NIH Toolbox



Technical Manual

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NIH Toolbox Technical Manual

Domain:

EMOTION

Subdomain:

STRESS AND SELF-EFFICACY

Subdomain Component:

COPING STRATEGIES

Measure:

NIH Toolbox Emotion Control Survey

(Supplemental Measure)

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This Technical Manual contains the following informational sections:

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Study (NCS)

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Section 1: Introduction to NIH Toolbox

NIH Toolbox is a multidimensional set of brief measures assessing cognitive, emotional, motor, and sensory function from ages 3-85. This suite of on-line and royalty-free measures can be administered to study participants 3 to 85 years of age in two hours or less, across diverse study designs and settings.

What is the NIH Toolbox?

The NIH Toolbox provides a standard set of royalty-free, brief, and comprehensive assessment tools that can be used by researchers and clinicians in a variety of settings, with a particular emphasis on measuring outcomes in longitudinal epidemiologic studies and prevention or intervention trials across the lifespan (ages 3-85). The battery ensures that assessment methods and results can be used for comparisons across existing and future studies and provides a "common currency" for the study of neurological research that promotes economies of scale and enhanced efficiency in measurement. The NIH Toolbox can be used to monitor neurological and behavioral function over time and measure key constructs across developmental stages. This facilitates the study of functional changes across the lifespan, including evaluating intervention and treatment effectiveness.

The NIH Toolbox Batteries

The basic NIH Toolbox can be administered within two hours and divides tests into four domain batteries: Cognition, Emotion, Motor, and Sensation. In addition, within some domains, there are supplemental measures that are available to be administered.

Selection of the NIH Toolbox Domains and Subdomains

Four domains were selected for the NIH Toolbox: Cognition, Emotion, Motor, and Sensation.

Subdomain selection was based upon literature reviews, expert interviews, and multiple formal Requests for Information (RFI) of NIH-funded researchers. Initial literature and database reviews and an RFI identified the subdomains for inclusion in the NIH Toolbox, existing measures relevant to the project goals, and criteria for instrument selection. NIH Project Team members, external content experts, and contract scientists met at a follow-up consensus meeting to discuss potential subdomains along with the criteria affecting instrument selection, creation, and norming. Additional expert interviews were undertaken to gather more detailed information from clinical and scientific experts to help further refine the list of possible subdomains. A second consensus group meeting was held and results directed the decision for the final NIH Toolbox to assess four core domain areas (cognitive, emotional, motor, and sensory health and function).

Selection of Measures for the NIH Toolbox

More than 1,400 existing measures were identified and evaluated for potential inclusion in the NIH Toolbox. The selection criteria included a measure's applicability across the life span,

psychometric soundness, brevity, ease of use, applicability in diverse settings and with different groups, and lack of intellectual property constraints. There was also a preference for instruments that were already validated and normed for use with individuals between 3 and 85 years old. Results of the instrument selection process yielded draft development plans established for the NIH Toolbox measures.

Early Childhood Use

NIH Toolbox measure development focused special attention on assessing young children, to ensure that all tests given are developmentally appropriate for ages 3-7. A special team of early childhood assessment consultants was engaged to provide testing guidelines for the very young, to offer input on measure development, and to review all NIH Toolbox measures to ensure they fit the needs of young children. Advanced statistical methods were used to emphasize continuity of measurement, allowing Toolbox users to confidently conduct longitudinal measurement from age 3 through the life span while assessing the same domain constructs.

Section 2: Validation

Validation studies were conducted for all NIH Toolbox Emotion domain measures, to assure that these important tools for research met rigorous psychometric standards. Studies were

conducted across the entire age range and were statistically compared against "gold standard" measures wherever available.

For specifics regarding Emotion domain measure validation, see Salsman et al., Emotion Assessment using the NIH Toolbox, *Neurology*, in press. This manuscript describes measure development studies undertaken (e.g., expert panels for content development and validation; cognitive interviews; small and large-scale pilot testing) and psychometric characteristics (e.g., internal consistency and test-retest reliability; convergent and divergent validity).

Section 3: Norming

NIH Toolbox conducted a large national standardization study in both English and Spanish languages to allow for normative comparisons on each assessment. A sample of 4,859 participants, ages 3-85 – representative of the U.S. population based on gender, ethnicity, race, and socioeconomic status – was administered all of the NIH Toolbox measures at sites around the country (n = 2,917 English-speaking children, ages 3-17; n = 496 Spanish-speaking children, ages 3-7; n = 1,038 English-speaking adults, ages 18-85; n = 408 Spanish-speaking adults, ages 18-85). NIH Toolbox normative scores are now available for each year of age from 3 through 17, as well as for age ranges 18-29, 30-39, 40-49, 50-59, 60-69, and 70-85, allowing for targeted and accurate comparisons to the U.S. population.

Specifics regarding NIH Toolbox norming sampling methods (e.g., stratification by age, gender, and language preference; sampling a minimum of 25-100 individuals per targeted demographic and language subgroup) and norming analytic methods (e.g., post-stratification adjustment using iterative proportional fitting, i.e., "raking") can be found in the following publication:

Beaumont et al., Norming Plans for the NIH Toolbox, *Neurology*, in press.

Section 4: NIH Toolbox and the National Children's Study (NCS)

In collaboration with NIH Toolbox scientists, NCS investigators selected measures from PROMIS and NIH Toolbox for a Maternal Health Profile, the Maternal Self-Reported Health Battery. This profile assesses Physical Health (Physical function, Fatigue, Sleep disturbance, Sleep-related impairment), Mental Health (Anger, Anxiety, Depression, Positive affect, Perceived stress, Self-efficacy), and Social Health (Social support and companionship, Social isolation). The Maternal Self-Reported Health Battery was field tested in fall 2011, using an online sample of 1000 women (200 pre-conception, 150 pregnant women (50 per trimester), and 650 mothers with a child between 0-36 months of age). In addition, NIH Toolbox norming was jointly sponsored by the NCS and included: 3,413 children in single-year age bands (from 3-17 years); 1,446 adults in seven age bands, including the mothers of children also being tested; and 105 pregnant women. The NIH Toolbox sampling plan matched distributions of race/ethnicity and level of education for each age bands.

Section 5: Domain Definition

Domain:

EMOTION

Emotion refers to any strong feelings, as of joy, sorrow, or fear. Emotion is an affective state of consciousness in which joy, sorrow, fear, hate, or the like, is experienced, as distinguished from cognitive and volitional states of consciousness. Emotions can be negative and distressing, or positive emotions can be reflections of well-being in our lives, and positive social relationships can buffer stress and enhance health. The NIH Toolbox Emotion domain includes four major subdomains: Psychological Well-Being, Negative Affect, Stress and Self-Efficacy, and Social Relationships. Measures include both self-report and, for certain ages, parent-report versions.

PSYCHOLOGICAL WELL-BEING

POSITIVE AFFECT

Measured by:

NIH Toolbox Positive Affect Survey

LIFE SATISFACTION

Measured by:

NIH Toolbox General Life Satisfaction Survey

NIH Toolbox Domain-Specific Life Satisfaction Survey (Supplemental

Measure)

MEANING AND PURPOSE

Measured by:

NIH Toolbox Meaning and Purpose Survey

NEGATIVE AFFECT

ANGER

Measured by:

NIH Toolbox Anger-Affect Survey

NIH Toolbox Anger-Hostility Survey

NIH Toolbox Anger-Physical Aggression Survey

NIH Toolbox Anger Survey

FEAR

Measured by:

NIH Toolbox Fear-Affect Survey

NIH Toolbox Fear-Somatic Arousal Survey

NIH Toolbox Fear-Over Anxious Survey

NIH Toolbox Fear Survey

NIH Toolbox Fear-Separation Anxiety Survey

SADNESS Measured by: **NIH Toolbox Sadness Survey** NIH Toolbox Apathy Survey (Supplemental Measure) STRESS AND SELF-EFFICACY **PERCEIVED STRESS** Measured by: NIH Toolbox Perceived Stress Survey **SELF-EFFICACY** Measured by: NIH Toolbox Self-Efficacy Survey **COPING STRATEGIES** Measured by: NIH Toolbox Emotion Control Survey (Supplemental Measure) **SOCIAL RELATIONSHIPS**

PERCEIVED SOCIAL SUPPORT

Measured by:

NIH Toolbox Emotional Support Survey

NIH Toolbox Instrumental Support Survey

NIH Toolbox Maternal Relationship Survey (Supplemental Measure)

NIH Toolbox Paternal Relationship Survey (Supplemental Measure)

NIH Toolbox Positive Parental Relationship Survey (Supplemental

Measure)

NIH Toolbox Negative Parental Relationship Survey (Supplemental

Measure)

COMPANIONSHIP

Measured by:

NIH Toolbox Friendship Survey

NIH Toolbox Loneliness Survey

NIH Toolbox Social Withdrawal Survey

NIH Toolbox Positive Peer Interaction Survey

SOCIAL DISTRESS

Measured by:

NIH Toolbox Perceived Rejection Survey

NIH Toolbox Perceived Hostility Survey

NIH Toolbox Peer Rejection Survey

NIH Toolbox Sibling Rejection Survey (Supplemental Measure)

POSITIVE SOCIAL DEVELOPMENT

Measured by:

NIH Toolbox Empathic Behaviors Survey

EMOTION Batteries

There are two NIH Toolbox Emotion Batteries – a self-report battery and a parent-report battery. The self-report battery is available for ages 8-85 and includes all age-specified measures in the Psychological Well-Being, Negative Affect, Stress and Self-Efficacy, and Social Relationships domains, as indicated. The parent-report battery is available for ages 3-12 and includes all age-specified measures in the Psychological Well-Being, Negative Affect, Stress and Self-Efficacy, and Social Relationships domains, as indicated. There are individual scores provided for each individual battery measure, as described, but no composite scores.

Section 6: Subdomain and Subdomain Component Definitions

Subdomain: STRESS AND SELF-EFFICACY

Stress and Self-Efficacy focus on individual perceptions about the nature of events and their relationship to the perceived coping resources of an individual. In general, psychological stress is said to occur when an individual perceives that environmental or internal demands that are

personally meaningful exceed his/her adaptive capacity. NIH Toolbox assesses three areas related to stress and adaptive capacity: Perceived Stress, Self-Efficacy, and Emotion Control.

Subdomain Component: COPING STRATEGIES

Coping Strategies are the cognitive and behavioral efforts to manage specific external or internal demands (as well as conflicts between them) that are appraised as taxing or exceeding the resources of the person. Coping Strategies vary across situations, over time, and as development progresses. In NIH Toolbox, Coping Strategies is measured by:

NIH Toolbox Emotion Control Survey

Section 7: Measure Description

EMOTION Supplemental Measure

The NIH Toolbox Emotion Control Survey is a supplemental measure that includes self-report versions for ages 8-17 as well as a parent-report version for ages 8-12. It is a 10-item fixed-length form that assesses the ability to control the frequency and intensity of both positive and negative emotion when it occurs.

Section 8: Post-Validation/Post-Norming Changes to

the Measure

No notable Post-Validation/Post-Norming changes were made to the measure subsequent to those changes previously reported on during the measure's development and validation phases (Salsman et al., Emotion Assessment Using the NIH Toolbox, *Neurology*, in press).

Section 9: The Measure's Scoring Model

Measurement theory applied for scoring:

Classical Test Theory (CTT)

CTT scoring approach employed:

Sum (raw sum of item responses)

Measure length:

Fixed (10 items, 8-17 Self Report and 8-12 Parent Report)

Response data:

Ordinal (items have a 5-point response scale; options range from "not at all true" to "very true")

Scores computed/available*:

Age-Adjusted Scale Score (mean=50, standard deviation=10)

Fully Adjusted Scale Score (mean=50, standard deviation=10)

Unadjusted Scale Score (mean=50, standard deviation=10)

National Percentile Rank (corresponds to the Age-Adjusted Scale Score)

^{*}Details on these scores and their interpretations are available in the NIH Toolbox Scoring and Interpretation Guide.

Section 10: Measure Norms-8-17 Self Report

The following Tables and Figure present NIH Toolbox normative data associated with this measure:

- Table 1. Measure Raw/Computed Score, Unadjusted Scale Score, and Fully

 Adjusted Scale Score Summary (N, Mean, Standard Deviation) by Age

 Group (8, 9, 10, 11, 12, 13, 14, 15, 16, 17, All)
- Table 2. Measure Raw/Computed Score Statistics (N, Mean, Standard Deviation,

 Minimum/Maximum Observed, 25th/50th/75th Percentile) per Age

 Group (8, 9, 10, 11, 12, 13, 14, 15, 16, 17, All)
- Figure 1. Measure Mean Unadjusted Scale Scores across All Age Groups (8, 9, 10, 11, 12, 13, 14, 15, 16, 17)

Table 1. NIH Toolbox Emotion Control 8-17 by		tion Control aw score)		8-17	tion Cor Unadjustale Sco	usted 8-17 Fully Adjus			usted
Age Group	N	Mean	SD	N	Mean	SD	N	Mean	SD
Age Group									
3	0			0			0		
4	0			0			0		
5	0			0			0		
6	0			0			0		
7	0			0			0		
8	162	33.77	4.96	162	49.02	6.03	156	50.26	6.41
9	181	34.38	4.51	181	49.73	5.50	171	50.08	5.45
10	215	34.83	4.53	215	50.23	5.51	200	50.29	5.71
11	199	35.49	4.33	199	50.88	5.11	189	50.01	5.22
12	210	35.83	4.31	210	51.33	5.16	200	49.98	5.10
13	212	35.17	4.60	212	50.52	5.51	204	50.12	5.61
14	232	34.38	4.44	232	49.57	5.27	224	49.94	5.19
15	222	34.19	4.76	222	49.41	5.68	216	50.03	5.83
16	212	35.33	4.71	212	50.75	5.61	202	49.99	5.49
17	223	35.93	4.07	223	51.43	4.90	215	49.97	4.92
18 - 29	0			0			0		
30 - 39	0			0			0		
40 - 49	0			0			0		
50 - 59	0			0			0		
60 - 69	0			0			0		
70 - 85	0			0			0		
All	2068	34.97	4.52	2068	50.32	5.43	1977	50.06	5.47

Table 2. NIH Toolbox Em	otion	English			Spanish		Т		
Control (raw score) – A	ge 8 Male	Females	Total	Males	Females	Total	Males	Females	All
N	8	3 79	162	0	0	0	83	79	162
Mean	33.6	33.88	33.77				33.69	33.88	33.77
Standard Deviation	n 5.2	9 4.63	4.96				5.29	4.63	4.96
Minimum Observe	d 17.0	15.00	15.00				17.00	15.00	15.00
25th Percentile	27.0	28.00	28.00				27.00	28.00	28.00
50th Percentile (M	edian) 32.0	32.00	32.00				32.00	32.00	32.00
75th Percentile	41.0	42.00	41.00				41.00	42.00	41.00
Maximum Observe	ed 50.0	50.00	50.00				50.00	50.00	50.00

Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Cont	rol (raw score) – Age 9	Males	Males Females		Males	Females	Total	Males	Females	All
	N	90	91	181	0	0	0	90	91	181
	Mean	34.87	33.66	34.38				34.87	33.66	34.38
	Standard Deviation	5.02	3.95	4.51				5.02	3.95	4.51
	Minimum Observed	17.00	10.00	10.00				17.00	10.00	10.00
	25th Percentile	28.00	29.00	29.00				28.00	29.00	29.00
	50th Percentile (Median)	34.00	33.00	33.00				34.00	33.00	33.00
	75th Percentile	41.00	40.00	41.00				41.00	40.00	41.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2	Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Contro	ol (raw score) – Age 10	Males	Males Females		Males	Females	Total	Males	Females	All
	N	109	106	215	0	0	0	109	106	215
	Mean	34.61	35.17	34.83				34.61	35.17	34.83
	Standard Deviation	4.61	4.47	4.53				4.61	4.47	4.53
	Minimum Observed	12.00	10.00	10.00				12.00	10.00	10.00
	25th Percentile	30.00	30.00	30.00				30.00	30.00	30.00
	50th Percentile (Median)	34.00	34.00	34.00				34.00	34.00	34.00
	75th Percentile	41.00	42.00	41.00				41.00	42.00	41.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table	2. NIH Toolbox Emotion	English				Spanish		Т		
Contr	ol (raw score) – Age 11	Males	Females	Total	Males	Females	Total	Males	Females	All
	N	97	102	199	0	0	0	97	102	199
	Mean	35.48	35.50	35.49				35.48	35.50	35.49
	Standard Deviation	4.91	3.72	4.33				4.91	3.72	4.33
	Minimum Observed	12.00	16.00	12.00				12.00	16.00	12.00
	25th Percentile	30.00	30.00	30.00				30.00	30.00	30.00
	50th Percentile (Median)	36.00	35.00	36.00				36.00	35.00	36.00
	75th Percentile	41.00	42.00	42.00				41.00	42.00	42.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Contr	ol (raw score) – Age 12	Males	Males Females		Males	Females	Total	Males	Females	All
	N	98	112	210	0	0	0	98	112	210
	Mean	37.18	34.07	35.83				37.18	34.07	35.83
	Standard Deviation	4.54	3.95	4.31				4.54	3.95	4.31
	Minimum Observed	21.00	13.00	13.00				21.00	13.00	13.00
	25th Percentile	31.00	29.00	30.00				31.00	29.00	30.00
	50th Percentile (Median)	37.00	35.00	36.00				37.00	35.00	36.00
	75th Percentile	43.00	39.00	41.00				43.00	39.00	41.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т		
Contr	ol (raw score) – Age 13	Males Females To		Total	Males	Females	Total	Males	Females	All
	N	110	102	212	0	0	0	110	102	212
	Mean	35.72	34.22	35.17				35.72	34.22	35.17
	Standard Deviation	5.02	4.09	4.60				5.02	4.09	4.60
	Minimum Observed	10.00	11.00	10.00				10.00	11.00	10.00
	25th Percentile	30.00	28.00	29.00				30.00	28.00	29.00
	50th Percentile (Median)	37.00	34.00	36.00				37.00	34.00	36.00
	75th Percentile	42.00	41.00	41.00				42.00	41.00	41.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

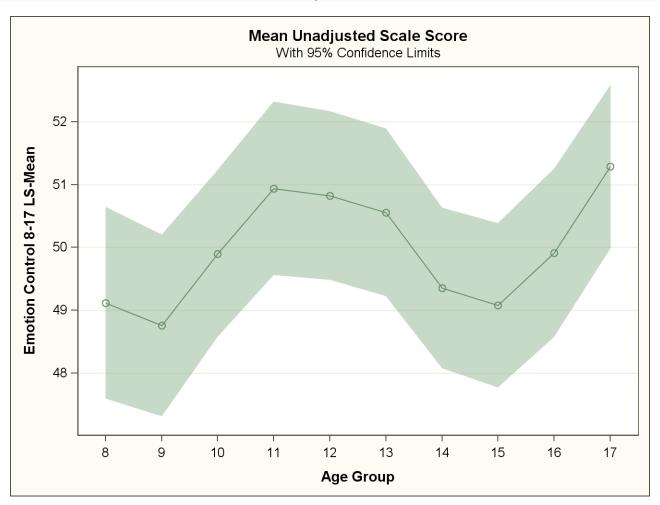
Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т		
Contr	ol (raw score) – Age 14	Males	Males Females		Males	Females	Total	Males	Females	All
	N	111	121	232	0	0	0	111	121	232
	Mean	34.91	33.63	34.38				34.91	33.63	34.38
	Standard Deviation	4.53	4.35	4.44				4.53	4.35	4.44
	Minimum Observed	17.00	10.00	10.00				17.00	10.00	10.00
	25th Percentile	30.00	28.00	29.00				30.00	28.00	29.00
	50th Percentile (Median)	35.00	35.00	35.00				35.00	35.00	35.00
	75th Percentile	40.00	40.00	40.00				40.00	40.00	40.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Control (raw score) – Age 15	Males	Females	Total	Males	Females	Total	Males	Females	All
N	111	111	222	0	0	0	111	111	222
Mean	35.09	32.93	34.19				35.09	32.93	34.19
Standard Deviation	4.88	4.57	4.76				4.88	4.57	4.76
Minimum Observed	15.00	10.00	10.00				15.00	10.00	10.00
25th Percentile	29.00	27.00	29.00				29.00	27.00	29.00
50th Percentile (Median) 35.00	33.00	34.00				35.00	33.00	34.00
75th Percentile	41.00	39.00	40.00				41.00	39.00	40.00
Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Contr	ol (raw score) – Age 16	Males	Females	Total	Males	Females	Total	Males	Females	All
	N	106	106	212	0	0	0	106	106	212
	Mean	36.93	33.00	35.33				36.93	33.00	35.33
	Standard Deviation	4.59	4.57	4.71				4.59	4.57	4.71
	Minimum Observed	19.00	12.00	12.00				19.00	12.00	12.00
	25th Percentile	31.00	28.00	30.00				31.00	28.00	30.00
	50th Percentile (Median)	37.00	34.00	36.00				37.00	34.00	36.00
	75th Percentile	43.00	38.00	42.00				43.00	38.00	42.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table	Table 2. NIH Toolbox Emotion		English			Spanish		Т	otal	
Contr	ol (raw score) – Age 17	Males	Females	Total	Males	Females	Total	Males	Females	All
	N	111	112	223	0	0	0	111	112	223
	Mean	35.84	36.08	35.93				35.84	36.08	35.93
	Standard Deviation	4.41	3.71	4.07				4.41	3.71	4.07
	Minimum Observed	16.00	17.00	16.00				16.00	17.00	16.00
	25th Percentile	31.00	31.00	31.00				31.00	31.00	31.00
	50th Percentile (Median)	37.00	36.00	37.00				37.00	36.00	37.00
	75th Percentile	41.00	41.00	41.00				41.00	41.00	41.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Figure 1 Least Squares Means



Section 11: Measure Norms-8-12 Parent Report

The following Tables and Figure present NIH Toolbox normative data associated with this measure:

- Table 1. Measure Raw/Computed Score, Unadjusted Scale Score, and Fully

 Adjusted Scale Score Summary (N, Mean, Standard Deviation) by Age

 Group (8, 9, 10, 11, 12, All)
- Table 2. Measure Raw/Computed Score Statistics (N, Mean, Standard Deviation,

 Minimum/Maximum Observed, 25th/50th/75th Percentile) per Age

 Group (8, 9, 10, 11, 12, All)
- Figure 1. Measure Mean Unadjusted Scale Scores across All Age Groups (8, 9, 10, 11, 12)

Table 1. NIH Toolbox Emotion Control Parent 8-12 by Age Group			on Control Report (raw core)		tion Cor arent 8-1 justed S Score	2	Emotion Co Parent 8-12 Adjusted S Score		Fully	
	N	Mean	SD	N	Mean	SD	N	Mean	SD	
Age Group										
3	0			0			0			
4	0			0			0			
5	0			0			0			
6	0			0			0			
7	0			0			0			
8	206	37.12	4.15	206	49.94	5.29	198	49.97	5.37	
9	209	36.69	4.50	209	49.60	5.72	199	50.23	5.95	
10	229	36.55	4.10	229	49.36	5.26	211	50.07	5.31	
11	210	37.27	4.09	210	50.15	5.27	200	49.96	5.33	
12	214	38.42	4.20	214	51.77	5.51	205	49.79	5.25	
13	0			0			0			
14	0			0			0			
15	0			0			0			
16	0			0			0			
17	0			0			0			
18 - 29	0			0			0			
30 - 39	0			0			0			
40 - 49	0			0			0			
50 - 59	0			0			0			
60 - 69	0			0			0			
70 - 85	0			0			0			
All	1068	37.21	4.22	1068	50.17	5.42	1013	50.00	5.43	

Table 2. NIH Toolbox Emotion	English			Spanish			Total		
Control Parent Report (raw score) – Age 8	Males	Females	Total	Males	Females	Total	Males	Females	All
N	105	101	206	0	0	0	105	101	206
Mean	36.36	38.23	37.12				36.36	38.23	37.12
Standard Deviation	4.48	3.73	4.15				4.48	3.73	4.15
Minimum Observed	12.00	10.00	10.00				12.00	10.00	10.00
25th Percentile	32.00	34.00	33.00				32.00	34.00	33.00
50th Percentile (Median)	37.00	39.00	38.00				37.00	39.00	38.00
75th Percentile	40.00	42.00	41.00				40.00	42.00	41.00
Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2. NIH Toolbox Emotion Control Parent Report (raw score) – Age 9		English			Spanish			Total		
		Males	Females	Total	Males	Females	Total	Males	Females	All
	N	104	105	209	0	0	0	104	105	209
	Mean	36.12	37.54	36.69				36.12	37.54	36.69
	Standard Deviation	5.58	3.06	4.50				5.58	3.06	4.50
	Minimum Observed	10.00	18.00	10.00				10.00	18.00	10.00
	25th Percentile	31.00	32.00	31.00				31.00	32.00	31.00
	50th Percentile (Median)	37.00	38.00	38.00				37.00	38.00	38.00
	75th Percentile	43.00	41.00	42.00				43.00	41.00	42.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2. NIH Toolbox Emotion	English			Spanish			Total		
Control Parent Report (raw score) – Age 10	Males	Females	Total	Males	Females	Total	Males	Females	All
N	115	114	229	0	0	0	115	114	229
Mean	36.05	37.32	36.55				36.05	37.32	36.55
Standard Deviation	4.69	3.38	4.10				4.69	3.38	4.10
Minimum Observed	13.00	10.00	10.00				13.00	10.00	10.00
25th Percentile	31.00	32.00	31.00				31.00	32.00	31.00
50th Percentile (Median)	37.00	38.00	38.00				37.00	38.00	38.00
75th Percentile	41.00	42.00	41.00				41.00	42.00	41.00
Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2. NIH Toolbox Emotion Control Parent Report (raw score) – Age 11		English			Spanish			Total		
		Males	Females	Total	Males	Females	Total	Males	Females	All
	N	105	105	210	0	0	0	105	105	210
	Mean	36.86	37.87	37.27				36.86	37.87	37.27
	Standard Deviation	4.56	3.56	4.09				4.56	3.56	4.09
	Minimum Observed	16.00	19.00	16.00				16.00	19.00	16.00
	25th Percentile	31.00	32.00	31.00				31.00	32.00	31.00
	50th Percentile (Median)	38.00	39.00	38.00				38.00	39.00	38.00
	75th Percentile	42.00	44.00	42.00				42.00	44.00	42.00
	Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Table 2. NIH Toolbox Emotion	English			Spanish			Total		
Control Parent Report (raw score) – Age 12	Males	Females	Total	Males	Females	Total	Males	Females	All
N	98	116	214	0	0	0	98	116	214
Mean	38.29	38.59	38.42				38.29	38.59	38.42
Standard Deviation	4.58	3.86	4.20				4.58	3.86	4.20
Minimum Observed	11.00	10.00	10.00				11.00	10.00	10.00
25th Percentile	34.00	34.00	34.00				34.00	34.00	34.00
50th Percentile (Median)	39.00	40.00	39.00				39.00	40.00	39.00
75th Percentile	43.00	44.00	44.00				43.00	44.00	44.00
Maximum Observed	50.00	50.00	50.00				50.00	50.00	50.00

Figure 1 Least Squares Means

