

**Life Changes**  
Grade 9/Year 10  
Fast Track Project Technical Report  
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**Citations**

*Instrument*

Dodge, K.A., Bates, J.E., and Pettit, G.S. (1990). Mechanisms in the cycle of violence. *Science*, 250, 1678-1683.

*Reports*

Rains, C. (2002). *Life Changes* (Fast Track Project Technical Report). Available from the Fast Track Project website: <http://www.fasttrackproject.org>

Miller-Johnson, S. and Maumary-Gremaud, A. (1995). *Developmental History and Life Changes* (Fast Track Project Technical Report). Durham, NC: Duke University.

**Data Sources**

*Raw:* P10C

*Scored:* LCH10

**I. Scale Description**

The Life Changes measure, which was originally part of a larger measure called Developmental History, consists of a 15-minute interview that is completed with the parent as part of the summer interview. The Developmental History, developed and used by Dodge and colleagues (1990), is part of a longitudinal study of family origins of children's behavior problems. The measure assesses a number of constructs: perceptions of the parent-child relationship, developmental history, life changes, child care history, discipline strategies, expected success of child in life, school, and service utilization.

There are five versions of the Developmental History measure, based on the time point of administration. Version 1 is administered during year 1 and includes all of the constructs listed above. In addition, the life changes items are asked both for the pre-kindergarten and kindergarten years. Version 2 is administered during year 2 and includes: perceptions of the parent-child relationship, life changes (only for the previous year), discipline strategies, expected success of child in life and school, and service utilization items. In year 3, the Life Changes measure includes only four areas: perceptions of the parent-child relationship, life changes for the previous year, discipline strategies, and service utilization items. The fourth version is given during year 4 and includes the same four areas as in year 3; however, the choices for discipline strategies changed. Finally, in year 5 and thereafter, respondents are asked only questions about life changes for the previous year and about service utilization.

The Life Changes measure has been modified over time but the basic items are primarily still the same. The measure first assesses whether any events, major or minor, have occurred during the past year for the child; examples of these events include a parent's divorce or death, a move to a new location, or financial problems. These questions are rated on a scale of 0 (did not occur), 1 (minor), and 2 (major). The parent is then asked open-ended questions about his/her relationship with the child; these answers are then scored, as are the interviewer's impressions of the parent for these questions, on a scale of 1 to 5, with 1 representing a very negative response and 5 representing a very positive response. Next, the interviewer describes a series of six situations, and the parent is asked to describe how she/he would handle the misbehavior in that situation (i.e. ignoring the actions, reasoning, directions, etc.). Interviewers then code these responses as 0 (not mentioned) or 1 (mentioned). Lastly, the parent answers questions about the family's use of treatment services during the past year.

## **II. Report Sample**

These exploratory analyses were conducted with the first cohort on the control sample (n=155) and on the normative sample (n=387, 463 with overlap) during the tenth year of the study. Overall, 93 records were missing the whole measure. 29 were missing from the control sample (4 from Durham, 11 from Nashville, 7 from Pennsylvania, and 7 from Washington) and 83 were missing from the normative sample (12 from Durham, 28 from Nashville, 23 from Pennsylvania, and 20 from Washington).

In addition, it should be noted that 283 records skipped 3 or more items; of these, 81 were from the control sample (26 from Durham, 14 from Nashville, 22 from Pennsylvania, and 19 from Washington) and 242 were from the normative sample (74 from Durham, 53 from Nashville, 64 from Pennsylvania, and 51 from Washington); a number of these were from the overlap sample.

Four items in particular had a higher number of skips: how the child reacted to the changes during the previous year (86 responses), what type of treatment facility the child had used for emotional or behavioral difficulties in the past year (322 responses), what type of treatment facility the respondent had used in the past year (329 responses), and which other member of the family had received treatment (326 responses).

## **III. Scaling**

As noted earlier, there are four main sections to the Life Changes measure: perceptions of the parent-child relationship, life changes (only for the previous year), discipline strategies, and service utilization items. These are then broken down into eleven subscales, which are described as follows.

Two subscales measure the perceptions of the parent-child relationship: *Quality of Parent-Child Relationship - Parent Rating* (items PxC18, PxC219R, PxC20, PxC21) and *Quality of Parent-Child Relationship - Observer Rating* (items P2x22, PxC23, PxC24, PxC25). The mean value is calculated for each of these subscales.

The third subscale, called the *Stress Scale Sum Score* is summed across the scale to represent the cumulative total of life changes experienced by the family.

The rest of the subscales come as part of the section on discipline strategies. In this portion of the measure, the parent is presented with a series of vignettes that cover episodes of child misbehavior. The parent is asked to describe how they would respond to the scenario. The interviewer then rates whether or not the parent mentioned using any of the following discipline strategies: ignore, reasoning, inductive reasoning, verbal punishment, withdrawal of privileges, commands, proactive guidance, or physical punishment. During year 4 of this study, the strategies change and remain the same for the later years. The new strategies in year 4 are: contingent ignoring, doing nothing, reasoning/inductive reasoning/proactive guidance, inappropriate verbal correction, appropriate verbal correction, withdrawal of privileges, directives, or physical punishment.

Each of the discipline strategies are summed across the vignettes, averaged, and maintained as a separate scale score. In other words, the items on the scale represent the responses for each vignette for that specific discipline strategy. The subscales based on the vignettes are not included after year 4 because the items involved in these subscales are dropped after year 4.

Cronbach's alpha was calculated for each subscale and are shown in the table below:

Cronbach's Alpha for Scales		
Variable	Normative	High Risk Control
Y9 LC Quality Parent-Child Relat_ Observ (LCH9qob )	0.85	0.86
Y9 LC Quality Parent-Child Relat_Parent (LCH9qpr )	0.75	0.80
Y9 LC Stress Scale sum score (LCH9str )	0.63	0.68

Both the *Quality of the Parent-Child Relationship-parent version* and the *Quality of the Parent-Child Relationship-observer version* showed adequate reliability for internal consistency. The *Stress Scale Sum Score* showed a more moderate reliability for both samples.

#### IV. Differences Between Groups

A series of t-tests indicated significant differences between the normative and control samples for all three subscales. Two of the subscales, the *Quality of the Parent-Child Relationship-parent version* and the *Quality of the Parent-Child Relationship-observer version*, also showed the mean for the normative sample to be greater than the mean for the control sample.

Of the 8 items not included in the scales, 5 had significant differences between the normative and control samples. They were whether the child had received treatment for emotional or behavioral difficulties (P10C74), whether the child had received medication to control behavior or attention (P10C76), whether the respondent had received treatment during the past year for personal or emotional difficulties (P10C77), what type of treatment facility the respondent had used in the past year for the treatment of personal or emotional difficulties (P10C78), and whether anyone else in the household had received treatment during the past year for emotional or behavioral difficulties (P10C79). All, except P10C78, have higher means for the control sample relative to the normative sample.

Comparison of Means for Normative and Control for Scales							
Variable	Normative		Control		DF	t Value	Pr >  t
	Mean	Std Dev	Mean	Std Dev			
Y10 LC Quality Parent-Child Relat_ Observer (LCH10qob)	3.94	0.72	3.62	0.76	366	-3.90	0.0001
Y10 LC Quality Parent-Child Relat_Parent (LCH10qpr)	4.05	0.70	3.62	0.74	366	-5.40	<.0001
Y10 LC Stress Scale sum score (LCH10str)	2.77	2.88	3.85	3.71	205	2.84	0.0050

Comparison of Means for Normative and Control for Items							
Variable	Normative		Control		DF	t Value	Pr >  t
	Mean	Std Dev	Mean	Std Dev			
2. TC reaction to changes (P10C17)	2.73	1.14	2.61	1.19	277	-0.85	0.3987
13. TC treated emot/beh difficulties (P10C74)	0.07	0.26	0.23	0.42	174	3.89	0.0001
13a. facility where TC treated (P10C75)	1.88	0.60	1.71	0.46	43	-1.06	0.2960
14. medication to control beh/attent (P10C76)	0.03	0.18	0.15	0.35	156	3.32	0.0011
15. respondent received treatment (P10C77)	0.08	0.27	0.16	0.37	195	2.18	0.0305
15a. facility where resp treated (P10C78)	2.74	0.99	2.05	0.51	26.6	-2.70	0.0119
16. others receive treatment (P10C79)	0.07	0.26	0.19	0.40	183	2.99	0.0032
16a. which member was treated (P10C80)	2.28	0.46	2.08	0.28	26.4	-1.58	0.1258

## V. Recommendations for Use

Analysts should note that the distributions for the *Quality of the Parent-Child Relationship-parent version* and the *Quality of the Parent-Child Relationship-observer version* were fairly normal for both the normative and control samples. The *Stress Scale Sum Score* was positively skewed for both samples.

Analysts should also note that several items were excluded from the analysis because they were open-ended response questions. Item P10C11a asked the respondent to specify which person had been involved with drug use, alcohol use, or addiction during the past year. Item P10C16a asked the respondent to specify any life changes not previously mentioned in the list. Item P10C75a asked the respondent to specify the type of facility the child had received treatment at if it was not either inpatient/residential center/day hospital or outpatient therapist/mental health center. Item P10C78a asked the respondent to specify the type of facility the respondent had received treatment at if it was not one of the following: inpatient/residential center/day hospital, outpatient therapist/mental health center, or alcohol and drug rehabilitation center. Items P10C17A-P10C17D were the respondent's answers to a series of four questions about the child. These questions were: what is the child like (P10C17A), how well do the respondent and the child get along (P10C17B), what is the best thing about the child (P10C17C), and what is the most troubling thing about the child/concerns about the child (P10C17D).

## VI. Item and Scale Means and SDs

Descriptive Statistics for Items - High Risk Control Sample						
Variable	Label	N	Mean	Std Dev	Minimum	Maximum
P10C1	1. changes: moved/major remodeling	126	0.44	0.76	0.00	2.00
P10C2	1. changes: medical problems w/TC	126	0.21	0.56	0.00	2.00
P10C3	1. changes: medical problems w/family	126	0.49	0.81	0.00	2.00
P10C4	1. changes: death of important person	126	0.51	0.84	0.00	2.00
P10C5	1. changes: divorce of TCs parents	126	0.02	0.20	0.00	2.00
P10C6	1. changes: separation of TCs parents	126	0.10	0.41	0.00	2.00
P10C7	1. changes: remarriage/reconciliation	126	0.03	0.22	0.00	2.00
P10C8	1. changes: parent/child separation	126	0.36	0.71	0.00	2.00
P10C9	1. changes: financial problems	126	0.40	0.71	0.00	2.00
P10C10	1. changes: legal problems	126	0.24	0.61	0.00	2.00
P10C11	1. changes: drug/alcohol use	126	0.10	0.44	0.00	2.00
P10C12	1. changes: stress/conflicts	126	0.25	0.60	0.00	2.00
P10C13	1. changes: pregnancies, miscarriages	126	0.12	0.45	0.00	2.00
P10C14	1. changes: job-related stress	126	0.31	0.63	0.00	2.00
P10C15	1. changes: loss of job	126	0.18	0.56	0.00	2.00
P10C16	1. changes: other	126	0.09	0.40	0.00	2.00
P10C17	2. TC reaction to changes	95	2.61	1.19	1.00	5.00
P10C18	p-rating 1. satisfaction w/parent role	126	3.94	1.02	1.00	5.00
P10C19	p-rating 2. child difficulty	126	3.10	0.83	1.00	5.00
P10C20	p-rating 3. parent-child relation	126	4.09	0.93	1.00	5.00
P10C21	p-rating 4. satisfaction child behav	126	3.56	1.09	1.00	5.00
P10C22	i-rating 1. parent description of TC	126	3.81	0.92	1.00	5.00
P10C23	i-rating 2. parent insight about TC	126	3.48	0.94	1.00	5.00
P10C24	i-rating 3. parent affect	126	3.69	0.81	1.00	5.00
P10C25	i-rating 4. parent-child relationship	126	3.52	0.94	1.00	5.00
P10C74	13. TC treated emot/beh difficulties	126	0.23	0.42	0.00	1.00
P10C75	13a. facility where TC treated	28	1.71	0.46	1.00	2.00
P10C76	14. medication to control beh/attent	124	0.15	0.35	0.00	1.00
P10C77	15. respondent received treatment	125	0.16	0.37	0.00	1.00
P10C78	15a. facility where resp treated	20	2.05	0.51	1.00	4.00
P10C79	16. others receive treatment	125	0.19	0.40	0.00	1.00
P10C80	16a. which member was treated	24	2.08	0.28	2.00	3.00

Descriptive Statistics for Items - Normative Sample						
Variable	Label	N	Mean	Std Dev	Minimum	Maximum
P10C1	1. changes: moved/major remodeling	303	0.42	0.76	0.00	2.00
P10C2	1. changes: medical problems w/TC	303	0.16	0.48	0.00	2.00
P10C3	1. changes: medical problems w/family	303	0.44	0.78	0.00	2.00
P10C4	1. changes: death of important person	303	0.44	0.79	0.00	2.00
P10C5	1. changes: divorce of TCs parents	303	0.03	0.21	0.00	2.00
P10C6	1. changes: separation of TCs parents	303	0.05	0.29	0.00	2.00
P10C7	1. changes: remarriage/reconciliation	303	0.03	0.23	0.00	2.00
P10C8	1. changes: parent/child separation	303	0.16	0.47	0.00	2.00
P10C9	1. changes: financial problems	303	0.30	0.65	0.00	2.00
P10C10	1. changes: legal problems	303	0.16	0.52	0.00	2.00
P10C11	1. changes: drug/alcohol use	302	0.08	0.37	0.00	2.00
P10C12	1. changes: stress/conflicts	302	0.25	0.62	0.00	2.00
P10C13	1. changes: pregnancies, miscarriages	303	0.10	0.39	0.00	2.00
P10C14	1. changes: job-related stress	303	0.23	0.51	0.00	2.00
P10C15	1. changes: loss of job	303	0.13	0.47	0.00	2.00
P10C16	1. changes: other	303	0.12	0.43	0.00	2.00
P10C17	2. TC reaction to changes	230	2.65	1.14	1.00	5.00
P10C18	p-rating 1. satisfaction w/parent role	302	4.29	0.94	1.00	5.00
P10C19	p-rating 2. child difficulty	302	2.71	0.96	1.00	5.00
P10C20	p-rating 3. parent-child relation	302	4.31	0.85	1.00	5.00
P10C21	p-rating 4. satisfaction child behav	302	3.98	1.03	1.00	5.00
P10C22	i-rating 1. parent description of TC	302	4.14	0.94	1.00	5.00
P10C23	i-rating 2. parent insight about TC	302	3.60	0.97	1.00	5.00
P10C24	i-rating 3. parent affect	302	3.93	0.75	1.00	5.00
P10C25	i-rating 4. parent-child relationship	302	3.81	0.90	1.00	5.00
P10C74	13. TC treated emot/beh difficulties	302	0.10	0.30	0.00	1.00
P10C75	13a. facility where TC treated	29	1.83	0.54	1.00	3.00
P10C76	14. medication to control beh/attent	302	0.05	0.22	0.00	1.00
P10C77	15. respondent received treatment	301	0.09	0.29	0.00	1.00
P10C78	15a. facility where resp treated	28	2.46	0.92	1.00	4.00
P10C79	16. others receive treatment	301	0.10	0.30	0.00	1.00
P10C80	16a. which member was treated	29	2.17	0.38	2.00	3.00

Descriptive Statistics for Subscales - High Risk Control Sample						
Variable	Label	N	Mean	Std Dev	Minimum	Maximum
LCH10qob	Y10 LC Quality Parent-Child Relat_Observer	126	3.62	0.76	1.50	5.00
LCH10qpr	Y10 LC Quality Parent-Child Relat_Parent	126	3.62	0.74	1.00	5.00
LCH10str	Y10 LC Stress Scale sum score	126	3.85	3.71	0.00	17.00

Descriptive Statistics for Subscales - Normative Sample						
Variable	Label	N	Mean	Std Dev	Minimum	Maximum
LCH10qob	Y10 LC Quality Parent-Child Relat_Observer	302	3.87	0.75	1.50	5.00
LCH10qpr	Y10 LC Quality Parent-Child Relat_Parent	302	3.97	0.73	1.00	5.00
LCH10str	Y10 LC Stress Scale sum score	303	3.07	3.21	0.00	17.00

**VII. Item and Scale Correlations**

**Item Correlations**

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations												
	P10C1	P10C2	P10C3	P10C4	P10C5	P10C6	P10C7	P10C8	P10C9	P10C10	P10C11	P10C12
<b>P10C1</b> 1. changes: moved/major remodeling	1.000 0.400 369	-0.044 0.400 369	0.060 0.251 369	0.101 0.052 369	0.142 0.006 369	0.033 0.521 369	-0.029 0.585 369	0.136 0.009 369	0.178 0.001 369	0.197 0.000 369	0.138 0.008 368	0.033 0.523 368
<b>P10C2</b> 1. changes: medical problems w/TC	-0.044 0.400 369	1.000 0.349 369	0.049 0.209 369	0.066 0.209 369	0.045 0.390 369	-0.028 0.593 369	-0.045 0.386 369	0.044 0.394 369	0.080 0.127 369	0.030 0.560 369	-0.042 0.424 368	0.089 0.087 368
<b>P10C3</b> 1. changes: medical problems w/family	0.060 0.251 369	0.049 0.349 369	1.000 0.000 369	0.302 0.000 369	-0.037 0.473 369	-0.008 0.873 369	-0.048 0.358 369	0.069 0.187 369	0.220 0.000 369	0.169 0.001 369	0.123 0.018 368	0.281 0.000 368
<b>P10C4</b> 1. changes: death of important person	0.101 0.052 369	0.066 0.209 369	0.302 0.000 369	1.000 0.000 369	-0.017 0.744 369	0.099 0.056 369	-0.018 0.738 369	-0.006 0.903 369	0.141 0.007 369	0.059 0.259 369	0.012 0.816 368	0.119 0.023 368
<b>P10C5</b> 1. changes: divorce of TCs parents	0.142 0.006 369	0.045 0.390 369	-0.037 0.473 369	-0.017 0.744 369	1.000 0.000 369	0.336 0.000 369	-0.018 0.736 369	0.090 0.084 369	0.186 0.000 369	0.194 0.000 369	-0.028 0.594 368	0.018 0.725 368
<b>P10C6</b> 1. changes: separation of TCs parents	0.033 0.521 369	-0.028 0.593 369	-0.008 0.873 369	0.099 0.056 369	0.336 0.000 369	1.000 0.000 369	0.044 0.395 369	0.075 0.148 369	0.094 0.071 369	0.062 0.238 369	-0.039 0.454 368	0.090 0.086 368
<b>P10C7</b> 1. changes: remarriage/reconciliation	-0.029 0.585 369	-0.045 0.386 369	-0.048 0.358 369	-0.018 0.738 369	-0.018 0.736 369	0.044 0.395 369	1.000 0.493 369	0.036 0.493 369	0.058 0.270 369	0.004 0.939 369	-0.029 0.585 368	0.019 0.718 368
<b>P10C8</b> 1. changes: parent/child separation	0.136 0.009 369	0.044 0.394 369	0.069 0.187 369	-0.006 0.903 369	0.090 0.084 369	0.075 0.148 369	0.036 0.493 369	1.000 0.493 369	0.145 0.005 369	0.280 0.000 369	0.033 0.525 368	0.188 0.000 368
<b>P10C9</b> 1. changes: financial problems	0.178 0.001 369	0.080 0.127 369	0.220 0.000 369	0.141 0.007 369	0.186 0.000 369	0.094 0.071 369	0.058 0.270 369	0.145 0.005 369	1.000 0.000 369	0.293 0.000 369	0.172 0.001 368	0.194 0.000 368
<b>P10C10</b> 1. changes: legal problems	0.197 0.000 369	0.030 0.560 369	0.169 0.001 369	0.059 0.259 369	0.194 0.000 369	0.062 0.238 369	0.004 0.939 369	0.280 0.000 369	0.293 0.000 369	1.000 0.000 369	0.258 0.000 368	0.366 0.000 368
<b>P10C11</b> 1. changes: drug/alcohol use	0.138 0.008 368	-0.042 0.424 368	0.123 0.018 368	0.012 0.816 368	-0.028 0.594 368	-0.039 0.454 368	-0.029 0.585 368	0.033 0.525 368	0.172 0.001 368	0.258 0.000 368	1.000 0.000 368	0.165 0.001 368
<b>P10C12</b> 1. changes: stress/conflicts	0.033 0.523 368	0.089 0.087 368	0.281 0.000 368	0.119 0.023 368	0.018 0.725 368	0.090 0.086 368	0.019 0.718 368	0.188 0.000 368	0.194 0.000 368	0.366 0.000 368	0.165 0.001 368	1.000 0.000 368
<b>P10C13</b> 1. changes: pregnancies, miscarriages	0.063 0.228 369	0.054 0.297 369	0.120 0.021 369	0.103 0.048 369	-0.033 0.523 369	0.038 0.466 369	-0.034 0.513 369	0.102 0.049 369	0.156 0.003 369	0.088 0.091 369	-0.054 0.301 368	0.054 0.297 368
<b>P10C14</b> 1. changes: job-related stress	0.121 0.020 369	0.045 0.387 369	0.003 0.955 369	0.021 0.692 369	0.051 0.331 369	-0.005 0.925 369	0.024 0.651 369	0.311 0.000 369	0.174 0.001 369	0.171 0.001 369	0.141 0.007 368	0.044 0.397 368
<b>P10C15</b> 1. changes: loss of job	0.089 0.086 369	0.014 0.793 369	0.094 0.071 369	0.034 0.520 369	0.196 0.000 369	0.014 0.787 369	0.006 0.905 369	0.152 0.003 369	0.293 0.000 369	0.196 0.000 369	0.176 0.001 368	0.117 0.024 368
<b>P10C16</b> 1. changes: other	0.005 0.917 369	-0.047 0.365 369	-0.015 0.779 369	-0.061 0.246 369	-0.034 0.519 369	-0.047 0.365 369	-0.035 0.508 369	0.125 0.016 369	-0.022 0.669 369	0.025 0.634 369	0.153 0.003 368	0.064 0.220 368



Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations												
	P10C1	P10C2	P10C3	P10C4	P10C5	P10C6	P10C7	P10C8	P10C9	P10C10	P10C11	P10C12
<b>P10C17</b> 2. TC reaction to changes	0.051 0.392 279	0.020 0.743 279	-0.215 0.000 279	-0.207 0.001 279	-0.003 0.956 279	-0.007 0.902 279	0.120 0.045 279	-0.036 0.552 279	-0.144 0.016 279	-0.144 0.016 279	-0.163 0.006 278	-0.082 0.174 278
<b>P10C18</b> p-rating 1. satisfaction w/parent role	-0.081 0.119 368	-0.029 0.577 368	-0.034 0.514 368	-0.009 0.867 368	0.044 0.403 368	-0.021 0.682 368	0.085 0.104 368	-0.145 0.005 368	-0.142 0.006 368	-0.162 0.002 368	-0.016 0.760 367	-0.086 0.100 367
<b>P10C19</b> p-rating 2. child difficulty	0.021 0.693 368	0.002 0.976 368	0.070 0.177 368	-0.024 0.644 368	-0.081 0.123 368	0.022 0.679 368	0.017 0.747 368	0.143 0.006 368	0.057 0.277 368	0.094 0.071 368	0.109 0.037 367	0.102 0.051 367
<b>P10C20</b> p-rating 3. parent-child relation	0.001 0.984 368	-0.064 0.221 368	-0.016 0.763 368	-0.040 0.448 368	0.078 0.135 368	-0.024 0.651 368	0.000 1.000 368	-0.080 0.128 368	-0.049 0.353 368	-0.068 0.195 368	-0.027 0.606 367	-0.119 0.023 367
<b>P10C21</b> p-rating 4. satisfaction child behav	-0.118 0.024 368	-0.034 0.520 368	-0.090 0.086 368	-0.037 0.485 368	-0.086 0.100 368	-0.176 0.001 368	-0.031 0.553 368	-0.184 0.000 368	-0.163 0.002 368	-0.155 0.003 368	-0.093 0.076 367	-0.205 0.000 367
<b>P10C22</b> i-rating 1. parent description of TC	-0.000 0.995 368	-0.086 0.100 368	-0.086 0.098 368	0.034 0.517 368	-0.010 0.843 368	-0.042 0.427 368	0.038 0.472 368	-0.177 0.001 368	-0.137 0.009 368	-0.135 0.009 368	-0.024 0.646 367	-0.145 0.005 367
<b>P10C23</b> i-rating 2. parent insight about TC	0.032 0.545 368	-0.023 0.663 368	-0.033 0.532 368	-0.001 0.983 368	0.043 0.411 368	-0.040 0.443 368	0.025 0.637 368	-0.068 0.196 368	-0.147 0.005 368	-0.068 0.190 368	-0.050 0.339 367	-0.101 0.052 367
<b>P10C24</b> i-rating 3. parent affect	0.016 0.767 368	-0.036 0.489 368	-0.063 0.225 368	0.047 0.368 368	0.057 0.276 368	-0.009 0.865 368	0.018 0.728 368	-0.123 0.018 368	-0.100 0.056 368	-0.098 0.060 368	-0.030 0.572 367	-0.099 0.058 367
<b>P10C25</b> i-rating 4. parent-child relationship	-0.009 0.870 368	-0.018 0.732 368	-0.008 0.875 368	0.054 0.300 368	0.066 0.205 368	-0.018 0.732 368	0.047 0.368 368	-0.095 0.070 368	-0.116 0.026 368	-0.134 0.010 368	-0.100 0.057 367	-0.063 0.231 367
<b>P10C74</b> 13. TC treated emot/beh difficulties	0.116 0.026 367	0.110 0.035 367	0.010 0.856 367	0.013 0.801 367	0.040 0.446 367	0.085 0.106 367	-0.050 0.336 367	0.240 0.000 367	0.106 0.042 367	0.219 0.000 367	0.166 0.001 367	0.201 0.000 367
<b>P10C75</b> 13a. facility where TC treated	-0.222 0.147 44	-0.081 0.600 44	-0.150 0.330 44	-0.329 0.029 44	0.062 0.690 44	-0.069 0.655 44	.	-0.474 0.001 44	-0.052 0.735 44	-0.226 0.141 44	0.018 0.910 44	-0.350 0.020 44
<b>P10C76</b> 14. medication to control beh/attent	0.053 0.315 365	0.064 0.224 365	0.041 0.440 365	0.045 0.393 365	-0.036 0.496 365	-0.050 0.339 365	-0.037 0.485 365	0.109 0.037 365	-0.010 0.848 365	0.047 0.372 365	0.059 0.264 365	0.049 0.353 365
<b>P10C77</b> 15. respondent received treatment	0.034 0.513 366	0.117 0.025 366	0.237 0.000 366	0.068 0.194 366	0.002 0.970 366	0.072 0.167 366	0.026 0.616 366	0.096 0.067 366	0.167 0.001 366	0.213 0.000 366	0.236 0.000 366	0.278 0.000 366
<b>P10C78</b> 15a. facility where resp treated	-0.266 0.102 39	0.235 0.150 39	-0.214 0.190 39	-0.097 0.556 39	-0.075 0.651 39	0.270 0.096 39	0.314 0.052 39	0.044 0.789 39	-0.352 0.028 39	-0.036 0.826 39	-0.042 0.799 39	-0.108 0.514 39
<b>P10C79</b> 16. others receive treatment	0.042 0.424 366	0.070 0.184 366	0.214 0.000 366	0.084 0.108 366	-0.047 0.366 366	-0.014 0.792 366	-0.049 0.354 366	0.051 0.335 366	0.070 0.183 366	0.147 0.005 366	0.085 0.106 366	0.119 0.022 366
<b>P10C80</b> 16a. which member was treated	0.039 0.807 42	0.120 0.448 42	0.254 0.104 42	-0.161 0.308 42	.	-0.070 0.660 42	.	-0.178 0.259 42	0.252 0.107 42	0.044 0.780 42	0.100 0.527 42	0.067 0.673 42

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations										
	P10C13	P10C14	P10C15	P10C16	P10C17	P10C18	P10C19	P10C20	P10C21	P10C22
<b>P10C1</b> 1. changes: moved/major remodeling	0.063 0.228 369	0.121 0.020 369	0.089 0.086 369	0.005 0.917 369	0.051 0.392 279	-0.081 0.119 368	0.021 0.693 368	0.001 0.984 368	-0.118 0.024 368	-0.000 0.995 368
<b>P10C2</b> 1. changes: medical problems w/TC	0.054 0.297 369	0.045 0.387 369	0.014 0.793 369	-0.047 0.365 369	0.020 0.743 279	-0.029 0.577 368	0.002 0.976 368	-0.064 0.221 368	-0.034 0.520 368	-0.086 0.100 368
<b>P10C3</b> 1. changes: medical problems w/family	0.120 0.021 369	0.003 0.955 369	0.094 0.071 369	-0.015 0.779 369	-0.215 0.000 279	-0.034 0.514 368	0.070 0.177 368	-0.016 0.763 368	-0.090 0.086 368	-0.086 0.098 368
<b>P10C4</b> 1. changes: death of important person	0.103 0.048 369	0.021 0.692 369	0.034 0.520 369	-0.061 0.246 369	-0.207 0.001 279	-0.009 0.867 368	-0.024 0.644 368	-0.040 0.448 368	-0.037 0.485 368	0.034 0.517 368
<b>P10C5</b> 1. changes: divorce of TCs parents	-0.033 0.523 369	0.051 0.331 369	0.196 0.000 369	-0.034 0.519 369	-0.003 0.956 279	0.044 0.403 368	-0.081 0.123 368	0.078 0.135 368	-0.086 0.100 368	-0.010 0.843 368
<b>P10C6</b> 1. changes: separation of TCs parents	0.038 0.466 369	-0.005 0.925 369	0.014 0.787 369	-0.047 0.365 369	-0.007 0.902 279	-0.021 0.682 368	0.022 0.679 368	-0.024 0.651 368	-0.176 0.001 368	-0.042 0.427 368
<b>P10C7</b> 1. changes: remarriage/reconciliation	-0.034 0.513 369	0.024 0.651 369	0.006 0.905 369	-0.035 0.508 369	0.120 0.045 279	0.085 0.104 368	0.017 0.747 368	0.000 1.000 368	-0.031 0.553 368	0.038 0.472 368
<b>P10C8</b> 1. changes: parent/child separation	0.102 0.049 369	0.311 0.000 369	0.152 0.003 369	0.125 0.016 369	-0.036 0.552 279	-0.145 0.005 368	0.143 0.006 368	-0.080 0.128 368	-0.184 0.000 368	-0.177 0.001 368
<b>P10C9</b> 1. changes: financial problems	0.156 0.003 369	0.174 0.001 369	0.293 0.000 369	-0.022 0.669 369	-0.144 0.016 279	-0.142 0.006 368	0.057 0.277 368	-0.049 0.353 368	-0.163 0.002 368	-0.137 0.009 368
<b>P10C10</b> 1. changes: legal problems	0.088 0.091 369	0.171 0.001 369	0.196 0.000 369	0.025 0.634 369	-0.144 0.016 279	-0.162 0.002 368	0.094 0.071 368	-0.068 0.195 368	-0.155 0.003 368	-0.135 0.009 368
<b>P10C11</b> 1. changes: drug/alcohol use	-0.054 0.301 368	0.141 0.007 368	0.176 0.001 368	0.153 0.003 368	-0.163 0.006 278	-0.016 0.760 367	0.109 0.037 367	-0.027 0.606 367	-0.093 0.076 367	-0.024 0.646 367
<b>P10C12</b> 1. changes: stress/conflicts	0.054 0.297 368	0.044 0.397 368	0.117 0.024 368	0.064 0.220 368	-0.082 0.174 278	-0.086 0.100 367	0.102 0.051 367	-0.119 0.023 367	-0.205 0.000 367	-0.145 0.005 367
<b>P10C13</b> 1. changes: pregnancies, miscarriages	1.000 369	0.040 0.440 369	0.023 0.656 369	0.049 0.351 369	-0.011 0.854 279	-0.036 0.494 368	-0.028 0.596 368	0.031 0.549 368	-0.038 0.472 368	-0.049 0.344 368
<b>P10C14</b> 1. changes: job-related stress	0.040 0.440 369	1.000 369	0.283 0.000 369	-0.032 0.535 369	-0.076 0.205 279	-0.104 0.046 368	0.071 0.174 368	0.057 0.276 368	-0.009 0.867 368	0.030 0.561 368
<b>P10C15</b> 1. changes: loss of job	0.023 0.656 369	0.283 0.000 369	1.000 369	0.107 0.041 369	-0.097 0.106 279	0.000 0.997 368	0.021 0.685 368	0.054 0.303 368	-0.110 0.035 368	0.018 0.728 368
<b>P10C16</b> 1. changes: other	0.049 0.351 369	-0.032 0.535 369	0.107 0.041 369	1.000 369	-0.035 0.557 279	-0.087 0.096 368	0.082 0.118 368	-0.071 0.173 368	-0.101 0.052 368	-0.013 0.805 368
<b>P10C17</b> 2. TC reaction to changes	-0.011 0.854 279	-0.076 0.205 279	-0.097 0.106 279	-0.035 0.557 279	1.000 279	0.152 0.011 278	-0.009 0.885 278	0.101 0.094 278	0.149 0.013 278	0.089 0.140 278

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations										
	P10C13	P10C14	P10C15	P10C16	P10C17	P10C18	P10C19	P10C20	P10C21	P10C22
<b>P10C18</b> p-rating 1. satisfaction w/parent role	-0.036 0.494 368	-0.104 0.046 368	0.000 0.997 368	-0.087 0.096 368	0.152 0.011 278	1.000 0.000 368	-0.369 0.000 368	0.478 0.000 368	0.538 0.000 368	0.430 0.000 368
<b>P10C19</b> p-rating 2. child difficulty	-0.028 0.596 368	0.071 0.174 368	0.021 0.685 368	0.082 0.118 368	-0.009 0.885 278	-0.369 0.000 368	1.000 0.000 368	-0.445 0.000 368	-0.478 0.000 368	-0.402 0.000 368
<b>P10C20</b> p-rating 3. parent-child relation	0.031 0.549 368	0.057 0.276 368	0.054 0.303 368	-0.071 0.173 368	0.101 0.094 278	0.478 0.000 368	-0.445 0.000 368	1.000 0.000 368	0.555 0.000 368	0.574 0.000 368
<b>P10C21</b> p-rating 4. satisfaction child behav	-0.038 0.472 368	-0.009 0.867 368	-0.110 0.035 368	-0.101 0.052 368	0.149 0.013 278	0.538 0.000 368	-0.478 0.000 368	0.555 0.000 368	1.000 0.000 368	0.573 0.000 368
<b>P10C22</b> i-rating 1. parent description of TC	-0.049 0.344 368	0.030 0.561 368	0.018 0.728 368	-0.013 0.805 368	0.089 0.140 278	0.430 0.000 368	-0.402 0.000 368	0.574 0.000 368	0.573 0.000 368	1.000 0.000 368
<b>P10C23</b> i-rating 2. parent insight about TC	0.060 0.250 368	0.037 0.474 368	-0.008 0.881 368	0.051 0.327 368	-0.023 0.707 278	0.155 0.003 368	-0.248 0.000 368	0.290 0.000 368	0.246 0.000 368	0.501 0.000 368
<b>P10C24</b> i-rating 3. parent affect	-0.022 0.671 368	0.014 0.795 368	-0.005 0.925 368	-0.105 0.044 368	0.143 0.017 278	0.408 0.000 368	-0.367 0.000 368	0.488 0.000 368	0.491 0.000 368	0.670 0.000 368
<b>P10C25</b> i-rating 4. parent-child relationship	0.026 0.625 368	0.026 0.616 368	0.008 0.885 368	-0.036 0.492 368	0.108 0.072 278	0.427 0.000 368	-0.380 0.000 368	0.499 0.000 368	0.437 0.000 368	0.644 0.000 368
<b>P10C74</b> 13. TC treated emot/beh difficulties	0.076 0.147 367	0.114 0.029 367	0.027 0.604 367	0.024 0.646 367	-0.185 0.002 277	-0.329 0.000 367	0.214 0.000 367	-0.237 0.000 367	-0.315 0.000 367	-0.252 0.000 367
<b>P10C75</b> 13a. facility where TC treated	-0.186 0.228 44	0.019 0.902 44	-0.029 0.854 44	0.110 0.478 44	0.066 0.705 35	-0.082 0.598 44	-0.018 0.909 44	-0.254 0.096 44	0.060 0.699 44	-0.025 0.871 44
<b>P10C76</b> 14. medication to control beh/attent	0.045 0.396 365	0.023 0.658 365	-0.054 0.305 365	-0.043 0.413 365	-0.102 0.090 276	-0.163 0.002 365	0.177 0.001 365	-0.174 0.001 365	-0.163 0.002 365	-0.137 0.009 365
<b>P10C77</b> 15. respondent received treatment	0.052 0.325 366	0.100 0.056 366	0.085 0.105 366	0.018 0.735 366	-0.093 0.125 276	0.014 0.784 366	0.058 0.272 366	-0.037 0.482 366	-0.020 0.701 366	-0.026 0.616 366
<b>P10C78</b> 15a. facility where resp treated	-0.133 0.420 39	-0.087 0.599 39	0.007 0.966 39	0.270 0.096 39	0.156 0.377 34	0.291 0.072 39	-0.041 0.807 39	0.096 0.562 39	0.301 0.063 39	0.280 0.084 39
<b>P10C79</b> 16. others receive treatment	0.110 0.036 366	0.035 0.500 366	-0.101 0.054 366	0.031 0.554 366	-0.136 0.023 276	-0.075 0.150 366	0.061 0.241 366	0.005 0.918 366	-0.058 0.267 366	-0.046 0.382 366
<b>P10C80</b> 16a. which member was treated	-0.160 0.312 42	-0.234 0.137 42	. . 42	0.124 0.434 42	0.082 0.629 37	0.215 0.172 42	-0.046 0.772 42	0.231 0.140 42	0.212 0.178 42	0.095 0.550 42

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations										
	P10C23	P10C24	P10C25	P10C74	P10C75	P10C76	P10C77	P10C78	P10C79	P10C80
<b>P10C1</b> 1. changes: moved/major remodeling	0.032 0.545 368	0.016 0.767 368	-0.009 0.870 368	0.116 0.026 367	-0.222 0.147 44	0.053 0.315 365	0.034 0.513 366	-0.266 0.102 39	0.042 0.424 366	0.039 0.807 42
<b>P10C2</b> 1. changes: medical problems w/TC	-0.023 0.663 368	-0.036 0.489 368	-0.018 0.732 368	0.110 0.035 367	-0.081 0.600 44	0.064 0.224 365	0.117 0.025 366	0.235 0.150 39	0.070 0.184 366	0.120 0.448 42
<b>P10C3</b> 1. changes: medical problems w/family	-0.033 0.532 368	-0.063 0.225 368	-0.008 0.875 368	0.010 0.856 367	-0.150 0.330 44	0.041 0.440 365	0.237 0.000 366	-0.214 0.190 39	0.214 0.000 366	0.254 0.104 42
<b>P10C4</b> 1. changes: death of important person	-0.001 0.983 368	0.047 0.368 368	0.054 0.300 368	0.013 0.801 367	-0.329 0.029 44	0.045 0.393 365	0.068 0.194 366	-0.097 0.556 39	0.084 0.108 366	-0.161 0.308 42
<b>P10C5</b> 1. changes: divorce of TCs parents	0.043 0.411 368	0.057 0.276 368	0.066 0.205 368	0.040 0.446 367	0.062 0.690 44	-0.036 0.496 365	0.002 0.970 366	-0.075 0.651 39	-0.047 0.366 366	. . 42
<b>P10C6</b> 1. changes: separation of TCs parents	-0.040 0.443 368	-0.009 0.865 368	-0.018 0.732 368	0.085 0.106 367	-0.069 0.655 44	-0.050 0.339 365	0.072 0.167 366	0.270 0.096 39	-0.014 0.792 366	-0.070 0.660 42
<b>P10C7</b> 1. changes: remarriage/reconciliation	0.025 0.637 368	0.018 0.728 368	0.047 0.368 368	-0.050 0.336 367	. . 44	-0.037 0.485 365	0.026 0.616 366	0.314 0.052 39	-0.049 0.354 366	. . 42
<b>P10C8</b> 1. changes: parent/child separation	-0.068 0.196 368	-0.123 0.018 368	-0.095 0.070 368	0.240 0.000 367	-0.474 0.001 44	0.109 0.037 365	0.096 0.067 366	0.044 0.789 39	0.051 0.335 366	-0.178 0.259 42
<b>P10C9</b> 1. changes: financial problems	-0.147 0.005 368	-0.100 0.056 368	-0.116 0.026 368	0.106 0.042 367	-0.052 0.735 44	-0.010 0.848 365	0.167 0.001 366	-0.352 0.028 39	0.070 0.183 366	0.252 0.107 42
<b>P10C10</b> 1. changes: legal problems	-0.068 0.190 368	-0.098 0.060 368	-0.134 0.010 368	0.219 0.000 367	-0.226 0.141 44	0.047 0.372 365	0.213 0.000 366	-0.036 0.826 39	0.147 0.005 366	0.044 0.780 42
<b>P10C11</b> 1. changes: drug/alcohol use	-0.050 0.339 367	-0.030 0.572 367	-0.100 0.057 367	0.166 0.001 367	0.018 0.910 44	0.059 0.264 365	0.236 0.000 366	-0.042 0.799 39	0.085 0.106 366	0.100 0.527 42
<b>P10C12</b> 1. changes: stress/conflicts	-0.101 0.052 367	-0.099 0.058 367	-0.063 0.231 367	0.201 0.000 367	-0.350 0.020 44	0.049 0.353 365	0.278 0.000 366	-0.108 0.514 39	0.119 0.022 366	0.067 0.673 42
<b>P10C13</b> 1. changes: pregnancies, miscarriages	0.060 0.250 368	-0.022 0.671 368	0.026 0.625 368	0.076 0.147 367	-0.186 0.228 44	0.045 0.396 365	0.052 0.325 366	-0.133 0.420 39	0.110 0.036 366	-0.160 0.312 42
<b>P10C14</b> 1. changes: job-related stress	0.037 0.474 368	0.014 0.795 368	0.026 0.616 368	0.114 0.029 367	0.019 0.902 44	0.023 0.658 365	0.100 0.056 366	-0.087 0.599 39	0.035 0.500 366	-0.234 0.137 42
<b>P10C15</b> 1. changes: loss of job	-0.008 0.881 368	-0.005 0.925 368	0.008 0.885 368	0.027 0.604 367	-0.029 0.854 44	-0.054 0.305 365	0.085 0.105 366	0.007 0.966 39	-0.101 0.054 366	. . 42
<b>P10C16</b> 1. changes: other	0.051 0.327 368	-0.105 0.044 368	-0.036 0.492 368	0.024 0.646 367	0.110 0.478 44	-0.043 0.413 365	0.018 0.735 366	0.270 0.096 39	0.031 0.554 366	0.124 0.434 42
<b>P10C17</b> 2. TC reaction to changes	-0.023 0.707 278	0.143 0.017 278	0.108 0.072 278	-0.185 0.002 277	0.066 0.705 35	-0.102 0.090 276	-0.093 0.125 276	0.156 0.377 34	-0.136 0.023 276	0.082 0.629 37

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations										
	P10C23	P10C24	P10C25	P10C74	P10C75	P10C76	P10C77	P10C78	P10C79	P10C80
<b>P10C18</b> p-rating 1. satisfaction w/parent role	0.155 0.003 368	0.408 0.000 368	0.427 0.000 368	-0.329 0.000 367	-0.082 0.598 44	-0.163 0.002 365	0.014 0.784 366	0.291 0.072 39	-0.075 0.150 366	0.215 0.172 42
<b>P10C19</b> p-rating 2. child difficulty	-0.248 0.000 368	-0.367 0.000 368	-0.380 0.000 368	0.214 0.000 367	-0.018 0.909 44	0.177 0.001 365	0.058 0.272 366	-0.041 0.807 39	0.061 0.241 366	-0.046 0.772 42
<b>P10C20</b> p-rating 3. parent-child relation	0.290 0.000 368	0.488 0.000 368	0.499 0.000 368	-0.237 0.000 367	-0.254 0.096 44	-0.174 0.001 365	-0.037 0.482 366	0.096 0.562 39	0.005 0.918 366	0.231 0.140 42
<b>P10C21</b> p-rating 4. satisfaction child behav	0.246 0.000 368	0.491 0.000 368	0.437 0.000 368	-0.315 0.000 367	0.060 0.699 44	-0.163 0.002 365	-0.020 0.701 366	0.301 0.063 39	-0.058 0.267 366	0.212 0.178 42
<b>P10C22</b> i-rating 1. parent description of TC	0.501 0.000 368	0.670 0.000 368	0.644 0.000 368	-0.252 0.000 367	-0.025 0.871 44	-0.137 0.009 365	-0.026 0.616 366	0.280 0.084 39	-0.046 0.382 366	0.095 0.550 42
<b>P10C23</b> i-rating 2. parent insight about TC	1.000 368	0.524 0.000 368	0.601 0.000 368	-0.118 0.023 367	0.059 0.704 44	-0.104 0.047 365	-0.011 0.838 366	-0.073 0.659 39	0.063 0.226 366	-0.014 0.930 42
<b>P10C24</b> i-rating 3. parent affect	0.524 0.000 368	1.000 368	0.754 0.000 368	-0.284 0.000 367	-0.091 0.556 44	-0.195 0.000 365	-0.034 0.517 366	0.070 0.674 39	-0.087 0.096 366	0.261 0.094 42
<b>P10C25</b> i-rating 4. parent-child relationship	0.601 0.000 368	0.754 0.000 368	1.000 368	-0.273 0.000 367	0.011 0.941 44	-0.195 0.000 365	-0.007 0.891 366	0.065 0.693 39	-0.019 0.713 366	0.232 0.139 42
<b>P10C74</b> 13. TC treated emot/beh difficulties	-0.118 0.023 367	-0.284 0.000 367	-0.273 0.000 367	1.000 368	. .45	0.415 0.000 366	0.221 0.000 366	-0.325 0.043 39	0.205 0.000 366	-0.161 0.308 42
<b>P10C75</b> 13a. facility where TC treated	0.059 0.704 44	-0.091 0.556 44	0.011 0.941 44	. .45	1.000 45	-0.089 0.567 44	0.065 0.674 44	. 0.287 13	0.164 0.287 44	0.047 0.879 13
<b>P10C76</b> 14. medication to control beh/attent	-0.104 0.047 365	-0.195 0.000 365	-0.195 0.000 365	0.415 0.000 366	-0.089 0.567 44	1.000 366	0.152 0.004 365	-0.215 0.188 39	0.140 0.007 365	-0.029 0.857 42
<b>P10C77</b> 15. respondent received treatment	-0.011 0.838 366	-0.034 0.517 366	-0.007 0.891 366	0.221 0.000 366	0.065 0.674 44	0.152 0.004 365	1.000 366	. .39	0.237 0.000 366	0.115 0.468 42
<b>P10C78</b> 15a. facility where resp treated	-0.073 0.659 39	0.070 0.674 39	0.065 0.693 39	-0.325 0.043 39	. .13	-0.215 0.188 39	. .39	1.000 39	-0.325 0.043 39	. .13
<b>P10C79</b> 16. others receive treatment	0.063 0.226 366	-0.087 0.096 366	-0.019 0.713 366	0.205 0.000 366	0.164 0.287 44	0.140 0.007 365	0.237 0.000 366	-0.325 0.043 39	1.000 366	. .42
<b>P10C80</b> 16a. which member was treated	-0.014 0.930 42	0.261 0.094 42	0.232 0.139 42	-0.161 0.308 42	0.047 0.879 13	-0.029 0.857 42	0.115 0.468 42	. .13	. .42	1.000 42

### Scale Correlations

Pearson Correlation Coefficients Prob >  r  under H0: Rho=0 Number of Observations			
	LCH10qob	LCH10qpr	LCH10str
LCH10qob Y10 LC Quality Parent-Child Relat_Observer	1.000 368	0.604 0.000 368	-0.106 0.041 368
LCH10qpr Y10 LC Quality Parent-Child Relat_Parent	0.604 0.000 368	1.000 368	-0.198 0.000 368
LCH10str Y10 LC Stress Scale sum score	-0.106 0.041 368	-0.198 0.000 368	1.000 369

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