

## **Things That You Have Done**

*Grade 5/Year 6*

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:* 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., 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 6 normative (n=387) and high risk control samples (n=155, overlap is 79). Sixty-eight students were missing the entire measure (15% of the sample), including 58 from the normative sample (15% of the sample) and 20 of the control sample (13% of the sample). The non-respondents included 9 students from the Durham site, 13 from Nashville, 24 from Pennsylvania and 22 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>Subscale:</u>	<u>Normative</u>	<u>High-Risk Control</u>
General delinquency	.70	.77
Crimes against people	.52	.49
Theft	.52	.52
Vandalism	.23	.55
School delinquency	.41	.38
Organized delinquency	.22	.20
Alcohol use		
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. They were all found to be non-significant at the .05 level, except for the school delinquency scale, the students in the high-risk control group were shown to have a significantly higher occurrence of school delinquency offenses than those in the normative (non-high-risk) group.

### **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:

		<u>Item means:</u>		
Variable	Label	N	Mean	Std Dev
C6M1	Physical Aggression	135	8.0592593	36.0208818
C6M2	Coercive Threat	135	4.0666667	33.2555012
C6M3	Trespassing	135	2.5925926	26.8376257
C6M4	Shoplift under \$5	135	1.4518519	13.4883690
C6M5	Entry without Payment	135	0.5555556	4.4363940
C6M6	Run Away	135	0.1111111	0.6067612
C6M7	Arson	135	0.0814815	0.4061441
C6M8	Theft within the Home	135	0.2444444	1.7639282
C6M9	Tobacco Use	135	1.8296296	14.1466418
C6M10	Truancy	135	0.1925926	0.7580050
C6M11	Theft at School	135	0.3259259	1.6014435
C6M12	Carrying a weapon	135	0.6518519	5.0950935
C6M13	Physical Attack	135	0.4074074	1.4051945
C6M14	Property Destruction	135	0.0666667	0.2503729
C6M15	Stolen item between \$5 and \$50	135	0.1777778	1.2629429
C6M16	Vehicle Theft	135	0.7703704	8.9508948
C6M17	Marijuana Use	135	0.0370370	0.3092458
C6M18	Thrown objects at People	135	2.8370370	16.6492380
C6M19	School Suspension/Expulsion	135	0.9111111	2.5376763
C6M20	Gang Fight	135	0.2000000	0.9985063
C6M21	Graffiti	135	0.2074074	0.7440941
C6M22	Stolen Item over \$50	135	0.0814815	0.8643162
C6M23A	Beer Consumption	135	0.0296296	0.2715555
C6M23B	Wine Consumption	135	0.0370370	0.3542368
C6M23C	Liquor Consumption	135	0	0
C6M24A	Heroin Use	135	0	0
C6M24B	Crack Use	135	0	0
C6M24C	Cocaine Use	135	0	0
C6M24D	LSD Use	135	0	0
C6M25	Inhalant Use	135	0.0296296	0.2095033
C6M26	Drug Dealing	135	0.0370370	0.2255146
C6M27	Trouble with Police	135	0.0370370	0.4303315

### Scale means:

Variable	Label	N	Mean	Std Dev
TYD6GEN	General Delinquency	135	23.1185185	97.8169973
TYD6CAP	Crimes Against People	135	15.5703704	68.3611503
TYD6THF	Theft	135	5.3185185	32.6191620
TYD6VAN	Vandalism	135	0.3555556	1.0958992
TYD6SCH	School Delinquency	135	1.4296296	3.4652663
TYD6ORG	Organized Delinquency	135	3.2814815	26.8760704
TYD6ALC	Alcohol Use	135	0.0666667	0.4438636
TYD6DRU	Drug Use	135	0.0666667	0.3705583

Normative sample:

Item means:

Variable	Label	N	Mean	Std Dev
C6M1	Physical Aggression	329	8.3981763	62.8133811
C6M2	Coercive Threat	329	2.6109422	22.9758755
C6M3	Trespassing	329	1.4832827	17.6573206
C6M4	Shoplift under \$5	328	0.5579268	8.6407928
C6M5	Entry without Payment	329	0.2066869	2.1667845
C6M6	Run Away	329	0.0638298	0.4192748
C6M7	Arson	329	0.0364742	0.2313950
C6M8	Theft within the Home	329	0.6656535	6.3508262
C6M9	Tobacco Use	329	0.5714286	8.6571857
C6M10	Truancy	329	0.2158055	2.0088811
C6M11	Theft at School	329	0.0729483	0.5583328
C6M12	Carrying a weapon	329	0.5835866	6.5894297
C6M13	Physical Attack	329	0.1610942	0.8597752
C6M14	Property Destruction	329	0.2370821	2.8900099
C6M15	Stolen item between \$5 and \$50	329	0.0699088	0.8028002
C6M16	Vehicle Theft	329	0.3556231	5.7587135
C6M17	Marijuana Use	329	0	0
C6M18	Thrown objects at People	329	2.7568389	23.5495422
C6M19	School Suspension/Expulsion	329	0.5531915	2.3421633
C6M20	Gang Fight	329	0.1246201	0.7239176
C6M21	Graffiti	329	0.1580547	1.3966217
C6M22	Stolen Item over \$50	329	0.0303951	0.5513178
C6M23A	Beer Consumption	329	0.0729483	0.6989741
C6M23B	Wine Consumption	329	0.0212766	0.2397348
C6M23C	Liquor Consumption	329	0.0668693	1.1050451
C6M24A	Heroin Use	329	0	0
C6M24B	Crack Use	329	0	0
C6M24C	Cocaine Use	329	0	0
C6M24D	LSD Use	329	0	0
C6M25	Inhalant Use	329	0.0243161	0.3014471
C6M26	Drug Dealing	329	0.0060790	0.0778492
C6M27	Trouble with Police	329	0.0151976	0.2756589

Scale means:

Variable	Label	N	Mean	Std Dev
TYD6GEN	General Delinquency	329	18.7933131	93.0118984
TYD6CAP	Crimes Against People	329	14.0516717	79.4279110
TYD6THF	Theft	329	3.1610942	22.2791644
TYD6VAN	Vandalism	329	0.4316109	3.2650735
TYD6SCH	School Delinquency	329	0.8419453	3.7464541
TYD6ORG	Organized Delinquency	329	1.7993921	17.7163250
TYD6ALC	Alcohol Use	329	0.1610942	1.3731551
TYD6DRU	Drug Use	329	0.0243161	0.3014471

## **VII. Item and Subscale Correlations**

Control sample:

	<b>TYD6GEN</b>	<b>TYD6CAP</b>	<b>TYD6THF</b>	<b>TYD6VAN</b>
<b>TYD6GEN</b>	1.00000	0.97436	0.90272	0.12526
<b>General Delinquency</b>		<.0001	<.0001	0.1477
<b>TYD6CAP</b>	0.97436	1.00000	0.79381	0.06451
<b>Crimes Against People</b>	<.0001		<.0001	0.4573
<b>TYD6THF</b>	0.90272	0.79381	1.00000	0.14336
<b>Theft</b>	<.0001	<.0001		0.0972
<b>TYD6VAN</b>	0.12526	0.06451	0.14336	1.00000
<b>Vandalism</b>	0.1477	0.4573	0.0972	
<b>TYD6SCH</b>	0.20046	0.16668	0.19876	0.43700
<b>School Delinquency</b>	0.0197	0.0533	0.0208	<.0001
	<b>TYD6SCH</b>	<b>TYD6ORG</b>	<b>TYD6ALC</b>	<b>TYD6DRU</b>
<b>TYD6GEN</b>	0.20046	0.88717	-0.00053	0.00575
<b>General Delinquency</b>	0.0197	<.0001	0.9952	0.9472
<b>TYD6CAP</b>	0.16668	0.84262	-0.00839	-0.00917
<b>Crimes Against People</b>	0.0533	<.0001	0.9230	0.9159
<b>TYD6THF</b>	0.19876	0.86334	-0.01024	-0.01720
<b>Theft</b>	0.0208	<.0001	0.9062	0.8430
<b>TYD6VAN</b>	0.43700	0.00773	0.15035	0.49250
<b>Vandalism</b>	<.0001	0.9291	0.0818	<.0001
<b>TYD6SCH</b>	1.00000	0.07498	0.28206	0.36691
<b>School Delinquency</b>		0.3875	0.0009	<.0001

	TYD6GEN	TYD6CAP	TYD6THF	TYD6VAN
TYD6ORG	0.88717	0.84262	0.86334	0.00773
Organized Delinquency	<.0001	<.0001	<.0001	0.9291
TYD6ALC	-0.00053	-0.00839	-0.01024	0.15035
Alcohol Use	0.9952	0.9230	0.9062	0.0818
TYD6DRU	0.00575	-0.00917	-0.01720	0.49250
Drug Use	0.9472	0.9159	0.8430	<.0001
	TYD6SCH	TYD6ORG	TYD6ALC	TYD6DRU
TYD6ORG	0.07498	1.00000	0.00405	0.01084
Organized Delinquency	0.3875		0.9629	0.9007
TYD6ALC	0.28206	0.00405	1.00000	0.42650
Alcohol Use	0.0009	0.9629		<.0001
TYD6DRU	0.36691	0.01084	0.42650	1.00000
Drug Use	<.0001	0.9007	<.0001	

Normative sample:

	TYD6GEN	TYD6CAP	TYD6THF	TYD6VAN
TYD6GEN General Delinquency	1.00000	0.96882 <.0001	0.61502 <.0001	0.11070 0.0448
TYD6CAP Crimes Against People	0.96882 <.0001	1.00000	0.41659 <.0001	0.07695 0.1638
TYD6THF Theft	0.61502 <.0001	0.41659 <.0001	1.00000	0.03006 0.5870
TYD6VAN Vandalism	0.11070 0.0448	0.07695 0.1638	0.03006 0.5870	1.00000
TYD6SCH School Delinquency	0.30970 <.0001	0.28360 <.0001	0.16201 0.0032	0.11426 0.0383
	TYD6SCH	TYD6ORG	TYD6ALC	TYD6DRU
TYD6GEN General Delinquency	0.30970 <.0001	0.62925 <.0001	0.01005 0.8559	0.00051 0.9927
TYD6CAP Crimes Against People	0.28360 <.0001	0.48270 <.0001	0.00627 0.9098	-0.00909 0.8695
TYD6THF Theft	0.16201 0.0032	0.83555 <.0001	0.00473 0.9319	0.02665 0.6300
TYD6VAN Vandalism	0.11426 0.0383	0.00329 0.9525	-0.00944 0.8646	0.00479 0.9310
TYD6SCH School Delinquency	1.00000	0.08422 0.1274	0.01741 0.7531	0.10330 0.0613
	TYD6GEN	TYD6CAP	TYD6THF	TYD6VAN
TYD6ORG Organized Delinquency	0.62925 <.0001	0.48270 <.0001	0.83555 <.0001	0.00329 0.9525
TYD6ALC Alcohol Use	0.01005 0.8559	0.00627 0.9098	0.00473 0.9319	-0.00944 0.8646
TYD6DRU Drug Use	0.00051 0.9927	-0.00909 0.8695	0.02665 0.6300	0.00479 0.9310
	TYD6SCH	TYD6ORG	TYD6ALC	TYD6DRU
TYD6ORG Organized Delinquency	0.08422 0.1274	1.00000	0.00672 0.9033	0.00548 0.9211
TYD6ALC Alcohol Use	0.01741 0.7531	0.00672 0.9033	1.00000	0.03470 0.5305
TYD6DRU Drug Use	0.10330 0.0613	0.00548 0.9211	0.03470 0.5305	1.00000