

Things That You Have Done

Grade 4/Year 5

FAST Track Project Technical Report

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Table of Contents

- I. Scale Description
- II. Report Sample
- III. Scaling
- IV. Differences Between Groups
- V. Recommendations for Use
- VI. Item and Scale Means and SD's
- VII. Item and Scale Correlations

Citation

Instrument

Conduct Problems Prevention Research Group (1995).

Elliot, D.S., Age ton, 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: c5m

Scored: tyd5

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., Age ton, 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 5 normative (n=387) and high risk control samples (n=155, overlap is 79). 56 students were missing the entire measure (12% of the sample), including 47 from the normative sample (12% of the sample) and 19 of the control sample (12% of the sample). The non-respondents included 15 students from the Durham site, 10 from Nashville, 19 from Pennstate and 12 from the Seattle site; 35 white 17 black students. Finally, the breakdown by gender was 34 boys and 22 girls.

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>Subscale:</u>	<u>Normative</u>	<u>High-risk control</u>
General delinquency	.65	.65
Crimes against people	.72	.71
Theft	.15	.14
Vandalism	.10	.15
School delinquency	.16	.13
Organized delinquency	.14	.25
Alcohol use	.79	.90
Drug use	.00	.00

IV. Differences Between Groups

Tests of mean comparison were conducted between the normative (non-high-risk) and the high-risk control group. The t-tests were found significant at a .05 significance level for the General Delinquency, Crimes Against Persons, Theft, Vandalism (marginal), School Delinquency and Organized Delinquency. For all these scales, the students in the high-risk Control group committed significantly more offenses than the students in the Normative (non-high-risk) 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. Scale Means and SD's

Control sample:

Item means:

Variable	Label	N	Mean	Std Dev
C5M1	Physical Aggression	135	7.0444444	33.1139747
C5M2	Coercive Threat	136	4.2279412	24.6305943
C5M3	Trespassing	136	0.8970588	3.8897385
C5M4	Shoplift under \$5	136	0.2794118	1.2453836
C5M5	Entry without Payment	136	0.0441176	0.2061156
C5M6	Run Away	136	0.0882353	0.3745731
C5M7	Arson	136	0.1029412	0.5203903
C5M8	Theft within the Home	136	0.5073529	4.2981414
C5M9	Tobacco Use	135	5.5037037	60.2596216
C5M10	Truancy	136	0.5588235	4.3491416
C5M11	Theft at School	136	0.1102941	0.4662346
C5M12	Carrying a weapon	136	0.3161765	1.9577092
C5M13	Physical Attack	136	1.6838235	6.9203963
C5M14	Property Destruction	136	0.4191176	2.0057515
C5M15	Stolen item between \$5 and \$50	136	0.0441176	0.2948357
C5M16	Vehicle Theft	136	0.0514706	0.2807359
C5M17	Marijuana Use	136	0.0073529	0.0857493
C5M18	Thrown objects at People	136	2.8970588	14.7634581
C5M19	School Suspension/Expulsion	136	1.3676471	5.2842307
C5M20	Gang Fight	136	0.1838235	0.6798933
C5M21	Graffiti	136	0.1691176	0.5907327
C5M22	Stolen Item over \$50	136	0.0294118	0.2087414
C5M23A	Beer Consumption	135	0.3555556	2.4387012
C5M23B	Wine Consumption	136	0.1544118	1.7164937
C5M23C	Liquor Consumption	136	0.1470588	1.7149859
C5M24A	Heroin Use	136	0	0
C5M24B	Crack Use	136	0	0
C5M24C	Cocaine Use	136	0	0
C5M24D	LSD Use	136	0	0
C5M25	Inhalant Use	135	0.0666667	0.3498400
C5M26	Drug Dealing	136	0.0294118	0.2705598
C5M27	Trouble with Police	136	0	0

Scale means:

Variable	Label	N	Mean	Std Dev
TYD5GEN	General Delinquency	136	0.9816755	3.6384173
TYD5CAP	Crimes Against People	136	3.1974250	13.4418443
TYD5THF	Theft	136	0.3014705	1.0526301
TYD5VAN	Vandalism	136	0.2303921	0.7563335
TYD5SCH	School Delinquency	136	0.6789214	2.3890719
TYD5ORG	Organized Delinquency	136	0.6985294	2.2117359
TYD5ALC	Alcohol Use	136	0.2181372	1.8050585
TYD5DRU	Drug Use	136	0.0122549	0.0596021

Normative sample:

Item means:

Variable	Label	N	Mean	Std Dev
C5M1	Physical Aggression	339	3.8112094	21.9075463
C5M2	Coercive Threat	340	1.8764706	16.2633936
C5M3	Trespassing	340	0.4823529	2.6232982
C5M4	Shoplift under \$5	340	0.1294118	0.8419423
C5M5	Entry without Payment	340	0.0911765	0.8658952
C5M6	Run Away	340	0.0529412	0.3645301
C5M7	Arson	340	0.0323529	0.3006587
C5M8	Theft within the Home	340	0.2617647	2.7457142
C5M9	Tobacco Use	340	0.1147059	1.3831332
C5M10	Truancy	340	0.2558824	2.8277691
C5M11	Theft at School	340	0.0647059	0.3193673
C5M12	Carrying a weapon	340	0.1617647	1.5458603
C5M13	Physical Attack	340	0.7441176	4.5985563
C5M14	Property Destruction	340	0.1882353	1.3281088
C5M15	Stolen item between \$5 and \$50	340	0.0235294	0.2018481
C5M16	Vehicle Theft	340	0.0117647	0.1325153
C5M17	Marijuana Use	339	0	0
C5M18	Thrown objects at People	340	1.6000000	10.0146795
C5M19	School Suspension/Expulsion	340	0.5647059	3.0500140
C5M20	Gang Fight	340	0.3852941	5.4379109
C5M21	Graffiti	340	0.1823529	2.2039748
C5M22	Stolen Item over \$50	340	0.0176471	0.1525991
C5M23A	Beer Consumption	339	0.2507375	1.9624337
C5M23B	Wine Consumption	340	0.1294118	1.3505225
C5M23C	Liquor Consumption	340	0.0647059	1.0897436
C5M24A	Heroin Use	340	0	0
C5M24B	Crack Use	340	0	0
C5M24C	Cocaine Use	340	0	0
C5M24D	LSD Use	339	0	0
C5M25	Inhalant Use	340	0.0382353	0.2576439
C5M26	Drug Dealing	340	0.0029412	0.0542326
C5M27	Trouble with Police	340	0	0

Scale means:

Variable	Label	N	Mean	Std Dev
TYD5GEN	General Delinquency	340	0.5182584	2.4772064
TYD5CAP	Crimes Against People	340	1.6813229	9.1600100
TYD5THF	Theft	340	0.1544117	0.6933664
TYD5VAN	Vandalism	340	0.1343137	0.8949760
TYD5SCH	School Delinquency	340	0.2950980	1.4737429
TYD5ORG	Organized Delinquency	340	0.4073529	2.0029157
TYD5ALC	Alcohol Use	340	0.1480392	1.2709003
TYD5DRU	Drug Use	340	0.0063725	0.0429406

VII. Scale Correlations

Control sample:

	TYD5GEN	TYD5CAP	TYD5THF	TYD5VAN
TYD5GEN General Delinquency	1.00000 <.0001	0.98932 <.0001	0.35167 <.0001	0.47404 <.0001
TYD5CAP Crimes Against People	0.98932 <.0001	1.00000	0.22018 0.0100	0.39846 <.0001
TYD5THF Theft	0.35167 <.0001	0.22018 0.0100	1.00000	0.52670 <.0001
TYD5VAN Vandalism	0.47404 <.0001	0.39846 <.0001	0.52670 <.0001	1.00000
TYD5SCH School Delinquency	0.32653 0.0001	0.24584 0.0039	0.50335 <.0001	0.38468 <.0001
	TYD5SCH	TYD5ORG	TYD5ALC	TYD5DRU
TYD5GEN General Delinquency	0.32653 0.0001	0.82915 <.0001	0.03697 0.6691	0.04516 0.6016
TYD5CAP Crimes Against People	0.24584 0.0039	0.77950 <.0001	0.03476 0.6879	0.03949 0.6481
TYD5THF Theft	0.50335 <.0001	0.62648 <.0001	0.05068 0.5579	-0.00029 0.9973
TYD5VAN Vandalism	0.38468 <.0001	0.64700 <.0001	0.05696 0.5101	0.06471 0.4542
TYD5SCH School Delinquency	1.00000	0.27851 0.0010	0.01732 0.8414	0.35152 <.0001

	TYD5GEN	TYD5CAP	TYD5THF	TYD5VAN
TYD5ORG Organized Delinquency	0.82915 <.0001	0.77950 <.0001	0.62648 <.0001	0.64700 <.0001
TYD5ALC Alcohol Use	0.03697 0.6691	0.03476 0.6879	0.05068 0.5579	0.05696 0.5101
TYD5DRU Drug Use	0.04516 0.6016	0.03949 0.6481	-0.00029 0.9973	0.06471 0.4542
	TYD5SCH	TYD5ORG	TYD5ALC	TYD5DRU
TYD5ORG Organized Delinquency	0.27851 0.0010	1.00000	0.16781 0.0508	0.00482 0.9556
TYD5ALC	0.01732	0.16781	1.00000	-0.01738

Alcohol Use	0.8414	0.0508		0.8408
TYD5DRU Drug Use	0.35152 <.0001	0.00482 0.9556	-0.01738 0.8408	1.00000

Normative sample:

	TYD5GEN	TYD5CAP	TYD5THF	TYD5VAN
TYD5GEN General Delinquency	1.00000	0.98823 <.0001	0.33968 <.0001	0.35210 <.0001
TYD5CAP Crimes Against People	0.98823 <.0001	1.00000	0.21221 <.0001	0.26825 <.0001
TYD5THF Theft	0.33968 <.0001	0.21221 <.0001	1.00000	0.31402 <.0001
TYD5VAN Vandalism	0.35210 <.0001	0.26825 <.0001	0.31402 <.0001	1.00000
TYD5SCH School Delinquency	0.36067 <.0001	0.27419 <.0001	0.53568 <.0001	0.28421 <.0001
	TYD5SCH	TYD5ORG	TYD5ALC	TYD5DRU
TYD5GEN General Delinquency	0.36067 <.0001	0.67326 <.0001	0.11082 0.0411	0.08302 0.1266
TYD5CAP Crimes Against People	0.27419 <.0001	0.64600 <.0001	0.08871 0.1025	0.06292 0.2472
TYD5THF Theft	0.53568 <.0001	0.46046 <.0001	0.08371 0.1234	0.03841 0.4803
TYD5VAN Vandalism	0.28421 <.0001	0.25668 <.0001	0.33777 <.0001	0.17808 0.0010
TYD5SCH School Delinquency	1.00000	0.23114 <.0001	0.06953 0.2009	0.34828 <.0001
	TYD5GEN	TYD5CAP	TYD5THF	TYD5VAN
TYD5ORG Organized Delinquency	0.67326 <.0001	0.64600 <.0001	0.46046 <.0001	0.25668 <.0001
TYD5ALC Alcohol Use	0.11082 0.0411	0.08871 0.1025	0.08371 0.1234	0.33777 <.0001
TYD5DRU Drug Use	0.08302 0.1266	0.06292 0.2472	0.03841 0.4803	0.17808 0.0010
	TYD5SCH	TYD5ORG	TYD5ALC	TYD5DRU
TYD5ORG Organized Delinquency	0.23114 <.0001	1.00000	0.13404 0.0134	0.01117 0.8374
TYD5ALC Alcohol Use	0.06953 0.2009	0.13404 0.0134	1.00000	0.07275 0.1808

TYD5DRU	0.34828	0.01117	0.07275	1.00000
Drug Use	<.0001	0.8374	0.1808	

Appendix – SAS Scoring Program
[\(See Instrument Summary\)](#)