

South Australia Department of Family and Community Services

Risk Assessment Validation Study

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CHILDREN'S RESEARCH CENTER

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BACKGROUND

In August 1997, the South Australia Department for Family and Community Services contracted with the Children's Research Center (CRC), a division of the National Council on Crime and Delinquency (NCCD), to assist in the conduct of a study of South Australia families recently confirmed for child abuse and/or neglect. The objective of this collaborative research effort is to develop a preliminary risk assessment instrument and other case management procedures which may help improve the delivery of child protective services. This report examines risk-related characteristics of families confirmed for child maltreatment and attempts to construct a preliminary risk instrument employing information currently reported in the Department's Child Information System (CIS).

Actuarial Risk Assessment in Child Abuse and Neglect

Actuarial risk assessment has a long history in the field of corrections where a large number of longitudinal studies have been conducted which identify the characteristics of offenders (such as prior offense history, drug or alcohol abuse, age, etc.) most likely to commit new offenses. These studies permit cases to be assigned a risk classification determined by an actuarial risk assessment procedure or tool which estimates the likelihood that an individual entering community supervision will re-offend. If the estimated probability of a new offense is high, the offender is classified as high risk; if it is low, the classification is low risk. In effect, a risk assessment locates offenders on a criminal risk continuum that ranges from low to high and this information is used to assist in developing case management strategies for offenders placed on probation or parole.

A probation or parole case management system based on an actuarial risk assessment ensures that offenders most likely to re-offend are supervised more closely by the agency responsible for

them and have a greater claim on available service resources. The operating assumption that high-risk offenders should be allocated more agency resources than low-risk offenders is based on findings from research studies that examined the impact of casework intervention/service levels on criminal behavior. The general conclusion drawn from these studies is that a high level of supervision activity will significantly reduce criminal activity among high-risk offenders, but has little effect on low-risk offenders (see Baird et al, 1981 and Eisenberg and Markley, 1987). Consequently, matching the supervision level to the risk classification offers probation and parole agencies the best opportunity to maximize the impact limited resources have on public safety and this strategy is consistent with the major goal of most correctional service agencies; i.e., to protect the public by reducing new criminal offenses.

The use of risk assessment in corrections has many parallels in child protective services, but it was employed only recently. The Children's Research Center implemented the first child protective case management system based on actuarial risk assessment in 1988 in Alaska. Since then Michigan, New Mexico, Indiana, and Rhode Island have adopted case management systems, based on the actuarial probability that a family involved in an incident of maltreatment will experience a reoccurrence of abuse or neglect. In the next year, the state of California plans to implement a similar risk based/case management system. The logic of risk assessment in child abuse/neglect is simple. There are limited public resources to manage protective service cases and it is important that they be allocated to those high-risk families where children are in most need of protection. This approach was advocated by Johnson and L'Esperance in their 1984 study of child cases in Alameda county California. A recent study in Michigan has confirmed that more active intervention in high-risk families help protective service agencies reduce the incidence of abuse or neglect among families they serve.

Actuarial Versus Clinical Risk Assessment

Risk assessment is not a new concept in child protective services (CPS). The child protection philosophy that forms the core value of case service practice in child welfare has always required that the social worker perform a prospective evaluation of cases where child maltreatment has been confirmed. Essentially, effective intervention on behalf of the child requires that the worker estimate the likelihood or risk of future maltreatment. Typically, caseworkers have used the case study method, which is a form of clinical appraisal, to estimate the likelihood of future maltreatment. In this method of risk assessment, the investigating CPS worker relies almost entirely upon his or her clinical experience, intuition, and interviewing skills to assess the future risk to the child. In some states, the clinical assessment is structured by an assessment instrument which identifies specific case characteristics, often selected from careful reviews of past research studies, which the worker should assess, but these instruments are not derived from an empirical analysis of case outcomes in the jurisdiction where they are used. In other words, they are instruments which help organize the caseworkers clinical assessment of risk but they are not actuarial risk assessment tools (see Marks and McDonald, et. al. 1988). Actuarial assessment methods, which require extensive longitudinal research, have only recently been introduced in CPS. In their 1989 summary of this area of research, Marks and McDonald (1989) cited only two actuarial risk assessment studies in abuse and neglect. The Alameda county study conducted by Johnson and L'Esperance (1984) and the Alaska study conducted by NCCD in Alaska (see Baird, 1988). In the summary discussion of their review article they make the following suggestion concerning future research in child abuse/neglect screening:

"However, what is needed at this stage of development, if the full potential of risk assessment instruments is to be realized, are more efforts of the type carried out by Johnson and his colleagues in Oakland and Baird in Alaska. Collect good data, track clients, and test for good predictors. When this has been done in 20 or 30 sites, the field will be in a position to sit down and compare notes and reach sound conclusions about the utility of risk assessment for prediction and the best items to be used in risk

assessment instruments. Sharing of information as these studies are completed will be helpful in promoting some standardization of measures." (p.43)

Since the Alaska study, the CRC has conducted statewide actuarial risk assessment studies in Michigan, Oklahoma, Rhode Island, New Mexico, and New York. These recent research efforts have employed large, random samples (1,800 cases in Michigan; 1,200 in Oklahoma; 1,000 in Rhode Island; 1,400 in New Mexico; and 1,200 in New York) of confirmed abuse and neglect cases and use an 18-month longitudinal follow-up to track case outcomes. In each case, easily observable child and family characteristics were used to construct actuarial risk assessment tools for estimating the risk of future abuse or neglect.

For the most part, CRC risk assessment studies have incorporated variables identified in previous child welfare research in their design. The case review surveys from which the risk assessment tool is constructed collect extensive information about each child and household from case file reviews and/or caseworkers who served the family. The data collected includes variables that have shown a relationship to abuse/neglect in previous studies. These include:

1. Characteristics of the Child - including age, sex, special needs or disability, and prior out of home placement experience (see, for instance, Kadushin and Martin, 1981);
2. Household Characteristics - income (Steinberg, et. al. 1981), address stability, number of children, single or two parent composition (Webster-Stratton, 1985), and relationship stress among adults including domestic violence (Burgess and Conger, 1978; Straus, 1979);
3. Caretaker(s) Characteristics - including various measures of parental skill (Polansky, 1979; Johnson and L'Esperance, 1984), parent-child relationship, personal functioning (Kempe and Kempe, 1976, Wolfe, 1985), alcohol/drug use, social isolation/self-esteem (Polansky, 1981; Anderson and Lauderdale, 1982), age, prior abuse or neglect as a child, or criminal record;
4. Type and Severity of Maltreatment - as confirmed by investigators;
5. Previous Family Investigations, Referrals or Confirmations for Abuse/Neglect - both type and frequency;

6. Information about the perpetrator(s) - relationship to child, access to the child, prior criminal record, motivation to change, willingness to engage in services; and
7. Prior Service Utilization - the household's prior utilization of services such as foster care placement, temporary removal, or the utilization of other child welfare services.

The CRC studies focus on a risk assessment procedure to be employed by a worker at the initial admission for protective service (see Pecora, 1987). Simple actuarial risk scales are designed which can easily be employed by CPS staff to estimate the likelihood that abuse or neglect will re-occur. These assessment tools permit families to be classified as high, medium or low risk based on an actuarial assessment of each agency's historical experience with similar cases. For example, the Michigan risk assessment tool for neglect cases identifies a group of "Very Low" risk cases at the low end of the risk continuum and a group of "Intensive" risk cases at the high end. During an 18-month follow-up period after the sample incident, only 1.7% of the "Very Low" risk cases were maltreated compared to 43% of the cases classified as "Intensive" risk. This demonstrates the ability of actuarial risk assessment tools to estimate the probability of future neglect. Similar findings can be reported for other states. In Rhode Island, it was possible to identify low risk families maltreated at a 6% rate and a very high risk group with a 63% rate during a similar follow-up period.

The evidence now available from actuarial studies of child abuse/neglect suggests a conclusion endorsed several years ago in the field of corrections, i.e., that actuarial risk assessment based on simple, empirically validated instruments may be superior to the clinical assessment of an individual caseworker. A large body of research evidence in experimental psychology supports the conclusion (see, for instance, Meehl, 1954; Sawyer, 1966; or Dawes, 1989) that actuarial instruments can predict future behavior more accurately than an individual decision maker - even those that have had extensive clinical training.

Why actuarial assessment has almost always proven superior to clinical judgment in settings where human behavior must be predicted has been the subject of much speculation. The explanation most frequently advanced is that a clinician, or any individual making predictive decisions based on case study, cannot assess the large amount of information that each case presents as effectively as an actuarial model.

Compared to clinical methods, actuarial techniques are explicit. Typically, actuarial assessment tools assess a small number of case descriptors that have demonstrated a strong relationship to the behavior being forecast, assign a numerical weight to each one, and apply a simple decision rule. The case study decision making method, on the other hand, relies upon mental processes which are difficult to specify and almost certainly less systematic. Individual clinicians or caseworkers consider information more impressionistically, and attributes viewed as relevant are chosen from a vast number of objective characteristics a case presents to them plus abstract impressions they may form. Studies of clinical decision making have suggested that the accuracy of decisions is not improved and may decline as the number of factors available for assessment is increased (Sines, 1959; or Dawes, 1989). One explanation offered by researchers is that the availability of too much information increases the likelihood that the factors the clinician chooses to consider will bear no relationship to the behavior being predicted (see Kelly and Fiske, 1950; or Slovic and Lichtenstein, 1971).

This line of reasoning is based on the assumption that humans have a limited capacity to integrate data, and when faced with multiple informational cues and the necessity of choice, are forced to base their decision on two or three factors. In effect, actuarial models may outperform clinicians because clinicians are more likely to consider the wrong information. Even when interpreting very limited set of case information employed by an actuarial procedure, a clinician may

ignore some attributes, weight others differently, or configure them into new variables and, in the process, may make a less accurate prediction (Faust, 1989). This is a particularly difficult problem in child abuse or neglect assessments where caseworkers in the field must integrate complex information about the incident, the child, the caretakers, the household environment, and the perpetrator in order to estimate the likelihood of future maltreatment. This task requires a great deal of experience and training- something which not all CPS workers have. In addition, clinical judgements about families have often proved unreliable across different workers. A recent research study has shown that even expert clinical judges may reach different conclusions about the needs for placement when assessing the same family (see Rossi, Schuermann and Budde, 1996 or a much earlier study by Blenkner, 1954). Simple actuarial instruments have proven to result in more consistent assessments by workers in a field setting than procedures which rely heavily on clinical assessment (Baird, 1997).

Integrating Actuarial And Clinical Decision Making

Despite these problems with clinical decision, assessments made by a CPS caseworker can sense things that an actuarial instrument would ignore or could not employ. Many characteristics of human subjects simply cannot be quantified empirically and actuarial models cannot easily account for rare events. Circumstances unique to individual cases, that only judgement based on case study conducted by a child welfare worker can discern, may be critical to the predictive enterprise. Few doubt that the caseworkers judgement in risk assessment decisions is important or argue that it should be abandoned. And despite a tendency among many researchers to view the issue as a clinical versus actuarial contest, the question, in terms of improving prediction, is not whether actuarial procedures are superior to the case study approach, but whether "we should try to

find the optimal combination of actuarially controlled methods and sensitive clinical judgment for any particular enterprise" (Holt, 1958 p. 12).

The point of actuarial assessment in case management is not to substitute an actuarial procedure for the discretionary judgement or skill of CPS workers. It is to assess families more accurately and prioritize them for service more effectively by integrating an actuarial assessment tool into current case assessment procedures. This practice may prove more effective because the actual assessment model helps practitioners focus their initial assessment on the relatively small set of case characteristics that have demonstrated a strong statistical relationship to future child maltreatment. After having made this objective assessment, they may exercise discretionary judgement more effectively in each case.

Risk Assessment And CPS Case Management

Until recently, the potential of risk assessment has been largely unexplored in an actual practice setting. Risk assessment is, after all, not an end in itself but the first step in a case management process which focuses treatment and intervention services on children and families most at risk. Consequently, the real promise of more accurate CPS risk assessment is that intervention services will be applied to the right cases and that this will make it possible to reduce the incidence or severity of future neglect or abuse. Given limited resources to intervene in families, prioritizing high risk cases offers CPS agencies the best opportunity to impact the safety of children. This strategy is predicated from both fiscal reality and objective research evidence of where resources can be applied with the greatest impact.

The potential for actuarial risk assessment to redirect protective services was initially discussed by Johnson and L'Esperance in their 1984 study. They found that high risk CPS cases in

the agency where they conducted their study were frequently closed more quickly and presumably received less service intervention than cases with a low probability of recurrent maltreatment. The question they posed was an important one. Can more accurate targeting of intensive service to high risk cases reduce the incidence of abuse or neglect? The case management system which Michigan implemented in 1992 suggests that it does. In a controlled comparison between demonstration counties which employed different case management systems, those which incorporated a differential service standard based on actuarial risk and a structured family needs assessment for case planning and service referral reporting, were able to significantly reduce the reoccurrence of abuse and neglect among the families they served. While risk assessment was only one of the improvements in case management made in these demonstration counties, it did appear to improve outcomes observed for families the agency served.

RESEARCH AND SAMPLING METHODS

This research employs a sample of 966 families confirmed for child abuse and/or neglect in the state of South Australia between July 1, 1994 and December 31, 1995. The sample includes all families investigated and confirmed for abuse or neglect by the Department during that time period. Case characteristics available for this research were limited to information routinely reported by agency staff on the CIS for children and their adult caregivers. This includes the age, sex, and type of abuse or neglect alleged or confirmed for each child in a CPS incident and identifying information about the responsible adult household head. Since CPS and service intake information has been recorded on CIS for several years, similar information is available for each CPS investigation or confirmation that occurred before and after the family's sample confirmation. This makes it possible

to use CIS data to observe each family's CPS history prior to the sample confirmation and to examine any CPS investigation or confirmation subsequent to it.

In addition to information describing CPS investigations and confirmations, the CIS also records limited intake information describing assessment or service contacts with family members. For instance, CIS reports if a service intake for a domestic violence incident occurred. Intakes for financial assistance, substance abuse, or parental skill problems are also reported, as is the temporary or permanent placement of children outside the home. It should be noted that these observations do not represent systematic assessments of each family in the research sample. The Department's computer system was not designed to record, nor were case service workers expected to systematically report, observations for research purposes. The purpose of using this information here is to conduct an exploratory research effort to determine whether family characteristics identified in previous CRC research studies are associated with subsequent abuse or neglect among South Australia families. The objective is to develop a preliminary risk instrument to support implementation of a new protective service case management procedure which will systematically assess the risk factors and service needs of families confirmed for abuse or neglect. More reliable and comprehensive assessment data will be available at a later time and a second study will be conducted to improve this preliminary assessment.

CHARACTERISTICS OF SAMPLE FAMILIES

Each family in the sample experienced a confirmed CPS incident between July 1994 and December 1995. Information available on CIS was employed initially to describe case characteristics at the time of the sample confirmation and at prior service intakes. Essentially, the research adopts the perspective of a child protective service worker conducting an investigation of

the sample incident. At that time, it is possible to observe characteristics of the current protective service incident and the family (both children and adults) involved. In addition, the worker may observe each family's prior service history including protective service incidents as well as other recorded service episodes. This kind of information is typically employed to make decisions about agency management of the case. Should the case be opened for service or closed? What priority for service intervention should this family have? An important factor to consider in these decisions is the estimate of future risk to children in the family. The purpose of an actuarial risk assessment instrument is to help the protective service worker make an objective assessment of the likelihood that there will be a reoccurrence of maltreatment with available information at the time.

Characteristics of the 966 sample families observed at the time of sample confirmation are shown in Table 1. Thirty-seven percent had two or more children and 47% had a child seven years old or younger. Based on assessment and service intake data available on CIS, 5.9% of the households had some history of substance abuse at the time of the sample confirmation, 9.7% had experienced a service contact related to parental skill deficits, and 10.8% had received assistance of some kind for domestic violence. It should be noted that these estimates are not drawn from systematic assessments of the families and probably underestimate these kinds of problems.

Table 1		
Sample Family Characteristics: Household Characteristics at Sample Confirmation		
	N	%
Total Sample	966	100.0%
Number of Children in Household		
One	616	63.8%
Two	209	21.6%
Three	90	9.3%
Four or more	51	5.3%
Age of Youngest Child in Household		
13 or older	208	21.5%
8 to 12	303	31.4%
7 or younger	455	47.1%
Alcohol or Drug Abuse		
No	909	94.1%
Yes	57	5.9%
Parental Skill Deficit		
No	872	90.3%
Yes	94	9.7%
Family With One Caregiver		
No	131	13.6%
Yes	835	86.4%
Domestic Violence Occurrences		
No	862	89.2%
Yes	104	10.8%

Table 2 displays specific allegations investigated at the sample incident. Slightly more than 50% of the families were investigated for physical abuse, 20% for neglect, 11% for emotional abuse, and 30.5% for sexual abuse. The types of abuse or neglect confirmed upon investigation follow a similar pattern. Families may be confirmed for more than one type of abuse or neglect at a single investigation.

An injury to one or more children in the household was reported by investigating workers in 22.8% of the sample families. These include minor bruises, cuts, or abrasions plus more serious injuries related to physical or sexual abuse. Malnutrition or failure to thrive conditions related to neglect are also included in the definition. The definition of injury employed here is a broad one and it does not require actual confirmation. Both confirmed and unconfirmed incidents are included. (See Appendix for definitions employed.)

Based on CIS data, 3.4% of the sample families had at least one child removed during the sample incident. This includes both temporary respite removals and placements in foster care.

Table 2		
Sample Family Characteristics: Sample Confirmation		
	N	%
Total Sample	966	100.0%
Allegations of Sample Report		
Physical Abuse	491	50.8%
Neglect	198	20.5%
Emotional Abuse	108	11.2%
Sexual Abuse	295	30.5%
Confirmed Allegations		
Physical Abuse	406	42.0%
Neglect	146	15.1%
Emotional Abuse	97	10.0%
Sexual Abuse	241	24.9%
Injury to Child in Sample Substantiated Investigation?		
No	746	77.2%
Yes	220	22.8%
Placed as a Result of Sample Investigation?		
No	933	96.6%
Yes	33	3.4%

Table 3 examines the protective service history of families prior to the sample confirmation. Approximately 22% had experienced at least one previous protective service investigation and 8.7% had a prior confirmed abuse or neglect incident. Prior household intakes recorded in CIS for protective services or other agency family services were much more frequently observed. More than 40% of the households had at least one prior agency contact and 21.2% had three or more. Financial assistance had been provided to 22.9% of the 966 families prior to the protective service intake sampled for the study.

Table 3		
Sample Family Characteristics: Prior Protective Service History		
	N	%
Total Sample	966	100.0%
Prior Protective Service Investigations		
None	754	78.1%
One	128	13.3%
Two or more	84	8.7%
Prior Protective Service Confirmations		
None	882	91.3%
One	60	6.2%
Two or more	24	2.5%
Prior Intake of Any Type		
None	572	59.2%
One	126	13.0%
Two	63	6.5%
Three or more	205	21.2%
Previously Received Financial Assistance		
No	745	77.1%
Yes	221	22.9%

FOLLOW-UP PROTECTIVE SERVICE INCIDENTS

The purpose of an actuarial risk assessment instrument is to estimate the future probability of maltreatment for each family. Table 4 shows the confirmed and unconfirmed protective service incidents reported for sample families during an 18-month period following their sample confirmation. Approximately 21.9% had at least one subsequent protective service investigation and 12.8% had at least one confirmed reoccurrence of abuse or neglect.

Neglect and emotional abuse incidents were combined to simplify reporting because the definitions employed for emotional abuse in South Australia appear similar to those employed by CRC in previous American studies for neglect. Subsequent investigations for neglect or emotional abuse were reported for 12.4% of the sample families and 6.0% were confirmed for these types of maltreatment.

Abuse incidents combine both physical and sexual abuse. One hundred and sixty-four of the 966 sample families (17%) experienced a subsequent abuse investigation. Physical or sexual abuse was confirmed during the 18-month follow-up in 8.3% of the sample families.

The definition of child injury employed in the follow-up includes those observed by investigators during confirmed or unconfirmed protective service incidents. Only 3.8% of the sample families had a protective service incident which involved a child injury.

Placements of children in temporarily respite or permanent foster care also occurred infrequently. Only 4.8% of the families were reported to have had a child removed from their household. This includes placements unrelated to protective service incidents.

Table 4		
Sample Family Characteristics: Follow-Up Protective Service Investigations and Confirmations*		
	N	%
Total Sample	966	100.0%
Follow-Up Investigations		
None	754	78.1%
One or more	212	21.9%
Follow-Up Confirmations		
None	842	87.2%
One or more	124	12.8%
Follow-Up Neglect or Emotional Abuse Investigations		
None	846	87.6%
One or more	120	12.4%
Follow-Up Neglect or Emotional Abuse Confirmations		
None	908	94.0%
One or more	58	6.0%
Follow-Up Physical or Sexual Abuse Investigations		
None	802	83.0%
One or more	164	17.0%
Follow-Up Physical or Sexual Abuse Confirmations		
None	886	91.7%
One or more	80	8.3%
Follow-Up Injury to Any Child in an Investigation (Confirmed and Unconfirmed Incidents)		
None	929	96.2%
Injury to one or more children	37	3.8%
Follow-Up Permanent or Respite Child Placement		
No	920	95.2%
Yes	46	4.8%

*Recorded within 18 months after the sample confirmation.

PRELIMINARY RISK ASSESSMENT FOR ABUSE AND NEGLECT

The risk assessment tool described here is a structured procedure for using the characteristics of families and children involved in confirmed incidents of abuse or neglect to assess the risk of future abuse or neglect. It is designed to be completed by an investigating worker at the time of confirmation. In summary, the assessment procedure helps the individual worker and the child welfare agency evaluate families in which abuse or neglect has occurred and set a service priority appropriate to the risk of future maltreatment.

The 11-item family neglect assessment and the 9-item abuse assessment described below are the products of a preliminary research effort during which CRC: 1) observed families in which a confirmed incident of abuse or neglect had occurred; 2) examined the limited set of family characteristics available in CIS; and 3) used this information to develop risk assessment instruments for use by investigating CPS workers. The investigating worker would score the simple checklist assessment instruments described here and the scores would be used to set an initial risk level for each case, i.e., “low,” “moderate,” “high,” or “very high” risk. These risk classifications estimate the likelihood that another incident of abuse or neglect will occur in that family. For example, in the research findings presented here, families placed in the very high risk classification were nearly ten times more likely to have another confirmed incident of maltreatment than those placed in the low risk classification. This risk classification is used to help the investigating worker assess the family and set an appropriate service priority.

The case management principle which this risk assessment procedure serves is straightforward. Since the agency’s mission is to reduce the incidence of abuse and neglect, it is important to insure that families most likely to be involved in future abuse or neglect incidents receive a high priority for service provision and caseworker time. The primary purpose of the family

risk assessment procedure is to help caseworkers identify these families and thus, perform this service allocation task more effectively. The ability to assess future risk more accurately and to assign service resources accordingly should result in improved services for families.

Construction of the Preliminary Abuse and Neglect Instruments

Items on each instrument are derived from the very limited set of information about families available on CIS. The assessment items are posed as questions and refer to characteristics of the household, caregivers, or children that could be observed by workers completing an investigation. Two criteria were used to select items for these instruments: 1) their statistical association with subsequent abuse or neglect or subsequent child injury; and 2) the ease with which they could be identified and scored by workers. A more detailed, empirical examination of the items employed in the instruments appears in the Appendix.

Preliminary Risk Assessment for Neglect

In actual field application, each family would be assessed separately with the neglect and the abuse instrument by the investigating worker. Items on each instrument would be scored and the total score would be used to classify the family for neglect and for abuse. The assessment instrument for neglect, which follows, places families in four risk classifications based on an 11-item score. (See the Appendix for a more detailed definition of the CIS data employed to construct these items.)

State of South Australia
 Department of Family and Community Services
 Preliminary Risk Assessment for Neglect

9/24/97

Family Case Name: _____ Notification #: _____
 Family Case #: _____ Date: _____ / _____ / _____

			Score
N1.	Current Report is for Neglect or Emotional Abuse		
a.	No	0	
b.	Yes (check and add for score):		
	___ Neglect	2	
	___ Emotional Abuse	1	_____
N2.	Prior Investigated Reports of Neglect or Emotional Abuse		
a.	None	0	
b.	One or more	1	_____
N3.	Number of Prior Family Intakes (include both CPS and other service contacts) (circle one)		
a.	None	-1	
b.	One	0	
c.	Two or three	1	
d.	Four or more	2	_____
N4.	Family With One Caregiver (circle one)		
a.	No	0	
b.	Yes	1	_____
N5.	Age of Youngest Child in Family at the Time of Investigation (circle one)		
a.	13 or Older	-1	
b.	8 to 12	0	
c.	7 or Younger	1	_____
N6.	Number of Children Confirmed for Abuse or Neglect During the Investigation (circle one)		
a.	One	0	
b.	Two or more	1	_____
N7.	A Child was Found to be Injured During the Current Investigation (circle one)		
a.	No	0	
b.	Yes	1	_____
N8.	Adult Caregiver(s) has a Current or Prior Assessment History of Domestic Violence (circle one)		
a.	No	0	
b.	Yes	1	_____
N9.	Adult Caregiver(s) has a Current Prior Assessment History of Alcohol or Drug Abuse (circle one)		
a.	No	0	
b.	Yes	1	_____
N10.	Adult Caregiver(s) has a Current Prior Assessment History of Parental Skills Deficits (circle one)		
a.	No	0	
b.	Yes	1	_____
N11.	Household has Received Financial Assistance Prior to the Investigation (circle one)		
a.	No	0	
b.	Yes	1	_____
Total Score:			=====

Risk Classification for Neglect
 (check below)

<u>Total Score</u>	<u>Risk Classification</u>
-2 to 0	___ Low
1 to 3	___ Moderate
4 to 6	___ High
7 to 14	___ Very High

OVERRIDES Policy: Override to Very High. Check appropriate reason

_____	1.	Sexual Abuse cases where the perpetrator is likely to have access to the child victim.
_____	2.	Cases with non-accidental physical injury to an infant.
_____	3.	Serious non-accidental physical injury requiring hospital or medical treatment.
_____	4.	Death (previous or current of a sibling as a result of abuse or neglect
Discretionary: _____	5.	Reason _____

Override Risk Level: ___ Low ___ Moderate ___ High ___ Very High

 Supervisor's Review/Approval of Discretionary Override

 Date

As Table 5 indicates, 28% (270 of the sample families) were classified as having low future risk of neglect or emotional abuse; 41.3% (389 families) moderate risk; 19.2% high risk; and 11.6% were very high risk families.

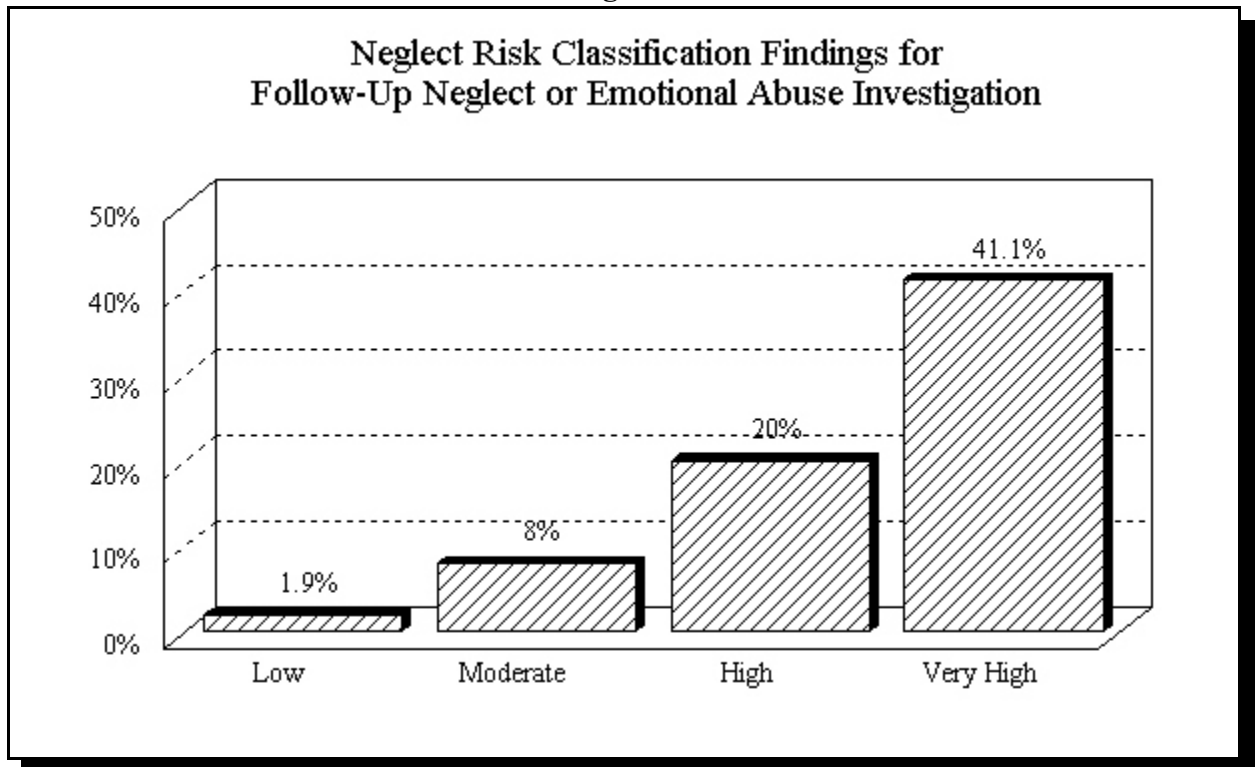
Neglect and emotional abuse investigations observed during the 18-month follow-up are shown in the two right hand columns of Table 5. Only 1.9% (5 of the 270 cases) of the families classified by the instrument as low risk were investigated for neglect or emotional abuse during the follow-up. The moderate and high risk families have investigation rates of 8% and 20%, respectively. On the other hand, families classified very high risk had an investigation rate of 41.1% (i.e., 46 of 112 were investigated for neglect or emotional abuse during the 18-month follow-up period).

The results suggest that the preliminary instrument can discriminate pretty accurately between families with a high or low probability of future investigation for neglect. For instance, families classified as high risk on the neglect assessment have a follow-up investigation rate of 41.1% which is several times the 1.9% rate observed for families classified low risk.

Table 5				
Neglect Risk Classification Findings for Follow-Up Neglect or Emotional Abuse Investigation				
Neglect Classification	Sample Cases	Percent of Sample	Follow-Up Neglect/Emotional Abuse Investigation*	
			Cases	Rate
Low	270	28.0%	5	1.9%
Moderate	399	41.3%	32	8.0%
High	185	19.2%	37	20.0%
Very High	112	11.6%	46	41.1%
Total	966	100%	120	12.4%

*Investigated allegation (one or more) within 18 months of the sample investigation.

Figure 5

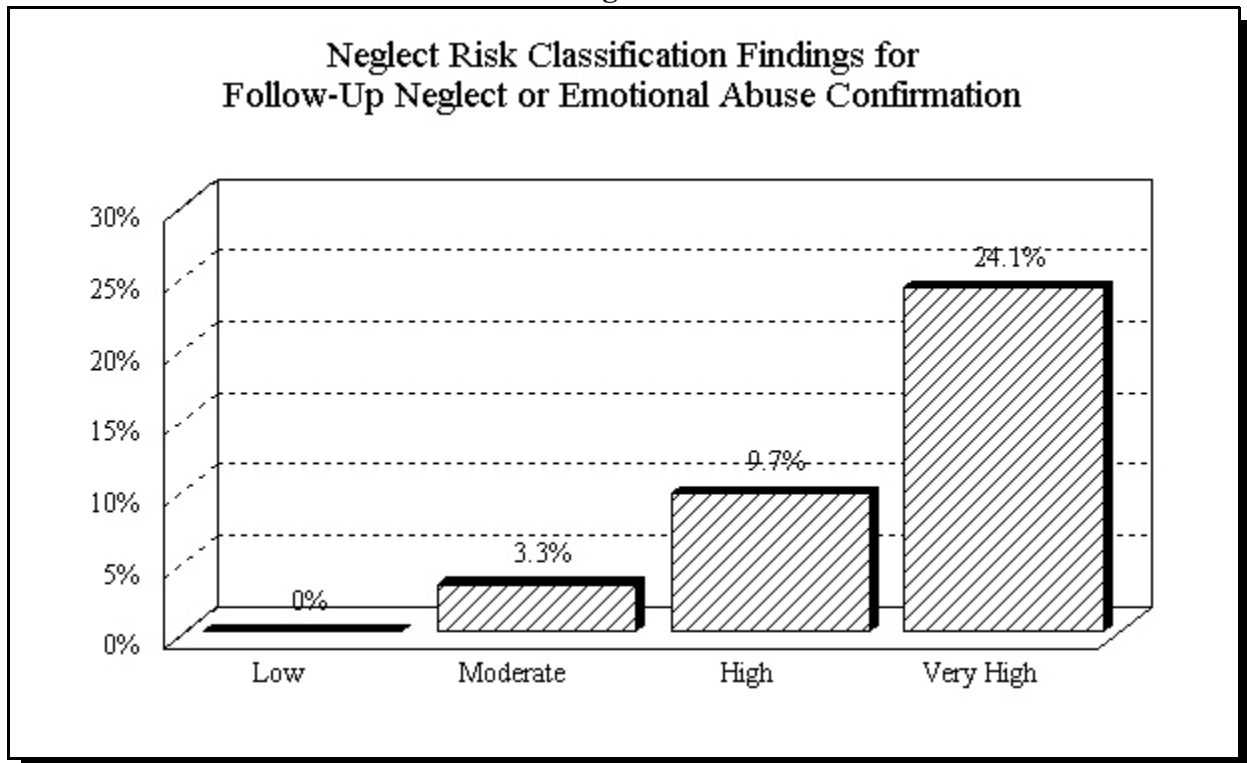


The four classifications drawn from this assessment instrument also define a meaningful progression in the future risk of neglect or emotional abuse confirmation. As Table 6 indicates, there were no confirmed incidents of neglect or emotional abuse among low risk sample families. The confirmation rate for moderate risk sample families was 3.3% progressing to 9.7% for high risk and then to 24.1% for very high risk cases.

Neglect Classification	Sample Cases	Percent of Sample	Follow-Up Neglect/Emotional Abuse Confirmation*	
			Cases	Rate
Low	270	28.0%	0	0.0%
Moderate	399	41.3%	13	3.3%
High	185	19.2%	18	9.7%
Very High	112	11.6%	27	24.1%
Total	966	100%	58	6.0%

*Confirmed allegation (one or more) within 18 months of the sample investigation.

Figure 6



Risk Assessment for Abuse

The nine-item instrument for assessing the risk of abuse, which follows, employs somewhat different items but is scored and can be evaluated in essentially the same way as the neglect assessment. Table 7 shows how investigating workers can use the instrument to observe and score simple case characteristics which permit them to classify the 966 sample families into four risk groups. Twenty-nine percent of the families (288 cases) fall into the low risk classification, 42.2% in the moderate risk, 19.4% in the high, and 8.6% are classified as very high risk.

The table shows abuse investigation (physical and sexual abuse are combined) rates for families during the 18 months following their sample confirmation. The 288 families classified as low risk had a 5.2% abuse investigation rate. For families classified very high risk, the investigation rate was 37.3% - more than seven times the rate of families classified low. Families in the moderate and high risk classifications had abuse investigation rates of 16.4% and 27.3%, respectively. Consequently, this assessment instrument can also place families in classification groups that provide a useful estimate of the risk of subsequent investigation for abuse.

State of South Australia
 Department of Family and Community Services
 Preliminary Risk Assessment for Abuse

10/08/97

Family Case Name: _____ Notification #: _____
 Family Case #: _____ Date: _____ / _____ / _____

		Score
A1.	Current Investigation is for Emotional Abuse	
a.	No	0
b.	Yes	1
A2.	Nature of Prior Intakes (score highest that applies)	
a.	No prior intakes of any kind	-1
b.	Prior intakes - non-child protection	1
c.	Prior child protection notification	2
d.	Prior confirmation of physical, sexual, or emotional abuse	3
A3.	Number of Children Confirmed for Abuse or Neglect	
a.	One	0
b.	Two or more	1
A4.	Prior Alternative Care Placements of Household Children	
a.	No	0
b.	Yes	1
A5.	Age of Youngest Child in Family in the Investigation	
a.	7 or younger	1
b.	8 to 12	0
c.	13 or older	-1
A6.	Age of Youngest Child Found Injured During the Investigation	
a.	7 or younger	2
b.	8 to 12	1
c.	13 or older	0
d.	No injury	0
A7.	Caregiver(s) has Alcohol or Drug Abuse Problem that Contributed to the Incident	
a.	None	0
b.	Alcohol <u>or</u> drug	1
A8.	Caregiver(s) has a History of Domestic Violence	
a.	No	0
b.	Yes	2
A9.	Adult Caregiver(s) has Current or Prior Assessment History of Significant Parental Skills Deficits (enter highest that applies)	
a.	No	0
b.	Yes	1

Total Score: _____

Risk Classification for Abuse
 (check below)

<u>Total Score</u>	<u>Risk Level</u>
-2 to -1	_____ Low
0 to 2	_____ Moderate
3 to 5	_____ High
6 to 13	_____ Very High

OVERRIDES	Policy: Override to Very High. Check appropriate reason
_____	1. Sexual Abuse cases where the perpetrator is likely to have access to the child victim.
_____	2. Cases with non-accidental physical injury to an infant.
_____	3. Serious non-accidental physical injury requiring hospital or medical treatment.
_____	4. Death (previous or current of a sibling as a result of abuse or neglect
Discretionary: _____	5. Reason _____

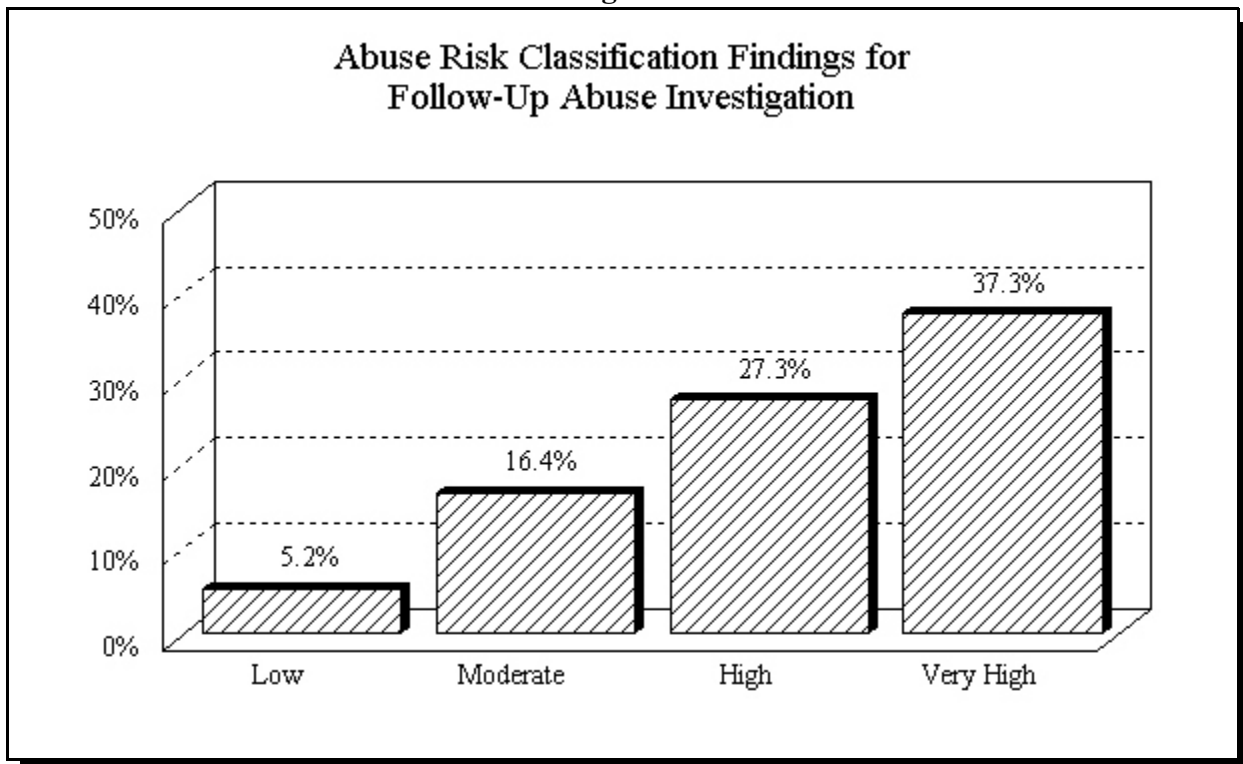
Override Risk Level: _____ Low _____ Moderate _____ High _____ Very High

 Supervisor's Review/Approval of Discretionary Override _____ / _____ / _____
 Date

Table 7				
Abuse Risk Classification Findings for Follow-Up Abuse Investigation				
Abuse Classification	Sample Cases	Percent of Sample	Follow-Up Abuse Investigation*	
			Cases	Rate
Low	288	29.8%	15	5.2%
Moderate	408	42.2%	67	16.4%
High	187	19.4%	51	27.3%
Very High	83	8.6%	31	37.3%
Total	966	100.0%	164	17.0%

*Investigated physical or sexual abuse allegation (one or more) within 18 months of the sample investigation.

Figure 7



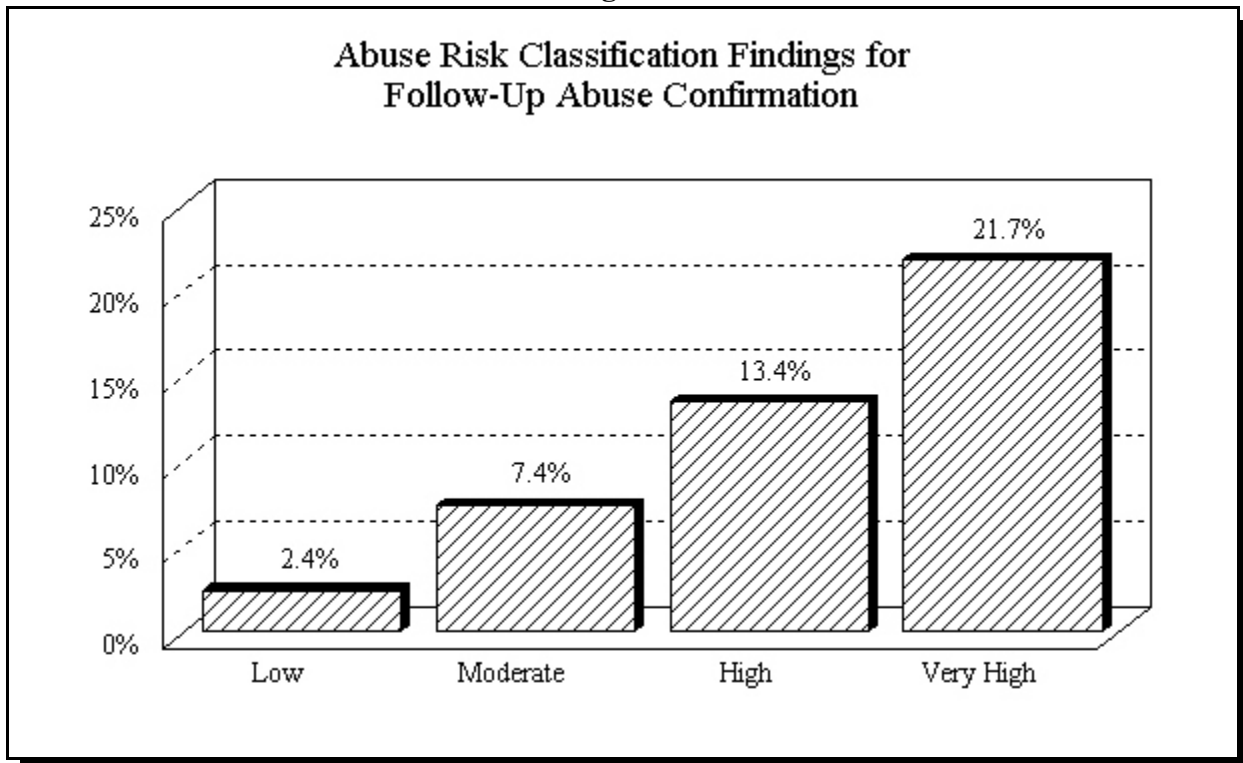
The instrument also provides a useful estimate of confirmed abuse. Only 8.3% of the sample families were confirmed for abuse during the follow-up. Table 8 shows the abuse confirmation rates for each risk classification. They range from 2.4% among low risk families to 21.7% in the very high risk classification.

Abuse Classification	Sample Cases	Percent of Sample	Follow-Up Abuse Confirmation*	
			Cases	Rate
Low	288	29.8%	7	2.4%
Moderate	408	42.2%	30	7.4%
High	187	19.4%	25	13.4%
Very High	83	8.6%	18	21.7%
Total	966	100.0%	80	8.3%

*Confirmed physical or sexual abuse allegation (one or more) within 18 months of the sample investigation.

FINAL RISK CLASSIFICATION

Figure 8



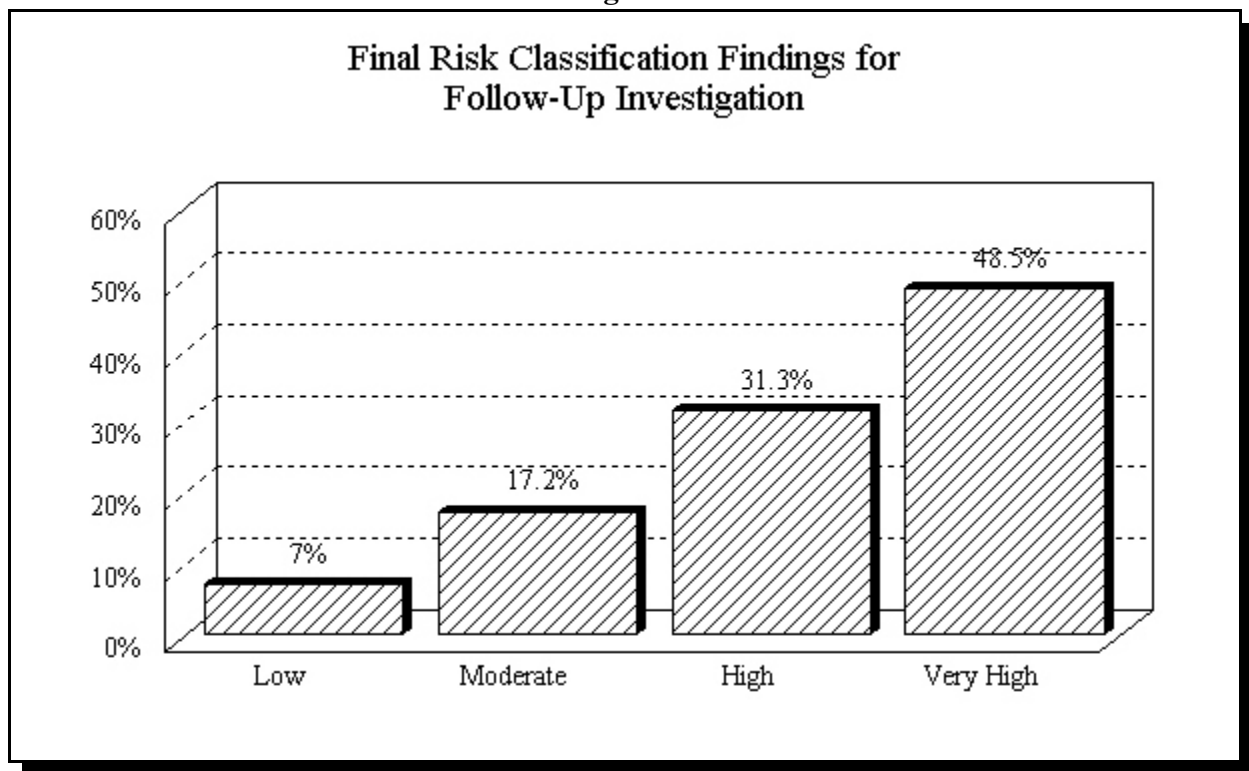
A final family risk classification is obtained by simply assigning the case to the highest risk classification determined by either the abuse or neglect instrument previously described. The result is a risk classification that can be used to assist the worker in estimating the likelihood that a family will become involved in either an abuse or a neglect incident.

Table 9 shows the final risk classification groups derived from the abuse and neglect instruments for sample families and presents their follow-up investigation rates for abuse or neglect. Subsequent to their sample confirmation, 212 (21.9%) of the 966 sample families were investigated for another abuse or neglect incident. By comparison, the 242 families classified low for abuse or neglect had a 7% investigation rate and those classified very high had a 48.5% rate.

Table 9				
Final Risk Classification Findings for Follow-Up Investigation				
Final Classification	Sample Cases	Percent of Sample	Follow-Up Investigation*	
			Cases	Rate
Low	242	25.1%	17	7.0%
Moderate	383	39.6%	66	17.2%
High	211	21.8%	66	31.3%
Very High	130	13.5%	63	48.5%
Total	966	100.0%	212	21.9%

*Investigated allegation of any type (one or more) within 18 months of the sample investigation.

Figure 9



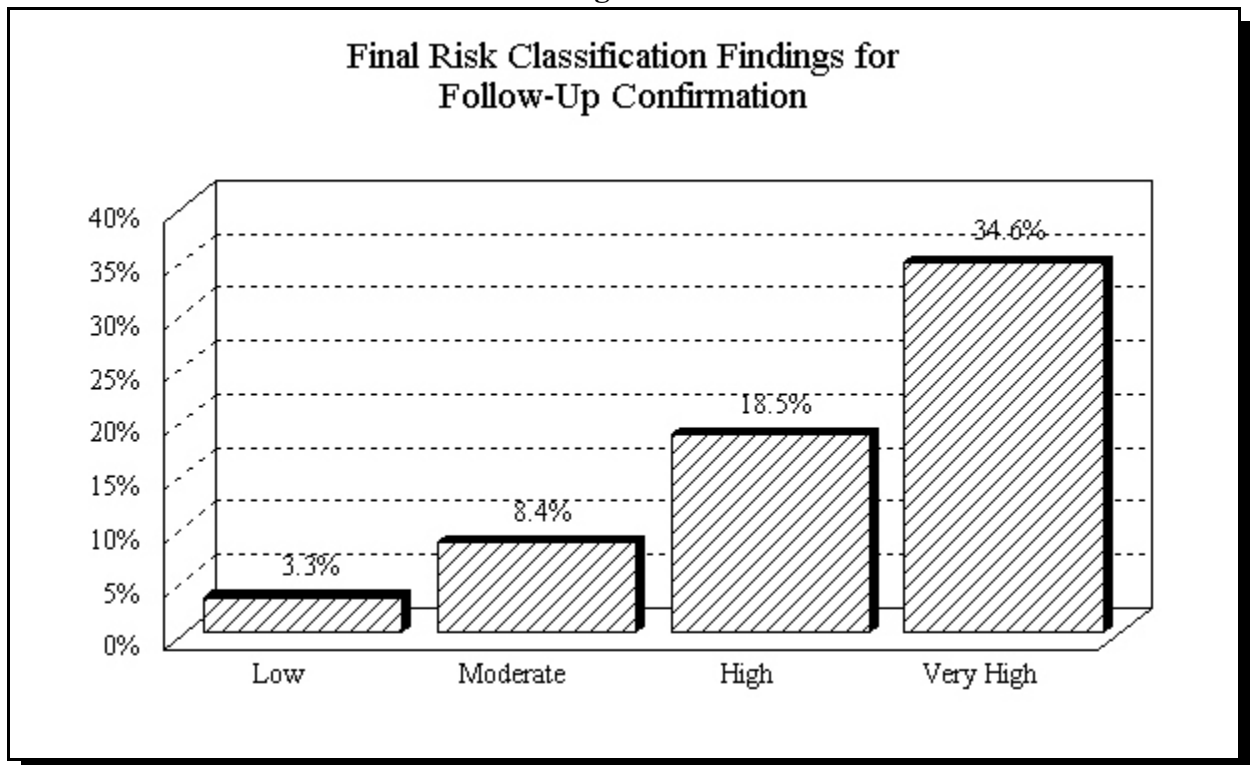
A similar finding is obtained for subsequent confirmation of abuse or neglect. Only 3.3% of the low risk families were reconfirmed versus 34.6% of those in the very high risk group (see Table 10).

Table 10				
Final Risk Classification Findings for Follow-Up Confirmation				
Final Classification	Sample Cases	Percent of Sample	Follow-Up Confirmation*	
			Cases	Rate
Low	242	25.1%	8	3.3%
Moderate	383	39.6%	32	8.4%
High	211	21.8%	39	18.5%
Very High	130	13.5%	45	34.6%
Total	966	100.0%	124	12.8%

*Confirmed allegation of any type (one or more) within 18 months of the sample investigation.

Table 11 attempts to examine the relative severity of subsequent abuse or neglect incidents. It employs the CIS report codes to determine whether any child in a subsequent abuse or neglect incident experienced an injury. Only 3.8% of the sample households were reported for a child injury in either confirmed or unconfirmed incidents. The final classification does perform a reasonably useful estimate of future injury incidents. For instance, families classified low risk had a 1.7% injury

Figure 10

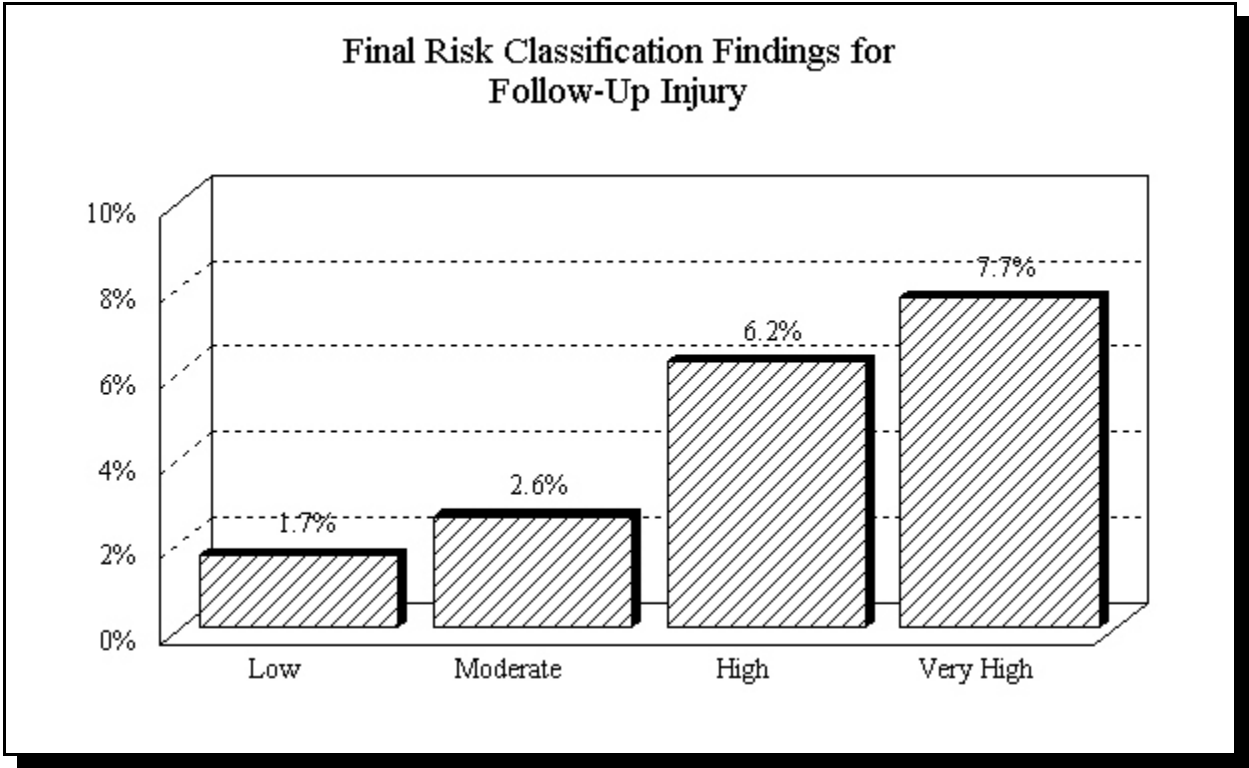


rate compared to a 7.7% rate for the very high risk classification group.

Table 11				
Final Risk Classification Findings for Follow-Up Injury				
Final Classification	Sample Cases	Percent of Sample	Follow-Up Injury*	
			Cases	Rate
Low	242	25.1%	4	1.7%
Moderate	383	39.6%	10	2.6%
High	211	21.8%	13	6.2%
Very High	130	13.5%	10	7.7%
Total	966	100.0%	37	3.8%

*Injury to any child reported (confirmed and unconfirmed investigations) within 18 months of the sample investigation.

Figure 11

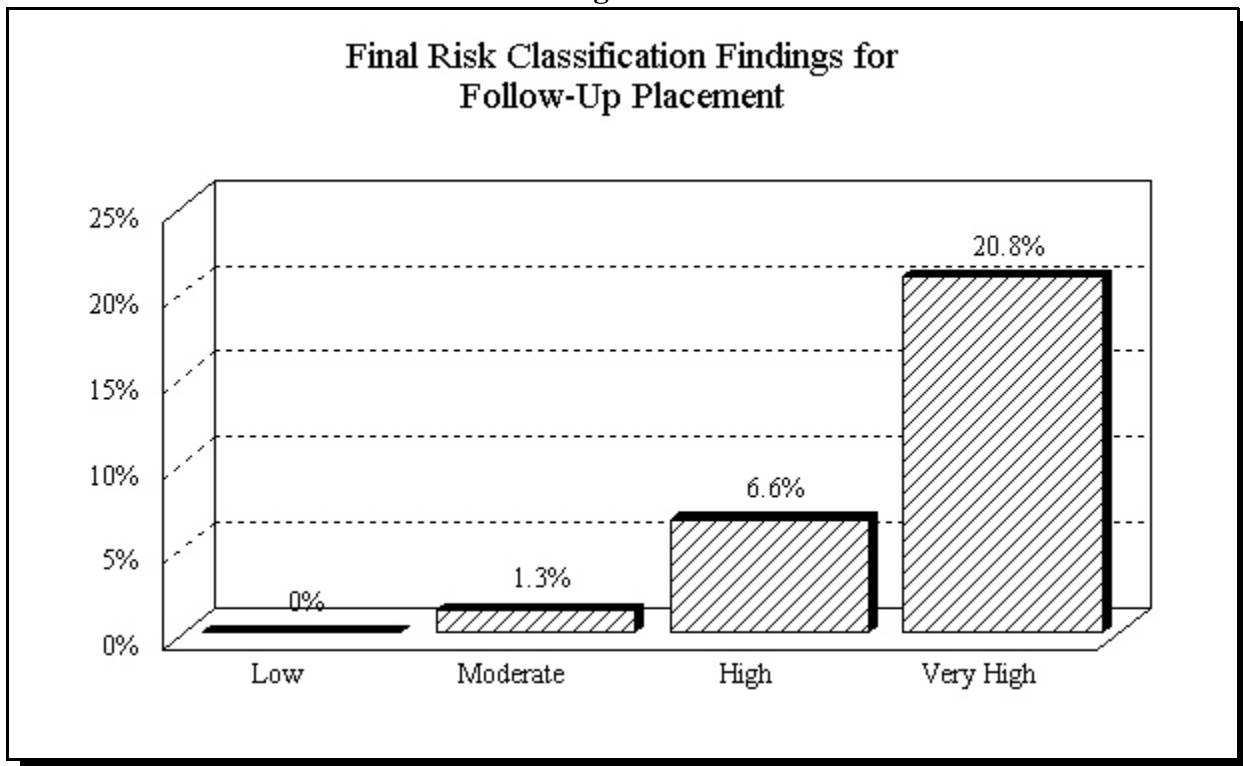


Classification findings may also be presented for temporary or permanent child placement occurring subsequent to the sample confirmation event. As Table 12 indicates, none of the families in the low risk group experienced a placement during the follow-up period versus 20.8% of the very high risk group. Since high risk families are more likely to be involved in confirmed protective service incidents and child injury, they are also more likely to have a child placed outside the home.

Table 12				
Final Risk Classification Findings for Follow-Up Placement				
Final Classification	Sample Cases	Percent of Sample	Follow-Up Placement*	
			Cases	Rate
Low	242	25.1%	0	0.0%
Moderate	383	39.6%	5	1.3%
High	211	21.8%	14	6.6%
Very High	130	13.5%	27	20.8%
Total	966	100.0%	46	4.8%

*Any permanent or respite placement during 18 months following the sample investigation.

Figure 12



SUMMARY OF STUDY FINDINGS

When combined in the manner suggested above, the assessment tools described above assign South Australia families to risk classifications which provide a good actuarial estimate of the risk of future abuse or neglect. Given the very limited assessment information available for families in this sample, the results obtained are very positive. Risk factors which CRC researchers have identified in prior protective service research projects in the United States appeared to have very similar relationships to the reoccurrence of maltreatment when examined in this sample. And the instruments themselves are similar in design to recent CRC studies conducted in Rhode Island and New Mexico . While the current abuse and neglect instruments should be viewed as preliminary, they provide convincing evidence that the actuarial risk of South Australia families can be assessed with a degree of accuracy necessary to better inform case management decisions. Some modification of the assessment items shown may be required prior to implementation to expand the number, type and sensitivity of the family risk factors observed. These changes may be based on results obtained in previous research. A second study which employs information available from an expanded and more systematic family assessment process is planned for a later date.

It is important to note that the assessment procedure just described is not the only factor considered in making case decisions. Investigating caseworkers or their supervisors may override the actuarial risk classification based on their own professional judgement and observation of the family. In addition, they may be required to override cases to high risk in certain cases where there has been a serious, non-accidental injury to a child, sexual abuse where the perpetrator has access to the child, and similar situations. Example overrides appear on the abuse and neglect instruments show above. Whether workers exercise an override or not, they begin the decision making process

with a risk classification which is systematically determined and has a very strong empirical relationship to the incidence of future maltreatment.

RISK ASSESSMENT AND CASE PLANNING

It should be noted that the preliminary assessment procedure described here is only the first step in the CPS case planning process. Department of Family Services staff and staff from the CRC are also developing a structured family needs assessment instrument for systematically identifying family problems to be addressed by agency service interventions.

APPENDIX A

Neglect Scale Definitions

- N1. Current Report is for Neglect or Emotional Abuse**
Indicate “yes” if the current complaint is for neglect and/or emotional abuse, then add for a total item score of up to three. This item uses the assessment codes recorded for the family investigation in CIS; i.e., CAN, CAL and CAT were used to identify neglect. The CAE code was used to identify emotional abuse. If any child in the family was investigated for these reasons, the items should be scored.
- N2. Prior Investigated Reports of Neglect or Emotional Abuse**
Count all reports assigned for investigation for emotional abuse or neglect prior to the complaint resulting in the current investigation start. The same codes shown above were employed.
- N3. Number of Prior Family Intakes (include both CPS and other service contacts)**
Count all separate intakes prior to the current investigation. These include CPS and other service/assessment activity for members of the household.
- N4. Family With One Caregiver**
Single household heads identified in the CIS extract.
- N5. Age of Youngest Child in Family at the Time of Investigation**
Record the current age in years of the youngest child residing in the household. If a child was removed as a result of the investigation, the child should still be assessed.
- N6. Number of Children Confirmed for Abuse or Neglect During the Investigation**
Count the number of children in the family who were confirmed for any type of abuse or neglect.
- N7. A Child was Found to be Injured During the Current Investigation**
The injury definition includes these maltreatment codes: BRN, CUT, DIS, FBR, FRC, MAL, OBJ, OBR, SKL, THR, and WEL. Note that physical abuse indicators as well as malnutrition and failure to thrive are included. The definition for R7 does not require that the injury be confirmed, but that was usually the case.
- N8 to N10. Adult Caregiver(s) has a Current or Prior Assessment History of:**
These CIS assessment codes were used to construct these items: Domestic Violence - ACC, OFV, SAV, and TRN; Alcohol or Drug Use - ALD; and Parental Skill Deficit - PSK.
- N11. Household has Received Financial Assistance Prior to the Investigation (circle one)**
This item was constructed by using CIS codes for financial assistance: PYT, PYO, EFO, and EFA. Any intake for financial assistance to a family member prior to the current investigation start should score this point.

Abuse Scale Definitions

A1. Current Investigation is for Emotional Abuse

Indicate “yes” if the current complaint is for emotional abuse. This item uses the assessment codes recorded for the family investigation in CIS; the CAE code was used to identify emotional abuse. If any child in the family was investigated for this reason, the items should be scored.

A2. Nature of Prior Intakes

Code highest score based on the family’s prior intake or protective service history.

A3. Number of Children Involved in Current Abuse Incident

Count the number of children in the family who were confirmed for any type of abuse or neglect.

A4. Prior Alternative Care Placements of Household Children

Any prior respite or foster care placement. CIS codes RES or PNR.

A5. Age of Youngest Child in Family in the Investigation

Record the current age in years of the youngest child residing in the household. If a child was removed as a result of the investigation, the child should still be assessed.

A6. Age of Youngest Child Found Injured During the Investigation

The injury definition includes these maltreatment codes: BRN, CUT, DIS, FBR, FRC, MAL, OBJ, OBR, SKL, THR, and WEL. Note that physical abuse indicators as well as malnutrition and failure to thrive are included. The definition for R7 does not require that the injury be confirmed, but that was usually the case.

A7 to A9. Adult Caregiver(s) has a Current or Prior Assessment History of:

These CIS assessment codes were used to construct the item: Domestic Violence - ACC, OFV, SAV, and TRN; Alcohol or Drug Use - ALD; and Parental Skill Deficit - PSK.

Additional Notes:

In the tables some in the study, the risk assessment is examined relative to several outcomes observed 18 months after the sample investigation on CIS.

A follow-up placement incident was defined as either a foster care or a temporary respite removal of a child, i.e., RES or PNR codes occurring after the sample confirmation. The placement activity did not have to be directly related to a subsequent CPS investigation or confirmation.

A follow-up child injury was defined using codes indicated above for item N7. A confirmed CPS incident was not a requirement for this follow-up definition of child injury.

Table A1						
Neglect Scale Item Analysis						
Item	Sample Distribution		Cases With Subsequent Neglect or Emotional Abuse Investigations			
	N	%	N	%	Correlation	P Value
Total Sample	996	100.0%	155	12.6%		
N1. Current Report is for Neglect or Emotional Abuse					.299	.001
No	660	68.3%	79	8.0%		
Yes, for Neglect	198	20.5%	76	31.0%		
Yes, for Emotional Abuse	108	11.2%	26	17.0%		
N2. Prior Investigated Reports of Neglect or Emotional Abuse					.246	.001
None	880	91.1%	111	9.9%		
One or more	86	8.9%	44	38.6%		
N3. Number of Prior Family Intakes					.269	.001
None	572	59.2%	42	5.7%		
One	126	13.0%	20	13.5%		
Two or Three	90	9.3%	23	18.7%		
Four or more	178	18.4%	70	31.1%		
N4. Primary Caregiver is Female					.067	.038
No	131	13.6%	12	7.0%		
Yes	835	86.4%	143	13.5%		
N5. Age of Youngest Child in Family at Time of Investigation					.184	.001
13 or Older	208	21.5%	7	2.6%		
8 to 12	303	31.4%	44	11.1%		
7 or Younger	455	47.1%	104	18.2%		
N6. Number of Children Confirmed for Abuse or Neglect During Investigation					.121	.001
One	826	85.5%	109	10.4%		
Two or more	140	14.5%	46	25.3%		
N7. Child found to be Injured during Current Investigation*					-.032	.314*
No	746	77.2%	123	12.9%		
Yes	220	22.8%	32	11.3%		
Adult Caregiver has a Current or Prior Assessment History of:						
N8. Domestic violence	104	10.8%	37	27.4%	.153	.001
N9. Alcohol or drug abuse	57	5.9%	29	41.4%	.239	.001
N10. Parental skill deficit	94	9.7%	37	30.6%	.152	.001
N11. Household has Received Financial Assistance Prior to Investigation					.243	.001
No	745	77.1%	79	8.2%		
Yes	221	22.9%	76	27.9%		

*This variable has a significant correlation with follow-up injury.

Table A2						
Abuse Scale Item Analysis						
Item	Sample Distribution		Cases With Subsequent Abuse Investigations			
	N	%	N	%	Correlation	P Value
Total Sample	966	100.0%	164	17.0%		
A1. Current Investigation is for Emotional Abuse					.085	.009
No	858	88.8%	136	15.9%		
Yes	108	11.2%	28	25.9%		
A2. Nature of Prior Intakes					.210	.001
No prior intakes of any kind	572	59.2%	58	10.1%		
Prior intakes - non-child protection	182	18.8%	47	25.8%		
Prior child protection notification	128	13.3%	33	25.8%		
Prior confirmation of physical, sexual, or emotional abuse	84	8.7%	26	31.0%		
A3. Number of Children Confirmed for Abuse or Neglect					.112	.001
One	826	85.5%	126	15.3%		
Two or more	140	14.5%	38	27.1%		
A4. Prior Alternative Care Placements of Household Children					.137	.001
No	903	93.5%	141	15.6%		
Yes	63	6.5%	23	36.5%		
A5. Age of Youngest Child in Family at the Investigation					.165	.001
13 or older	208	21.5%	17	8.2%		
8 to 12	303	31.4%	41	13.5%		
7 or younger	455	47.1%	106	23.3%		
A6. Age of Youngest Child Found Injured During Current Investigation*					.047	.142*
No injury or age is 13 or older	788	81.6%	128	16.2%		
8 to 12	79	8.2%	14	17.7%		
7 or younger	99	10.2%	22	22.2%		
A7. Caregiver(s) has Alcohol or Drug Abuse Problem that Contributed to the Incident					.086	.008
No	909	94.1%	147	16.2%		
Alcohol or drug problem	57	5.9%	17	29.8%		
A8. Caregiver(s) has a History of Domestic Violence					.128	.001
No	862	89.2%	132	15.3%		
Yes	104	10.8%	32	30.8%		
A9. Adult Caregiver(s) has Current or Prior Assessment History of Significant Parental Skill Deficits					.093	.004
No	872	90.3%	138	15.8%		
Yes, parental skill deficits	94	9.7%	26	27.7%		

*This variable has a significant correlation with follow-up injury.

APPENDIX B

BRIEF METHODOLOGY OF RISK ASSESSMENT

The Limitations of Risk Assessment

All actuarial devices use group experience to estimate what an individual's future behavior will be like. Consequently, risk assessment classifications are estimates which fall short of an infallible prediction for an individual family. If the classification was always correct, we might expect 100% of the families in the very high risk classification to have a reoccurrence of abuse or neglect. In fact, only 48% of these families were investigated during the 18-month follow-up period and 35% were confirmed (see Tables 9 and 10).

The expectation for an actuarial assessment tool is very similar to that attached to a weather forecast that there is a 50% probability of rain. On any given day, the forecast of rain may prove to be wrong but since it rained 50% of the time on similar days in the past, it may be a good idea to carry an umbrella (see Gottfredson, 1987). All actuarial assessment procedures fall short of perfect prediction for individual cases, but despite that limitation they can be very useful tools for objectively placing families in meaningful categories which help decision makers evaluate cases.

Method of Analysis

CRC staff employ both bivariate and multi-variate statistical techniques to: 1) ascertain the predictive capabilities of potential items for the instrument; 2) determine appropriate weights for each item and set cut-off scores for classification categories.

In previous studies, CRC has found that the following steps to provide the best overall methodology for actuarial instrument construction:

1. The sample population is divided randomly into two groups; the first is used to construct a preliminary instrument; the second used for validation purposes. The use of construction and validation samples allows a scale to be developed on one

population and tested on another. In general, scales best “fit” the population used for development. Validating the scale on a separate population better indicates how a risk assessment instrument will perform when actually implemented. The amount of predictive power lost from construction to validation sample is termed “shrinkage.” Some shrinkage is normal and fully expected; excessive shrinkage invalidates the scale. No rule on allowable shrinkage is applicable to all situations; each analysis must be viewed in the context of the base rate and outcome definitions. Since the current study was exploratory and a second effort is planned, construction and validation samples were not employed.

2. Simple correlations and cross tabulations are developed between each family background factor available for study and each measure of reoccurrence. Reoccurrence measures include abuse or neglect investigations and confirmations. Measures of child injury were also employed.
3. Items with significant statistical association (.05 level) with any of the reoccurrence measures are selected for further analysis.
4. Multiple linear regression analysis is conducted to help guide selection of the best combination of predictive items or variables. This analysis provides some insights as to which factors should receive primary consideration for scale inclusion and which may be redundant.
5. Cross tabulations (with a number of associated statistics) are repeated to further determine relationships between reoccurrence and potential scale items. These analyses help to determine how values of each independent factor could best be weighted in a summative scale to maximize each variable's relationship to the various outcome measures.
6. Variables are re-coded, based on the above analysis and the cross tabulations and correlations are repeated. Item weights are selected based on the ability of each to discriminate reoccurrence measures reported during the follow-up period.
7. Items are reviewed for scale inclusion based on both the results of the cross tabulations and the regression analysis described above. Since the scale must be completed by investigating workers, case characteristics which are easy to observe and score reliably are given priority for use as scale items.
8. A preliminary scale is then developed and tested against outcome measures to evaluate overall predictive capabilities and optimal cut-off points for classification categories. Items may be added, deleted, or re-weighted from the preliminary scale during this process based on assessments of their contribution to the classification.
9. The best combination of factors is chosen and the scale is completed.
10. The scale is tested against the validation sample to determine the degree of shrinkage.

11. Finally, tests may be performed based on race or gender to determine if the scale demonstrates any significant racial or gender bias.

A variety of statistical methods could be used to conduct the analyses described. A prior study by Simon (1971) and an exhaustive study by Gottfredson and Gottfredson (1979), later confirmed by other researchers (see Wilbanks, 1985 and Benda, 1987), found that less precise methods of statistical evaluation (including bivariate analyses or least squares regression) often produce the best overall result. These procedures were employed in the previous analysis.

In the final selection and weighting of scale items, variables which prove most useful in the prediction of more serious reoccurrence measures (i.e., confirmation) are given priority.

APPENDIX C

ONGOING DATA COLLECTION TO ASSIST REVALIDATION

Actuarial risk instruments are, quite simply, based on actual case outcomes. Factors thought to be related to outcomes (in this instance subsequent maltreatment) are identified using past studies and experience as a guide. The 11-item family neglect assessment and the 9-item abuse assessment described previously are the results of a preliminary research effort using the limited amount of data provided in CIS.

Following is a suggested risk assessment, supplementing research-based risk assessment items with those factors that have been shown in the U.S. to assess the likelihood of subsequent abuse or neglect. While some transferability is possible, differences in laws, nomenclature, reporting requirements, and data availability indicate that a small revalidation study is necessary to ensure a system fit.

A revalidation of the assessment instruments would allow a more thorough examination of family characteristics as factors related to the likelihood of subsequent maltreatment. A comprehensive validation of a risk assessment tool involves the following tasks: 1) conduct of a risk assessment study to validate the current risk classification instrument; 2) construction of a new instrument which provides the best possible discrimination between families with low and high risk of subsequent maltreatment (this may involve the alteration or replacement of current risk assessment items); 3) examining the impact of the agency's current needs assessment procedures (if any) on classification with a revised risk assessment; and 4) the assessment of classification overrides employed by agency staff. Such a study would determine whether or not the instruments were able to successfully separate families by risk of maltreatment.

An empirical study would be the first step in revalidating South Australia's risk assessment instruments. The general approach would be to draw a large, random sample of approximately 400

to 600 new investigations in protective services during a prior year, observe the risk characteristics (current allegations and confirmations, prior allegations and confirmations of maltreatment, caretaker characteristics such as substance abuse, employment, age, gender, child characteristics, and other risk/needs assessment factors) of each sampled family at the time of investigation, and then record any new allegations, confirmations, injury to a child or child placement that occur during the 9 to 12 months following the start of the investigation. This information would be used to validate the existing risk assessment and, if necessary, to revise it.

Data sources would include the CIS and the current risk and needs assessment instruments. This appendix contains a data collection form which would supplement CIS information when a revalidation occurred. If data entry for the revalidation study were ongoing from the time of implementation, it would be possible to monitor the distribution of cases and explore the impact of moving cut points between risk levels.

State of South Australia
 Department of Family and Community Services
 Suggested Draft Risk Assessment for Abuse

10/08/97

Family Case Name: _____ Notification #: _____

Family Case #: _____ Date: _____ / _____ / _____

A1.	Current Investigation is for Physical, Sexual or Emotional Abuse		Score
	a. No	0	
	b. Yes	1	
A2.	Nature of Prior Intakes (score highest that applies)		
	a. No prior intakes of any kind	-1	
	b. Prior intakes - non-child protection	1	
	c. Prior child protection notification	2	
	d. Prior confirmation of physical, sexual, or emotional abuse	3	
A3.	Child Characteristics (check all that apply, add for score)		
	a. None	0	
	b. Yes	1	
	___ Special needs	1	
	___ History of offending	1	
A4.	Number of Children Involved in Current Abuse Incident		
	a. One	0	
	b. Two or more	1	
A5.	Prior Alternative Care Placements of Household Children		
	a. No	0	
	b. Yes	1	
A6.	Age of Youngest Child in Family in the Investigation		
	a. 7 or younger	1	
	b. 8 to 12	0	
	c. 13 or older	-1	
A7.	Age of Youngest Child Found Injured by the Physical/Sexual Abuse		
	a. 7 or younger	2	
	b. 8 to 12	1	
	c. 13 or older	0	
	d. No injury	0	
A8.	Caregiver(s) has Alcohol or Drug Abuse Problem that Contributed to the Incident		
	a. None	0	
	b. Alcohol only	1	
	c. Drug only or alcohol <u>and</u> drug	2	
A9.	Caregiver(s) has a History of Domestic Violence		
	a. No	0	
	b. Yes	1	
A10.	Adult Caregiver(s) has Current or Prior Assessment History of Significant Parental Skills Deficits (enter highest that applies)		
	a. No	0	
	b. Yes, other than discipline-related	1	
	c. Yes, excessive/inappropriate discipline	2	
A11.	Caregiver(s) Response to Investigation		
	a. Caregiver(s) cooperated with investigator	0	
	b. One or more caregiver(s) did <u>not</u> cooperate with investigator	2	

Total Score: _____

Risk Classification for Abuse
 (check below)

Total Score	Risk Level
-2 to 2	___ Low
3 to 5	___ Moderate
6 to 8	___ High
9 to 18	___ Very High

OVERRIDES	Policy: Override to Very High. Check appropriate reason
_____	1. Sexual Abuse cases where the perpetrator is likely to have access to the child victim.
_____	2. Cases with non-accidental physical injury to an infant.
_____	3. Serious non-accidental physical injury requiring hospital or medical treatment.
_____	4. Death (previous or current of a sibling as a result of abuse or neglect
Discretionary: _____	5. Reason _____

Override Risk Level: ___ Low ___ Moderate ___ High ___ Very High

 Supervisor's Review/Approval of Discretionary Override _____
Date

**State of South Australia
Supplementary Data Collection Form**

**4. Sex of caregiver(s).
Primary Caregiver**

1. Male 2. Female

Secondary Caregiver

1. Male 2. Female

**5. Age of caregiver(s) at the time of the investigation.
Primary Caregiver**

_____ age in years

Secondary Caregiver

___ age in years

**6. Did the caregiver(s) have a Criminal Arrest or Conviction history? (other than traffic offenses) as an adult or juvenile (include credible reports from any source)? (circle one)
Primary Caregiver**

1. Yes 2. No

Secondary Caregiver

1. Yes 2. No

**9. How cooperative was the caregiver(s) during the abuse/neglect investigation? (circle one)
Primary Caregiver**

- 1. Cooperative
- 2. Limited cooperation
- 3. Uncooperative
- 4. Hostile/threatening/refused to cooperate
- 5. Don't know

- 1. Cooperative
- 2. Limited cooperation
- 3. Uncooperative
- 4. Hostile/threatening/refused to cooperate
- 5. Don't know

Caregiver Child Welfare History/Emotional Stability		
	Primary	Secondary
C. Caregivers' Child Welfare History (enter a "Y" for yes, "N" for no in each box)		
1. Caregiver physically abused or neglected as child (alleged or substantiated)		
D. Mental Health History (enter a "Y" for yes, "N" for no in each box)		
1. Caregiver's current mental health problems have a significant negative impact on their functioning, or on their ability to protect, supervise, or care for children.		
3. Exhibits low self-esteem		
13. Difficulty controlling impulses		

HOUSEHOLD NEEDS ASSESSMENT AT TIME OF SAMPLE CONFIRMED ABUSE CASE
 (Complete for Primary and Secondary caregiver, if present)

Parental Skills/Problems	USP 1	
	Primary	Secondary
F. Parental Skills (enter a “Y” for yes, “N” for no in each box)		
1. Provided inadequate physical care		
2. Provided inadequate supervision		
3. Employed excessive/inappropriate discipline		
4. Provided inadequate emotional/psychological support		
5. Age-inappropriate expectations		
7. Is a domineering parent		
8. Limited intellectual capacity affects ability to parent		

Family Relationships/Support		
	Primary	Secondary
G. Caregiver Relationships (enter a “Y” for yes, “N” for no in each box)		
1. Caregivers’ relationship with adults has significant negative impact on family; frequent conflict, disruption, turmoil; or abdication of responsibility; or caregivers reinforce/support each other’s negative behavior (e.g., both are substance abusers)		
3. Caregiver had multiple live-in partners in past year		
7. History of domestic violence (as perpetrator or victim)		
H. External Social Support Issues (enter a “Y” for yes, “N” for no in each box)		
1. No or very limited support relationships with relatives/friends		
2. No or very limited supportive connections with community resources		
4. Caregiver is socially isolated or withdrawn; few friends, little social interaction		

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