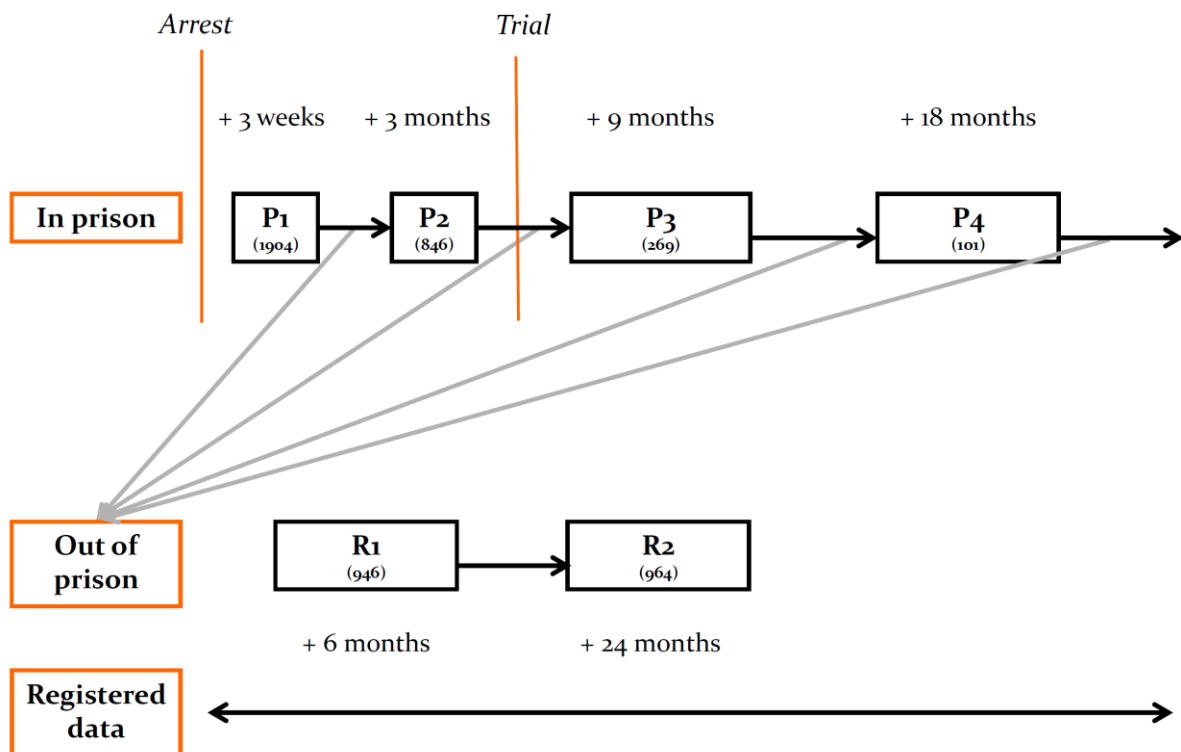
The present study was conducted in the Netherlands. On an average day in 2011, about 12,000 adult persons were incarcerated, and about half of them were held in pretrial detention. Compared with many other countries, prison sentences in the Netherlands are relatively short (Beijersbergen et al., 2015). Over 80% of all prisoners released in the Netherlands have been confined to a maximum of 6 months. At the time of the present study (2010-2011), the Netherlands had 58 correctional facilities for adult prisoners. Most prisoners were held in a single cell; 15% of the total capacity consisted of double bunking. The Netherlands has long been admired for their tradition of open and humane prison conditions (Dirkzwager & Kruttschnitt, 2012). In the past decades, however, prison regimes have become more sober as a result of budget cuts and a growing punitive climate in society. For instance, prisoners' daily activities were curtailed, they had fewer opportunities of maintaining contact with their families, rehabilitation efforts were restricted, and the tradition of one prisoner to a cell was abandoned. Currently, only a small group of long-term prisoners— with a prison sentence of at least 4 months after trial—are offered personalized educational and vocational training. Nevertheless, prison conditions in the Netherlands are still rather liberal compared with other countries. Dutch prisons, for instance, do not face major overcrowding or understaffing, prisoners can wear their own clothes, and staff-prisoner relationships are generally characterized as informal and supportive (Dirkzwager & Kruttschnitt, 2012).

Potential respondents of the Prison Project consisted of all adult male prisoners aged 18-65 years, who were born in the Netherlands, and who entered one of the Dutch pretrial detention centers between October 2010 and April 2011. In the first few weeks of their pre-trial detention, employees of the Prison Project approached and informed all eligible prisoners. Participation was voluntary, and all participants signed an informed consent declaration. Participants were followed for a number of years, and questioned repeatedly regarding their lives before, during and after imprisonment. In this way, elaborate information is gathered on multiple life domains (e.g. criminal behavior, employment, housing situation, social networks, health, and wellbeing of family members).

The design of the study is summarized in Figure 1. The first wave of the Prison Project was conducted when the prisoners were held in pre-trial detention for about three weeks. This first measurement consisted of a structured face-to-face interview and a self-administered questionnaire. Between October 2010 and April 2011, 3,983 prisoners meeting the selection criteria entered the remand centers in the Netherlands. Of these 2,841 were approached and informed about the study by

employees of the project. Of the inmates who could be approached, 1,904 (67%) were interviewed. Inmates who were still in prison were questioned again 3, 9, and 18 months after their arrival in custody (they filled out a written questionnaire). Each person was also approached and asked to participate in a face-to-face interview six months and 24 months after his release from prison.

Figure 1. Design of the Prison Project



In this way, self-reported data were collected with the interviews and questionnaires. In addition, a variety of officially registered data were collected. For instance, registration systems of the Prison Service, the Probation Services and the Municipalities provided data on respondents' criminal behavior, their participation in behavioral interventions, disciplinary infractions during imprisonment, and marriages and divorces.

The instruments used in the Prison Project cover a diversity of life domains (e.g. criminal behavior, employment, financial situation, social networks, family formation and disruption, health) as well as detailed characteristics of the prison experience (e.g. prison regime, sentence length, visits from family and friends, disciplinary infractions, participation in behavioral interventions). In addition, many intermediate factors that may explain why imprisonment affects prisoners' life-course circumstances are measured (e.g. labeling, self-control, social capital, criminal attitudes, and coping style).



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Some additional data collections were organized as well. Employees of the Prison Project visited each correctional facility and filled out questionnaires on the prison architecture of each facility and unit (e.g. the layout –e.g. panopticon, radial, rectangular, courtyard–, size, year of construction, percentage of double bunking). Partners of respondents filled out a questionnaire about their own lives and wellbeing and about the wellbeing of their children. In addition, some prison officers filled out questions about the prison climate on their unit. Finally, probation officers filled out a questionnaire about the probation supervision of the respondents.

The combination of these different data resulted in a very rich dataset, which can be used to answer a number of important research questions regarding imprisonment and the effects of imprisonment on the further life course of prisoners.

## **SOME RESULTS**

The Prison Project includes different research projects focusing on different research questions. The results of two of these projects will be highlighted below (for more information see: [www.prisonproject.nl/eng/](http://www.prisonproject.nl/eng/)).

### *Mental health problems in prison*

Individuals with psychological symptoms and disorders are largely overrepresented in the criminal justice system. This overrepresentation is especially pronounced in prisons, showing an excess of mental health problems behind bars. Compared with the general population, adult prisoners have, for instance, a two- to four-fold excess of major depression and experience substantial elevated levels of psychological distress (Fazel & Danesh, 2002).

Less is known, however, about changes in mental health problems during imprisonment because most prior research on prisoners' mental health problems assessed these health problems at only one moment during imprisonment. Worldwide only a few longitudinal studies exist, and these studies have identified the first weeks of custody as a period of increased vulnerability of mental health problems. Accurate knowledge on the course of prisoners' mental health problems will increase insight in the course of prisoners' medical needs and, therefore, will enhance the deliverance of optimal health care in prison. In addition, such knowledge is important for a successful management of prisons because some mental health problems are related to violent behavior.

One project of the Prison Project focuses on prisoners' mental health problems, their health care use, and the reciprocal relationship between imprisonment and mental health. Below some first results are presented on the longitudinal course of mental health problems in prison (Brons et al., 2013).

Mental health problems were assessed with the Dutch adaptation of the Brief Symptom Inventory (BSI). This is a frequently used screening instrument consisting of 53 mental health symptoms. On each



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measurement wave, the prisoners were asked to indicate to what extent they experienced these symptoms in the past week. The items relate to a total scale indicating the total level of psychological distress and to different subscales, like depressive and anxiety symptoms. The percentage of prisoners with a very high score of mental health problems 3 weeks and 3 months after arrival in custody is presented in Table 1.

*Table 1: A very high level of mental health problems 3 weeks and 3 months after arrival in custody*

	<b>3 weeks in custody % very high score<sup>a</sup></b>	<b>3 months in custody % very high score<sup>a</sup></b>
BSI Total	26%	17%
BSI Depression	25%	25%
BSI Anxiety	21%	13%

<sup>a</sup> A very high score is achieved by five percent of the males from the general population. Therefore, a very high score indicates the existence of serious mental health problems.

Three weeks after their arrival in custody, one out four inmates had a very high score on the Brief Symptom Inventory. After three weeks, a quarter of the inmates reported a very high level of depressive symptoms, and one out of five inmates experienced very high levels of anxiety. Although the proportion of prisoners with a very high level of mental health problems decreased during imprisonment, a substantial part of them still experienced very high levels of mental health problems three months after arrival in custody. At that moment, 17% still had a very high score on the total BSI scale.

We also examined to what extent individual and environment (deprivation) factors of the first three weeks of custody predicted mental health problems in the subsequent months (Brons et al., 2013). As expected, the level of mental health problems after three weeks was a significant predictor of mental health problems after three months. Prisoners who shared a cell during the first weeks of their custody and who judged more positively about the daily activities in the facility reported fewer mental health problems after three months. Prisoners who reported they had been verbally assaulted by prison staff during the first weeks of their custody, reported more mental health problems after three months.

This study confirms that prisoners experience high levels of mental health problems. In line with prior research, it was observed that the level of mental health problems decreased during imprisonment, suggesting that the first phase of custody is particularly stressful and demanding. The study also showed that – even after controlling for mental health problems after three weeks – certain individual and deprivation characteristics were identified as determinants of prisoners’ subsequent mental health problems.

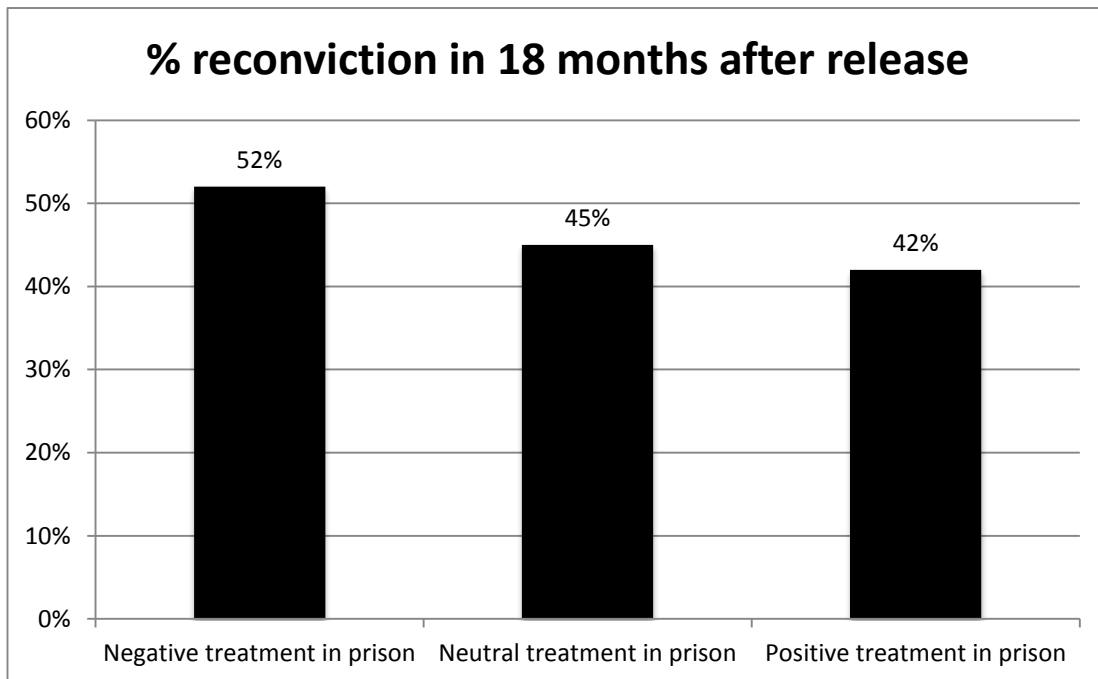
*Procedural justice in prison*

In an attempt to learn more about the effects of imprisonment and how certain aspects of prison life may affect prisoners’ behavior, one project focuses on the role of procedural justice in prison

(Beijersbergen, 2014). In this project procedural justice refers to prisoners’ perceptions of the fairness of procedures in prisons, being treated with respect and humanity by prison staff, and positive and constructive officer-prisoner relationships. This project is related to procedural justice theories, which argue that people will be more likely to comply with the law when they feel treated in a procedurally just manner by criminal justice actors (Tyler, 1990). In the project, it was not only investigated to what extent a fair and respectful treatment of prisoners affected their reoffending behavior after release from prison but also to what extent such a treatment affected their adjustment in prison (i.e. their misconduct and mental health problems).

It turned out that prisoners who evaluated their treatment in the correctional facility as more fair and respectful, were less likely to get reconvicted in the 18 months after their release from prison. In Figure 2 the percentages of prisoners who were reconvicted in the 18 months after their release are presented, split up by how the prisoners experienced their treatment by prison staff during their time in custody.

*Figure 2: Percentage of prisoners that recidivated in the 18 months after release, split up by how they experienced the treatment by prison staff during imprisonment.*



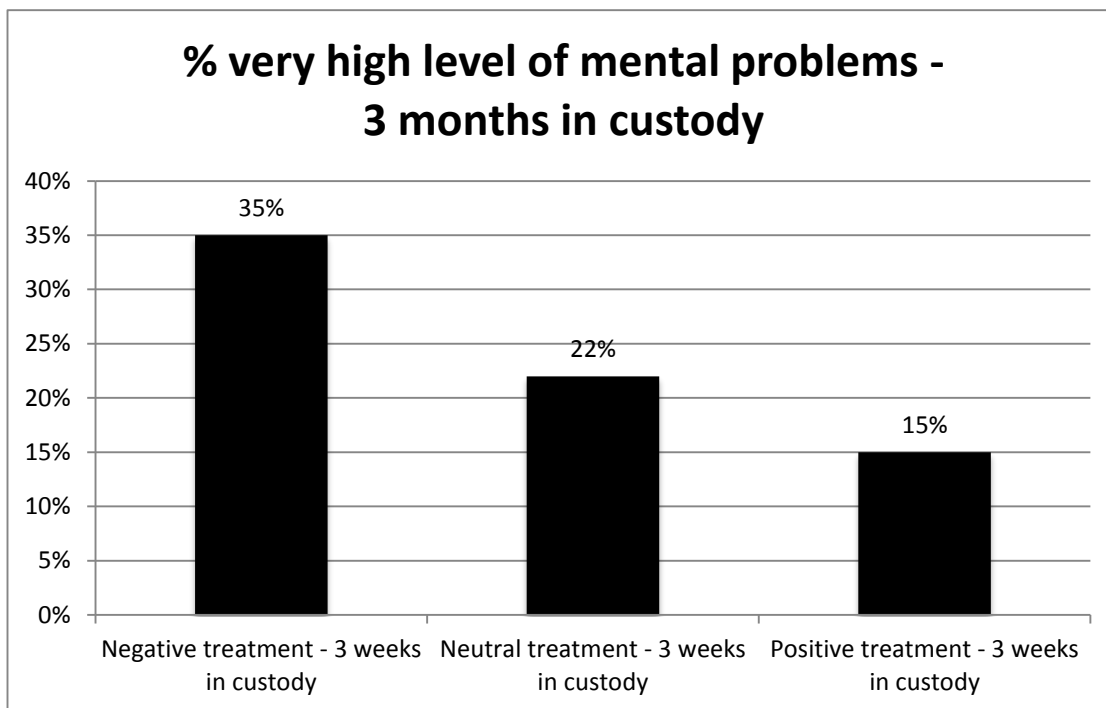
Half of the prisoners who judged negative about the treatment by prison staff were reconvicted in the first 18 months after their release, while 42% of the prisoners who were positive about the treatment by prison staff were reconvicted. After taking prisoners’ background characteristics into account, the relationship between being treated in a procedurally fair manner in prison and recidivism rates remained significant. When prisoners’ background characteristics are kept at the average, a prisoner who evaluated his treatment in prison as procedurally just, was 5% less likely to get reconvicted after



his release than a prisoner who was neutral regarding the treatment by prison staff (Beijersbergen et al., 2015).

Prisoners who felt treated in a fair and respectful manner in prison, were also less likely to misbehave and reported fewer mental health problems during their time in prison (Beijersbergen et al., 2014a; Beijersbergen et al., 2014b). As an illustration, Figure 3 shows the percentage of prisoners with very high levels of mental health problems three months after their arrival in prison, split up by how they experienced the treatment by prison staff shortly after their arrival in custody.

*Figure 3: Percentage of prisoners with very high levels of mental health problems - three months after arrival in custody - by their perceptions of a procedural fair treatment - three weeks after arrival in custody.*



Of the prisoners who judged negative about the treatment by staff in the first weeks of their custody, 35% reported very high levels of mental health problems in the subsequent months. Of the prisoners who felt that staff treated them fair and respectful only 15% reported very high levels of mental health problems in the following months.

Traditionally, order and safety are important topics in correctional facilities. The results suggest that correctional authorities can enhance prisoners' compliance and prison order by creating a fair and humane prison climate.



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### **FURTHER INFORMATION ON THE PRISON PROJECT**

Other projects are currently ongoing, like projects examining the effects of imprisonment on (ex)prisoners' labor market prospects, their housing situation and their social networks; the effects of participation in behavioral interventions during imprisonment; the subjective severity of imprisonment; and the wellbeing of prisoners' partners and children. More information about the Prison Project's design, research team and first publications can be found on the website: [www.prisonproject.nl/eng/](http://www.prisonproject.nl/eng/).

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