



Correlates of Abuse

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CORRELATES OF ABUSE

Our interest in the study of child abuse among long-term inmates is to first understand the magnitude of the experience and then to begin to develop an understanding of the consequences of that experience. The focus of this section is on correlates of abuse with particular attention to “plausible consequences” (criminal experience, hostility, disassociation, anxiety, coping strategies, and history of psychological treatment). The study is presented in four parts: 1) derivation of the measures of abuse used; 2) derivation of measures of plausible consequences; 3) correlates of abuse; and 4) multivariate prediction of plausible consequences from types of abuse.

Measures of Abuse

Studies of self-report child abuse historically have asked respondents to report their childhood histories. Initial instruments simply asked the respondent to indicate whether they had been abused. These instruments were then refined to specify the type of abuse asking whether the respondent had been physically abused, sexually abused, or neglected. The problem with these instruments was that the definition of abuse was left to the respondent. This leads to the situation where two people having the same experience would define it differently. For example, a person may have experienced unprovoked daily beatings by a parent and not consider it abuse—it may simply be viewed as the way people relate to one another. By contrast, another person may feel abused if a hand was ever raised to them—it may simply be that they have concluded that any physical violence constitutes abuse.

In an effort to overcome these definitional problems researchers began to develop measures based on experiences. The logic underlying the use of experiential measures was that the ambiguity injected into the measurements of abuse would be lessened by more clearly specifying behaviors linked to abuse. So, instead of asking “were you abused as a child?” the respondent was asked a series of questions about specific experiences (were you beaten by fists? were you beaten with belts or sticks? were you injured by a knife or gun? etc.). There were different series of abuse questions designed to measure different types of abuse: physical, sexual, and neglect. These series have been asked in both yes/no formats that indicate whether the respondent had that experience as a child or not, and a frequency scores (e.g., never experienced the behavior, once or twice, sometimes, frequently, most of the time).

While the experiential measures are an improvement over the ambiguous global measures, the scoring of these indices has been problematic. Most frequently scoring has defined an individual as abuse if they had any of the experiences listed in the series of questions. This results in two problems: 1) it does not distinguish serious abuse from less abuse; and, 2) the scoring does not indicate

chronicity. This has the effect of someone who once was involved in a schoolyard fight being classified the same as someone whose parent routinely used them as an ashtray.

This study is an effort to develop improved measures of abuse that incorporates seriousness. Our effort focused on creating uni-dimensional scales that are internally consistent from series of questions asked to measure experiences thought to reflect physical abuse, sexual abuse, and neglect (the specific series items are addressed in another part of the report). We addressed this task by first factor analyzing each of the question series to: 1) determine if the question series was uni-dimensional or if it appears to tap several independent conceptions of abuse; and, 2) if the series appears multi-dimensional, to isolate variables that constitute sub-elements of abuse. Scales were created as simple sums of variables that the factor analysis suggests represent uni-dimensional sub-elements of items. Second, we conducted a reliability analysis of each of the scales or sub-scales to determine whether scales were internally consistent.

Table 1 highlights the resultant measures presenting the measures means and Chronbach Alpha scores that assess internal consistency. The Chronbach Alpha scores indicate that each of the scales has a high degree of internal consistency.

Table 1: Measures of Child Abuse

Measure	Mean	Range	Chronbach Alpha
Conflict Tactics Scale (four sub-scales):			
Physical/Verbal (10 items)	23.22	10-50	.94
Serious Physical Harm (3 items)	3.50	3-15	.69
Self-Report Child Abuse, Physical (SRCAP, two sub-scales):			
Hit/Beat (3 items)	1.73	0-3	.66
Serious Injury (3 items)	.58	0-3	.70
Child Sexual Abuse (10 sexual experience items):	4.80	0-10	.93
Neglect (two series):			
Need Scale (7 items)	11.25	0-10	.88
Neglect Series (3 items)	.45	0-3	.69

Physical Abuse Measures

The physical abuse scales were constructed from two series of questions. The first is a 19 item series that asks about methods respondent's family used to settle conflicts (Conflict Tactics Scale). The items were scored by frequency of occurrence (never, once or twice, sometimes, frequently, most of the time). When the Conflict Tactics Scale series of questions were examined four factors were isolated (physical/verbal abuse, serious physical harm, rational discussion, sulking). Two of the factors, physical/verbal abuse and serious physical harm, were examined¹ further. The Physical/Verbal Abuse score is composed of the following items in response to the question, "How often would they [*family members*]:

¹ The others (rational discussion, sulking) were not explored as measures of abuse.

- Insult or swear at you (.638)²
- Do or say something to spite you (.553)
- Threaten to hit or throw something at you (.842)
- Throw, smash, hit or kick something (.764)
- Throw something at you (.761)
- Push grab or shove you (.851)
- Slap or spank you (.775)
- Kick, bite, or hit you with a fist (.764)
- Hit or try to hit you with something (.853)
- Beat you up (.792)

An extremely high score (50 is the highest possible score) on this scale indicates that the respondent experienced each of the forms of abuse “most of the time.” An extremely low score (10 is the lowest possible score) means that you rarely experience abuse. Scores in the middle indicate that either you occasionally experienced many forms of abuse or that you frequently experience several forms of abuse. For example, the mean Physical/Verbal Abuse score, 23.22, indicates that the respondent experienced all listed forms of abuse “once or twice” or up to four of the listed forms of abuse “most of the time” (five or 6 items-frequently, 7 or 8 items sometimes, etc.).

The second factor from the CTS scale is associated with a history of serious physical harm. The Serious Physical Harm scale includes the following items, again in response to the question, “How often would they [*family member*]....:

- Burn or scald you (.693)
- Threaten you with a knife or gun (.771)
- Use a knife or gun (.836)

As with the Physical/Verbal Abuse scale score, an extremely high value (15 is the highest possible score) would indicate that the respondent experience each of the items “most of the time.” An extremely low score (3 is the lowest possible score) would indicate that the respondent had none of the listed experiences. The mean score for Serious Physical Harm, 3.50, indicates that very few respondents experience assaults likely to produce serious physical harm within the family.

Physical abuse measures also were developed from the Self-Report Child Abuse Physical (SRCAP) series of questions. The factor analysis revealed two underlying constructs that, as above, distinguish different degrees of seriousness. The first scale, Beat/Hit is composed of the following items in response to the question, “Up to the time you finished elementary school or were 12 years old, did anyone either inside or outside of your family ever...:

- Beat or really hurt you by hitting you with a bare hand or fist (.790)

² The numbers in parentheses are factor loadings.

- Beat or hit you with something hard like a stick or baseball bat (.704)
- Beat or hit you with a whip, strap, or belt (.744)

These questions elicit either yes or no answer so frequency of the experience is not addressed. The scores on the Beat/Hit scale range from zero to three with a mean of 1.72. This suggests that most of the survey respondents had experience one or two of the items in the scale.

The second abuse scale extracted from the SRCAP series indicates serious injury experience. The second scale, Serious Injury, is composed of the following items in response to the question, “Up to the time you finished elementary school or were 12 years old, did anyone either inside or outside or your family ever...:

- Injure you with a knife, shoot you with a gun, or use another weapon against you (.738)
- Hurt you badly enough so that you needed a doctor or other medical treatment (.755)
- Physically injure you so that you were admitted to a hospital (.844)

As with the Beat/Hit scale the scores for the Serious Injury scale range from zero to three but with a lower mean, 0.58. This suggests that about half of the respondents experienced one of the items. The serious injury experience is much less prevalent than is being beaten or hit.

Child Sexual Abuse

Congregate interview participants were asked a series of childhood sexual experience questions, 10 items, that focused on their experiences before they finished 6th grade. The factor analysis revealed just one factor on which all ten of the childhood sexual experience questions loaded. The Child Sex Abuse scale is composed of the following items in response to the question, “Up to the time you finished elementary school (before 6th grade), did you ever have the experience of...:

- An invitation or request to do something sexual (.779)
- Kissing and hugging in a sexual way (.715)
- Another person showing his or her sex organs to you (.800)
- You showing your sex organs to another person (.781)
- Another person fondling you in a sexual way (.881)
- You fondling another person’s in a sexual way (.837)
- Another person touching your sex organs (.879)
- You touching another person’s sex organs (.871)
- Attempting inter course, but without penetration (.724)
- Intercourse (.624)

The Child Sex Abuse scale scores range from zero, indicating none of the listed experiences before finishing elementary school, to ten which indicates that the respondent had experienced all of the

behaviors listed. Table 2 presents the distribution of the Child Sex Abuse scores. Review of the table reveals that about 25 percent reported none of the listed experiences but nearly half report experiencing six or more of the listed behaviors.

Neglect

Two neglect series were examined. First, a three item series developed by Weeks and Widom that asked whether as a young child the respondent had been fed, clothed or housed because parents didn't get around to it; was there talk in the community about their being neglected; or were they left home alone. The second series asked how frequently basic needs (food, clothing, shelter, caring, medical attention, guidance) were not met. Factor analysis of each of the series isolated single dimension on which all items loaded.

The Neglect scale is composed of the following yes/no items:

- Were there times when you were young that a neighbor fed you or cared for you because your parents didn't get around to shopping for food or cooking, or when neighbors or relatives kept you overnight because no one was taking care of you at home (.851)
- When you were a young child, did anyone ever say that you weren't being given enough to eat, or kept clean enough, or that you weren't getting enough medical care when it was needed (.796)
- When you were a very young child, did your parents ever leave you home alone while they were out shopping or doing something else (.728)

Scores on the Neglect scale range from zero indicating a no answer to all questions to three indicating yes to all answers. Table 3 presents the distribution of Neglect scale scores. The majority of congregare interview participants reported experiencing none of the Neglect series items as a child.

The second scale, Need, was developed from a seven item list of basic needs that were scored by frequency of the experience (never, once or twice, sometimes, frequently, most of the time). The Need scale is composed of the following items in response to the question, "Up to the time you finished elementary school (up to age 12), how often...:

- Did you get so little food that you were hungry all day, and then went to bed hungry (.740)
- Did you not have the right kind of clothing to stay comfortable when you went outside (.761)

Table 2: Child Sex Abuse Scores for Long-term Inmates Participating in the Congregate Interview

Score	Percent
0=None	25.7
1	5.2
2	7.0
3	4.8
4	6.5
5	4.3
6	5.7
7	6.1
8	6.1
9	13.5
10	15.2

Table 3: Neglect Scores for Long-term Inmates Participating in the Congregate Interview

Score	Percent
0= None	71.7
1	16.9
2	5.9
3	5.5

- Was there really no place for you to stay, or the place you stayed at was not a good place to stay (.790)
- Were there no adults who cared about what you were doing all day (.755)
- When you had a medical problem did nobody care or do anything about it (.756)
- Did you feel that no one cared about what happened to you (.786)
- Were there no adults who cared enough about you to give you guidance on the important thing in life (.786)

Need scale scores range from 7, indicating that the respondent never experienced any of the listed need items, to 35 indicating that the respondent experienced each of the items most of the time. The mean Need scale score, 11.25, suggests that on average one or two of the needs were unmet infrequently.

Measures of Criminal Experience, Hostility, Disassociation, Anxiety Coping Strategies and Psychological Treatment History

Measures of plausible consequences of child abuse were created in the same manner as the measures of abuse with exception of the criminal experience measures. That is, a series of response items were reduced to uni-dimensional factors by factor analysis, and reliability of resultant scales was assessed. The criminal experience variables were single item scores drawn directly from the congregate interview or information taken from the inmates institutional file.

Table 4 highlights the resulting measures presenting means, range, and scale score Chronbach alphas.

Table 4: Measures of Plausible Consequences

Measure	Mean	Range	Chronbach's Alpha
Violent Offense	.52	0-1	na
Sex Offense	.32	0-1	na
Sentence Length (years)	20.09	2-198	na
Initial Security Level	13.96	2-35	na
Disassociation/Hostility Series (three sub-scales):			
Hostility	9.24	4-20	.8252
Disassociation	6.69	4-19	.7452
Anxiety	8.82	3-15	.7193
Coping Strategy Series (four sub-scales):			
Rational Problem Solving	15.94	5-20	.7456
Escapist	7.96	3-12	.5027
Psychological Treatment	1.08	0-4	.7461

Criminal Experience

Four measures of criminal experience were selected for analysis. Two are focused on the nature of the conviction offense; another is sentence length; and the final measure is initial security level score.

Violent Offense. The current conviction offense was classified as either violent, property, drug, sex, or other. The violent offense measure was coded as a binary variable with zero for conviction offense other than for a violent offense and one for a current violent offense conviction. Slightly more than one-half (52 percent) of the long-term inmates are incarcerated for violent offenses.

Sex Offense. As above the sex offense measure was coded as a binary variable with zero for conviction offense other than for a sex offense and one for a current sex offense conviction. Slightly less than one-third (32 percent) of survey respondents are serving long prison terms for sex offenses.

Sentence Length. The actual sentence length is measured in years and was taken from the inmate's file. The mean number of years to be served by inmates participating in the congregate interview was 24.1 years. The distribution of sentence length is skewed high that is there are a number of respondents serving extremely long-terms (27 are serving more that 40 years).

Initial Security Level. The initial security level is the score from the initial security assessment and was taken from the inmate's file. The mean security level score by inmates participating in the congregate interview was 14—indicates medium security level. The distribution of the security level score is close to symmetrical and gaussian.

Scores from the Disassociation/Hostility Series

The disassociation/hostility series is a 13 item series that asks about feelings that people sometimes have. Three scales were developed from this series of questions tapping: hostility, disassociation, and anxiety. Each of the scales was derived from responses to the following request. "Here is a list of feelings that people sometimes have. Please indicate how often during the past year you always, frequently, occasionally, rarely, or never felt this way." Factor scores are noted in parentheses after each item in the scale.

Hostility. The hostility scale is composed of four items in response the to the question, "In the past year how often have you...:

- Had urges to beat, injure, or harm someone (.634)
- Had urges to break or smash things (.782)
- Gotten into arguments (.723)
- Shouted or thrown things (.850)

An extremely high score (20 is the highest possible score) would indicate the respondent always or almost always had the specified urge or engaged in the behavior stated. An extremely low score (4 is the lowest possible score) indicates that the respondent never felt the urges or engaged in the

behaviors noted in the hostility scale. The mean score, 9.24, indicates that, on average, respondents experience the urges and engage in the behaviors occasionally. The hostility scale score has a Chronbach alpha score of .8252, which indicates a high degree of internal consistency.

Disassociation. The disassociation scale is composed of four item in response to the question, “In the past year how often have you...:

- Felt outside of your body (.697)
- Not felt like yourself (.620)
- Lost touch with reality (.687)
- Watch yourself from far away (.808)

An extremely high score (20 is the highest possible score) would indicate the respondent always or almost always had the disassociation feeling stated. An extremely low score (4 is the lowest possible score) indicates that the respondent never experienced the feeling noted in the disassociation scale. The mean score, 6.69, indicates that, on average, respondents experience the disassociation feelings rarely. The disassociation scale score has a Chronbach alpha score of .7452, which indicates a high degree of internal consistency.

Anxiety. The anxiety scale is composed of four item in response to the question, “In the past year how often have you...:

- Felt easily annoyed or irritated (.724)
- Felt fearful (.728)
- Felt tense or keyed up (.680)

An extremely high score (15 is the highest possible score) would indicate the respondent always or almost always had the specified feeling. An extremely low score (3 is the lowest possible score) indicates that the respondent never experiences the feeling that constitute the anxiety scale. The mean score, 8.82, indicates that, on average, respondents experience the feelings occasionally. The anxiety scale score has a Chronbach alpha score of .7193, which indicates a high degree of internal consistency.

The Coping Strategies Series

The coping strategies series is an eleven item series that asks how the respondent reacts to difficult situations. Four scales were isolated from this series of questions but just two will be used in this analysis: rational problem solving and escapist. Each of the scales was derived from responses to the following request. “Here is a list of things people do to help them deal with difficult or bad situations that happen to them. For each statement, how often do you do things like this when a bad

thing happens to you? The answer categories are a lot, sometimes, almost never, or never. Factor scores are noted in parentheses after each item in the scale.

Rational Problem Solving. The rational problem solving scale is composed of five items in response to the question, “When a bad thing happens to you how often do you....:”

- Try to get more information about the problem or how to deal with problems like this (.596)
- Try to see the situation differently (.642)
- Think about possible ways to improve the situation (.830)
- Do something to relax tension (.729)
- Do things to try to improve the situation (.731)

An extremely high score (20 is the highest possible score) would indicate the respondent engaged in the coping behaviors noted “a lot.” An extremely low score (5 is the lowest possible score) indicates that the respondent never uses the coping strategies that constitute the rational problem solving scale. The mean score, 15.93, indicates that, on average, respondents sometimes use the rational problem solving coping strategies. The rational problem solving scale has a Chronbach alpha score of .7456, which indicates a high degree of internal consistency.

Escapist. The escapist scale is composed of three items in response to the question, “When a bad thing happens to you how often do you....:”

- Do things to take your mind off the situation—like going out, watching TV, driving around, or doing something entertaining (.725)
- Take it out emotionally on other people (.565)
- Try to make yourself feel better by drinking or taking drugs (.776)

An extremely high score (12 is the highest possible score) would indicate the respondent engaged in escapist coping behaviors noted “a lot.” An extremely low score (3 is the lowest possible score) indicates that the respondent never uses the coping strategies that constitute the escapist scale. The mean score, 7.96, indicates that, on average, respondents sometimes use the escapist coping strategies. The escapist scale has a Chronbach alpha score of .5027, which indicates a modest degree of internal consistency.

The Psychological Treatment Scale

A single psychological treatment scale score was derived from a four items series of questions. The scale indicates whether the respondent had received psychological treatment for emotional problems not related to drug or alcohol abuse. The scale is composed of four items in response to the question, “Because of emotional or mental problem, have you ever....:”

- Taken a medication prescribed by a psychiatrist or other doctor (.802)
- Been admitted to a mental hospital, unit or treatment program (.776)
- Received counseling or therapy from a trained professional (.761)
- Received any other mental health services (.677)

Responses for the items are limited to yes (scored 1) or no (scored 0). An extremely high score (4 is the highest possible score) indicates the respondent has experienced each of the treatment noted above. An extremely low score (0 is the lowest possible score) indicates that the respondent has not had psychological treatment for emotional problems. The mean score, 1.08, indicates that, on average, respondents experience about one of the noted treatments. The psychological treatment scale has a Chronbach alpha score of .7461, which indicates a high degree of internal consistency.

Bivariate Correlations

Table 5 presents the correlation coefficients between forms of abuse and “plausible consequences.” There are several items of note in the correlation matrix. First, the measures of association indicate that the relationships are weak or not statistically significant. The strongest apparent relationship, $r=.385$, is between physical abuse (family) and escapist and accounts for just 15 percent of the variation.

Table 5. Correlation Coefficients between Types of Abuse and Indicators of Hostility, Disassociation, Coping Strategies, Sentence Length, and Security Level

Empty cells indicate that the coefficient was not statistically significant.

Type of abuse	Hostility	Disassociation	Anxiety	Rational problem solving	Escapist	Psychological treatment history	Sentence length	Initial security level
Needs	.221	.245	.196		.275	.268		
Neglect	.237	.163			.147			
Physical abuse (family)	.367	.186	.268		.385	.324		
Physical harm (family)	.195			-.150	.172			
Physical abuse (any source)	.216	.137	.222		.300	.295		
Physical harm (any source)	.227	.142	.169			.226		
Child sexual experience	.338	.156	.270		.336	.327		.140

Second, the statistically significant associations are as would be predicted. That is, if we assume that child abuse is associated problem behaviors or feeling then the positive association indicates that as the abuse experience increases (either in style or chronicity) then the problem behaviors or feeling also increase. The only statistically significant negative relationship between variables is between physical harm (family) and rational problem solving coping strategy. This suggests that persons who had experienced physical harm in the family are less likely to cope using rational problem solving strategies.

Third, it is instructive to note that variation in the abuse scales was not related to variation in sentence length, or effectively to rational problem solving or initial security level. This suggests that child abuse histories are not related to these problems when the focus is on long-term inmates.

The level of measurement of conviction offense, either violent or sex, precludes Pearson Product-Moment coefficients so t-test were used to determine whether mean abuse scores were different for violent offenders and others and for sex offenders and others. Table 6 presents the mean abuse scores and t-tests that compares those convicted for the type of offense indicated to those who had been convicted for different offenses. In just one of the 14 comparisons was a statistically significant difference detected—as predicted, if we assume that abuse is related to problem behaviors, violent offenders had higher average physical harm scores than others. It is instructive to note that there were no differences in mean abuse scores when long-term inmates sex offenders were compared to other long-term inmates.

**Table 6. Mean Abuse Scores by Conviction Offense
(Either Violent or Sex Offense)**

Type of abuse	Violent offense			Sex offense		
	Yes (means)	No (means)	t-value	Yes (means)	No (means)	t-value
Needs	11.56	11.25	-.38	12.15	11.08	-1.14
Neglect	.48	.45	-.25	.55	.43	-.88
Physical abuse (family)	23.62	23.79	.12	24.79	23.20	-1.02
Physical harm (family)	3.57	3.47	-.54	3.61	3.48	-.64
Physical abuse (any source)	1.82	1.73	-.59	1.84	1.75	-.56
Physical harm (any source)	.74	.42	-2.58 *	.48	.64	1.27
Child sexual experience	5.25	4.50	-1.44	4.20	5.23	1.86

Review of correlates suggests that to the extent that there is a relationship between types of abuse and “plausible consequences” the relationship is weak but consistent. That is, when a relationship was apparent it was consistent with the expectation that abuse is positively related to problem behaviors and feelings.

Multivariate Models

The foregoing analysis suggests that abuse may be weakly associated with problem behaviors and feelings. The following analysis explores the possibility that some of types of abuse may be more important predictors of problem behavior and feeling than others. Table 7 presents the results of forward stepwise regression models. The only coefficients in the array are those that were statistically significant predictors. The table also presents statistically significant R^2 values for each of the models. Logistic regression equations were estimated for the binary violence and sex current conviction offense respondents.

Several items of note are apparent in Table 7. First, we could not distinguish violent offenders or sex offenders from other offenders based on their child abuse histories. Neither could we predict

Table 7. Regression Equations that Predict Conviction Offense, Sentence Length, Security Level, and Indicators of Hostility, Disassociation, and Coping Strategies

Forward stepwise regression; only statistically significant predictors are presented.

Type of abuse	Violent offense (logistic)	Sex offense (logistic)	Sentence length	Initial security level	Hostility	Disassociation	Anxiety	Rational problem solving	Escapist	Psychological treatment history
Needs						.1300				
Neglect										
Physical abuse (family)					.0096		.0042		.0071	.0028
Physical harm (family)								-.3050		
Physical abuse (any source)										
Physical harm (any source)										
Child sexual experience				.2470	.2240		.1360		.1320	.0073
Constant				12.5490	5.7950	5.1150	7.0300	17.1500	5.5800	.0081
R ²	NS	NS	NS	.032	.186	.059	.085	.020	.220	.128

sentence length from abuse histories. The models estimated to predict the likelihood of being a violent offender, a sex offender, or to predict sentence length were not statistically significant.

Second, those models that were statistically significant (7 of 10 estimated) explained a very small proportion of the variance. In just two of the models did the proportion of variance explained approach 20 percent (Hostility and Escapist). The remaining model account for less than 13 percent of variance.

Third, to the extent that there is an apparent relation between forms of abuse and problem behavior and feeling it appears that Physical Abuse (family) and Child Sexual Experience are the most important. Physical Abuse (family) and Child Sexual Experience were statistically significant predictors of Hostility, Anxiety, Escapist, and Psychological Treatment History.

The most important finding from the multivariate analysis is that child abuse histories do not account for problem behaviors and feeling. While it remains likely that child abuse is a contributing factor it is apparent that a great deal more than child abuse must be considered if we are to fully understand these problematic behaviors and feelings.