
**An Evaluation of the
Minnesota SDM Family Risk Assessment**

Executive Summary

Conducted for the
Minnesota Department of Human Services

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Executive Summary

The Structured Decision Making (SDM) Family Risk Assessment (FRA) determines the probability that a family will continue to abuse or neglect their children. The FRA categorizes families as low, moderate, high or intensive risk of future child abuse and neglect. The charge for the present research was to determine for the *entire population of families served through CPS* and for *specific subpopulations* the *reliability, validity and effects on services* of the FRA. Five subpopulations were to be considered: Caucasian, African American, American Indian, Southeast Asian and Hispanic.

A note on reading the report: The full report is available on the web site (www.iarstl.org). An alternative for readers desiring more detail but unwilling to wade through the technical details of the report would be to read Chapter 1 and Chapter 7 of the full report. The latter is a longer version of this summary, with fuller conclusions and recommendations. The numbering of the sections of Chapter 7 corresponds to the numbers of preceding chapters (2 through 6) to permit easy movement between the summary and more detailed materials, as desired.

Predictive Validity

- Analysis showed that the FRA has predictive validity in regard to new reports of child maltreatment and new cases opened for families following such reports. Low-risk families have fewer new reports than moderate-risk families. Similarly, moderate-risk families have fewer new reports than high and intensive risk families.
 - Like all tools intended to predict future human behavior, however, the FRA involves error. Analysis indicated that the scale misclassified approximately one in three families.
 - The larger portion of predictive error arose from families with low and moderate risk scores that were reported later. This may reflect conditions and circumstances of families and family members *that were not present at the time the FRA was administered*. It may also reflect the failure of workers to accurately complete all FRA items.
- All the individual items of the FRA showed predictive validity, including demographic characteristics of families, such as number of children and age of the caregiver. Some risk factors can be addressed and changed while others cannot. Together they point toward the families in greatest need of attention.

Reliability

- The FRA is composed of two subscales—one for risk of neglect and the other for risk of abuse. Both scales demonstrated internal consistency slightly below the lower range of what is generally considered acceptable.
- Analysis of a vignette survey in which workers determined the risk of family in a written description showed that workers tended to use the two subscales consistently. This finding is mitigated somewhat because the vignette methodology could not take into account differences that might arise from encounters between workers and real-life families.
 - There was also evidence that consistency among workers dropped in producing the final categorical rankings (low through intensive) on the FRA because relatively minor variation in subscale scores can produce substantive variation in final risk categories.

Other Practice Issues

In surveys and interviews of workers:

- Most workers recognized that the FRA introduced positive features, such as consistency, into the family assessment process.
- Differences were found in the extent to which the FRA affected decision-making about services to families. Some respondents said it was a minor factor or unimportant in responding to families. For others it was a major factor.
 - This seemed to be a function of local offices rather than differences among workers within offices. The larger the county and CPS office, the more importance the FRA assumed in decision-making.
- Responses to families with lower risk scores also varied in the same way. Low-risk families were less often provided with post-assessment services in the larger urban offices compared to other counties.
- The FRA was completed at different points in the assessment process. FRA scores in some cases reflect the state of the family during or shortly after the first visit by the worker while in other cases the score represents the family at the end of the assessment process.
- Workers were also concerned that *certain characteristics of the FRA push families to higher risk levels* than should be the case. These included the following:

- Events from long ago may be scored the same as events that occurred recently (e.g., very old past cases versus cases that just closed)
 - Some risk factors may be present but mitigating factors reduce their significance (e.g., coping skill or extended family support)
 - Some items may be more risky for one subculture than another (e.g., the number of children in the family).
 - Some other *items may need to be modified* to be accurate (e.g., the age of children is a factor in risk).
- On the other hand, *some risk-related items may be missing leading families to be rated as lower risk* than should be the case (e.g., mental health).
 - One factor mentioned by workers impinges directly on reliability. Workers indicated that there was *no way to indicate a lack of knowledge*. Missing information is scored as no risk on the FRA. And, items are sometime left blank when *workers suspect but cannot prove that a risk factor is present*.

Minority Subpopulations

- While the study of the five racial and ethnic subpopulations indicated some differences in the application of individual FRA items, many of these were evened out in the final categorization of families into the fourfold classification of low, moderate, high and intensive risk.
 - The exceptions to this rule were Southeast Asian families that received overall lower risk scores and American Indian families that received overall higher risk scores.
- The FRA showed levels of predictive validity for the subpopulations similar to the entire study sample, with the same exceptions. It was more accurate with Southeast Asian families and less accurate with American Indian families.
 - The lack of predictability of the FRA for American Indian families was examined in greater detail. The primary problem was one of false negatives—low-risk families with new reports. The problem appeared to occur among neglect subscale items having to do with parenting skills, harmful relationships of parents, substance abuse, financial problems, and motivation and cooperation. Examination of worker narratives showed that such risk factors (and some others, such as mental health, not included in the FRA) were present in low-risk American Indian families with report recurrence, either at the time of the original report or in later reports. This may indicate changes in families, mistakes by workers in completing the FRA, or both.

- Perusal of narratives indicated that this same problem was present, perhaps to a lesser extent, across the spectrum of low-risk families with recurrence.
- An experimental design was employed to permit workers to respond to the same family (in a descriptive vignette) but with different minority subpopulation identifications. No evidence of racial/ethnic bias could be detected in this analysis.

Services and the FRA

A substantial minority of families in the study were involved in the Alternative Response (AR) project, which involved a new approach to families reported for child maltreatment. In comparison to traditional investigations, AR family assessments are non-adversarial family-friendly visits that aim at engagement and fuller family participation in the assessment process. Comparing the traditional and AR approach, several differences were found.

- Significantly more services, particularly services addressing basic financially-related and household needs, were delivered to low-risk families under the Alternative Response approach than under the traditional approach.
- Data were utilized for this analysis from the Alternative Response evaluation. FRA risk levels, services and report-recurrence were considered. Experimental-control comparisons revealed that recurrence was lower for AR families generally under these conditions and, specifically, *that services to low-risk families made a difference in outcomes.*
 - While identification of high-risk and intensive-risk families through the FRA can be used as a means to determine families in need, it should not be the exclusive method of determining need. Services to low risk families improved family outcomes and were, in the long-term, cost effective for the CPS agency.

Recommendations

Certain recommendations are offered in the full report. They are outlined here. Refer to Chapter 7 for more details.

1. **Change the order of completion of the SDM instruments.** The new order might be SDM safety assessment, assessment of family strengths and needs (FSN), and family risk assessment. Low-risk families with many deficiencies and few strengths on the FSN may be considered for further services. Families with no indications of threats to child safety (or no child maltreatment in an investigation) but with high indications of needs *or* high risk should be invited for services on a voluntary basis.

2. **Improve the FRA Scoring method.** A more sophisticated scoring method might improve the predictability and reliability of the instrument. Furthermore, a new scoring method might provide fuller information to practitioners.
3. **Empirically Test Changes to the FRA.** Changes should be considered to the FRA and empirically tested:
 - a. Add a “do not know” category to each FRA item to create an *uncertainty score*.
 - b. Permit workers to check an item when they *strongly suspect* but cannot prove the presence of the risk factor.
 - c. Create an alternative risk factor list to accompany the FRA that would be the basis of increasing the risk level of families.
 - d. Create a list of mitigating or strength-based factors.
4. **Change in Practice in Larger Counties.** If the FRA is used in some large offices as the primary means of excluding low-risk families from response by the agency, consideration should be given to modifying this practice. Because the FRA, as currently employed, may misclassify some families as low-risk, additional criteria should be employed to determine whether post-assessment services are appropriate.