

DOCUMENT RESUME

ED 236 235

TM 830 760

AUTHOR TITLE Aronson, David M.; Baum, Steven K. CRISP-Psychometric Assessment of Postdivorce

Stress/Adjustment in Children.

PUB DATE . Aug 83

NOTE 20p.;

20p.; Paper presented at the Annual Meeting of the American Psychological Association (91st, Anaheim,

CA, August 26-30, 1983).

PUB TYPE Speeches/Conference Papers (1-50) -- Reports -

Research/Technical (143)

EDRS PRICE DESCRIPTORS

MF01/PC01 Plus Postage.

*Divorce; Elementary Education; Emotional Adjustment; Measurement Techniques; Parent Participation; *Projective Measures; Questionnaires; *Separation Anxiety; Stress Variables; *Test Construction; *Test

Reliability; *Test Validity

IDENTIFIERS.

*Childs Report of Impact of Separation by Parents; Louisville Behavior Check List

ABSTRACT

A new psychometric instrument for measuring the impact of divorce on elementary school age children was developed: the Child's Report of the Impact of Separation by Parents (CRISP). This structured projective test was specifically designed to assess children's postdivorce stress/adjustment. An initial version of the CRISP was administered to 99 Los Angeles area children. The postdivorce custodial parent completed a companion measure, the Parent Questionnaire, and the Louisville Behavior Check List. The CRISP demonstrated minimal levels of reliability and validity which were sufficient to warrant its continued development. Suggestions for future refinement of this new instrument are made in order to obtain more truly satisfactory demonstrations of the CRISP's reliability and validity. (Author)

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CRISP - Psychometric Assessment of
Postdivorce Stress/Adjustment in Children

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Presented at 91st Annual Convention of the American Psychological Association at Anahejm, CA, August 1983



Abstract

A new psychometric instrument for measuring the impact of divorce on elementary school age children was developed - the Child's Report of the Impact of Separation by Parents (CRISP).

This structured projective test was specifically designed to assess children's postdivorce stress/adjustment. An initial version of the CRISP was administered to 99 Los Angeles area children. The post-divorce custodial parent completed a companion measure, the Parent Questionnaire, and the Louisville Behavior Check List. The CRISP demonstrated minimal levels of reliability and validity which were sufficient to warrant its continued development. Suggestions for future refinement of this new instrument are made in order to obtain more truly satisfactory demonstrations of the CRISP's reliability and validity.

Statement of Purpose

A major impediment to research investigating the effects of divorce on children is the great variability of the measures used to assess the behaviors and attitudes of children. Research typically utilizes parent-report and teacher-report measures, despite the high potential for rater bias (Yarrow, 1963). A large amount of research data has also been generated by using clinical interviewing techniques with children (Kelly and Wallerstein, 1976, 1977; Wallerstein and Kelly, 1974, 1975, 1976, 1980). While this may provide descriptively meaningful information, the data can not be used for sophisticated quantitative analyses.

Thus, the need exists for a new psychometric instrument that that directly measure children's postdivorce adjustment. The purpose of the present study was to construct and begin empirical testing on an initial version of a new research tool called the Child's Report of the Impact of Separation by Parents (CRISP). It is hoped that, ultimately, development of the CRISP into a reliable and valid instrument will facilitate methodologically superior research in the critical area of how children are effected by divorce. It is also projected that the CRISP could be used to provide a practical diagnostic tool for use in school and clinical settings in order to identify a particular child's vulnerability or adjustment during the postdivorce period.

Subjects

A sample of ninety-nine (N=99) elementary school age children (6-12 years old) and their "custodial parents" (postseparation and/or postdivorce) served as subjects for this study. For the purposes of this study, "custodial parent" was defined in a non-legal sense as being the parent with whom the child currently lived on a regular weekly basis and who had primary responsibility for supervising the child's daily activities. In order to control for the effects of ethnicity, only Caucasion subjects were used. The investigator recruited subjects from a variety of communities throughout Southern, California with the aim of obtaining a diverse sample. They were solicited through private schools, mental health clinics, parent organizations and via informal friendship networks. Thus, the sample represented a mixture of primarily "normal" children (not in treatment for any kind of emotional problems) and a smaller "clinical" group of children (currently in treatment)."

The large majority of parents had already obtained a final legal divorce (75.8%). The mean number of years that had elapsed since the parental separation was 3.3 years. Most of the parents in the study were mothers (89.9%). There was a fairly even division between female and male children in the study (54.5% female, 45.5% male). Over half of the children were first born (58.6%) and, generally had few siblings.

The sample was neterogeneous in relation to the following demographic variables: 1) religious tradition in which the participating parent was raised (Catholic 23.2%, Jewish 32.3%, Protestant 32.3%, Other 12.2%), 2) participating parent's postseparation socio-

economic status (Lower middle-class 26.3%, Middle middle-class 39.4%, Upper middle-class 33.3%), 3) number of years that had passed since the parer tal-separation (Range = 0 - 11 years old), and 5) child's age at the time of testing (Range = 6 - 12 years old).

Procedure

There were three distinct procedural phases in this study:

1) Test Development - preliminary and initial test construction and refinement, 2) Data Collection - administration of the initial version of the CRISP to subjects in order to evaluate reliability and validity, and 3) Test Revision - modifications in the items included in the CRISP as a consequence of the results obtained in Phase 2 above.

Phases 1 and 2 will be discussed below, while Phase 3 will be covered under the Results section.

Test Development. A thorough and critical review of the literature on children of divorce suggested that there were at least three clearly identifiable and invariant experiences for all children whose parents separate and/or divorce. These three common experiences formed the conceptual basis for initially designing three corresponding scales to be included in the CRISP. They are described below:

The RESPONSIBILITY scale was designed to measure the degree to which the child feels that s/he has caused the parents to separate. Thus, it is an index of the child's feeling of guilt vs. other-blame.

The SEPARATION ANXIETY scale was designed to measure the child's report of affective and cognitive responses to the reality or fantasy of the parents' physical separation. This scale was expected to reflect abandonment fears, feelings of loss and loneliness for the departed parent, feelings of uncertainty and insecurity about the



future, feelings of rejection and/or neglect by one or both parents since the separation, and feelings of doubt and insecurity about the child's own identity in the world, and in the family in particular.

The LOYALTY CONFLICT scale was designed to measure the degree . to which the child feels torn between both parents. Thus, there were items related to visitation and custody arrangements, in addition to questions regarding the child's general parental allegiances.

Finally, a FILLER scale was included for the purpose of providing relief and stimulation of a positive nature for the child taking the test. These stories involved situations which children typically encounter in everday living, and were frequently humorous or whimsical in nature.

A brief "story" format was selected as the most age appropriate way of gathering information about the child's experiences when their parents separate or divorce. This format involves the child in responding to situations involving "other" children which, it was conceptualized, would help to eliminate the tendency to "lie" in a socially desireable manner about one's own parents.

This story format provides for each test item to consist of:

1) a story stem, which represents a basic theme or situation which is common of children's experiences when their parents separate or divorce, and 2) a choice of three one-sentence long story endings. Each of the single sentence story endings was constructed to represent, respectively, a low, moderate, or high degree of conflict and stress relative to the story theme.

The principal author created the stories which constituted the item pool for subsequent evaluation by a panel of judges. The panel of four judges participated in a two-fold process in order to develop

criss stories and the three theoretically proposed scales. First, each judge sorted each story into its appropriate scale based solely on written scale definitions. A "No Fit" category was also included." After completing the sorting task, each judge was asked to evaluate how well each story measured the scale theme using the following categories: 1) Excellent Story, 2). Good Story, and 3) Poor Story. The story endings were also evaluated separately regarding the extent to which the intended degree of conflict and/or stress, relative to the story theme, was being measured: 1) Very Adequately, 2) Somewhat Adequately, and 3) Not Adequately.

The principal author then developed a set of rules for selecting those stories which would comprise the CRISP from among the 64 stories which received positive evaluations by the panel of judges. A single form of the CRISP was assembled which included an equal number of male and females stories in order to control for possible gender effects. This original version of the CRISP contained a total of 24 scale stories (eight stories for each of the three scales) and an additional 8 "filler" stories.

The test was designed to be individually administered to each child. The child is presented with an answer booklet which contains only the three story endings for each story. The examiner simply reads the story stem and endings out loud to the child who is told to select the "best" ending. Since some children in this age group may nave limited, or no, reading skills, geometric symbols are used so that concrete physical shapes can help them remember the story endings by association.

Examples of stories from each of the CRISP scales are presented below in order to convey a direct impression of this instrument. The numbers in parentheses indicate the scoring key for each story ending, where 1 = Low, 2 = Moderate, and 3 = High degree of conflict and/or stress in relation to the stroy theme (stem).

RESPONSIBILITY

Dorothy's parents separated. At first, Dorothy was sad and quiet. Later, she spent a lot of time trying to figure out who was to blame.

- --Dorotny's decided that it was mainly her own fault. (3)
- --Dorothy decided that both she and her parents were to blame. (2)
- -- Dorothy decided that it was mainly her parents' fault. (1)

LOYALTY CONFLICT

Joe's parents separated. When Joe is alone with his mother, she sometimes tells him bad things about his father. But, when Joe is alone with his father, his father sometimes tells Joe bad things about this mother.

- --Joe feels a little uncomfortable each time this happens. (2)
- --Joe doesn't feel very upset, because he understands that his parents are still very angry at each other. (1)
- --Joe feels very confused because he doesn't know which parent to believe. (3)

SEPARATION ANXIETY

One evening Sally had a dream. In the dream Sally's parents tell her that they have decided to live in separate homes. This is how Sally felt while she was still dreaming:

- __Sally felt scared that one, or both, of her parents would leave her. (3)
- -- Sally felt upset that her parents wanted to separate. (1)
- -- Sally felt worried that she wouldn't get to spend enough time with one of her parents (2)



Data Collection. In order to obtain data ten female research assistants travelled to the homes of participating subjects and individually administered the CRISP to each child while the parent completed the Parent Questionnaire (a specially designed measure written by the principal author) and the Louisville Behavior Checklist (LBCL).

The Parent Questionnaire consists of three parts. Section One includes 24 items which ask the parent to evaluate how they think the child feels about varying aspects of their divorce. Section Two contains 24 items which solicit the parent's own perception of the divorce. The items correspond to the three levels of stress used in the CRISP itself, and were arranged randomly with an equal number of positive and negative statements. Section Three contains demographic data.

Sections One and Two were developed as planned elements of a strategy to demonstrate convergent construct validity for the CRISP That is, they are parallel parent versions of the CRISP in the sense that they sample from the same domain of situations related to parental separation and/or divorce. The format includes four possible parent responses to each questionnaire item: Strongly Agree, Mildly Agree, Mildly Disagree, and Strongly Disagree. Section Three of the Parent Questionnaire was designed for two reasons. First, it allowed for the collection of a variety of demographic data in order to understand the specific parameters of the obtained sample and for analyzing any confounding effects of particular demographic variables. Second, it permitted the calculation of correlations between the CRISP and various demographic predictor variables.

The Louisville Behavior Checklist, Form E2, (Miller, 1967, 1971) is a well-known psychosocial adjustment true-false scale. It has been shown to have good reliability and validity for elementary age school children (Humphreys and Ciminero, 1979). It was included in an attempt to demonstrate the CRISP's convergent construct validity.

Results

Reliability. Initial calculation of Cronbach's Alpha for the overall CRISP were based on N=24 items since there were eight filler stories included. Coefficient alpha was unacceptably low (r = .43, p < .001). Calculation of Cronbach's Alpha for the three theoretically derived scales, each taken separately, was also disappointing (r RESPONSIBILITY = .54; r LOYALTY CONFLICT = .45; r SEPARATION ANXIETY = -.35).

Item-total correlations were used in order to investigate the low reliability coefficients. Additionally, a factor analysis was employed in order to have more information available for deciding 1) whether the items did indeed cluster in ways which would empirically support the construct validity of each theoretically proposed scale, and 2) which stories to eliminate in order to obtain a higher reliability estimate for the overall CRISP.

The results of both the individual item analysis and factory analytic techniques led to the decision to delete <u>all</u> of the SEPARATION ANXIETY stories and the one RESPONSIBILITY story which had a negative item-test correlation. This was a practical necessity for improving the CRISP's reliability so that the planned validity tests could be performed. In particular, the conceptual basis for



including the SEPARATION ANXIETY stories was not rejected outright (see Discussion).

There was an impressive increase in Cronbach's Alpha for the recalculated CRISP: r = .60, p < .001. Even though the already short test was reduced in length by more than 33% (nine items were deleted), the increase in Cronbach's Alpha was substantial and sufficient to procede with the validity tests.

Both sections of the Parent Questionnaire demonstrated adequate reliability as estimated by the calculation of Cronbaci's Alpha: Section One (Child's Perception) r = .84; Section Two (Adult's Perception) r = .78. After the CRISP was revised, as above, Perceptions One and Two were correspondingly revised by eliminating the Sections One and Two were correspondingly revised by eliminating the SEPARATION ANXIETY items. This resulted in N=16 items in each section. The obtained Cronbach's Alpha for both sections remained adequate: Section One r = .74; Section Two r = .72.

Validity. The two attempts at demonstrating the recalculated CRISP's convergent validity were not fruitfall. The correlation of the recalculated CRISP and the Louisville Behavior Check List was not significant at the p=.05 level of confidence (r=-.03). Neither was the correlation of the recalculated CRISP and the Parent Neither was the correlation of the recalculated CRISP and the Parent Questionnaire - Child's Perception (r=.06, p < ns) or with the Parent Questionnaire - Adult's Perception (r=-.02, p < ns) significant at the p=.05 evel.

In contrast, support for the validity of the recalculated CRISP CRISP was obtained. The result of correlating recalculated CRISP scores with the child's age at the time of the parental separation was a Pearson product-moment correllation coefficient of r=-.29, which was statistically significant (p<.002). This finding was



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in the direction suggested by current divorce research.

Discussion •

Reliability. While the reliability coefficient for both the original and recalculated CRISP fell short of the minimum level of .70 suggested by Nunnally (1978), this may have been due to some serious methodological shortcomings in the initial stages of test development rather than reflect a true conceptual error. Originally the CRISP had three scales plus one filler scale. The theoretically proposed scales were formulated following a thorough review of the literature which revealed basic reactions of children to parental separation and divorce. They were: 1) RESPONSIBILITY, 2) LOYALTY CONFLICT, and 3) SEPARATION ANXIETY. Later, it was decided that the CRISP was too short an instrument to merit separate scale construction at this preliminary point in its continuing development. The early emphasis on separate scales may have artificially lowered coefficient alpha insofar as the different scales were intended to measure quite different things. Interestingly, coefficient alpha improved markedly at the same, time that the total test length was reduced by over onethird. This is impressive since reliability typically increases when the length of a test is increased.

In an effort to understand what accounted for the negative itemtotal test correlations for all the SEPARATION ANXIETY stories the content of each of these stories was considered in some depth. It was concluded that several possible sources of measurement errors had inadvertently been operating. First and foremost there was an

That is, there was more chance for this scale than others to reflect concomitants and consequences of separation anxiety rather than the actual experience of anxiety by the child related to parental separation. For example, as the result of dynamic, internal processes in the child the potential experience of separation anxiety may be denied, transformed into anger, etc. Second, the SEPARATION ANXIETY stories may actually have been measuring the impact of separation experiences that occurred prior to, and hence were unrelated to, parental divorce. The work of Bowlby (1969, 1973, 1980) suggests that separation anxiety results from experiences which occur throughout the lifespan and that the specific event of divorce may only have a partial effect.

Clearly, there are many ways in which the CRISP could-be-further refined prior to readministration in order to establish increased reliability. These include: 1) construction of some type of lie scale to screen out invalid protocols, 2) submitting stories to panels of children for judging in addition to adult judges, 3) generating even more rigorous criteria for selecting stories, 4) inclusion of more stories to increase total test length, and 5) redefining and revamping separation anxiety stories so that they would only measure the child's fears of abandonment, explicit rejection and/or neglect by one or both parents as direct consequences of parental separation and/or divorce.

<u>Validity.</u> The Pearson product-moment correlation coefficient (R = -.30) for the relationship between the recalculated CRISP scores and the child's age at the time of the parental separation was highly significant (p<.002). This provided some support for the prediction, based upon previous investigations, that within the elementary school



age group of children (6 to 12 years of age), younger children generally are more vulnerable to the impact of parental separation and/or divorce. The capacity of the recalculated CRISP to discriminate successfully between different ages of children in a way that is consistent with the findings of previous investigators demonstrated a degree of discriminant validity for the new instrument.

Other attempts to demonstrate evidence of the validity of the CRISP were generally unsuccessful. The correlation of the CRISP with the Parent Questionnaire (both Section One and Section Two) and the Louisville Behavior Checklist in order to demonstrate convergent construct validity failed to produce statistically significant zero order correlations at the level of p= .05 or less.

However, the original design for demonstrating validity had two major limitations which may have accounted for the failure to produce statistically significant correlations. The most serious shortcoming was the lack of any control group of children whose parents had not separated or divorced against which the sample of 99 children could be compared. That is, in order to demonstrate the validity of the CRISP a more heterogeneous sample with respect to the child's family situation should be used.

Because of the projective nature of the CRISP stories they can be applied equally to children from all types of family situations. Thus, future attempts to demonstrate validity should employ a sample that is divided into four different groups according to the child's family situation:

- 1) Children from intact families where there is a good parental relationship.
- 2) Children from intact families where there is a bad parental relationship.
- Children from separated and/or divorced families where there is a good parental relationship.
- 4) Children from separated and/or divorced families where there is a bad parental relationship.

The use of four groups as described above would, of course, require the operational definition of a "good" and a "bad" parental relationship. This might best be achieved through an objective inventory and a questionnaire administered to participating parents.

Another factor that may have contributed to the difficulty encountered in demonstrating the CRISP's validity was that 75% of the parents in the sample had already obtained a final legal divorce. It seems probable that in most cases there would be less of an acute stress in the home where the child lives after the parents have formalized their separation by obtaining a legal divorce, a process whish may often take two to three years. In comparison, CRISP scores of children who are closer to the point in time that the parents first separate might be expected to reflect higher degrees of stress and/or conflict. Therefore, future efforts to evaluate the CRISP's validity should include a sample that is more evenly distributed with regard to the time since the parental séparation.

Conclusion. In final summary, the CRISP demonstrated minimal levels of reliability and validity which nevertheless were sufficient to warrant its continued development. Refinements and revisions of



this new instrument are expected to result in more truly satisfactory reliability estimates. Improvements in sampling procedures and in the methodology employed in future investigations similarly are expected to provide more complete demonstrations of the CRISP's validity.

There is an urgent need for this line of test development to continue so that we may be able to measure accurately and objectively how the child is feeling in the aftermath of parental separation and/or divorce.

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