

DOCUMENT RESUME

ED 225 030

CG 016 376

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 TITLE The Stress Response Scale: A Preliminary Report.
 PUB DATE Aug 82
 NOTE 11p.; Paper presented at the Annual Convention of the American Psychological Association (90th, Washington, DC, August 23-27, 1982).
 PUB TYPE Speeches/Conference Papers (150) -- Reports - Descriptive (141)
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS Adolescents; *Behavior Rating Scales; Elementary Secondary Education; Emotional Problems; *Factor Analysis; Personality Theories; *Problem Children; Program Evaluation; *Psychological Evaluation; Psychological Patterns; Test Validity
 IDENTIFIERS *Stress Response Scale (Chandler)

ABSTRACT

Rating scales are increasingly popular in research and clinical studies of children. The Stress Response Scale was developed to test whether a child's behavior rating scale could be constructed based on a theoretical model of personality and if it could be validated by empirical means in order to obtain clinically useful factor scores. The scale was based on a model of personality functioning based on clinical experiences of the common response patterns adapted by children in coping with stress. A series of factor analytic studies done with previous versions of the scale yielded five factors labeled impulsive, passive-aggressive, dependent, repressed (withdrawn), and repressed (anxious) which were consonant with the predicted categories of the model. The results of these studies suggest that empirical evidence exists to support the conceptual model upon which the Stress Response Scale is based and that, while results are preliminary, further development is warranted so that the Scale may be used in future in clinical, community, and school settings. (PAS)

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The Stress Response Scale:

A Preliminary Report

(Index Terms: 22.2 - Clinical Assessment)
22.3 - Child Clinical)

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Paper to be presented at the convention of the American Psychological Association, Washington, D.C., August, 1982.

CG 016376

**The Stress Response Scale:
A Preliminary Report**

This paper outlines the development of the Stress Response Scale, a prototypic behavior rating scale for children. Rating scales have become increasingly popular in research and clinical studies of children. These instruments are typically factor analyzed to provide empirical validity but their construct validity often remains questionable. As a result, the meaning of the factors is obscured limiting the clinical usefulness of such instruments. The Stress Response Scale was developed from a model of personality functioning based on clinical experience of the common response patterns adopted by children in coping with stress. Preliminary results of factor analysis seem to confirm the validity of the model and suggest that the further developmental work is warranted.

The Stress Response Scale:

A Preliminary Report

Summary of the Presentation

Rationale

One of the central concerns of child psychology and psychopathology has been the diagnostic assessment of emotional problems. Accurate assessment depends on a valid theoretically-based taxonomy with instruments sensitive to the classifications established by the taxonomy.

The theoretical perspective adopted here is that children with emotional problems may be viewed as children under stress. Emotional adjustment reactions can be defined as extreme patterns of normal coping behavior adopted in response to stress. Within this paradigm the assessment becomes concerned with (among other things) describing the nature and severity of the child's stress response.

Figure 1 suggests a way in which an individual might respond to stress along certain dimensions of personality. From this model four types of responses can be described. Clinical experience and a literature review suggested that certain behavioral characteristics could be identified as associated with each type (Figure 2). These characteristics were formulated in a behavior rating scale. Empirical analysis of the scale could be used to confirm the existence of clusters of behavior consistent with the theoretical types predicted by the model.

Statement of the Problem

Can a child's behavior rating scale be constructed based on a theoretical model of personality; and be validated by empirical means in order that clinically-useful factors scores can be obtained?

Preliminary Studies

A series of factor analytic studies were done with previous versions of the scale.

Study #1, Form C (Chandler, 1979)

Subjects were 120 children, 85 boys and 35 girls, ages 5-0 to 16-11 years, who were referred for psychological services because of suspected emotional dysfunction. All subjects were without evidence of organic involvement in their personal histories and initial assessment found no evidence of organic involvement or of severe emotional disturbance. The adult who initiated the referral was asked to rate the child's behavior using the Stress Response Scale at the time of the initial referral.

Factor analysis yielded a five factor solution. The factors could be labeled as impulsive, passive-aggressive, dependent, repressed (withdrawn) and repressed (anxious)—consonant with the predicted categories of the model. These five factors accounted for 62% of the variance. Thirty-two of the 40 items of the scale were included in the analysis; with cluster sizes ranging from one to eight items. This study lent some support to the proposed model and indicated that further developmental work might be useful.

Study #2, Form E (Piso, 1980)

Subjects were clinic-referred and non-referred children, ages 5-0 to 17-0 years. There were 200 clinic-referred children, 127 boys and 73 girls, who were referred for psychological services because of suspected emotional dysfunction. Excluded were those showing evidence of organic involvement, retardation, or severe emotional disturbance. The non-referred population consisted of 376 children, 191 boys and 185 girls, in grades Kindergarten through Twelve at local public schools. Excluded were those who had been classified as special education students or who had been referred for psychological services. The adults who had initiated the referral were asked to rate the child by using the Stress Response Scale. Teachers were asked to rate the behavior of selected children in their classes.

Factor analysis of the clinic-referred ratings yielded a five factor solution consonant with the predicted categories of the model and essentially replicating the previous results. The results accounted for 70% of the variance. Thirty-three of the 40 items could be included in the analysis; and the cluster sizes ranged from three to 11 items. A comparison of the referred and non-referred groups showed considerable similarity of factor structures between each group, lending support to the notion that emotional adjustment reactions are extreme patterns of normal coping behavior.

Study #3 (Chandler & Lundahl, 1982)

Subjects and Procedure

Subjects were children, ages 5-0 to 14-11 years, chosen randomly from class rosters in grades Kindergarten through Eighth, in two school districts in Western Pennsylvania. Children in special education classes were excluded from the sample. Homeroom teachers at the targeted grade levels were asked to complete rating scales on three children in their class. There were 171 rating scales returned. Four were erroneously completed and had to be discarded. The final sample was composed of 167 children; 82 boys and 85 girls

Results

Factor analysis of the rating scales yielded a five factor solution consonant with the predicted categories of the model, which accounted for 64% of the variance. Table 1 shows the rotated factor matrix. Thirty-four of the forty items were included in the analysis; and the cluster size ranged from six to 12 items.

Conclusions

Factor analytic studies have provided empirical evidence to support the conceptual model upon which the Stress Response Scale is based. While the results are preliminary, further development seems warranted; and subsequent study will be necessary before the instrument can be used in clinical, community and school settings.

Table 1
Selected Rotated Factor Matrix*

Item	I	II	III	IV	V
I. IMPULSIVE (ACTING OUT)					
05 Demanding	66				
09 Selfish	73				
11 Temper outbursts	75				
15 Poor attitude toward school	52	72			
17 Defiant	82				
23 Cares about schoolwork	39	73			
25 Picks on other children	77				
26 Impulsive	62				
28 Willful	36				-65
29 Fights	70				
34 Detached, out of touch	-42	52			
37 Mischievous	51		51		
38 Able to take criticism	58				
39 Cooperative	74	43			
40 Stubborn	73	35			
II. PASSIVE-AGGRESSIVE					
02 Daydreams		71			
07 Underachiever		79			
13 Procrastinates, puts things off		78			
15 Poor attitude toward school	52	72			
21 Participates		52	-41		37
23 Cares about schoolwork	39	73			
24 Declining school grades		70			
27 Self-confident		45		45	
31 Completes assignments		60			
34 Detached, out of touch	42	52			
36 Independent		36			54
39 Cooperative	74	43			
40 Stubborn	73	35			
III. IMPULSIVE (OVERACTIVE)					
03 Easily excited			51		
08 Quiet, withdrawn			-82		
10 Passive			-63		-36
19 Playful			68		
21 Participates		52	-41		37
22 Talkative			68		
30 Shy			-64		
35 Afraid of new situations			-36	59	
37 Mischievous	51		51		

Table I (cont.)

IV. REPRESSED					
01 Worries				68	
18 Sensitive, easily hurt				78	
27 Self-confident		45		45	42
32 Nervous, jumpy				63	
33 Easily upset				73	
35 Afraid of new situations			-36	59	
V. DEPENDENT					
10 Passive			-63		-36
21 Participates			-41		37
27 Self Confident		45		45	42
28 Willful	36				65
36 Independent		36			54
38 Able to take criticism	58				48

*Six items (Numbers 4, 6, 12, 14, 16 & 20) were not included in the factor analysis. Items with factor loadings less than .35 were suppressed in the presentation.

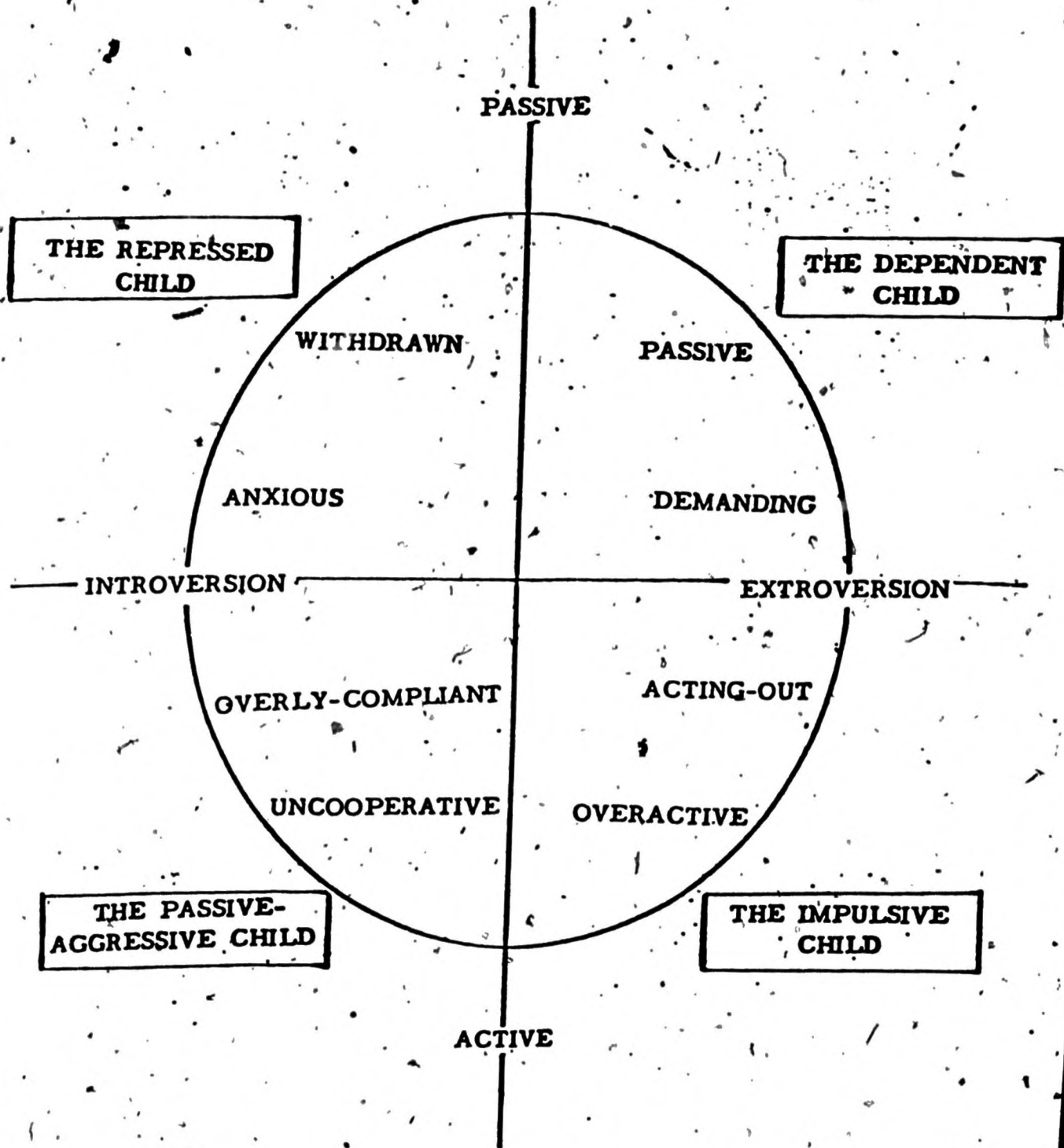


FIGURE 1

FOUR COMMON RESPONSE PATTERNS TO STRESS

The Impulsive Child is easily excited, impulsive, and generally over-active. If the child's activity is focused, it may be turned toward authority figures or peers. Such children are aggressive and hostile, subject to temper tantrums, violence, and acting out behavior. For both subgroups, the essential problem is a lack of appropriate controls.

The Passive-Aggressive Child is most often characterized by school underachievement, and is usually described as indifferent about his poor grades in school. While sometimes these children adopt an obstinate, uncooperative attitude, others are overly compliant and agreeable, yet they fail to follow through on promises to complete assigned work, and they tend to procrastinate.

The Dependent Child is often passive, immature, and characterized by regressive habits and childish mannerisms. This child lacks independence in many areas of functioning, and usually avoids taking the initiative in learning and social situations. Some children, while dependent, are less passive and more assertive, adopting a demanding manner to have their needs met. These children are often described as headstrong, defiant, selfish, and willful. They seek immediate need gratification.

The Repressed Child is typically quiet, reserved, shy, moody, and detached. He seldom initiates conversation, and is prone to daydreaming. Some of these children show more symptoms of being over-anxious. They may show fears, worries, and overly-sensitive reactions. They often have difficulty making decisions, and are unable to tolerate criticism.

Figure 2. Four Diagnostic Categories.