Center for Advanced Studies in Child Welfare



SUPPLEMENT ONE TO BRIEF No. 26

Exploration of a screening tool for predicting increased risk of young people in Minneapolis becoming victims of violent crime

Minneapolis Public Schools Disciplinary Incident Reporting System analysis (n=33,770.)

Predictive experience	Victims of violence, yes to predictive experience a	Nonvictims of violence, yes to predictive experience b	Victims of violence, no to predictive experience c	Nonvictims of violence, no to predictive experience d	Sensitivity	Specificity	Positive pre- dictive value a/(a+b)	Negative predictive value d/(c+d)
Single instance of			-	·	(
Disruptive/Disorderly	249	4,219	1,265	28,037	16%	87%	6%	96%
Alcohol or drugs	535	7,560	979	24,696	35%	77%	7%	96%
Assault	524	7,660	990	24,596	35%	76%	6%	96%
Other violent	501	7,246	1.013	25,010	33%	78%	6%	96%
Bullying	533	7,713	981	24,543	35%	76%	6%	96%
Fighting	377	6,064	1,137	26,192	25%	81%	6%	96%
Other Infraction	463	6,568	1,051	25,688	31%	80%	7%	96%
Threatening	476	7,089	1,038	25,167	31%	78%	6%	96%
Verbal harassment	445	6,819	1,069	25,437	29%	79%	6%	96%
Only one type of infraction, single instance	0	5	1,514	32,251	0%	100%	0%	96%
Two types of infraction combined, single instance each	5	34	1,509	32,222	0%	100%	13%	96%
Three types of infraction combined, single instance each	7	105	1,509	32,151	0%	100%	6%	96%
Four types of infraction combined, single instance each	20	243	1,494	32,013	1%	99%	8%	96%
Five types of infraction combined, single instance each	45	469	1,494	31,787	3%	99%	9%	96%
	78	1,049	1,409	31,767	5%	97%	7%	96%
Six types of infraction combined, single instance each		•		· · · · · · · · · · · · · · · · · · ·	10%			96%
Seven types of infraction combined, single instance each	157 29	2,014	1,357	30,242	2%	94%	7% 9%	96%
Eight types of infraction combined, single instance each	29	3.988	1,485 1.281	31,965 28,268	15%	88%	6%	96%
Nine types of infraction combined, single instance each	233	3,900	1,201	20,200	15%	00%	070	90%
Two or more instances of								
Disruptive/Disorderly	325	3,979	1,189	28,277	21%	88%	8%	96%
Alcohol or drugs	39	638	1,475	31,618	3%	98%	6%	96%
Assault	50	538	1,464	31,718	3%	98%	9%	96%
Other violent	73	952	1,441	31,304	5%	97%	7%	96%
Bullying	41	485	1,473	31,771	3%	98%	8%	96%
Fighting	197	2,134	1,317	30,122	13%	93%	8%	96%
Other Infraction	111	1,630	1,403	30,626	7%	95%	6%	96%
Threatening	98	1,109	1,416	31,147	6%	97%	8%	96%
Verbal harassment	129	1,379	1,385	30,877	9%	96%	9%	96%
Only one type of infraction, more than one instance	0	1	1,514	32,255	0%	100%	0%	96%
Two types of infraction, more than one instance each	152	1,942	1,362	30,314	10%	94%	7%	96%
Three types of infraction, more than one instance each	86	1,101	1,428	31,155	6%	97%	7%	96%
Four types of infraction, more than one instance each	47	570	1,467	31,686	3%	98%	8%	96%
Five types of infraction, more than one instance each	34	326	1,480	31,930	2%	99%	9%	96%
Six types of infraction, more than one instance each	12	171	1,502	32,085	1%	99%	7%	96%
Seven types of infraction, more than one instance each	9	75	1,505	32,181	1%	100%	11%	96%
Eight types of infraction, more than one instance each	1	21	1,513	32,235	0%	100%	5%	96%
Nine types of infraction, more than one instance each	0	3	1,514	32,253	0%	100%	0%	96%

The Center for Advanced Studies in Child Welfare (CASCW) is a resource for child welfare professionals, students, faculty, policy-makers, and other key stakeholders concerned about child welfare in Minnesota.

Minn-LInK is a unique collaborative, university-based research environment with the express purpose of studying child and family well-being in Minnesota using state administrative data from multiple agencies. For more information, contact Kristine Piescher at 612-625-8169 or email at kpiesche@umn.edu

Center for Advanced Studies in Child Welfare



SUPPLEMENT TWO TO BRIEF No. 26

Exploration of a screening tool for predicting increased risk of young people in Minneapolis becoming victims of violent crime

Combined systems analysis (n=33,770)

	Victims of violence, yes to predictive experience	Nonvictims of violence, yes to predictive experience	Victims of violence, no to predictive experience	Nonvictims of violence, no to predictive experience	Sensitivity	Specificity	Positive predictive value	Negative predictive value
Predictive experience	а	b	C	d	a/(a+c)	d/(b+d)	a/(a+b)	d/(c+d)
Free and reduced lunch	1,315	22,092	199	10,164	87%	32%	6%	98%
Any disciplinary citation	574	8,198	940	24,058	38%	75%	7%	96%
Out of home placement	290	1,694	1,224	30,562	19%	95%	15%	96%
Child Protection Services	525	2,887	989	29,369	35%	91%	15%	97%
Low achievement in math	101	4,353	1,413	27,903	7%	87%	2%	95%
Low achievement in reading	206	5,878	1,308	26,378	14%	82%	3%	95%
Any special education services	487	5,879	1,027	26,377	32%	82%	8%	96%
Limited English proficiency	29	2,700	1,485	29,556	2%	92%	1%	95%
Dropped out of school	152	2,037	1,362	30,219	10%	94%	7%	96%
Any homeless identification	217	2,647	1,297	29,609	14%	92%	8%	96%
Low attendance at school	609	9,001	905	23,255	40%	72%	6%	96%
Transfer schools, two or more times	258	4,077	1,256	28,179	17%	87%	6%	96%
Transfer schools, ever	754	12,657	760	19,599	50%	61%	6%	96%
Pre-adolescent appearance in MPD files	618	1,904	896	30,352	41%	94%	25%	97%
One risk factor present	55	5,072	1,459	27,184	4%	84%	1%	95%
Two risk factors present	108	7,260	1,406	24,996	7%	77%	1%	95%
Three risk factors present	217	6,150	1,297	26,106	14%	81%	3%	95%
Four risk factors present	299	4,803	1,215	27,453	20%	85%	6%	96%
Five risk factors present	271	3,050	1,243	29,206	18%	91%	8%	96%
Six risk factors present	236	1,640	1,278	30,616	16%	95%	13%	96%
Seven risk factors present	155	833	1,359	31,423	10%	97%	16%	96%
Eight risk factors present	105	315	1,409	31,941	7%	99%	25%	96%
Nine risk factors present	34	115	1,480	32,141	2%	100%	23%	96%
Ten risk factors present	12	31	1,502	32,225	1%	100%	28%	96%
Eleven risk factors present	7	3	1,507	32,253	0%	100%	70%	96%
Twelve risk factors present	2	0	1,512	32,256	0%	100%	100%	96%

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