

Renzema/Campbell cep 2005

This is the “short version” – a longer version with some commentary on methodology will be posted by 1 june 2005 at: <http://renzema.net>

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Latest Results from the Campbell Collaboration EM Systematic Review

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Abbreviated c.v.

- Prison psychologist 1968-69
- Doctoral student & evaluation researcher, 1969-1976
- Professor of Criminal Justice, 1977-2005
- Founded Journal of Offender Monitoring, 1987
- National Institute of Justice EM survey 1989
- Campbell Collaboration meta-analysis, 2001-

Robert Gable's hope

- “behavioral electronics” would facilitate the “understanding, maintenance and modification” of behavior (Psychology Today, 1969)
- Belts were 2-way communicators; delinquents reported their activities
- Key was delivering of positive reinforcement
- Observation: not the reward but that “someone cares” was key

**Robert Gable, 4/69, *Psychology Today*,
p. 65**

“The deterrent function of an electronic parole system is based on the assumption that we can suppress unwanted behavior most effectively by applying mild punishment for every transgression rather than administering infrequent, strong punishment.”

Today's agenda

- What EM can do
- The evidence on recidivism
- Thoughts on using EM productively

What EM can do

- Relatively uncontroverted; some hedging necessary
 - Punish humanely
 - Reduce pressure to build prisons
 - Punish more cheaply than institutions
 - Preserve offender employment (e.g. DWI)
 - Serve as symbol that an offense is taken seriously despite offender remaining in community (e.g. DWI, insider trading)
 - Provide early warning of recidivism, recidivism precursors
 - Punish with less damage to offender's family relationships and economic viability than if the offender is institutionalized

“First, do no harm”

(probable origin: Galen, Roman physician)

- Allegations against EM
 - Net widening
 - Stigmatization
 - Impaired self esteem leading to more crime
 - **Waste of resources depriving more useful interventions of support**

What is the Campbell Collaboration?

- Copycat of the Cochrane Collaboration in medicine
- Focus: evidence based practice in education, crime, social work
- 60+ projects in justice: range is various therapies to street lighting to hotspots policing

The Campbell process

- Protocol (specifies standards and process in advance)
 - Randomized
 - Matched
 - Historical comparison
 - Major issues: volunteer bias, homogeneity
- The search
 - Published & unpublished
 - Attempt at avoidance of “publication bias”

Campbell process -2

- Screening
- Independent coding
- Reconciliation of differences
- Review
- Publication

Analytic issues-1

Issue: use risk as moderator variable or divide into separate populations, i.e. “stages” of cancer or comparing AIDS with cancer

- High risk (arbitrary: expect > 30% arrest in 1 yr)
- Low risk (mostly DUI)
- Juveniles

Analytic issues-2

- When is a match “good enough”?
 - Many studies with equivalent risk TOTALS in E & C
 - Two groups of patients, both with 20% probability of mortality in 1 year.
 - Group A mainly heart patients
 - Group B mainly cancer patients
 - After treatment of group A with drug X, 90% alive at 1 year. Group B gets old treatment, 80% alive at 1 year.
 - Should you use drug X on group B?
 - We have excluded otherwise good studies because of offense, sex, age differences as well as volunteer bias and/or subjective (unquantified) elements in selection for EM.

LONGER TERM OUTCOMES OF ELECTRONIC MONITORING (moderate to high risk)

Study	Outcome	#on EM/ # in Comp. Group	Odds Ratio	Lower Limit	Upper Limit	Z (negative favors E)	p-Value
Bonta et al. (1999,2000a,2000b)	Conviction in < 12 mos.	54/17	.842	.267	2.657	-.293	.770
Sugg et al. (2001)	Conviction in < 24 mos.	261/261	.962	.653	1.417	-.198	.843
Finn & Muirhead-Steves (2002)	Imprisoned in < 36 mos.	128/158	1.001	.577	1.736	.004	.997
Combined		443/436	.965	.711	1.309	.231	.817

Note: limits are for 95% CI

A little evidence of suppression/rebound

EM OUTCOMES OVER 3 TIME PERIODS AMONG MALE PAROLEES WITH VIOLENCE HISTORY

Outcome	Proportions recommitted	Percent C recommitment >E	Odds Ratio	Lower Limit	Upper Limit	Z	p-Value
Recommitted within 150 days	E: 0/128 C: 4/158	2.53%	.134	.007	2.505	-1.346	.178
Recommitted within 1 year	E: 4/128 C: 15/125	6.93%	.308	.099	0.951	-2.047	.041
Recommitted within 3 years	E: 30/128 C: 37/158	-0.02%	1.001	.577	1.736	.004	.997

Source: Finn & Muirhead-Steves (2002)

Note: limits are for 95% CI; mean duration of EM was 87.4 days with a range of 6 to 153 days

Clues about impact of simultaneous treatment - 1

BONTA ET AL.'S RECIDIVISM AS A FUNCTION OF RISK LEVEL AND TREATMENT

	Treatment			
	Yes (IRS)*		No (Prison)	
Risk Level	Percentage	n	Percentage	n
Low	32.3	10	14.5	8
High	31.6	12	51.1	23

Source: Bonta, Wallace-Capretta, & Rooney (2000b), p. 324

*includes participants in "LDP", a CBT program of whom 54 were divertees with EM and 17 were probationers without EM

Clues about impact of simultaneous treatment - 2

RETURN TO PRISON WITH THREE YEARS FOR GEORGIA SEX OFFENDERS Treatment

OUTCOME	EM+other		Comparison (other without EM)	
	Percentage	n	Percentage	n
Not returned	94.3	33	70.4	31
Returned	5.7	2	29.6	13

SOURCE: Finn & Muirhead-Steves (2002), additional data supplied by Finn
p=.0088 (Fisher's exact test), C=.29

Low risk

- Candidates for Campbell
 - Duplicate coding, reconciliation not complete
 - Decision on “included” v. “exclusion list” remains
 - No perfect studies, even those using randomization
 - General counsel for researchers:
 - Use historic control groups with EM group not having choice OR
 - Use randomization in mature programs comparing EM with some other “add-on” intervention

Low risk – Erwin, 1989

- Population: addicted, mostly black, probationers, n=24
- **Interventions:** EM, ISP, drug testing
- **Problems:** despite randomization, dissimilar groups; more drug testing in EM than C; tentatively included in C2
- **Results:** 3/24 EM fled or returned to prison in 60 days; 6/24 C, *nsd*

Low risk – Baumer, 1990

- Population: probationers, >55% DUI, n=72
- **Interventions:** assorted, not uniform, compared EM with manual monitoring
- **Problems:** randomized, but C did not get all of planned interventions; high absence rates in both EM,C; tentatively included in C2
- **Results:** Program failure (20.5% EM, 17.3% C) for mean 5 months, *nsd*. Arrests in programs 4.6%, arrests in next six months 17.4%. Authors see suppression effects.

Low risk – BRÅ, 2004

- Population: early prison releasees, mainly DUI, n=260
- Interventions: EM+ISP+counseling, C presumably same-EM
- Problems: excellent demographic & offense match, but participants were all volunteers and screening did include a subjective element, no tentative decision yet on inclusion/exclusion from C2
- Results: multiple indicators, mean time to reoffense for EM 30 days>C, 5% of EM sentenced to prison, 8% of C, contrary to other studies, lowest risk group did best on EM (1% reoffended for EM, 8% for C), my marginal notes: “greatest impact on old drunks”, 11% of EM, 15% of C reconvicted in first year, *nsd*.

Low risk – Villetaz, 2005

- Population: Swiss probationers, ~63% DUI, n=60
- Interventions: EM included counseling & addiction treatment; C were supervised in context of community service employment
- Problems: successful randomization, uncertain about equality of follow-up periods, EM duration; tentatively include in C2 contingent on further details
- Results: 53 of 60 EM avoided arrest, 49 of 59 C avoided arrest, *nsd*

What do we know?

- EM was invented for rehabilitation, but that has not been its primary use.
- As punishments go, EM is relatively benign.
- EM is not a “program” and has not affected, probably can not affect, post-EM recidivism BY ITSELF.
- There may be a suppression effect, but research is lacking.
- There may be a synergistic effect with treatment, but research is lacking.

Policy & practice suggestions

- Evaluate all use
- The greatest harm from EM is likely to be deprivation of funds for proven effective programs.
- Best bets for lowering recidivism through EM
 - Drunk drivers with accompanying treatment
 - As part of “containment approach” for pedophiles
 - As a means of increasing participation in other kinds of interventions for moderate to high risk offenders

Afterthoughts on theory-1

- Behavior shaping rarely (ever?) tried
 - Analyze individual contingencies
 - Be very flexible on schedules, routes, rewards, sanctions
 - Training of supervisors required
 - Needs to have positive and cognitive elements
- Social support for criminal behavior ignored
 - Brer Rabbit in Uncle Remus stories: hang me, boil me, skin me, but don't throw me in the briar patch
 - EM routinely returns Brer Rabbit to the briar patch

Afterthoughts on theory-2

- Routine activity theory provides EM-relevant factors:
 - a suitable target is available (person, place, object)
 - there is the lack of a suitable guardian to prevent the crime from happening
 - a likely and motivated offender is present(source: <http://www.crimereduction.gov.uk/learningzone/rat.htm>)
- EM, especially GPS, provides way to manipulate target availability
- EM should be added to Cohen & Felson's lists of "suitable guardians"
- Integration of GPS with crime-mapping increases suitability of guardianship
- Endurance of EM effects post-EM is NOT suggested by this theory

Research vacuums

- Who profits, who doesn't (risk analysis)
- Rigid v. behavior shaping schedules
- Maximizing suppression effects (who, how long)
- Treatment combinations, e.g. therapy, interlocks, drugs, residential alcohol testing
- Does treatment compliance really increase?
- Minimal v. draconian violation sanctions