Appendix 1

Determining a cut-off score for the criminality variable subsequently used in the matching process

Proposed criminality index has three components: (a) age at first conviction, (b) total grave offences, and (c) total non-grave offences. Initial checks indicate very little sensitivity to changes in the threshold of (c), and thus the tables below are all calculated with total non-grave offences >15 scoring as 1.

Information in the OGRS table supports the use of a cut-off at a score of 1. This threshold was valid also for PCL-R and HCR20h (method R)

OGRS

Thresholds	ANOVA		score 0		score 1		score 2		score 3		p-value for pairwise post hoc tests if <.05					
	F	p	mean	n	mean	n	mean	n	mean	n	0-1	1-2	2-3	0-2	0-3	1-3
Method B: age first conviction <15, total grave offences >4	3.5	.018	45.3	27	60.4	49	64.9	33	66.4	23	.020			.006	.006	
Method D: age first conviction <16, total grave offences >4	4.4	.006	44.3	26	57.9	39	65.1	38	67.7	29	.045			.003	.001	
Method F: age first conviction <17, total grave offences >4	8.0	<.001	35.5	20	57.4	36	66.3	41	67.2	35	.003			.000	.000	
Method H: age first conviction <15, total grave offences >5	3.2	.027	48.0	36	61.6	42	65.9	33	64.6	21	.028			.006	.026	
Method J: age first conviction <16, total grave offences >5	5.1	.002	43.7	32	63.1	37	64.6	37	66.3	26	.003			.001	.001	
Method L: age first conviction <17, total grave offences >5	8.3	<.001	37.1	25	61.1	36	66.9	39	66.0	32	.000			.000	.000	
Method N: age first conviction <15, total grave offences >6	3.6	.016	48.2	41	63.8	43	66.0	31	63.5	17	.008			.006	.049	
Method P: age first conviction <16, total grave offences >6	5.9	.001	43.8	36	65.6	39	64.7	36	65.8	21	.000			.001	.003	
Method R: age first conviction <17, total grave offences >6	10.9	<.001	35.1	27	65.7	39	65.6	42	66.0	24	.000			.000	.000	

PCL-R

Thresholds	ANOVA		score 0		score 1		score 2		score 3		p-value for pairwise post hoc tests if <.05					
	F	p	mean	n	mean	n	mean	n	mean	n	0-1	1-2	2-3	0-2	0-3	1-3
Method B: age first conviction <15, total grave offences >4	10.1	<.001	16.5	27	20.5	49	23.3	33	25.8	23	.012			.000	.000	.001
Method D: age first conviction <16, total grave offences >4	9.7	<.001	16.2	26	20.5	39	22.6	38	25.2	29	.010			.000	.000	.003
Method F: age first conviction <17, total grave offences >4	15.7	<.001	13.5	20	21.0	36	22.2	41	25.0	35	.000		.044	.000	.000	.007
Method H: age first conviction <15, total grave offences >5	9.1	<.001	17.9	36	20.0	42	23.6	33	26.0	21		.019		.000	.000	.001
Method J: age first conviction <16, total grave offences >5	8.9	<.001	17.3	32	20.1	37	23.0	37	25.5	26				.000	.000	.001
Method L: age first conviction <17, total grave offences >5	13.0	<.001	15.1	25	20.8	36	22.4	39	25.2	32	.001			.000	.000	.004
Method N: age first conviction <15, total grave offences >6	7.5	<.001	17.8	41	21.1	43	24.0	31	25.1	17	.024			.000	.000	.037
Method P: age first conviction <16, total grave offences >6	7.5	<.001	17.3	36	21.2	39	23.3	36	24.8	21	.013			.000	.000	.043
Method R: age first conviction <17, total grave offences >6	13.4	<.001	14.8	27	21.8	39	23.2	42	24.5	24	.000			.000	.000	

HCR-20-h

Thresholds	ANOVA		score 0		score 1		score 2		score 3		p-value for pairwise post hoc tests if <.05					
	F	p	mean	n	mean	n	mean		mean	n	0-1	1-2	2-3	0-2	0-3	1-3
Method B: age first conviction <15, total grave offences >4	13.4	<.001	11.4	25	14.0	45	16.1	32	16.5	23	.002	.006		.000	.000	.003
Method D: age first conviction <16, total grave offences >4	14.0	<.001	11.4	25	13.6	36	15.9	35	16.3	29	.009	.003		.000	.000	.001
Method F: age first conviction <17, total grave offences >4	16.6	<.001	10.4	19	13.9	34	15.2	37	16.5	45	.000			.000	.000	.001
Method H: age first conviction <15, total grave offences >5	13.5	<.001	11.8	33	14.2	39	16.2	32	16.4	21	.002	.011		.000	.000	.013
Method J: age first conviction <16, total grave offences >5	14.5	<.001	11.6	31	14.1	33	15.9	35	16.4	26	.002	.022		.000	.000	.007
Method L: age first conviction <17, total grave offences >5	17.7	<.001	10.7	24	14.4	33	15.2	36	16.6	32	.000			.000	.000	.005
Method N: age first conviction <15, total grave offences >6	11.7	<.001	12.0	36	14.6	42	16.3	30	16.2	17	.001	.034		.000	.000	
Method P: age first conviction <16, total grave offences >6	12.5	<.001	11.8	34	14.5	35	15.9	35	16.3	21	.001			.000	.000	
Method R: age first conviction <17, total grave offences >6	16.4	<.001	10.8	26	14.6	34	15.6	41	16.3	24	.000			.000	.000	.042

method	age first <	Num grave >	Num non-grave >	
A	15	4	14	not pursued, since changing threshold for number of non-grave has little effect
B	15	4	16	
C	16	4	14	not pursued, since changing threshold for number of non-grave has little effect
D	16	4	16	
E	17	4	14	not pursued, since changing threshold for number of non-grave has little effect
F	17	4	16	
G	15	5	14	not pursued, since changing threshold for number of non-grave has little effect
H	15	5	16	
I	16	5	14	not pursued, since changing threshold for number of non-grave has little effect
J	16	5	16	
K	17	5	14	not pursued, since changing threshold for number of non-grave has little effect
L	17	5	16	
M	15	6	14	not pursued, since changing threshold for number of non-grave has little effect
N	15	6	16	
O	16	6	14	not pursued, since changing threshold for number of non-grave has little effect
P	16	6	16	
Q	17	6	14	not pursued, since changing threshold for number of non-grave has little effect
R	17	6	16	