

CHAPTER 13

THE C.A.T.-H.

A. Development of the C.A.T.-H.

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After the creation of the C.A.T. many studies were reported that showed that some children responded better to animal stimuli and others to human figures. Bellak and Bellak (1965), partly in response to this new evidence, therefore developed a human modification of the C.A.T. (C.A.T.-H.). It was also believed that the human form would be more adequate to the intellectual development of some children between the ages of 7 and 10, especially those with high I.Q.s.

B. Review of Studies Comparing Animal versus Human Pictures

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The following studies are representative of the kinds that were conducted in the intervening period between the development of the C.A.T. and the creation of the C.A.T.-H. with the purpose of comparing responses obtained with different samples of children on animal and human forms of the C.A.T.

Budoff (1960) tested 4-year-old preschoolers with C.A.T. cards and an analogous human set. There were no statistically significant differences between picture sets on measures of productivity, story level, and transcendence index, although the general trend indicated higher scores for the human figures on story level and transcendence index. It was hypothesized that, where responses to human figures seemed especially threatening, animal figures elicited more productive stories possibly due to the increase of psychological distance.

Biersdorf and Marcuse (1953) tested first-grade children with animal and human pictures. No significant differences were obtained on the following measures: number of words, ideas, characters mentioned, characters introduced, and response-time indices.

Armstrong (1954) compared the responses of first-, second-, and third-grade children on five C.A.T. cards and a duplicate set with human figures. The mean I.Q. for each grade of children was in the superior range. Significantly higher transcendence index scores were found for the human figures, in that more subjective, personalized, and interpretive responses were obtained instead of mere description.

Boyd and Mandler (1955) studied third-grade children's reactions to human and animal stories and pictures. It was found that animal stimuli led to a greater degree of expression of ego involvement, particularly as manifested in the projection of negative affects. On the other hand, it was reported that the

more significant effect of human stories on the production of imaginative material did not corroborate the hypothesis of children's primary identification with animals.

A study using animal and human figures with children aged 5½ to 7 years was conducted by Weisskopf-Joelson and Foster (1953). It was found that the mean transcendence index scores for all stories to human pictures compared with all stories to animal pictures did not differ significantly. A more detailed analysis of the results indicated, though, that the group of children with the lowest transcendence index scores were more productive when responding to animal pictures, suggesting to the authors that low scorers are able to reveal themselves more easily when they believe that they are telling about animals rather than humans. It was inferred that personality differences among children are associated with greater productivity to either animal or human pictures, depending on the specific personality involved.

Bellak and Hurvich (1966) have considered the evidence obtained from several reports in the literature (see Table 13-1) concerning the superiority of either the animal or the human pictures, and have noted that the two most influential factors responsible for the conflicting evidence have been variations among the studies in stimulus cards used and in outcome measures employed. The sets of human drawings used have generally not been characterized by the ambiguity of age or sex that is achieved with the animal figures. As far as outcome measures are concerned, dynamic evaluation of the responses has been infrequent. However, Silva (1982, 1985) has done normative and sex-related differences in his work in Portugal.

C. Modification of the Pictures for Use in the C.A.T.-H.

The major difficulty in the creation of the human drawings for inclusion in the C.A.T.-H. derived from the effort to achieve at least some ambiguity with regard to some of the figures in terms of age, sex, and cultural attributes. Although the C.A.T.-H. figures are not as free from cultural determinants as are the original animal figures, the C.A.T.-H. has and will serve as a highly useful instrument for those purposes for which it was developed. The set of 10 pictures that were finally selected is shown in Figure 13-1.

D. Studies with the C.A.T.-H.

Haworth (1966) tested a clinic sample of children whose diagnoses ranged from neurotic difficulties to borderline psychoses with the C.A.T. and an experimental set of C.A.T.-H. provided by me. All stories were scored for specific defense mechanisms, as assessed by Haworth's "A Schedule of Adaptive Mechanisms in C.A.T. Responses" (Figure 13-2) and for story content, assessed with the Haworth C.A.T. Story Dynamics form (Table 13-2). No significant differences were obtained between the animal and human forms on the total number of categories receiving critically high scores. However, a difference was found, for this group of children, between the two sets of stimuli concerning the elicitation

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TABLE 13-1 Studies of Animal vs. Human Figures*

<i>Stimuli</i>	<i>Subjects</i>	<i>Response Measures</i>	<i>Results</i>	<i>Ref.</i>
10 T.A.T. cards vs. 10 chromatic pics of rabbits in various activities	48 M and F, 5 to 10, normal school children	Story length, card rejections	Animals—significantly longer stories, fewer card rejections	49
Same as Bills (1950)	8 M and F, 3rd grade, normal school children	Comparison on 26 of Murray's manifest needs	Animals seen as easier for children; correlation from a 0.09 to +0.58 (3 stat. sig.)	50
5 C.A.T. cards (1, 2, 4, 5, 8, and 10) vs. comparable human set	30 M and F, 1st grade, normal school children	Number of words, ideas, characters mentioned, characters introduced, response-time indices	No significant differences	48
Same as Biersdorf and Marcuse (1953)	28 M and F, 5.4 to 8.5, emotionally disturbed	Similar to Biersdorf and Marcuse (1953) plus ratings of clinical usefulness	No significant differences; human judged more clinically useful	174
5 C.A.T. cards (1, 2, 4, 8, 10) vs. a comparable human set	60 M and F, 1st-3rd grade, I.Q. superior, normal school children	Story length, number of nouns, verbs, ego words, transcendence scores, and reaction time	Human significantly higher transcendence index; other measures no difference	6
C.A.T. vs. T.A.T.	75 M and F, 9-10.6, normal school children	Amount and kinds of feelings, themes, conflicts, and definite outcomes	Human—all response criteria significantly higher except number of words	169
2 stories (with minimal or human characters), each followed by 2 pics of animals or humans in ambiguous action	96 M and F, mean age 8.5, mean I.Q. 101, normal school children	Story length, presence of original ideas, value judgments, punishment, reward, new themes, pronoun I, and formal features	Human for stimulus stories; animal for stimulus pics	56
Same as Biersdorf and Marcuse (1953)	72 Japanese, M and F, 6 to 12, normal school children	Definite outcomes, expression of feelings	Human—more definite outcomes and more expression of feelings and significant conflicts	103
C.A.T. vs. comparable human set	28 German, 8-9, 2nd grade, normal	Story length, speed of verbalization, number of themes, reaction time	Human—superior on all the response measures	247

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TABLE 13-1 (continued)

Stimuli	Subjects	Response Measures	Results
9 C.A.T. cards (6 omitted) vs. comparable human set	18 M and F, age 4, all I.Q.'s above 120, normal nursery school children	Productivity, story level, and transcendence index	No statistical difference; trend in favor of human
4 C.A.T. cards (3, 4, 9, 10) vs. comparable human set, color and black and white	40 M and F, 5.5 to 9, normal kindergarten	Transcendence index	No difference except by personality

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of certain defense mechanisms. The largest difference in critical score incidence was in the projection-introjection category, with the greater number of such scores on the animal form. Children were most consistent between forms in the Identification category. The story content analysis enabled a card by card comparison of the two versions. There was high agreement in the themes elicited by the two forms, although a greater degree of negative effect was expressed in responses to certain cards for the animal form.

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Card 1. Oral gratification is the main theme for both animal and human forms. For those subjects not using this response on both forms, the trend favors the animal form, while more oral deprivation is used on the human form. The adult is most often seen as the mother on both forms, with only a few responses of "shadow" or figure other than father (who is seen one-third as often as mother). Few punishment themes are reported on either form.

Card 2. Predominantly seen as a game, rather than a fight, on both forms, with the pair most frequently seen as the winner, especially on the human card. The child is more often seen with either mother or father on the animal version and almost exclusively with a peer on the human form.

Card 3. No outstanding use of either the adult attacking the child or the child helping the adult on either form. The large figure is seen as powerful (or as king) *only* on the animal form, and is more often seen as old or tired on the human form. The child figure teases the adult *only* on the animal form.

Card 4. Most frequently seen as going to a picnic or to the store on both forms, and with very few disasters happening in either version. Only a very few instances on either card of the child running over the adult's heel with his bike.

Card 5. Children are seen as playing, sleeping (most often), or being naughty equally on both cards; parents are mentioned equally on both forms.

Card 6. There is no difference between cards in terms of the child running away, fearing attack, or an attack taking place; none of these themes were used frequently.

Card 7. The smaller figure is frequently seen as being attacked on both versions, but with somewhat greater incidence on the animal form. The child escapes equally often on both cards and only infrequently turns to retaliate against the larger figure.

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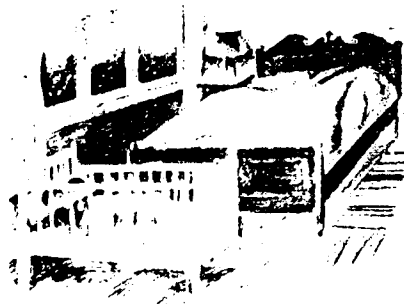
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Figure 13-1 Pictures for Use with the C.A.T.-H.

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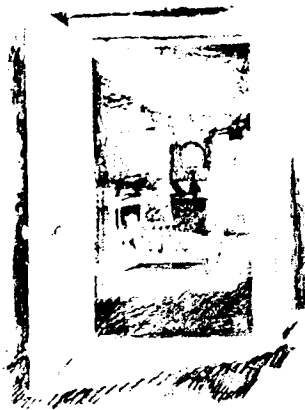
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10

Figure 13-1 (continued)

Name Bd: Date: Age:

Critical Scores:

TOTALS

DEFENSE MECHANISMS

- **A. Reaction-formation (only one check per story)**
 - 1. Exaggerated goodness or cleanliness
 - (A+ 2. Oppositional attitudes, rebellion, stubbornness
 - B=5) 3. Story tone opposed to picture content
- **B. Undoing and Ambivalence (only one check per story)**
 - 1. Undoing
 - 2. Gives alternatives; balanced phrases (asleep-awake; hot-cold, etc.)
 - 3. Indecision by S or story character
 - 4. Restates (e.g., "that....., no this.....;" "he was going to, but.....")
- **C. Isolation**
 - (6) 1. Detached attitude ("it couldn't happen," "it's a cartoon")
 - 2. Literal ("it doesn't show, so I can't tell.")
 - 3. Comments on story or picture ("That is hard"; "I told a good one.")
 - 4. Laughs at card, exclamations
 - 5. Use of fairy-tale, comic-book, or "olden times" themes or characters
 - 6. Describes in detail, logical; "the end"; gives title to story
 - 7. Specific details, names or quotes ("four hours"; she said, ".....")
 - 8. Character gets lost
 - 9. Character runs away due to anger
 - 10. S aligns with parent against "naughty" child character; disapproves child's actions
- **D. Repression and Denial**
 - (5) 1. Child character waits, controls self, conforms, is good, learned lesson
 - 2. Accepts fate, didn't want it anyway
 - 3. Prolonged or remote punishments
 - 4. "It was just a dream"
 - 5. Forgets, or loses something
 - 6. Omits figures or objects from story (on #10 must omit mention of toilet and tub or washing)
 - 7. Omits usual story content
 - 8. No fantasy or story (describes card blandly)
 - 9. Refuses card
- **E. Deception**
 - (3)* 1. Child superior to adult, laughs at adult, is smarter, tricks adult, sneaks, pretends, hides from, steals from, peeks at or spies on adult (only one check per story)
 - 2. Adult tricks child, is not what appears to be (only one check per story)
- **F. Symbolization**
 - (4) 1. Children play in bed
 - 2. See parents in bed (#5)
 - 3. Open window (#5, #9); Dig, or fall in, a hole
 - 4. Babies born
 - 5. Rope breaks (#2); chair or cane breaks (#3); balloon breaks (#4); tail pulled or bitten (#4, 7); crib broken (#9)
 - 6. Rain, river, water, storms, cold
 - 7. Fire, explosions, destruction
 - 8. Sticks, knives, guns
 - 9. Cuts, stings, injuries, actual killings (other than by eating)
 - 10. Oral deprivation
- **G. Projection and Introjection**
 - (4) 1. Attacker is attacked, "eat and be eaten"
 - 2. Innocent one is eaten or attacked
 - 3. Child is active aggressor (bites, hits, throws; do not include verbal or teasing attacks)
 - 4. Characters blame others
 - 5. Others have secrets or make fun of somebody
 - 6. S adds details, objects, characters, or oral themes
 - 7. Magic or magical powers

(* or 2, if both are E-2 responses)

Figure 13-2 A Schedule of Adaptive Mechanisms in C.A.T. Responses, by Mary R. Haworth. Copyright C.P.S. Inc., Box 83, Larchmont, New York 10538.

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PHOBIC, IMMATURE OR DISORGANIZED

- H. *Fear and Anxiety*
 - (3) 1. Child hides from danger, runs away due to fear
 - 2. Fears outside forces (wind, ghosts, hunters, wild animals, monsters)
 - 3. Dreams of danger
 - 4. Parent dead, goes away, or doesn't want child
 - 5. Slips of tongue by S

- I. *Regression*
 - (2) 1. Much affect in telling story
 - 2. Personal references
 - 3. Food spilled
 - 4. Bed or pants wet, water splashed
 - 5. Dirty, messing, smelly; person or object falls in toilet
 - 6. Ghosts, witches, haunted house

- J. *Controls weak or absent*
 - (1) 1. Bones, blood
 - 2. Poison
 - 3. Clang or nonsense words
 - 4. Perseveration of unusual content from a previous story
 - 5. Tangential thinking, loose associations
 - 6. Bizarre content

IDENTIFICATION

- K. *Adequate, same-sex*
 - (L= 1. S identifies with same-sex parent or child character
 - or >K) 2. Child jealous of, scolded or punished by, same-sex parent
 - 3. Child loves, or is helped by, parent of opposite sex

- L. *Confused, or opposite-sex*
 - 1. S identifies with opposite-sex parent or child character
 - 2. Child fears, or is scolded or punished by, opposite-sex parent
 - 3. Misrecognition by S of sex or species
 - 4. Slips of tongue with respect to sex of figures

This checklist has been designed primarily as an aid in the qualitative evaluation of children's CAT stories; it can also be used to furnish a rough quantitative measure for making comparisons between subjects and groups. The Schedule provides a quick summary of the number and kinds of defenses employed as well as the content of items used most frequently. The categories are arranged as nearly as possible on a continuum from indicators of high control and constriction to suggestions of disorganization and loosening of ties to reality.

Directions for Scoring: In the blank preceding each item, indicate with a check mark (or the card number, for future reference) any occurrence of such a response. A story may be "scored" in several categories and, except where indicated, a story may receive checks on more than one item under any one category.

After all stories have been scored, record the total number of checks for each category in the blank provided. The number in parentheses under each of these blanks indicates the *minimum* number of checks regarded as a "critical score" for that category.

For the Identification measure, the equivalent of a critical score is secured by comparing the relative number of checks for categories *K* and *L*. If the sum of checks for *L* is equal to or exceeds the sum for *K*, identification is considered to be "confused" and contributes one unit to the total of critical scores.

The final quantitative measure consists of the number of categories receiving critical scores (and not the total number of checks for all categories).

On the basis of research findings,* five or more critical scores would indicate enough disturbance to warrant clinical intervention.

*Mary R. Haworth, Ph.D., A Schedule for the Analysis of CAT Responses, *Journal of Projective Techniques & Personality Assessment*, Vol. 27, 1965, No. 2, 181-184.

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Figure 13-2 (continued)

TABLE 13-2 C.A.T. Story Dynamics

Name:	Sex:	Form: A or H
1. Oral gratification _____ Adult is Father _____, Mother _____, Shadow _____ Other _____ *M & F _____ Punishment theme _____	Deprivation _____	
2. Game _____ Winner: Pair _____ Child with: Parent of same sex _____ of opposite sex _____ Peer _____	Fight _____ Single _____	
3. Adult attacks or scolds child _____ Adult is king _____ old, tired, lonely, etc. _____ Child teases or attacks adult _____	Child helps adult _____	
4. Picnic _____ Bike runs over tail or leg _____	Disaster, fire, etc. _____	
5. Parents in bed _____ Children play in bed _____ Naughty _____ Sleep _____		
6. Child runs away _____ Attack from outside: feared _____	*Camp (Hibernate) _____ takes place _____	
7. Child is: attacked _____ gets away _____ turns on large fig. _____	*Friends _____	
8. Scolding, punishing _____ Mention of picture _____ Male adult _____	Child is helpful _____ Secret _____	
9. Attack from outside: feared _____ **Everyday event _____ Parents in another rm. _____	takes place _____ Loneliness _____ *Naughty _____ *Sleep _____ *Sick _____	
10. Naughtiness relates to toilet _____ Punisher is same sex _____ Continues naughtiness _____	other _____ opposite sex _____ learned lesson _____	
Cards rejected:		
Unusual stories:		

* Haworth included forty-eight items on her original story dynamics form. Lawton added six items when she employed the list. Additions of Lawton are identified by an asterisk.
 ** This item was deleted by Lawton in her study.
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 Card 8. Scoldings occur with equal frequency with both cards, and the child is rarely seen as being helpful. The picture on the wall is mentioned more frequently on the human form, and secrets are reported more often on the animal card. Male figures were seen *only* on the animal form and were mentioned in 10 of the 22 stories.
 Card 9. Attacks are only infrequently reported as being feared or as taking place on either card. Rather, a preponderance of everyday events are mentioned (especially

to the human form), and the parents are occasionally reported as being in the next room. Themes of loneliness occurred more often on the human form.

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Card 10. Toilet naughtiness was reported with fair frequency on both forms, but with somewhat more on the human. Punishing parents are seen about equally as being of the same or the opposite sex, but with a trend for more same-sex parents on the animal form and more opposite-sex parents on the human form. In only a very few cases does the child "learn a lesson," and this tends to happen more often on the human form.*

Lawton (1966) conducted a study similar to Haworth's (1964). She tested school children with the C.A.T. and the same experimental set of the C.A.T.-H. used by Haworth (1964) and scored each form for the presence of 10 defense mechanisms. Analysis of the data showed no significant agreement between the two forms in eliciting or not eliciting the four defense mechanism: reaction formation, isolation, symbolization, and identification. The one major exception was the result for projection, which showed significant agreement between forms. Lawton also compared the protocols for both forms with the expected themes and found considerable agreement between forms with a few exceptions, the principal one being the finding of more negative reactions on the animal form. Most of these thematic differences were deemed capable of resolution by slight modifications in the pictures, and not indicative of a theoretical difference between the forms.

Billy

Porterfield (1969) administered the C.A.T.-H. and the Bender-Gestalt Test to a group of black preschool stutterers and to similar age and ability groups of nonstuttering classmates (adaptive group) and nonstutterers characterized by behavior problems (maladaptive group). C.A.T.-H. protocols were evaluated with Haworth's "A Schedule of Adaptive Mechanisms in C.A.T. Responses," and it was found that the categories of repression-denial, symbolization, and projection-introjection differentiated stutterers from nonstutterers. Significant differences were obtained between stutterer and adaptive nonstutterer groups on the three dimensions, with the stutterer group attaining higher scores on repression-denial and symbolization. Whereas no significant differences were found between stutterer and maladaptive nonstutterer groups on the C.A.T.-H. dimensions, differences were obtained between these groups on Bender-Gestalt scores, the latter group performing on a lower level. These last findings are indicative both of the lesser relevance of the C.A.T.-H. to overt behavior, and of the relation of adaptive mechanisms to covert behavior.

Billy

In their study of second-grade girls, Neuringer and Livesay suggest that the C.A.T. and C.A.T.-H. are equivalent forms. Myler and colleagues agree, and find in addition that the C.A.T. and C.A.T.-H. were more useful for second-grade girls than the T.A.T.

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