

Appendix to Sundell et al. Stability and change in patterns of adolescent antisocial behavior

**Supplementary Table 1**

*Frequencies (and percentages) of included and excluded adolescents reporting tobacco use, alcohol use, delinquency, truancy and bullying in grades 7 to 9 and no school grade, illicit drug use and depressive symptoms in grade 9*

	Grade 7			Grade 8			Grade 9		
	Included	Excluded	$\chi^2$	Included	Excluded	$\chi^2$	Included	Excluded	$\chi^2$
<i>Tobacco use</i>									
No use	593 (76.2)	225 (57.8)	54.56, $p < .001$	527 (67.7)	164 (49.1)	59.32, $p < .001$	411 (52.8)	148 (41.0)	36.79, $p < .001$
Tried	154 (19.8)	114 (29.3)		196 (25.2)	98 (29.3)		233 (29.9)	105 (29.1)	
Occasional use	22 (2.8)	27 (6.9)		29 (3.7)	30 (9.0)		79 (10.2)	42 (11.6)	
Daily use	9 (1.2)	23 (5.9)		26 (3.3)	42 (12.6)		55 (7.1)	66 (18.3)	
<i>Alcohol use</i>									
1 Never	687 (88.3)	307 (73.1)	51.78, $p < .001$	596 (76.6)	203 (53.7)	74.48, $p < .001$	417 (53.6)	169 (39.7)	31.67, $p < .001$
2	40 (5.1)	32 (7.6)		67 (8.6)	46 (12.2)		78 (10.0)	38 (8.9)	
3	35 (4.5)	50 (11.9)		60 (7.7)	48 (12.7)		102 (13.1)	65 (15.3)	
4	9 (1.2)	21 (5.0)		25 (3.2)	32 (8.5)		71 (9.1)	47 (11.0)	
5 More than 10 times	7 (0.9)	10 (2.4)		30 (3.9)	49 (13.0)		110 (14.1)	107 (25.1)	
<i>Delinquency</i>									
No crimes	418 (53.7)	141 (38.5)	37.41, $p < .001$	386 (49.6)	132 (36.3)	49.68, $p < .001$	324 (41.6)	126 (29.6)	36.79, $p < .001$
One less serious crime	139 (17.9)	58 (15.8)		142 (18.3)	48 (13.2)		151 (19.4)	70 (16.5)	
Several less serious crimes	196 (25.2)	138 (37.7)		237 (30.5)	156 (42.9)		277 (35.6)	188 (44.2)	
One or more serious crimes	25 (3.2)	29 (7.9)		13 (1.7)	28 (7.7)		26 (3.3)	41 (9.6)	
<i>Truancy</i>									
No	714 (91.8)	345 (82.7)	23.99, $p < .001$	703 (90.4)	286 (77.7)	34.59, $p < .001$	634 (81.5)	304 (71.7)	15.99, $p < .001$
Yes, once	29 (3.7)	27 (6.5)		35 (4.5)	35 (9.5)		50 (6.4)	45 (10.6)	
Yes, 2-3 times	21 (2.7)	22 (5.3)		25 (3.2)	26 (7.1)		57 (7.3)	42 (9.9)	
Yes, more than 3 times	14 (1.8)	23 (5.5)		15 (1.9)	21 (5.7)		37 (4.8)	33 (7.8)	
<i>Bullying</i>									
Not bullied/harassed	678 (87.1)	330 (77.8)	18.21, $p < .001$	689 (88.6)	303 (81.7)	13.24, $p < .001$	696 (89.5)	358 (84.6)	7.42, $p < .05$
Very occasionally	77 (9.9)	68 (16.0)		74 (9.5)	49 (13.2)		66 (8.5)	47 (11.1)	
2-3 times a month to several times a week	23 (3.0)	26 (6.1)		15 (1.9)	19 (5.1)		16 (2.1)	18 (4.3)	
No school grade ( $\geq 1$ subjects) <sup>a</sup>							35 (4.6)	97 (10.2)	18.67, $p < .001$
Illicit drug use							38 (4.9)	50 (11.7)	18.97, $p < .001$
Depressive symptoms <sup>b</sup>							282 (36.8)	178 (42.7)	3.98, $p < .05$

<sup>a</sup> Information available for 764 pupils

<sup>b</sup> Information available for 767 pupils

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**Supplementary Table 2**

*Frequencies (and percentages) of students in intervention and control schools reporting tobacco use, alcohol use, delinquency, truancy and bullying in grades 7 to 9 and no school grade, illicit drug use and depressive symptoms in grade 9*

	Grade 7		$\chi^2$	Grade 8		$\chi^2$	Grade 9		$\chi^2$
	Control schools	Intervention schools		Control schools	Intervention schools		Control schools	Intervention schools	
<i>Tobacco use</i>									
No use	227 (75.7)	366 (76.6)	1.42, ns	198 (66.0)	329 (68.8)	3.21, ns	146 (48.7)	265 (55.4)	4.57, ns
Tried	58 (19.3)	96 (20.1)		82 (27.3)	114 (23.8)		96 (32.0)	137 (28.7)	
Occasional use	11 (3.7)	11 (2.3)		8 (2.7)	21 (4.4)		37 (12.3)	42 (8.8)	
Daily use	4 (1.3)	5 (1.0)		12 (4.0)	14 (2.9)		21 (7.0)	34 (7.1)	
<i>Alcohol use</i>									
1 Never	262 (87.3)	425 (88.9)	2.87, ns	223 (74.3)	373 (78.0)	2.59, ns	165 (55.0)	252 (52.7)	1.72, ns
2	14 (4.7)	26 (5.4)		27 (9.0)	40 (8.4)		30 (10.0)	48 (10.0)	
3	18 (6.0)	17 (3.6)		25 (8.3)	35 (7.3)		34 (11.3)	68 (14.2)	
4	3 (1.0)	6 (1.3)		13 (4.3)	12 (2.5)		26 (8.7)	45 (9.4)	
5 More than 10 times	3 (1.0)	4 (0.8)		12 (4.0)	18 (3.8)		45 (15.0)	65 (13.6)	
<i>Delinquency</i>									
No crimes	159 (53.0)	259 (54.2)	5.11, ns	145 (48.3)	241 (50.4)	1.49, ns	131 (43.7)	193 (40.4)	1.76, ns
One less serious crime	51 (17.0)	88 (18.4)		55 (18.3)	87 (18.2)		55 (18.3)	96 (20.1)	
Several less serious crimes	75 (25.0)	121 (25.3)		93 (31.0)	144 (30.1)		102 (34.0)	175 (36.6)	
One or more serious crimes	15 (5.0)	10 (2.1)		7 (2.3)	6 (1.3)		12 (4.0)	14 (2.9)	
<i>Truancy</i>									
No	268 (89.3)	446 (93.3)	4.63, ns	261 (87.0)	442 (92.5)	6.91, ns	237 (79.0)	397 (83.1)	2.66, ns
Yes, once	16 (5.3)	13 (2.7)		17 (5.7)	18 (3.8)		22 (7.3)	28 (5.9)	
Yes, 2-3 times	9 (3.0)	12 (2.5)		13 (4.3)	12 (2.5)		23 (7.7)	34 (7.1)	
Yes, more than 3 times	7 (2.3)	7 (1.5)		9 (3.0)	6 (1.3)		18 (6.0)	19 (4.0)	
<i>Bullying</i>									
Not bullied/harassed	262 (87.3)	416 (87.0)	4.34, ns	260 (86.7)	429 (89.7)	3.46, ns	259 (86.3)	437 (91.4)	8.01, $p < .05$
Very occasionally	25 (8.3)	52 (10.9)		31 (10.3)	43 (9.0)		30 (10.0)	36 (7.5)	
2-3 times a month to several times a week	13 (4.3)	10 (2.1)		9 (3.0)	6 (1.3)		11 (3.7)	5 (1.0)	
No school grade ( $\geq 1$ subjects) <sup>a</sup>							13 (4.4)	22 (4.7)	0.03, ns
Illicit drug use							23 (7.7)	15 (3.1)	8.14, $p < .01$
Depressive symptoms <sup>b</sup>							116 (39.2)	166 (35.2)	1.22, ns

<sup>a</sup> Information available for 764 pupils

<sup>b</sup> Information available for 767 pupils

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**Supplementary Table 3**

*Frequencies (and percentages) of girls and boys reporting tobacco use, alcohol use, delinquency, truancy and bullying in grades 7 to 9 and no school grade, illicit drug use and depressive symptoms in grade 9*

	Grade 7		$\chi^2$	Grade 8		$\chi^2$	Grade 9		$\chi^2$
	Girls	Boys		Girls	Boys		Girls	Boys	
<i>Tobacco use</i>									
No use	286 (76.5)	307 (76.0)	4.72, ns	257 (68.7)	270 (66.8)	5.06, ns	191 (51.1)	220 (54.5)	15.87, $p<.001$
Tried	68 (18.2)	86 (21.3)		86 (23.0)	110 (27.2)		108 (28.9)	125 (30.9)	
Occasional use	15 (4.0)	7 (1.7)		19 (5.1)	10 (2.5)		54 (14.4)	25 (6.2)	
Daily use	5 (1.3)	4 (1.0)		12 (3.2)	14 (3.5)		21 (5.6)	34 (8.4)	
<i>Alcohol use</i>									
1 Never	311 (83.2)	376 (93.1)	19.09, $p<.001$	267 (71.4)	329 (81.4)	19.49, $p<.001$	182 (48.7)	235 (58.2)	19.93, $p<.001$
2	29 (7.8)	11 (2.7)		30 (8.0)	37 (9.2)		36 (9.6)	42 (10.4)	
3	24 (6.4)	11 (2.7)		41 (11.0)	19 (4.7)		43 (11.5)	59 (14.6)	
4	6 (1.6)	3 (0.7)		17 (4.5)	8 (2.0)		43 (11.5)	28 (6.9)	
5 More than 10 times	4 (1.1)	3 (0.7)		19 (5.1)	11 (2.7)		70 (18.7)	40 (9.9)	
<i>Delinquency</i>									
No crimes	190 (50.8)	228 (56.4)	13.66, $p<.01$	180 (48.1)	206 (51.0)	7.09, ns	155 (41.4)	169 (41.8)	11.94, $p<.01$
One less serious crime	82 (21.9)	57 (14.1)		74 (19.8)	68 (16.8)		76 (20.3)	75 (18.6)	
Several less serious crimes	96 (25.7)	100 (24.8)		118 (31.6)	119 (29.5)		139 (37.2)	138 (34.2)	
One or more serious crimes	6 (1.6)	19 (4.7)		2 (0.5)	11 (2.7)		4 (1.1)	22 (5.4)	
<i>Truancy</i>									
No	339 (90.6)	375 (92.8)	3.07, ns	324 (86.6)	379 (93.8)	11.83, $p<.01$	296 (79.1)	338 (83.7)	3.10, ns
Yes, once	18 (4.8)	11 (2.7)		24 (6.4)	11 (2.7)		29 (7.8)	21 (5.2)	
Yes, 2-3 times	9 (2.4)	12 (3.0)		17 (4.5)	8 (2.0)		30 (8.0)	27 (6.7)	
Yes, more than 3 times	8 (2.4)	6 (1.5)		9 (2.4)	6 (1.5)		19 (5.1)	18 (4.5)	
<i>Bullying</i>									
Not bullied/harassed	336 (89.8)	342 (84.7)	4.68, ns	348 (93.0)	341 (84.4)	18.52, $p<.001$	351 (93.9)	345 (85.4)	14.80, $p<.001$
Very occasionally	29 (7.8)	48 (11.9)		18 (4.8)	56 (13.9)		18 (4.8)	48 (11.9)	
2-3 times a month to several times a week	9 (2.4)	14 (3.5)		8 (2.1)	7 (1.7)		5 (1.3)	11 (2.7)	
No school grade ( $\geq 1$ subjects)							13 (3.5)	22 (5.5)	1.74, ns
Illicit drug use							22 (5.9)	16 (4.0)	1.54, ns
Depressive symptoms <sup>b</sup>							187 (50.7)	95 (23.9)	59.19, $p<.001$

<sup>a</sup> Information available for 764 pupils

<sup>b</sup> Information available for 767 pupils

**Supplementary Table 4.**

Number (and percentage) of individuals in different clusters in grade 7 attending intervention and control schools.

Cluster	Control schools	Intervention schools	<i>n</i>
Well-adjusted	119 (36.0)	212 (64.0)	331
Delinquency	77 (41.2)	110 (58.8)	187
Tobacco use & Delinquency	37 (37.8)	61 (62.2)	98
Tobacco use, Alcohol use & Delinquency	14 (42.4)	19 (57.6)	33
Delinquency & Truancy	12 (57.1)	9 (42.9)	21
Delinquency & Bullying	25 (35.7)	45 (64.3)	70
<i>n</i>	284 (38.4)	456 (61.6)	740

 $\chi^2=5.02$ , ns**Supplementary Table 5.**

Number (and percentage) of individuals in different clusters in grade 8 attending intervention and control schools.

Cluster	Control schools	Intervention schools	<i>n</i>
Well-adjusted	129 (38.1)	210 (61.9)	339
Delinquency	85 (35.9)	152 (64.1)	237
Tobacco use, Alcohol use & Delinquency	24 (36.9)	41 (63.1)	65
Delinquency & Truancy	17 (47.2)	19 (52.8)	36
Delinquency & Bullying	30 (42.9)	40 (57.1)	70
Multi-problems	8 (53.3)	7 (46.7)	15
<i>n</i>	293 (38.5)	469 (61.5)	762

 $\chi^2=3.91$ , ns**Supplementary Table 6.**

Number (and percentage) of individuals in different clusters in grade 9 attending intervention and control schools.

Cluster	Control schools	Intervention schools	<i>n</i>
Well-adjusted	113 (41.4)	160 (58.6)	273
Delinquency	63 (30.6)	143 (69.4)	206
Tobacco use, Alcohol use & Delinquency	55 (37.4)	92 (62.6)	147
Tobacco use, Alcohol use, Delinquency & Truancy	28 (40.0)	42 (60.0)	70
Delinquency & Bullying	19 (47.5)	21 (52.5)	40
Multi-problems	17 (48.6)	18 (51.4)	35
<i>n</i>	295 (38.3)	476 (61.7)	771

 $\chi^2=9.43$ , ns