

Cohort Profile: the Prison Project—a Study of Criminal Behavior and Life Circumstances Before, During, and After Imprisonment in the Netherlands

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Abstract

Purpose The Prison Project is a nationwide prospective cohort study examining the development of criminal behavior and other life circumstances before, during, and after detention in the Netherlands.

Methods The target population of the study consisted of all men, aged 18–65 years, and born in the Netherlands, who entered pre-trial detention between October 2010 and April 2011. Participants were questioned repeatedly during detention and six and 24 months after release. Self-reported information on a variety of topics was collected at each measurement, including demographics, lifestyle, personality traits, self-control, attitudes towards criminal justice actors, experiences during detention, and different life domains (i.e., recidivism, employment, financial and housing situation, health, family situation, social networks). Moreover, detailed longitudinal information was gathered from different official registration systems.

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Results In total, 1904 men participated in the baseline interview. Of those qualifying for an interview six and 24 months after release, 53% and 56% were successfully interviewed. Analyses show that—at each measurement—respondents' characteristics are almost identical to those of the total target population.

Conclusions Findings of the Prison Project illustrate the value of having longitudinal data to disentangle possible causal relationships. Results of the Prison Project will contribute to more knowledge on life-course criminology and more effective treatment of offenders by the criminal justice system.

Keywords Imprisonment · Re-entry · Recidivism · Life-course · Prospective

Why Was the Cohort Setup?

At present, about ten million people are being held in penal institutions throughout the world [17]. Given the severity of the punishment, the high numbers of people affected by it and the high costs associated with imprisonment, accurate knowledge on the implementation and consequences of imprisonment are important. Rigorous scientific knowledge regarding the effects of imprisonment on the further life course of offenders and their families is surprisingly limited, however [5, 10, 11, 18]. As a consequence, decisions by actors in the criminal justice system to place suspects in remand custody or to convict offenders to a prison sentence, and decisions on how to execute prison sentences are not substantiated by thorough empirical knowledge on the effects of imprisonment. In an attempt to fill this gap in knowledge, the Prison Project was established to increase current knowledge on imprisonment.

The Prison Project was designed with a broad scope and was set up in such a way to optimally examine the intended and unintended consequences of imprisonment. First, in order to adequately examine the consequences of imprisonment, the Prison Project has a methodologically strong design with a large population-based sample of male prisoners and a prospective design, in which prisoners are examined before, during, and after their imprisonment. Second, the project collects data on the development of multiple life domains of (former) prisoners (e.g., criminal behavior, employment, housing, family formation and dissolution, social networks, and health), which will enable the examination of the interrelationships between different life domains and the potential indirect effects of imprisonment on criminal behavior through changes in these life domains. Third, in order to examine why and how imprisonment may affect the further life course, the project collects information on a diversity of theoretical mechanisms and concepts (e.g., self-control, social and criminal capital, procedural justice, perceived costs of sentence, anti-social attitudes, coping style, stigma) that are assumed to explain effects of imprisonment. Fourth, prison is not a uniform experience for detainees and how imprisonment may affect the further life course may depend heavily on specific prison circumstances and experiences. In the Prison Project, detailed information on detainees' individual experiences during their time in prison is collected (e.g., sentence length, victimization, relationships with staff and inmates, pains of imprisonment, receiving visitors, health care use). Fifth, since collateral

effects of imprisonment are likely to extend to family members of prisoners, the life circumstances and well-being of prisoners' partners and children are investigated as well. Sixth, since routinely collected (administrative) data are often limited in the depth and richness of the available information, the Prison Project combined data from existing registrations with offenders' self-reported information.

The Prison Project is a nationwide longitudinal research venture examining the development of criminal behavior and life circumstances before, during, and after detention in the Netherlands. With its broad focus, the research project combines the merits of different types of criminological studies, like studies on criminal career and life-course development, studies on desistance, prison studies, and prisoner reentry studies. To the best of our knowledge, worldwide, only three studies on adult prisoners have a similar broad focus and longitudinal design: i.e., the American Returning Home Study [16], the American SVORI Project [8], and the Australian Passport Study [7]. All three studies, however, lack detailed information on offenders' experiences during imprisonment, and some of them address a specific offender population (e.g., serious and violent offenders in the SVORI project) or emphasize a specific outcome (e.g., health in the Passport project).

Who Is in the Cohort?

The target population of the Prison Project consisted of all persons who entered one of the pre-trial detention centers in the Netherlands between October 1, 2010, and April 1, 2011, and who met the following criteria: (a) men, (b) aged between 18 and 65 years, and (c) born in the Netherlands.

In total, 7801 persons were put in pre-trial detention in one of the 30 pre-trial detention centers in the Netherlands between October 2010 and April 2011. Overall 3981 detainees matched our additional inclusion criteria. Because the far majority of the 7801 pre-trial inmates were men (93%) and aged between 18 and 65 years (99.6%), the first two inclusion criteria did not substantially affect the number of eligible pre-trial detainees. However, about 40% of the eligible pre-trial detainees were excluded because they were not born in the Netherlands. This inclusion criterion was implemented because collecting (administrative) information on participants' entire lives was essential and it would have been difficult to collect such information for this group of non-Dutch detainees because they are known to be missing in official registration systems and may return to their country of origin after detention.

Of the 3981 persons meeting the inclusion criteria of the Prison Project, 2837 (71%) could be approached (see Table 1). The vast majority of the persons who could not be approached had already been released from custody before they could be contacted ($N=865$).

The Dutch Prison Service informed the Prison Project weekly about newly admitted inmates. Based on this information, trained employees of the Prison Project approached and informed eligible persons about the study, either on the prison unit or in their cells. Those who agreed to participate in the study were asked to fill out a written questionnaire in their cell and bring it to the baseline

Table 1 Prison Project participants at the baseline measurement

	P1		%
	3 weeks after entry		
	N	%	%
Total target sample	3981		
Unable to contact: already released	865	22	
Unable to contact: psychological problems	161	4	
Unable to contact: other reasons	118	3	
Sample contacted (% of total target sample)	2837		71
Refused to be interviewed—when contacted	626		
Refused to be interviewed—during interview	307		
Sample interviewed (% of sample contacted)	1904		67
Sample interviewed (% of total target sample)	1904		48

interview. Moreover, prisoners involved in a romantic relationship that lasted at least 3 months at the start of their detention and prisoners with children were asked to fill out additional questionnaires regarding the relationship with and the well-being of their partner and children.

Of the 2837 approached persons, 1904 (67%) agreed to participate in the baseline computer-assisted personal interview. Therefore, 48% of the total target population participated in the baseline interview. Of them, 1748 (92%) also filled out a written questionnaire on themselves. Around 20% of the respondents filled out one or more questionnaires on their partners and/or children.

The baseline interviews—which on average lasted for about one and a half hour—were held in private visiting rooms to guarantee respondents' privacy. At the beginning of the interview, all participants were asked to sign an informed consent declaration. At the end of the interview, respondents were asked for permission to contact them for follow-up interviews, to collect their data from official registration systems, and—if applicable—to contact their partner. The Dutch Prison Service did not allow to reimburse respondents for their participation in the study while they were in custody. In case prisoners reported any reading problems, written questionnaires were administered face-to-face by the interviewer.

Non-response analyses—based on official registration data—show that overall the characteristics of the respondents are almost identical to those of the total target population of the Prison Project (see Table 2). Detailed analyses comparing the “not contacted,” “non-respondents,” and “respondents” show some statistically significant differences, but most of the observed differences are rather small or inherent to the design of the study (see Table 2). For example, compared with respondents, the offense type of the “not contacted” referred on average to less severe and non-violent offenses, and correspondingly their time spent in detention was shorter. This finding is not surprising because their short detention period was often the reason why they could not be

Table 2 Characteristics of non-contacted, non-respondents, and respondents at the baseline measurement

	Not contacted N=1,144		Non respondents N=933		Respondents N=1,904		Total N=3,981	
	Mean	Std.dev.	Mean	Std.dev.	Mean	Std.dev.	Mean	Std.dev.
Age at entry (in years)	32 **	11	30	10	30	11	31	11
Age at entry: 18-25 yrs	39% **		42%		43%		42%	
Age at entry: 26-40 yrs	38%		40%		39%		39%	
Age at entry: 41-65 yrs	23% *		18%		19%		20%	
Married	11%		9%		10%		10%	
Working or studying	51%		43% **		51%		49%	
Living in major city	24%		34% **		25%		27%	
Alcohol addicted	11% **		6%		6%		7%	
Drug addicted	17%		15%		14%		15%	
Age of onset (in years)	19 *	8	17 **	5	19	7	18	7
Age of onset: 12 - 18 yrs	68%		79% **		69%		71%	
Prior convictions (number)	9	11	12 **	13	9	11	10	11
Prior convictions (yes/no)	90%		96% **		92%		92%	
Prior convictions (if yes: number)	11 *	11	12 **	13	10	11	11	11
Prior detention spells (number)	4	6	5 **	8	3	6	4	7
Prior detention spells (yes/no)	56%		73% **		58%		61%	
Prior detention spells (if yes: number)	7	7	8 **	9	6	8	7	8
Severity of crime: max. prison sentence in days	2724 **	1780	2984	1627	3073	1663	2953	1695
Type of crime: violence	40% **		44%		46%		44%	
Type of crime: property	38% **		37% **		31%		34%	
Type of crime: other	22%		19%		23%		22%	
Period of detention: length in days	51 **	141	242	282	230	255	181	250
Period of detention: + 30 days (yes/no)	19% **		96% **		93%		73%	
Period of detention: if + 30 days: length in days	216	263	250	285	245	258	244	267

* p < 0.05, ** p < 0.01. Results of bi-variate t-tests: Groep versus "Respondents".

NOTE. Grey: Statistically significant in multivariate logistic regression analyses (in which dummy variables for missing values were also included).

contacted in the first place. Some differences, however, are to be noted. For example, compared with respondents, non-respondents were more likely to have experienced a prior prison spell (73 versus 58%) and were more likely to live in the four largest cities in the Netherlands (34 versus 25%). These selection biases need to be kept in mind when discussing (the generalizability of) results from the Prison Project.

How Often Have They Been Followed Up?

Follow-up Measurements in Prison

Respondents who were still detained were approached and asked to fill out a written questionnaire again three, nine, and 18 months after their arrival in detention (see Fig. 1). At each of these three follow-up measurements, detainees involved in a romantic relationship were asked to also fill out a questionnaire about this relationship.

Because prison sentences in the Netherlands are relatively short, many participants had already been released at the time of the three follow-up measurements in prison (see Table 3). For example, at the first follow-up wave (P2)—held about 3 months after arrival in detention—33% of the 1904 participants had already

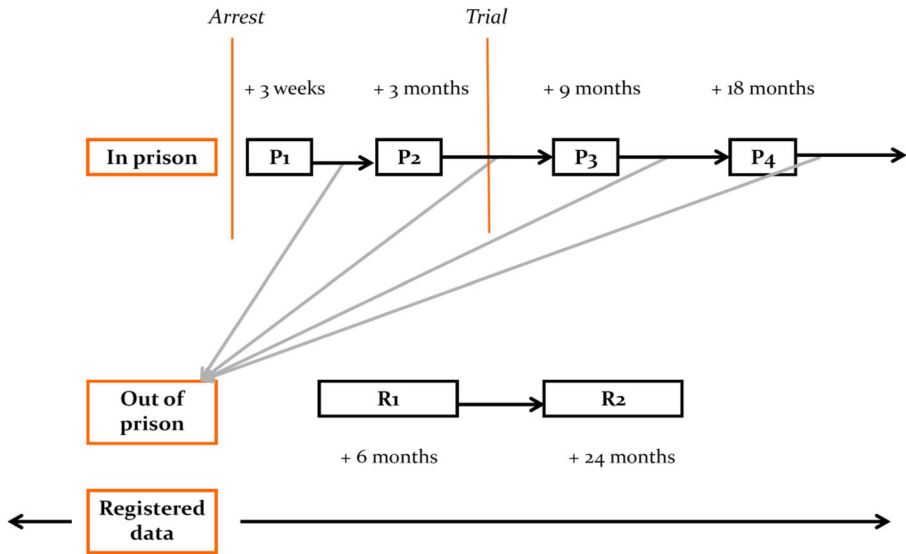


Fig. 1 Design of the Prison Project

been released. Nine months after arrival in detention, i.e., at the second follow-up wave (P3), 74% of the participants had already been released, and 18 months after entry (at P4), 89% had been released.

At each follow-up measurement, a small number of participants could not be contacted because they had already left in the week before we tried to approach them or because they experienced psychological problems that prevented understanding of study demands. At each measurement, about 80% were approached and asked to participate. Eventually, 79, 65, and 59% of those contacted filled out

Table 3 Prison Project participants in the follow-up measurements in prison

	P2		P3			P4		
	3 months after entry		9 months after entry			18 months after entry		
	<i>N</i>	%	<i>N</i>	%	%	<i>N</i>	%	%
Total sample	1904		1904			1904		
Already released from detention at moment to be interviewed	629	33%	1416	74%		1692	89%	
Sample to contact (of total sample)	1275		488			212		
Unable to contact: psychological problems, released in last week	219		80			45		
Sample contacted (% of sample to contact)	1056		83%	408	84%	167	79%	
Refused to be interviewed	218			143		68		
Sample interviewed (% of sample contacted)	838		79%	265	65%	99	59%	
Sample interviewed (% of sample to contact)	838		66%	265	54%	99	47%	

a questionnaire about their experiences in detention three, nine, and 18 months after entry, respectively.

Table 4 presents the characteristics of the respondents of the three follow-up measurements in prison. In general, the characteristics of respondents in the follow-ups in prison and respondents in the baseline measurement (see third column of Table 2) are very similar—with the obvious exception of length of detention. Moreover, the participants in each follow-up are quite similar regarding most of the characteristics. Again for obvious reasons, the offense type is more serious and the time spent in detention is longer for those questioned nine and 18 months after arrival in detention than for those who were assessed only after 3 months.

Table 4 Characteristics of respondents in the follow up waves in prison

	P2		P3		P4	
	3 months after entry		9 months after entry		18 months after entry	
	Respondents <i>N</i> = 838		Respondents <i>N</i> = 265		Respondents <i>N</i> = 99	
	Mean	Std.dev.	Mean	Std.dev.	Mean	Std.dev.
Age at entry (in years)	30	11	30	11	32	11
Age at entry: 18–25 years	42%		44%		33%	
Age at entry: 26–40 years	39%		38%		44%	
Age at entry: 41–65 years	19%		18%		22%	
Married	10%		13%		11%	
Working or studying	54%		54%		42%	
Living in major city	22%		21%		19%	
Alcohol addicted	6%		4%		6%	
Drug addicted	14%		13%		6%	
Age of onset (in years)	19	8	19	8	19	8
Age of onset: 12–18 years	63%		63%		65%	
Prior convictions (number)	8	10	8	10	9	13
Prior convictions (yes/no)	89%		89%		86%	
Prior convictions (if yes: number)	9	10	9	10	11	14
Prior detention spells (number)	3	6	3	6	4	7
Prior detention spells (yes/no)	54%		53%		63%	
Prior detention spells (if yes: number)	5	7	5	7	6	8
Severity of crime: max. prison sentence in days	3348	1653	3768	1491	3966	1554
Type of crime: violence	52%		64%		73%	
Type of crime: property	23%		11%		9%	
Type of crime: other	24%		25%		17%	
Period of detention: length in days	331	261	597	243	832	235
Period of detention: + 30 days (yes/no)	100%		100%		100%	
Period of detention: if + 30 days: length in days	331	261	597	243	832	235

Follow-up Interviews After Release

Each respondent who was released from prison was tracked and contacted again six and 24 months after his release and asked to participate in an interview. Tracking and contacting the Prison Project respondents after their release from prison was a major challenge, and a lot of time and effort was put into it. As a first step, detailed contact information was collected by the following: (a) collecting contact information at baseline on respondents themselves, on a contact person (family member or friend) and on respondents' lawyers; (b) updating contact information during the follow-up measurements in prison; and (c) regularly collecting up-to-date information on respondents' whereabouts from official registration systems during the entire data collection period (e.g., the National Municipal Records Administration, the Dutch Probation Services, and the Dutch Prison Service). As a next step, a team of specially trained interviewers started to search for and approach the respondents. The contact information was used to see whether a person could be contacted by phone, email, or social media accounts. If these attempts did not result in contact with the respondent, interviewers made house visits and—if possible—checked with neighbors.

To encourage cooperation, a gift voucher of 10 euros was offered for each post-release interview. The interviews were held at locations convenient for participants, e.g., their home (in private without presence of others), a public place (e.g., a café or restaurant), an office of the Dutch Probation Services, or in a clinic. At the follow-up interviews, respondents with a partner and/or children were again asked to answer additional questions about them.

When the fieldwork period ended at April 1, 2015, a small number of the 1904 participants had not been released (long enough) to qualify for the assessment at 6 months (R1) or 24 months (R2) after release from prison (see Table 5). Both six and 24 months after their release from prison, more than 80% of the sample was successfully located. During the search effort, it became clear that at both post-prison measurements 5% of the located participants could not be interviewed because they had died, moved abroad, or experienced psychological problems. About two-thirds of the participants who could be contacted participated in the two post-prison interviews. Overall, 53% of the sample who qualified for an interview were successfully interviewed 6 months after release, and 56% of them were interviewed 24 months after release.

Seventy-one percent of the respondents who were released long enough to be interviewed 24 months after release, participated in at least one of the post-prison follow-up interviews (i.e., 1216 out of 1724 ex-prisoners). Moreover, 37% of them (i.e., 643 out of 1724 ex-prisoners) were successfully interviewed at both post-prison measurements.

Respondents of the two post-prison measurements are highly comparable regarding most characteristics (see Table 6). The length of the detention period is somewhat longer for respondents interviewed 6 months after release than for respondents interviewed 24 months after release, but this could be expected because for the measurement after 24 months, respondents with a longer detention period had not yet had the time to be released long enough for this measurement. Additional analyses (not shown) for the two post-prison measurements show that

Table 5 Prison Project participants at the “post-release” measurements

	R1			R2		
	6 month after release			24 months after release		
	<i>N</i>	%	%	<i>N</i>	%	%
Total sample	1904			1904		
Still in prison or not long enough released to be interviewed	105	6%		180	9%	
Sample to locate	1799			1724		
Not found/located	318			241		
Sample located (% of sample to locate)	1481		82%	1483		86%
Impossible to contact: dead, moved abroad, psychological problems	74	5%		70	5%	
Sample contacted	1407			1413		
Refused to make an appointment for an interview	365			411		
Did not show up at interview appointment(s)	96			38		
Sample interviewed (% of contacted)	946		67%	964		68%
Sample interviewed (% of sample to locate)	946		53%	964		56%

respondents, non-respondents, and not-contacted persons are on average also very much alike with respect to the characteristics on which registration data are available. As a consequence, in general, the characteristics of respondents in each of the post-prison measurements and respondents in the baseline measurement are very similar (see third column of Table 2).

What Has Been Measured?

In order to address the aims of the project, elaborate information on a large number of topics was collected at each measurement (see Table 7). The baseline interview covered respondents’ lives prior to their arrests as well as their experiences in detention so far. Baseline information included demographics, characteristics of parental family, lifestyle (e.g., alcohol and drugs use, weight, smoking), detailed individual characteristics (e.g., personality traits, self-control, locus of control, coping style, criminal thinking style), and detailed information regarding the situation of different life areas (i.e., employment, financial and housing situation, health, family situation, social networks) both at the time of arrest and retrospectively about developments during their life course. In addition, respondents’ attitudes towards criminal justice actors were measured (e.g., fair and respectful treatment by prison staff, police, or lawyer).

At baseline and during the three follow-up measurements in prison, detailed information was also gathered about the situation during imprisonment (e.g., receiving visits, contact with the lawyer, aggression in prison, relationships with other inmates, participation in daily activities or behavioral interventions, health and health care use) and about the trial and sentence (e.g., attitude towards judge, sanction, opinion regarding verdict).

Table 6 Characteristics of respondents in “post-release” measurements

	R1		R2	
	6 month after release Respondents <i>N</i> = 946		24 months after release Respondents <i>N</i> = 964	
	Mean	Std.dev.	Mean	Std.dev.
Age at entry (in years)	31	11	31	11
Age at entry: 18–25 years	42%		41%	
Age at entry: 26–40 years	38%		39%	
Age at entry: 41–65 years	21%		21%	
Married	11%		10%	
Working or studying	51%		50%	
Living in major city	21%		25%	
Alcohol addicted	8%		8%	
Drug addicted	17%		17%	
Age of onset (in years)	19	8	19	8
Age of onset: 12–18 years	65%		65%	
Prior convictions (number)	9	11	9	11
Prior convictions (yes/no)	89%		90%	
Prior convictions (if yes: number)	10	11	10	11
Prior detention spells (number)	3	7	4	7
Prior detention spells (yes/no)	54%		58%	
Prior detention spells (if yes: number)	6	8	6	8
Severity of crime: max. prison sentence in days	3084	1673	3027	1646
Type of crime: violence	48%		45%	
Type of crime: property	31%		33%	
Type of crime: other	21%		22%	
Period of detention: length in days	232	251	195	186
Period of detention: + 30 days (yes/no)	93%		93%	
Period of detention: if + 30 days: length in days	247	254	208	187

During the first post-prison interview, the former prisoners were asked how they (retrospectively) perceived their time in prison (e.g., the subjective severity of their time in prison, participation in educational programs or behavioral interventions, contacts with staff and caregivers in prison, opinion regarding lawyer, judge, and verdict). During both post-prison interviews, detailed information was collected on the same life domains as measured at baseline, like their social networks, financial situation, labor participation, housing situation, health, and their family life. In addition, respondents were asked about their current attitudes towards criminal justice actors, contacts with Probation Services, their criminal thinking styles, and their experiences with stigmatization. Using a calendar method in each of the post-release interviews, (three) monthly

Table 7 Subject areas covered in Prison Project interviews per measurement

	P1	P2	P3	P4	R1	R2		P1	P2	P3	P4	R1	R2
CHILDHOOD SITUATION							(OPINION ABOUT) PERSONAL CONTACTS WITH CJ-SYSTEM						
Characteristics of parents / caretakers	X						Prison officers	X	X	X	X		
Parental criminal justice involvement	X						Police (at arrest)	X					
Parental mental health and substance use	X						Lawyer	X	X	X	X	X	
Living situation prior to age 16	X						Judge			X	X	X	
Education (incl. problems at school)	X						Court case			X	X	X	
Problem behavior prior to age 16	X						Expected sentence	X	X	X	X	X	
LIFE COURSE HISTORY - FROM YOUTH TO DETENTION							GENERAL ATTITUDES TOWARDS THE CJ-SYSTEM						
Labor market situation	X						Attitudes toward police, prosecutors, lawyers and judges	X	X			X	X
Living and housing situation	X						Attitudes toward the law	X	X	X	X	X	X
Romantic relationships	X						CIRCUMSTANCES IN DETENTION						
Physical and mental health	X						Double bunking	X	X	X	X		
Contacts with the Criminal Justice System	X						Number of hours per day in/out cell	X	X				
CHARACTERISTICS - (IMMEDIATELY) PRIOR TO DETENTION							REENTRY INTERVENTIONS IN DETENTION						
Personality traits (Big 5, self-control, LOC)	X						(full) Body searches	X	X				
Coping style	X						Placement in solitary confinement	X	X	X	X		
Type of crime for which arrested	X						Misconduct (incl. sanctions)	X	X	X	X		
Anti-social behavior (6 months pre detention)	X						Victimization	X	X	X	X		
Crime victimization (12 months pre detention)	X						Day time activities (e.g. yard time, exercise)		X	X	X		
LIFE CIRCUMSTANCES - AT TIME OF DETENTION AND INTERVIEW							SUBJECTIVE EXPERIENCES OF DETENTION						
Labor market participation	X				X	X	Religious meetings		X	X		X	
Education	X				X	X	Education and labour		X	X	X	X	
Living and housing situation	X				X	X	Social network in detention (3 network members)		X				
Income	X				X	X	Characteristics of network members		X				
Savings and debts	X				X	X	Contact with outside world		X	X	X		
(problematic) Alcohol use	X				X	X	REENTRY INTERVENTIONS IN DETENTION						
(problematic) Drug use	X				X	X	Leaves during detention			X	X	X	
Social Network (3 network members)	X				X	X	Participation in behavioral intervention programs in prison			X	X	X	
Criminal Network (3 network members)	X				X	X	Risc assessment tools used			X		X	
Characteristics of all network members	X				X	X	Motivation for intervention programs				X		
Religion and religious participation	X				X	X	Assistance from 'Reentry officer (MMD-er)'			X	X	X	X
Societal and political participation	X				X	X	Contacts with care givers in prison	X		X	X	X	
ID (Passport, drivers licence or ID-card)	X		X	X	X	X	Satisfaction with care givers in prison			X	X	X	X
LIFE CIRCUMSTANCES - POST RELEASE - MONTHLY CALENDERS							WELL-BEING & EXPECTATIONS						
Labor market situation					X	X	General life satisfaction		X	X	X	X	X
Living and housing situation					X	X	Attitudes towards working after release		X	X	X		
Romantic relationships					X	X	Things that are important and help to stay out of prison			X			
Alcohol and drug use					X	X	Situation at moment of release					X	
Criminal behavior					X	X	Stressful life events since detention or release			X		X	X
FAMILY MEMBERS - AT TIME OF DETENTION AND INTERVIEW							HEALTH & HEALTHCARE - AT TIME OF DETENTION AND INTERVIEW						
Romantic relationship / partner	X	X	X	X	X	X	Experienced loneliness	X	X		X	X	X
Characteristics of partner	X	X	X	X	X	X	Opinion regarding stigmatisation		X		X	X	X
Quality of relationship with partner	X	X	X	X	X	X	Expected effect of detention on labor market participation	X	X	X	X	X	X
Importance of characteristics of partner	X	X	X	X	X	X	Estimated chances of recidivism	X	X	X	X	X	X
Having / raising children	X				X	X	Estimated chances of arrest, convictions and imprisonment	X	X	X	X	X	X
Characteristics of children	X				X	X	Estimated costs of future stays in prison	X	X	X	X	X	X
Well-being of children	X				X	X	Estimated chances to stay out of prison			X		X	
Quality of relationship with children	X				X	X							
Parenting style	X				X	X							
Pets and how they were cared for during deten.	X				X	X							
HEALTH & HEALTHCARE - AT TIME OF DETENTION AND INTERVIEW							CONTACTS WITH HEALTH CARE PROFESSIONALS						
Length, weight	X	X	X	X	X	X	Contacts with health care professionals	X	X	X	X	X	X
General health status	X	X	X	X	X	X	Contacts with health care professionals in detention	X	X	X	X	X	X
Smoking behavior	X	X	X	X	X	X							
Physical health problems	X	X	X	X	X	X							
Mental health problems	X	X	X	X	X	X							
Chronic diseases	X	X	X	X	X	X							
Medication	X	X	X	X	X	X							
Posttraumatic stress symptoms	X	X	X	X	X	X							
Treatment for mental health problems	X	X	X	X	X	X							
Contacts with health care professionals	X	X	X	X	X	X							
Contact with health care professionals in detention	X	X	X	X	X	X							

NOTE. LOC = Locus of control; CJ = Criminal Justice.

information was also collected on life circumstances, criminal behavior, and substance use in the 24 months after release.

In addition to self-constructed questions, a number of standardized instruments were included, for example Dutch adaptations of the following: the Brief Symptom Inventory (mental health symptoms), the Tangney Brief Self-Control Scale (self-control), the Dutch Big Five Inventory (personality traits), the Criminal Sentiments Scale Modified (criminal attitudes), the Measurement of Quality of Prison Life Inventory (perceptions of prison climate), and the Pearlin and Schooler Mastery Scale (locus of control). More information on the questions and instruments can be found in the documentation and codebooks of the Prison Project (see: [4]).

Registration Data

In addition to the above-mentioned self-reported data, information was gathered for the Prison Project group from a variety of existing official registration systems. Information was, for example, drawn from systems of the Ministry of the Interior, the Ministry of Security and Justice, the Dutch Prison Service, the Dutch Probation Services, and the Public Prosecutor's Service (see Table 8). These registration systems provide a wealth of information on criminal convictions and different life circumstances before, during, and after imprisonment, like marriages/divorces, mortality, criminal behavior before and after imprisonment, criminogenic needs, registered misconduct in prison, participation in behavioral interventions, and contacts with the Probation Service. In the Netherlands, most official registration systems are of high quality and, therefore, provided information on nearly all persons in the target population of the Prison Project. These detailed registration data not only provided important information on the participants in the Prison Project but also allowed for analyses comparing respondents and non-respondents.

What Has It Found? Key Findings and Publications

Within the larger Prison Project, several research projects addressing different research questions are being conducted, including projects on the following: sentencing, participation in behavioral interventions, the perceived severity of imprisonment, procedural justice in prison, (former) prisoners' social networks and their employment and housing situation, and the well-being of offenders' partners and children. These projects have generated many findings (see for a complete list of publications: <http://www.prisonproject.nl/eng/>). To illustrate the broad scope of the Prison Project and the value of having longitudinal data, two key findings are highlighted.

Procedural Justice in Prison

Procedural justice theories argue that people will be more likely to comply with the law when they feel treated in a procedurally just manner (e.g., fair procedures, respectful treatment) by criminal justice actors [15]. Key findings from the Prison Project corroborate these expectations for the correctional context. Prisoners evaluating 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. Prisoners who evaluated their treatment in prison as procedurally just, were on average 5% less likely to get reconvicted after their release than prisoners who were neutral regarding the treatment by prison staff [2]. Moreover, prisoners experiencing higher levels of procedural justice in the first weeks of their pre-trial detention were significantly less likely to misbehave and reported fewer mental health problems in the subsequent months of their detention. No evidence was found for the reversed effect [1]. Therefore, the results of this project suggest that correctional authorities can enhance prisoners' compliance and prison order by creating a fair and humane prison climate.

Table 8 Registration data available in the Prison Project

Name of the registration system (Dutch name)	Source Organisation	Period	Contains detailed information on:
Municipal Records Administration (GBA)	Ministry of the Interior	Entire life course (from age 0)	Addresses, official partners & divorce, children, dates of death
Judicial Documentation System (JDS)	Ministry of Security and Justice	Entire life course (from age 12)	Judicial documentation; including waivers, convictions and sanctions like imprisonment or community service
Public Prosecutor's Service Administration (OM-data/Rapsody)	Public Prosecutor's Service	Entire life course (from age 12)	Arrest and actions by the public prosecutor's service
National Prison Registration System (TULP)	Dutch Prison Service	Time in prison	Moves in/out prisons, units and cells in all Dutch penitentiary institutions
Reducing Recidivism Information System (TRIS)	Dutch Prison Service	Time in prison	Activities and decisions within the prison-based rehabilitation program "Reducing Recidivism"
Medical Prison Files	Dutch Prison Service	Time in prison	Contacts with doctors (e.g. medical problems & medication) and medical screening upon arrival in detention
Labour activities in prison	Dutch Prison Service	Time in prison	Daily rosters of work activities in prison and salaries
Financial accounts of prisoners (Current Account)	Dutch Prison Service	Time in prison	Sources and amounts of money received in prison & how it is spent (e.g. in the prison shop)
Prison records (Penitentiary files)	Dutch Prison Service	Time in prison	Official registrations of all misconduct in prison and sanctions taken
Digital Platform Aftercare Prisoners (DPAN)	Dutch Prison Service	Time in prison	Situation regarding housing, labor, ID, debts and healthcare needs upon arrival and when released from prison
Dutch Risk Assessment Scales (RISc)	Dutch Probation Service	Time in prison & 2-yr post prison	Estimated recidivism risk, criminogenic needs, and pre-detention life circumstances
Registration System of the Dutch Probation Service (CVS/IRIS)	Dutch Probation Service	Time in prison & 2-yr post prison	Probation supervision and contacts with probation officers

Employment and Crime

Employment is noted to be important for a successful prisoner reentry both by scholars and prisoners themselves. Findings from the Prison Project are in line with this idea and show that ex-prisoners who had been confined for 6 months or longer were less likely to be employed in the first 6 months after release compared to men who were confined for a shorter period. Imprisonment length was, however, not significantly associated with post-release job stability measures (e.g., number of jobs, re-employment in pre-prison job, and time employed). The findings furthermore showed that a substantial share of the prisoners were able to return to their pre-prison employer upon release. This adds nuance to the assumption that employers are reluctant to hire this group of workers [12, 13]. The mere presence of a job did not reduce reoffending rates, but retaining a job during the 6 months after release did reduce ex-prisoners' recidivism risks [14]. The findings, therefore, indicate that not just any job but a stable job may help to reduce crime in this high-risk group of ex-prisoners.

What Are the Main Strengths and Weaknesses?

The main strengths of the Prison Project are that it is designed as a nationwide and prospective study and includes insights from various theoretical and disciplinary paradigms. Consequently, it enables to (1) describe the development of multiple life domains of (ex-) prisoners and their families before, during, and after imprisonment, (2) examine the effects of imprisonment on further criminal behavior and on conventional life domains of (ex-) prisoners and their families, and (3) empirically test mechanisms that are assumed to explain any effect of imprisonment. The Prison Project, thus, primarily should be regarded as an overarching research infrastructure intended to foster a large number of specific research projects each addressing different research questions. With its broad focus, the Prison Project contributes to distinct but related criminological disciplines—like life-course criminology, penology, prison studies, desistance research, and prisoner reentry studies—, but also to other disciplines like psychology, sociology, economics, and health sciences.

A limitation of the Prison Project is that it is restricted to male prisoners who were born in the Netherlands and who were held in Dutch correctional facilities, which are characterized by relatively liberal and decent prison conditions [3]. Future longitudinal studies focusing on other prison populations (e.g., females and first generation immigrants) and other countries and correctional systems are necessary to examine to what extent the findings of the Prison Project are generalizable. Moreover, in the Netherlands, sentences are relatively short compared with, for instance, the USA. About 80% of all prisoners in the Netherlands are serving a prison sentence of 6 months or shorter [6]. Therefore, it is important to note that the Prison Project focuses on (the effects of) relatively short-term prison sentences. Furthermore, it is important to realize that about half of all pre-trial detainees in the Netherlands do not receive a prison sentence exceeding the time already served in pre-trial detention [9]. As a consequence, the Prison Project includes a substantial group of prisoners who served their sentence only in pre-trial detention centers.

Can I Get Hold of the Data? Where can I Find out More?

Information on the original research team, current research projects, collaborating researchers, data collections, publications, and contact details can be found on the website of the project: <http://www.prisonproject.nl/eng/>. Since the Prison Project data are very rich and include many topics that may also interest other scholars, and since we feel the data need to be used extensively, the Prison Project has an open policy regarding collaboration with other researchers. Expressions of interest for collaborative research are, therefore, welcomed and can be addressed to the principal investigators. Requests for collaboration will be judged by their study aims, overlap with ongoing or planned studies, and logistic consequences.

Profile in a nutshell

- The Prison Project is a nationwide and prospective cohort study designed to examine the development of criminal behavior and other life circumstances of offenders and their families before, during and after detention in the Netherlands.
 - The sample consists of 1904 men, aged 18–65 years, and born in the Netherlands, who entered pre-trial detention between October 2010 and April 2011.
 - Participants were followed for a four-and-a-half-year study period (i.e., till the end of March, 2015) and questioned repeatedly during detention and six and 24 months after release.
 - Elaborate self-reported information on offenders' life course and characteristics was collected, including socio-demographics, lifestyle, personality traits, self-control, criminal thinking styles, attitudes towards criminal justice actors, experiences during detention, and different life-course domains (e.g., criminal behavior, employment, housing, finances, health, social networks, and well-being of family members).
 - Moreover, detailed longitudinal information on criminal behavior and life circumstances was gathered from different official registration systems.
 - Further information on the Prison Project and contact details of the principal investigators can be found on the Prison Project website: <http://www.prisonproject.nl/eng/>.
 - Expressions of interest for collaborative research are welcomed.
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