

Things That You Have Done
Grade 6/Year 7
FAST Track Project Technical Report
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Citation

Instrument

Conduct Problems Prevention Research Group (1995).

Elliot, D.S., Ageton, S.S., & Huizinga, D. (1985). Explaining delinquency and drug use. Beverly Hills: Siegel.

Elliott, D.S., Huizinga, D., & Menard, S. (1989). Multiple problem youth: Delinquency, substance use, and mental health. New York: Springer-Verlag.

Report

Anne Maumary-Gremaud (2000) Things That You Have Done (Technical Report) [Online]. Available: <http://www.fasttrackproject.org/>

This report is a shorter version of Jones, D. (1997). Things That You Have Done (Technical Report) [Online]. Available: <http://www.fasttrackproject.org/>

Data Sources

Raw: c7m

Scored: tyd7

I. Scale Description

1) Source of scale: Most of the items comprising "Things That You Have Done" were derived from the National Youth Survey. Additional items were written specifically for FAST Track. The following sources provide information on the conceptualization and classification of delinquent behavior based on the NYS items.

Elliot, D.S., Ageton, S.S., & Huizinga, D. (1985). Explaining delinquency and drug use. Beverly Hills: Siegel.

Elliott, D.S., Huizinga, D., & Menard, S. (1989). Multiple problem youth: Delinquency, substance use, and mental health. New York : Springer-Verlag.

2) Scale Description: The "Things That You Have Done" was first administered in Year 5. The interviewer reads the child a list of 32 anti-social behaviors. After each item, the child is asked if he/she has committed that behavior in the past year and if so, how many times. The questions mostly address areas such as physical aggression, stealing, vandalism and substance use. The 32 variables in the elementary

dataset were coded as frequencies of how often the child reported committing each act in the past year (if they reported not committing the act, the variable was coded as '0').

II. Report Sample

Primary analyses were conducted on Cohort 1 year 7 normative (n=387) and high risk control samples (n=155, overlap is 79). Sixty-seven students were missing the entire measure (14% of the sample), including 59 from the normative sample (15% of the sample) and 17 of the control sample (11% of the sample). The non-respondents included 12 students from the Durham site, 14 from Nashville, 15 from Pennsylvania and 26 from the Seattle site

III. Scaling

Scale Derivation: sorting the 32 items into eight non-exclusive categories created subscales for the "Things That You Have Done". This process was completely conceptual in nature (based on the work of Elliot, 1989. No empirical assessments were used to assist in deriving subscales for the initial analyses of this instrument. The eight categories are as follows: General Delinquency, Crimes Against Persons, Theft, Vandalism, School Delinquency, Organized Delinquency, Alcohol Use, Drug Use. Mean scores were computed from the items in each of the categories. Missing items were replaced by the mean of the other non-missing items in the category. If 50% or more of the items in a category were missing for a given subject, the category score for that subject was coded as missing. Following is a list of the items, which comprise each of the categories. After each question, the child is asked to indicate how many times they've committed the act in the past year (as displayed in the first item

Crimes Against People

In the past year, have you. . .

- (1) . . .hit, slapped, or shoved other kids or gotten into a physical fight? How many times?
- (2) . . .threatened to hit someone in order to get something?
- (13) . . .attacked someone?
- (18) . . .thrown objects such as rocks or bottles at people?
- (20) . . .been involved in a gang fight?

Theft

- (3) . . .gone into somebody's garden, backyard, house, or garage or some other place when you were not supposed to be there?
- (4) . . .taken something from a store without paying for it that cost under \$5?
- (8) . . .taken some money at home that did not belong to you like from your mother's purse or your parent's dresser?
- (15) . . .stolen something or tried to steal something worth between \$5 and \$50?
- (16) . . .taken or tried to take a car or truck or motorcycle that didn't belong to you for a ride?
- (22) . . .stolen something or tried to steal something worth more than \$50?

Vandalism

- (7) . . .purposely set fire (or tried to) to a house, building, car or other property?
- (14) . . .purposely damaged or destroyed property that didn't belong to you?
- (21) . . .written things or sprayed paint on walls or sidewalks or cars where you were not supposed to?

School Delinquency

- (10) . . .skipped classes or school without an excuse?
- (11) . . .taken anything at school from the teacher or other kids that did not belong to you?
- (19) . . .been suspended or expelled for bad behavior at school?

Alcohol Use

- (23) . . .drunk any (a) beer, (b) wine, or (c) liquor?

Drug Use

(17) . . .smoked marijuana?

(24) . . . used any illegal drugs such as (a) heroin, (b) crack, (c) cocaine, or (d) LSD?

(25) . . .sniffed something when you weren't supposed to?

Organized Delinquency

items 3, 13, 20 and 22

General Delinquency

items 1-4, 7-8, 10-11, 13-16, 18, 20-22, and the following items:

(5) . . .snuck into something without paying, such as movies, onto a bus or subway?

(6) . . .run away from home?

(12) . . .carried a weapon?

(26) . . .sold or carried illegal drugs for anyone?

Because of the very high rate of “zero response” for all the categories, distributions of the raw count mean scores were characterized by extreme positive skew as well as a concentration of values at zero. Two alternative scores with more analytically appropriate distributional characteristics were created before the initial outcome report was prepared. The first of these alternative scores was created by dichotomizing every item in the scale (i.e., changing the item from *how much* a child performs a certain action to *whether or not* they did), and then taking the average of the dichotomized items for each category. This produces a measure of the percentage of the items in each category the child reported having committed as opposed to a mean of the frequencies of every item the child claimed to have committed (what the raw count measures). This score will henceforth be referred to as the dichotomized item mean score. Missing values for this score were handled in the same manner as the raw means. A second new score was created by dichotomizing the raw category score (i.e., the raw count mean score was transformed into a '0-1' variable), thus creating a measure of whether or not the child reported having committed *any* of the actions in that category. This score will be referred to as the dichotomized category score.

The reliability coefficients for the raw count mean scores are presented in the following table:

	<u>Normative</u>	<u>High-risk control</u>
<u>Subscale:</u>		
General delinquency	.63	.61
Crimes against people	.11	.19
Theft	.44	.53
Vandalism	.27	.34
School delinquency	.41	.37
Organized delinquency	.30	.09
Alcohol use	N/A	N/A
Drug use		

IV. Differences Between Groups

T-tests of mean comparisons were conducted between the normative (non-high-risk) and the high-risk control groups. Three scales exhibited significant mean differences at the .05 significance level: Theft, School Delinquency and Organized Delinquency. For all three of these, the students in the control sample committed significantly more offenses than the non-high-risk students in the normative sample.

V. Recommendations for Use

The low reliabilities for the subscales in “Things That You Have Done” are not surprising after observing the concentration of scores at zero and the extreme positive skew of the distributions. For the raw count mean scores, the reliabilities for all of the subscales are unstable (and usually very low) across sites. It is not recommended that these scores be used in analyses for children in this age group. Although reliabilities are somewhat higher for the mean scores of the dichotomized items, they are still very

inconsistent across sites. Two of the dichotomized-item subscales, *General Delinquency* and *Crimes Against Persons*, seem to maintain sufficient reliability across sites. Because these two scores are highly correlated (see above), the researcher may want to limit analyses to the *General Delinquency* subscale since it appears to be the more reliable of the two. Other dichotomized-item mean scores had low/inconsistent reliability across sites and are not recommended for analyses. The dichotomized category scores are probably most appropriate for analyses (with children in this age range) since the scores are more balanced and less characterized by outliers. This score greatly simplifies the data, however, and changes the nature of the dependent variable, e.g., a child who reported having committed 4 of the delinquent acts in a certain category a total of 120 times would have the same value as a child who reported performing 1 delinquent act in that category on 1 occasion.

Logistic regressions should be used for analyses on the dichotomized-item mean scores or the dichotomized category scores (if generalized linear models using explanatory variables are desired). Because of the nature of the data, researchers may also want to consider analyses that model distributions of count data with high levels of zero response, such as the zero-inflated Poisson (ZIP) distribution. Methods to handle data such as these are not commonplace and advanced analytic methods would need to be employed.

While transformations are often considered with non-normally distributed data, they were ineffective in normalizing these data due to the degree of skew and zero modality. While log transformations succeeded in bringing in extreme values, skewed distributional characteristics were maintained. Although log-transformed scales were used in an initial outcome report for two of the scales, transformations of raw data are not recommended for analyses of these data.

VI. Item and Scale Means and SD's

Control sample:

Variable	Label	<u>Item means:</u>		
		N	Mean	Std Dev
C7M1	Physical Aggression	138	5.4275362	32.7195309
C7M2	Coercive Threat	138	0.4347826	1.7381781
C7M3	Trespassing	138	0.3188406	1.1461488
C7M4	Shoplift under \$5	138	0.6304348	2.4407612
C7M5	Entry without Payment	138	0.2173913	1.1883813
C7M6	Run Away	138	0.0942029	0.5110128
C7M7	Arson	138	0.0652174	0.3010086
C7M8	Theft within the Home	138	0.3188406	1.4447767
C7M9	Tobacco Use	138	9.7463768	85.6495202
C7M10	Truancy	138	0.5289855	1.9933906
C7M11	Theft at School	138	0.1956522	0.7133625
C7M12	Carrying a weapon	138	3.7246377	31.9981222
C7M13	Physical Attack	138	0.2173913	0.7898917
C7M14	Property Destruction	138	7.4782609	85.0281377
C7M15	Stolen item between \$5 and \$50	138	0.1884058	1.0003702
C7M16	Vehicle Theft	138	0.0289855	0.1683769
C7M17	Marijuana Use	138	0.8695652	8.5442823
C7M18	Thrown objects at People	138	1.5362319	8.9378711
C7M19	School Suspension/Expulsion	138	2.4057971	5.7447376
C7M20	Gang Fight	138	0.1086957	0.5626421
C7M21	Graffiti	138	0.4420290	2.5171474
C7M22	Stolen Item over \$50	138	0.0144928	0.1199457
C7M23A	Beer Consumption	138	0.5434783	4.4739629
C7M23B	Wine Consumption	138	0.0362319	0.1875474
C7M23C	Liquor Consumption	138	0.0579710	0.2638324
C7M24A	Heroin Use	138	0	0
C7M24B	Crack Use	138	0	0
C7M24C	Cocaine Use	138	0	0
C7M24D	LSD Use	138	0	0
C7M25	Inhalant Use	138	0.0652174	0.3860056
C7M26	Drug Dealing	138	0.0434783	0.2927236
C7M27	Trouble with Police	138	0	0

Scale means:

Variable	Label	N	Mean	Std Dev
TYD7GEN	General Delinquency	138	22.0144928	96.8066766
TYD7CAP	Crimes Against People	138	7.7246377	34.2734321
TYD7THF	Theft	138	1.5000000	4.5163935
TYD7VAN	Vandalism	138	7.9855072	85.0271735
TYD7SCH	School Delinquency	138	3.1304348	6.4996643
TYD7ORG	Organized Delinquency	138	0.6594203	1.5960553
TYD7ALC	Alcohol Use	138	0.6376812	4.4948341
TYD7DRU	Drug Use	138	0.9347826	8.5471697

Normative sample:

Item means:

Variable	Label	N	Mean	Std Dev
C7M1	Physical Aggression	328	6.4420732	61.9197196
C7M2	Coercive Threat	328	0.2957317	1.8591982
C7M3	Trespassing	328	0.1829268	0.8968589
C7M4	Shoplift under \$5	328	0.3536585	1.8114279
C7M5	Entry without Payment	328	0.0670732	0.4302207
C7M6	Run Away	328	0.0731707	0.4500897
C7M7	Arson	328	0.0335366	0.2386961
C7M8	Theft within the Home	328	0.1920732	1.1974736
C7M9	Tobacco Use	328	4.0030488	55.6325592
C7M10	Truancy	328	0.3871951	1.6771775
C7M11	Theft at School	328	0.0640244	0.3817531
C7M12	Carrying a weapon	328	2.3201220	23.1532184
C7M13	Physical Attack	328	0.0945122	0.4629057
C7M14	Property Destruction	328	3.1737805	55.1564662
C7M15	Stolen item between \$5 and \$50	328	0.0945122	0.6819430
C7M16	Vehicle Theft	328	0.0091463	0.0953436
C7M17	Marijuana Use	328	0.7378049	11.0781835
C7M18	Thrown objects at People	328	1.2012195	11.7716187
C7M19	School Suspension/Expulsion	328	1.4268293	4.5427780
C7M20	Gang Fight	328	0.0487805	0.3718682
C7M21	Graffiti	328	0.2621951	1.8862542
C7M22	Stolen Item over \$50	328	0.0060976	0.0779674
C7M23A	Beer Consumption	328	0.1707317	0.7868161
C7M23B	Wine Consumption	328	0.3841463	5.5403986
C7M23C	Liquor Consumption	328	0.3750000	5.8573446
C7M24A	Heroin Use	328	0	0
C7M24B	Crack Use	328	0	0
C7M24C	Cocaine Use	328	0	0
C7M24D	LSD Use	328	0.0030488	0.0552158
C7M25	Inhalant Use	328	0.0091463	0.0953436
C7M26	Drug Dealing	328	0.0487805	0.5452590
C7M27	Trouble with Police	328	0.0030488	0.0552158

Scale means:

Variable	Label	N	Mean	Std Dev
TYD7GEN	General Delinquency	328	15.3506098	86.9553768
TYD7CAP	Crimes Against People	328	8.0823171	63.2124416
TYD7THF	Theft	328	0.8384146	3.0960347
TYD7VAN	Vandalism	328	3.4695122	55.1786006
TYD7SCH	School Delinquency	328	1.8780488	5.2802563
TYD7ORG	Organized Delinquency	328	0.3323171	1.2522487
TYD7ALC	Alcohol Use	328	0.9298780	11.4123956
TYD7DRU	Drug Use	328	0.7500000	11.1329881

VII. Item and Scale Correlations

Control sample:

	TYD7GEN	TYD7CAP	TYD7THF	TYD7VAN
TYD7GEN	1.00000	0.34874	0.08279	0.87177
General Delinquency		<.0001	0.3344	<.0001
TYD7CAP	0.34874	1.00000	0.07205	-0.00727
Crimes Against People	<.0001		0.4010	0.9325
TYD7THF	0.08279	0.07205	1.00000	0.00321
Theft	0.3344	0.4010		0.9702
TYD7VAN	0.87177	-0.00727	0.00321	1.00000
Vandalism	<.0001	0.9325	0.9702	
TYD7SCH	0.12073	0.08129	0.30535	0.02129
School Delinquency	0.1584	0.3432	0.0003	0.8042
	TYD7SCH	TYD7ORG	TYD7ALC	TYD7DRU
TYD7GEN	0.12073	-0.00805	-0.00985	0.10772
General Delinquency	0.1584	0.9254	0.9087	0.2085
TYD7CAP	0.08129	-0.01507	-0.00776	0.30557
Crimes Against People	0.3432	0.8607	0.9280	0.0003
TYD7THF	0.30535	0.51592	0.02265	-0.01863
Theft	0.0003	<.0001	0.7920	0.8283
TYD7VAN	0.02129	-0.03446	-0.01226	0.00300
Vandalism	0.8042	0.6882	0.8865	0.9721
TYD7SCH	1.00000	0.08312	0.01462	0.14652
School Delinquency		0.3324	0.8648	0.0864
	TYD7GEN	TYD7CAP	TYD7THF	TYD7VAN
TYD7ORG	-0.00805	-0.01507	0.51592	-0.03446
Organized Delinquency	0.9254	0.8607	<.0001	0.6882
TYD7ALC	-0.00985	-0.00776	0.02265	-0.01226
Alcohol Use	0.9087	0.9280	0.7920	0.8865
TYD7DRU	0.10772	0.30557	-0.01863	0.00300
Drug Use	0.2085	0.0003	0.8283	0.9721

	TYD7SCH	TYD7ORG	TYD7ALC	TYD7DRU
TYD7ORG	0.08312	1.00000	0.04983	-0.03535
Organized Delinquency	0.3324		0.5617	0.6806
TYD7ALC	0.01462	0.04983	1.00000	-0.00955
Alcohol Use	0.8648	0.5617		0.9115
TYD7DRU	0.14652	-0.03535	-0.00955	1.00000
Drug Use	0.0864	0.6806	0.9115	

Normative sample:

	TYD7GEN	TYD7CAP	TYD7THF	TYD7VAN
TYD7GEN	1.00000	0.72309	0.08093	0.63116
General Delinquency		<.0001	0.1436	<.0001
TYD7CAP	0.72309	1.00000	0.01851	-0.00383
Crimes Against People	<.0001		0.7384	0.9449
TYD7THF	0.08093	0.01851	1.00000	0.01849
Theft	0.1436	0.7384		0.7387
TYD7VAN	0.63116	-0.00383	0.01849	1.00000
Vandalism	<.0001	0.9449	0.7387	
TYD7SCH	0.15633	0.09708	0.40173	0.03378
School Delinquency	0.0045	0.0791	<.0001	0.5421
	TYD7SCH	TYD7ORG	TYD7ALC	TYD7DRU
TYD7GEN	0.15633	0.03701	0.02726	0.03250
General Delinquency	0.0045	0.5042	0.6228	0.5575
TYD7CAP	0.09708	0.00757	-0.00135	-0.00044
Crimes Against People	0.0791	0.8913	0.9806	0.9937
TYD7THF	0.40173	0.40986	0.06615	0.04363
Theft	<.0001	<.0001	0.2322	0.4310
TYD7VAN	0.03378	-0.00346	0.01267	0.01346
Vandalism	0.5421	0.9502	0.8191	0.8081
TYD7SCH	1.00000	0.20040	0.15829	0.15040
School Delinquency		0.0003	0.0041	0.0064
	TYD7GEN	TYD7CAP	TYD7THF	TYD7VAN
TYD7ORG	0.03701	0.00757	0.40986	-0.00346
Organized Delinquency	0.5042	0.8913	<.0001	0.9502
TYD7ALC	0.02726	-0.00135	0.06615	0.01267
Alcohol Use	0.6228	0.9806	0.2322	0.8191
TYD7DRU	0.03250	-0.00044	0.04363	0.01346
Drug Use	0.5575	0.9937	0.4310	0.8081
	TYD7SCH	TYD7ORG	TYD7ALC	TYD7DRU
TYD7ORG	0.20040	1.00000	0.22546	0.20691
Organized Delinquency	0.0003		<.0001	0.0002
TYD7ALC	0.15829	0.22546	1.00000	0.99349
Alcohol Use	0.0041	<.0001		<.0001
TYD7DRU	0.15040	0.20691	0.99349	1.00000
Drug Use	0.0064	0.0002	<.0001	