Appendix A. Explanations of Measures

Table A1. Items Included in the Independent Variables

Variable	Items
Bullying Victimization	(1) Being severely teased or bantered during the last one year
	(2) Being threatened during the last one year
	(3) Being collectively bullied during the last one year
Risk Factor Index Variables	
Parental Attachment	(1) My parents and I try to spend much time together
(Cronbach's α: .775-.814)	(2) My parents always treat me with love and affection
	(3) My parents and I understand each other well
Parental Monitoring	(1) When I go out, my parents usually know where I am
(Cronbach's α: .850-.894)	(2) When I go out, my parents usually know whom I am with
	(3) When I go out, my parents usually know what I am doing
	(4) When I go out, my parents usually know when I return
Teacher Attachment	(1) I can talk about all my troubles and worries to my teachers without reservation
(Cronbach's α: .704-.799)	(2) Teachers treat me with love and affection
	(3) I hope to become a person just like my teacher
Negative Emotionality/Low Constraints	(1) I jump into exciting things even if I have to take an examination tomorrow
(Cronbach's α: .651-.690)	(2) I abandon a task once it becomes hard and laborious to do
	(3) I am apt to enjoy risky activities
	(4) I enjoy teasing and harassing other people
	(5) I lose my temper whenever I get angry
	(5) I don't do my homework habitually
Delinquent Peer Associations	(1) Among your close friends, how many drank during the last one year?
(Cronbach's α: .687-.897)	(2) Among your close friends, how many smoked during the last one year?
	(3) Among your close friends, how many severely beat others during the last one year?
	(4) Among your close friends, how many robbed during the last one year?
	(5) Among your close friends, how many stole during the last one year?
Low Self-Esteem	(1) Sometimes I think that I am a worthless person
(Cronbach's α: .752-.791)	(2) Sometimes I think that I am a bad person
	(3) I generally feel that I am a failure in life
Problem-Solving Ability	(1) I have confidence in my own decision
(Cronbach's α: .825-.870)	(2) I believe that I can deal with my problems by myself

Control Variables

Criminal Victimization	(1) Being severely beaten during the last one year
	(2) Being sexually assaulted/harassed during the last one year
	(3) Being robbed/extorted for money during the last one year
School-Related Strain	(1) I get stressed by poor school grades
(Cronbach's α: .749 -.796)	(2) I get stressed by home assignments or examinations
	(3) I get stressed because it is boring to study
Parental Strain	(1) I get stressed by disputes with my parents
(Cronbach's α: .862-.893)	(2) I get stressed by my parents' meddling into my life
	(3) I get stressed by communication difficulty with my parents
Parental Abuse	(1) I am often verbally abused by parents
(Cronbach's α: .756-.840)	(2) I am often severely beaten by parents
Self-Strain	(1) I get stressed by weight issue
(Cronbach's α: .720-.767)	(2) I get stressed by height issue
	(3) I get stressed by dissatisfaction over my appearance
Finance Strain	(1) I get stressed by inability to wear stylish clothes
(Cronbach's α: .823-.862)	(2) I get stressed by lack of pocket money
	(3) I get stressed by inability to get goods that I want
Anger	(1) I fight more frequently than others do
(Cronbach's α: .727-.788)	(2) I am often seized by an impulse to throw an object whenever I get angry
	(3) Sometimes I can't suppress an impulse to hit other people
	(4) I consider myself as an explosive soon to be blown off
	(3) I am taking full responsibility of my own life

Table A2. Descriptive Statistics by Wave

Variables	Wave 1		Wave 2		Wave 3		Wave 4		Wave 5	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Delinquency										
Overall Delinquency	1.111	1.618	.731	1.359	.707	1.177	.778	1.132	.886	1.123
Substance Use (smoking and drinking)	.430	.667	.386	.637	.473	.661	.578	.693	.675	.699
Analogous Behaviors	.092	.350	.100	.374	.091	.356	.097	.368	.133	.412
Violence and Theft	.263	.644	.129	.479	.070	.343	.053	.275	.038	.237
Bullying Perpetration	.326	.635	.116	.422	.073	.331	.050	.264	.039	.247
Bullying Victimization										
Bullying Victimization (dummy)	.142	.349	.070	.255	.032	.177	.024	.152	.016	.127
Bullying Duration	.000	.000	.031	.173	.016	.162	.013	.164	.005	.109
Time-Varying Controls										
Criminal Victimization (dummy)	.127	.333	.063	.243	.021	.142	.015	.121	.007	.081
School-Related Strain	.000	.812	.005	.834	.009	.837	.014	.833	.013	.835
Parents Strain	-.003	.887	-.003	.902	-.004	.882	-.005	.890	.001	.890
Parental Abuse	-.012	.888	-.012	.920	-.013	.896	-.005	.924	-.004	.921
Self-Strain	.002	.806	.001	.821	-.001	.800	-.002	.806	.003	.811
Finance Strain	.002	.853	-.004	.875	-.002	.880	-.005	.883	.002	.878
Anger	-.006	.733	-.003	.761	-.005	.753	-.008	.768	-.004	.780
Risk Factor Index	1.980	1.578	1.979	1.470	1.968	1.482	1.994	1.529	1.972	1.520
Age	13.785	.417	14.785	.417	15.788	.413	16.784	.415	17.781	.417
Time-Stable Control										
Male	.502	.500	.498	.500	.501	.500	.501	.500	.509	.500
n(individuals)	3,312		3,084		3,015		3,023		2,863	

Note: Negative means are a result of standardizing indices.
Abbreviations: SD = standard deviation