

What do we gain from early release preparation under electronic monitoring?

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68th Annual Meeting of the American Society of Criminology, Chicago, IL, 15 November 2012

Content

Abstract.....	2
Introduction	2
Background and aim of the study	3
Method	4
Results.....	4
Suggested and final participants.....	4
Socio-demographic features	4
Age	4
Family status	4
Education	5
Job situation prior to and after incarceration.....	5
Housing situation prior to and after incarceration	5
Criminal history and risk assessment.....	5
Privileges during current prison term	6
Risk assessment (LSI-R: SV)	6
Psychometric assessment.....	6
Rationale	6
Results.....	7
Conclusion.....	10

Abstract

In 1983, the United States of America introduced electronic monitoring (EM) as a means to supervise and control certain offender groups. Since then, EM has been implemented in at least 22 countries all over the world. It is applied for different purposes such as sentencing, avoiding incarceration, or monitoring so called “high-risk” or “dangerous offenders” after their release. Between October 2010 and March 2012, EM could be applied in Germany, that is, in the German state of Baden-Wuerttemberg as part of a pilot project. The objective of the pilot project was to prepare prisoners for early release as well as premature transfer to work release/day parole. Simultaneously to this introduction of EM in the correctional setting, the Max Planck Institute for Foreign and International Criminal Law launched an evaluation of this newly implemented measure with a Randomized Control Trial. We hypothesized that the use of EM to encourage and prepare release under certain circumstances would not reach the most suitable group of prisoners and might thus lead to net widening. We analyzed the supposition that release preparation with EM only covers low-risk offenders who do not need special supervision for early release preparation.

Introduction

The first EM programs were developed in Florida and New Mexico in the 1980s and were aimed at avoiding incarceration of low-risk offenders (see Cotter & de Lint, 2009). Further technological progress then led to the expanded use of (electronic) monitoring on offender groups of all risk levels. Whereas in the early days of EM a radio frequency technique was applied, nowadays GPS technology allows for the exact monitoring of an offender’s movements around the clock, thereby pushing high-risk offenders into the center of attention. Having said this, the benefit of EM programs has been controversially debated since their inception. Ethical issues have not been adequately discussed or solved. Supposedly pursued objectives, such as successfully rehabilitating and re-integrating offenders into society have, to date, not been satisfactorily proven (Bottos, 2007).

Despite these unsolved issues, EM is applied at different custodial/judicial levels.

The research project I will be talking about today is located at the so called “Indoor Level.” At this level, EM is applied while an inmate actually serves his¹ prison sentence. EM in this sense is used for prison leave or for early release preparation in the form of home detention.

In saying that, home detention is expected to meet at least three traditional correctional goals that are probably comparable or anticipated for application in the realm of prison leave as well.

First, the offender is incapacitated by restricting him to a particular place.

¹ Only prisons for male offenders were included in the pilot study.

Second, home detention is only moderately punitive.

Third, since the offender is allowed to remain with his family and continue to work, it is expected that home detention might also facilitate rehabilitation.

It is additionally hoped that EM may exert a rehabilitating effect by committing the offender to maintain a day structure or by internalizing self-control that is expected to be associated with wearing the electronic tag; an effect that, to date, has not been substantiated.

Background and aim of the study

In July 2009, the Justice Ministry of the German State of Baden-Wuerttemberg launched the "Act on electronic monitoring during the enforcement of the imprisonment sentence" (EAStVollzG, GBl. 2009, 360).

According to this law, home detention under EM could be ordered as a means of early release preparation. The offender is ordered to stay at home except for approved activities, such as work, school, or treatment or probation sessions. If the offender does not qualify and agree to the EM measure, then he or she will have to serve the rest of his prison sentence behind bars (Alt. 1: preparing prisoners for early release). Eligible subjects are required to have a permanent place of residence and an occupation or comparable day-structuring activity such as vocational training or schooling for at least 20 hours a week. A strict timetable rules the whereabouts of the offender at any given time. Comprehensive support is provided by the community probation service.

The second alternative of application is the premature transfer to work release while serving a prison sentence. A condition of work release is the availability of employment outside prison. Thus, the inmates work outside the correctional facility but still live and serve their sentences inside with contact to the prison's social workers (Alt. 2: premature transfer to work release).²

In both cases, an offender spends a given time of his prison sentence outside the correctional facility. Without the use of EM, the offender would not yet qualify for the exemption from the prison term or early or work release. Both alternatives can be granted up to six months prior to regular release. There are no statutory provisions concerning the type of offenders eligible for EM.

The primary goal of the study was to evaluate the implementation of this new judicial application. A further objective was to get an idea of the possible effects of EM that could promote

² The pilot project/law amendment also provided for the use of EM as an alternative sentence in lieu of a criminal fine. However, only three candidates were suggested for this scope of application. However, as they did not meet the necessarily requirements, they were ineligible for EM.

rehabilitation, since theoretical assumptions of the often presumed rehabilitating impact are vastly under-researched. The focus of this presentation is on the psychological features that we assessed to analyze the potential effect of EM with regard to self-efficacy, social competence, and risk potential among the participating subjects.

Method

Once the prison staff identified an inmate as eligible and asked him to participate in the pilot project, the correctional facility reported the subject to the research institute (Max Planck Institute for Foreign and International Criminal Law). We then randomly assigned the subject to either the control or the experimental group of the respective sample (home detention or work release).

Data sources included personal and telephone interviews with the subjects, psychometric assessments, file analysis, interviews with the probation service or the prison social workers, and expert interviews. Psychological tests were administered at two points of data collection in order to explore the possible/presumed rehabilitating value of EM. In addition, EM-subjects were compared with control group subjects.

Results

Suggested and final participants

A total of 130 eligible subjects were reported to the research institute during the run-time of the pilot project between 1 October 2010 and 31 March 2012. Home detention was applied to 19 subjects, work release to 26 subjects. Nineteen candidates for home detention and 30 candidates for work release were randomly assigned to the control group.

A considerable number of suggested participants dropped out. This means that they were originally randomly assigned to the experimental group but dropped out for diverse reasons. To name a few: unsuccessful job search (unemployment), release before subject was admitted to the measure (procedure of inspection took too long), place of residence was located outside the operational area/zone of the probation service.

Socio-demographic features

Age

Average age of the subjects was between 33 and 40 years in the different groups (Range: 21 - 67 years; see table 1).

Family status

Home detention subjects were more often married than the work release subjects.

Education

Approximately half of the home detention and two thirds of the work release sample had a certificate of secondary education. A considerable number of the pilot project participants had obtained a school leaving certificate higher than secondary school or even an academic degree, especially in the home detention group (prior to incarceration).

Job situation prior to and after incarceration

Almost all subjects of the home detention and three quarters of the work release group were employed at the time of imprisonment. With the exception of the work release control group, this was also the case shortly after release which was innate to the pilot project.

Housing situation prior to and after incarceration

Virtually all subjects had permanent accommodation both before and after incarceration.

Table 1 gives an overview of the socio-demographic features.

Table 1: Socio-demographic features

	Home detention				Work release			
	EG		CG		EG		CG	
Age	<i>M</i> = 35.5		<i>M</i> = 39.9		<i>M</i> = 33.6		<i>M</i> = 39.7	
scale	n	%	n	%	n	%	n	%
Married	6	32	11	58	6	25	6	35
Education								
Secondary school	8	47.1	7	50.0	10	66.7	8	66.7
Higher education	7	41.2	6	42.8	4	26.7	4	33.3
Permanent job								
Prior to incarceration	16	88.9	16	100.0	11	78.6	8	72.7
After release	18	100.0	16	100.0	13	92.9	7	63.6
Permanent accommodation								
Prior to incarceration	18	100.0	16	100.0	13	92.9	11	100.0
After release	18	100.0	16	100.0	13	92.9	11	100.0

Criminal history and risk assessment

The criminal history of the subjects shows that all subjects had several previous convictions, but that the majority was incarcerated for the first time. Average prison term for the index offense added up to two years. As to the type of the index offense, most of the subjects had committed a property or road traffic offense; violent offenses constituted an exception (Table 2).

Table 2: Criminal history

	Home detention				Work release			
	EG		CG		EG		CG	
Previous convictions	<i>M</i> = 3.9		<i>M</i> = 5.2		<i>M</i> = 5.4		<i>M</i> = 8.0	
Sentence (in months)	<i>M</i> = 23.5		<i>M</i> = 23.8		<i>M</i> = 26.1		<i>M</i> = 23.1	
scale	n	%	n	%	n	%	n	%
Former prison sentences	5	27.8	3	16.7	3	15.0	6	31.6
Type of committed offense								
Property offense	7	36.8	14	73.7	15	57.7	12	41.4
Road traffic offense	4	21.1	1	5.3	3	11.5	6	20.7
Violent offense	5	26.3	3	15.8	2	7.7	3	10.3

Privileges during current prison term

Over 80% of the home detention experimental and control group subjects were on work release before they were admitted to the pilot project.

Risk assessment (LSI-R: SV)

In order to obtain an idea of the risk level of the subjects, we conducted the Screening Version of the Levels of Service Inventory (“Levels of Service Inventory - Revised: Screening Version” LSI-R:SV, Andrews & Bonta, 1998). We identified two thirds of the home detention experimental and three quarters of the home detention control group as low-level offenders.

Work release subjects displayed a somewhat higher risk level than the home detention sample. Half of the subjects in the experimental and two thirds of the subjects in the control group showed a low risk level. No significant differences were found between experimental (*M* = 2.57) and control group (*M* = 2.42) in the work release sample.

Psychometric assessment

Rationale

A major focus of this study was to examine the effects of EM that are likely to lead to a norm complying behavior pattern and foster reintegration.

We expected that subjects who were under EM may experience more **social support**³, may develop a more functional **self-concept**⁴, and may reduce feelings of insufficiency.

We hypothesized that EM-subjects would develop an increased **internal control**⁵ as opposed to the CG who had to stay behind bars and thus may sustain their belief system that they cannot control their action and are directed by others (i.e., the prison staff). (we only included the scales *self-efficacy*, $\alpha = .79$, $n = 88$) and *externality*, $\alpha = .85$, $n = 88$).

Results

Firstly, we analyzed whether the subjects exhibited a baseline level different from the normative samples (Table 3).

Participants of the pilot project – regardless of whether they were allotted to the EG or CG – presented higher levels of social support, self-concept, and locus of control. They all exhibited more “favorable” scores than the normative samples recruited from the general population.

710 male German prisoners who were older than 21 formed the normative sample for the insufficiency scale. Subjects who were suggested for the EM pilot project showed a significantly lower level of insufficiency feelings than the normative sample of incarcerated men.

³ We expected this effect because EM-subjects were able to maintain their relationships (work, family) at an earlier stage than subjects who were not granted EM. We measured social support with the short version F-SozU K-22. Scales included: *emotional support* ($\alpha = .91$ ³, $n = 89$), *practical support* ($\alpha = .81$, $n = 91$), *social integration* ($\alpha = .72$, $n = 86$).

⁴ Self-concept refers to the way you think about yourself; it includes the whole set of attitudes, opinions, and cognitions that a person has of him-/herself. We hypothesized that over the course of EM, subjects would develop an affirmative/more positive level of self-concept due to a more independent lifestyle compared to the incarcerated control group. We administered the Frankfurt Self-Concept Scales (Frankfurter Selbstkonzeptskalen, FSKN, Deusinger, 1986) consisting of different scales such as self-concept of general achievement potential/performance capability; $\alpha = .82$ ($n = 89$), self-concept of general problem solving (Cronbach's $\alpha = .79$, $n = 90$), self-concept of general self-esteem ($\alpha = .81$, $n = 88$). In addition, we assessed feelings of insufficiency with the PFI (Seitz & Rautenberg, 2010; $\alpha = .76$, $n = 87$); this was expected to be increased in the control group and decreased among the EM-subjects.

⁵ Locus of control refers to an individual's perception of what causes his or her actions: mainly external (fate, luck, other people's decisions) or internal causes (own decisions and efforts). We administered the “Fragebogen zu Kompetenz- und Kontrollüberzeugungen” (Krampen, 1991) containing 32 items (thereby only including the scales self-efficacy, $\alpha = .79$, $n = 88$, and externality, $\alpha = .85$, $n = 88$).

Table 3: Baseline level of the psychometric measures for study sample and normative sample

scale	Study sample			Normative sample		Z
	n	M	SD	M	SD	
Insufficiency	91	2.30	(2.47)	4.10	(3.40)	-5.05**
Social support						
Emotional support	91	4.39	(0.66)	4.11	(0.73)	3.66**
Practical support	91	4.01	(0.75)	4.09	(0.75)	-1.02
Social integration	91	4.04	(0.71)	3.75	(0.75)	3.69**
Self-concept						
... of general effectiveness	89	48.39	(6.54)	47.90	(5.72)	0.81
... of general problem solving	90	48.63	(6.25)	47.20	(5.79)	2.34*
... of general self-esteem	88	49.63	(6.71)	49.30	(6.10)	0.51
Locus of control						
Internal control	90	70.17	(11.00)	64.20	(10.25)	5.53**
External control	91	43.36	(11.37)	53.00	(10.76)	-8.55**

Anmerkungen: *p <.05 **p <.01

Secondly, we analyzed whether the experimental group improved the scores on these psychometric tests as stated in our hypothesis (Table 4). However, most probably due to the high reference point, we could not confirm our hypothesis that EM improved the participants' self-concept, locus of control, and social-support. External control attribution only decreased, and thus improved in the expected direction, in the work release group.

Finally, we analyzed whether home detention subjects had higher scores in the psychometric features that were expected to exert a rehabilitative influence on the EM-subjects (Table 5). At the present point in time, we can only present data of the home detention group since the majority of the work release subjects are still incarcerated. There were no significant differences between the EG and CG. This means that we have to reject our hypothesis that subjects who were released earlier under EM underwent considerable changes with regard to self-concept, locus of control, insufficiency, or social support that might have explained why EM should have a rehabilitative effect on re-socializing behavior.

Table 4: Changes during electronic monitoring

Scale		Pre-EM		Post-EM		Z ^d
		M	(SD)	M	(SD)	
Insufficiency	HD	3.43	(3.18)	2.79	(3.60)	-1.37
	WR	2.75	(3.14)	2.45	(2.42)	-0.63
Social support^a						
Emotional support	HD	4.47	(0.45)	4.29	(0.61)	-1.81
	WR	4.18	(0.84)	4.14	(0.77)	-0.17
Practical support	HD	4.11	(0.55)	4.09	(0.66)	-0.05
	WR	3.81	(0.93)	3.73	(0.85)	-0.63
social integration	HD	3.94	(0.82)	4.01	(0.71)	-0.58
	WR	3.96	(0.73)	3.99	(0.65)	-0.26
Self-concept^b						
... of general effectiveness	HD	47.50	(7.42)	48.58	(7.70)	-1.03
	WR	48.00	(7.47)	47.76	(8.82)	0.00
... of general problem solving	HD	48.25	(7.23)	48.58	(7.46)	-0.67
	WR	47.88	(6.40)	47.76	(6.16)	-0.11
... of general self-esteem	HD	49.08	(7.37)	50.08	(7.45)	-1.44
	WR	48.47	(7.51)	49.76	(7.60)	-0.94
Locus of control^c						
Internal control	HD	69.62	(8.53)	70.77	(11.14)	-0.97
	WR	71.17	(9.70)	74.00	(8.99)	-1.54
External control	HD	48.00	(10.54)	46.85	(10.87)	-0.46
	WR	44.56	(10.68)	41.33	(11.28)	-1.99*

EM = electronic monitoring, HD = home detention, WR = work release

^a n_{EV} = 14, n_{FG} = 20 ^b n_{EV} = 12, n_{FG} = 17 ^c n_{EV} = 13, n_{FG} = 18 ^d Wilcoxon-Test

*p < .05

Table 5: Differential changes in the experimental group and the control group

		Pre		Post		Mann-Whitney U-Test		
		M	SD	M	SD	Rank sum	U	Z
Insufficiency^a	EG	3.43	(3.18)	2.79	(3.60)	13.25	80.5	-0.53
	CG	1.23	(1.09)	0.85	(0.99)	14.81		
Social support^b								
Emotional support	EG	4.47	(0.45)	4.29	(0.61)	13.46	83.5	-0.03
	CG	4.73	(0.34)	4.58	(0.46)	13.54		
Practical support	PG	4.11	(0.55)	4.09	(0.66)	12.32	67.5	-0.87
	VG	4.25	(0.67)	4.37	(0.50)	14.88		
Social integration	PG	3.94	(0.82)	4.01	(0.71)	14.79	66.0	-0.93
	VG	4.43	(0.44)	4.32	(0.43)	12		
Self-concept^c								
... of general effectiveness	PG	47.50	(7.42)	48.58	(7.70)	14.04	41.5	-1.53
	VG	53.00	(4.71)	52.09	(5.01)	9.77		
... of general problem solving	EG	48.25	(7.23)	48.58	(7.46)	11.96	65.5	-0.03
	CG	51.45	(6.33)	52.82	(4.98)	12.05		
... of general self-esteem	PG	49.08	(7.37)	50.08	(7.45)	12.42	61.0	-0.31
	VG	52.91	(5.99)	53.64	(3.96)	11.55		
Locus of control^d								
Internal control	EG	69.62	(8.53)	70.77	(11.14)	12.54	71.0	-0.03
	CG	72.64	(11.71)	74.73	(9.94)	12.45		
External control	EG	48.00	(10.54)	46.85	(10.87)	11.62	60.0	-0.67
	CG	38.45	(10.29)	38.45	(8.44)	13.55		

EG = Experimental group, CG = Control group

^a n_{PG} = 14 n_{VG} = 13 ^b n_{PG} = 14 n_{VG} = 12 ^c n_{PG} = 12 n_{VG} = 11 ^d n_{PG} = 13 n_{VG} = 11

Conclusion

Data on socio-demographic features, criminal history, and risk level of tagged offenders as well as their psychological structure showed that most offenders who qualified for EM in the pilot project were at a low risk to re-offend, regardless of whether they were being monitored; they had a considerable level of psychological functioning and were quite well adapted. As such, the EM measure mainly covered socially integrated and reliable prisoners.

Suggested subjects did not represent the general prison inmates of the prison population in Baden-Wuerttemberg. The percentage of road traffic offenders was higher in the present sample compared to the ratio in the prison population (15% vs. 4% in the prison population of 2011). In the common prison population there are more violent and drug offenders (Baden-

Wuerttemberg: 23% and 17% in 2011) than in the pilot project sample (15% violent and 10% drug offenders). Instead, the present sample had a slightly higher percentage of fraud and equivalent property offenders (52%) compared with Baden-Wuerttemberg's prison population (40%).⁶

In addition, according to a German prison census, only 18% of the German prisoners were married as opposed to 38% in the present study. The pilot project's subjects provided higher school leaving certificates than the total of Baden-Wuerttemberg's prison population (6% without leaving certificate vs. 17%; secondary education (Hauptschule) 58% vs. 46%.

The study has certain limitations. The sample size is rather small; so is the external validity. The time frame for hypothesized changes in psychometric features that we tested in connection with an assumed effect of the intervention was rather short. However, the subjects showed a functional baseline level, which meant that there was little scope left for change. Over-functional baseline scores may be traced back to the fact that only participants with functional belief systems stayed in the CG and drop outs may have dysfunctional schemata.

Basic questions about the role of EM abound when it is used as an element of broader rehabilitation and reintegration efforts. Is EM a punitive measure with disciplinary character, or is it a necessary security measure to allow for accompanying resocialization efforts, or is EM perhaps a resocialization measure in its own right? In the case of the model project, EM was considered by both the organizers and the subjects as a "means to an end": that is, enabling a form of early release not otherwise legally possible. The supposed increase in security was, however, viewed by many of the subjects as unnecessary, particularly in the case of prison leave. The pilot project was unable to provide any evidence on the effect of EM on resocialization.

Literature

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⁶ Statistics Office of the Federal State of Baden-Wuerttemberg