Guía para el análisis clínico de la prueba proyectiva:

El Dibujo de la Figura Humana

Tamaño

1. Dibujo pequeño (En una tercera parte del papel) _____
2. Dibujo grande (En más de 2/3 partes del papel) _____

Ubicación

3. Por la parte superior del papel _____
4. Pegado al margen izquierdo _____
5. Pegado al margen derecho _____
6. En la parte inferior del papel _____

Análisis de Figura

7. Líneas de apoyo para pies _____
8. Sombreado de la figura _____

Figura Incompleta *

9. Parte esencial del cuerpo omitida _____
* 10. Ausencia de pies _____
* 11. Ausencia de manos _____
* 12. Ausencia de brazos _____
13. Cuello alongado _____
* 14. Ausencia de cuello _____
15. Uñas afiladas _____
16. Puños cerrados _____
17. Botones _____
18. Área específica del cuerpo demarcada _____
19. Pestañas sobresalen _____
20. Labios carnosos; demarcados _____
Goodenough-Harris Drawing Test

By Florence L. Goodenough and Dale B. Harris

Name_________________________________________ Boy________ Girl________

School________________________________________ Date of Drawing________________

Grade________________ Age________ Birth Date____

Father's Occupation__________________________________________________________

Examiner's Notes

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Make Your First Drawing Here

Draw a picture of a man. Make the very best picture you can. Be sure to make the whole man, not just his head and shoulders.

1. 41.
2. 42.
3. 43.
4. 44.
5. 45.
6. 46.
7. 47.
8. 48.
9. 49.
10. 50.
11. 51.
12. 52.
13. 53.
14. 54.
15. 55.
16. 56.
17. 57.
18. 58.
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23. 63.
24. 64.
25. 65.
26. 66.
27. 67.
28. 68.
29. 69.
30. 70.
31. 71.
32. 72.
33. 73.
34. 
35. 
36. 
37. 
38. 
39. 
40. 

Raw Score
Make Your Second Drawing Here
Draw a picture of a woman. Make the very best picture you can. Be sure to make the whole woman, not just her head and shoulders.

Raw Score ___
Make Your Third Drawing Here
Draw a picture of yourself. Make the very best picture you can. Be sure to make your whole self, not just your head and shoulders.

1.   41.
2.   42.
3.   43.
4.   44.
5.   45.
6.   46.
7.   47.
8.   48.
9.   49.
10.  50.
11.  51.
12.  52.
13.  53.
14.  54.
15.  55.
16.  56.
17.  57.
18.  58.
19.  59.
20.  60.
21.  61.
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31.  71.
32.  72.
33.  73.
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38.   
39.   
40.   

Raw Score
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Administering the Test

The Goodenough-Harris Drawing Test may be administered to children individually or in groups using essentially the same directions. Preschool children, and children being studied clinically, should be examined individually. Kindergarten and primary-grade children may be successfully examined in groups if an assistant is present to help children who have any difficulty following the instructions. Although these children can generally print their names, the examiner or the classroom teacher must complete the rest of the information on the front of the test booklet.

Individual examinations should always be followed by some informal interrogation to clarify any ambiguous aspects of the drawings. The examiner should start by saying: "Tell me about your picture." Throughout the interrogation period the examiner should try to get at the child's intentions in the drawings, and should avoid making assumptions or direct suggestions. For example, if a child does not spontaneously identify an ambiguous part of his drawings, the examiner may ask (pointing): "What might that be?" The child's responses should be recorded, and his identification of parts written directly on the drawings.

Each child should be provided with a pencil and a test booklet. Crayons should not be used. The number two or two-and-one-half pencil is preferred. See that pictures and books are put aside, to reduce the likelihood of copying.

Have the children fill in the information requested on the cover sheet of the test booklet. With children of elementary school age it is best to ask them as a group to complete the items one at a time, the examiner directing the task, as follows:

Where it says "Name," print your name. Print your first name, and then your last name.

Now draw a circle around one of the words "Boy" or "Girl," to show whether you are a boy or a girl.
Now print the name of this school.

Where it says "Date of Drawing" put today's date. This is _______.

Where it says "Grade," put your grade in school. (In groups, say: This is the ______ grade.)

Where it says "Age," write how old you are now.

Now listen carefully: When were you born? Where it says "Birth Date," first write the month when your birthday comes, and then the date of the month. Is it November fourteenth, or January second? Write whatever date it is. Then put the year you were born. Do you know that? If you do, put it down. If not, just leave it blank. (Note: Birth dates should always be checked with official records. Ages should be taken to the nearest month.)

Now, where it says "Father's Occupation," write down what he does for a living. Tell what he does, not just where he works. For example: "He owns and runs a farm." "He's a foreman in the body shop of the Smith Motor Company," or "He runs machines at the Williams Pattern Works." Write down exactly the kind of work he does for a living.

When the children have finished supplying the face sheet data, have them fold it back so that the space for the first drawing, and only the first drawing, is exposed. Now say:

I am going to ask you to make three pictures for me today. We will make them one at a time. On this first page I want you to make a picture of a man. Make the very best picture that you can; take your time and work very carefully. I want to see whether the boys and girls in ______ School can do as well as those in other schools. Try very hard, and see what good pictures you can make. Be sure to make the whole man, not just his head and shoulders.

When the drawings have been completed, say a few words of praise and have the children turn over the sheets to the space for the second drawing. Then say:

This time I want you to make a picture of a woman. Make the very best picture that you can; take your time and work very carefully. Be sure to make the whole woman, not just her head and shoulders. (Note: With very young children it may be appropriate to say: ______ picture of a woman, a mommy.)

When this drawing has been completed, praise a bit more lavishly than before as a means of keeping up interest. Then demonstrate how to refold the sheets so that the two completed drawings are inside and the space for the third drawing is now face up. Now say:

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This picture is to be someone you know very well, so it should be the best of all. I want each of you to make a picture of yourself—your whole self—not just your face. Perhaps you don't know it but many of the greatest artists liked to make their own portraits, and these are often among their best and most famous pictures. So take care and make this last one the very best of the three.

Children under age eight or nine should have a short rest period between drawings two and three. Ask children to put down their pencils, stretch their arms and flex their fingers, to relax from the tension imposed by concentration and effort.

While the children are drawing, stroll about the room and encourage those who are slow or who seem to have difficulty by saying: "These drawings are very fine; you boys and girls are doing very well." Do not make adverse comments or criticisms, and do not give suggestions. If any child wishes to write about his picture, he may do so at the bottom of the sheet.

If children ask for further instructions, such as whether the man is to be doing anything particular like working or running, say: "Do it whatever way you think is best." Avoid answering "Yes" or "No" or giving any further specific instructions to the children.

The importance of avoiding every kind of suggestion cannot be overemphasized. The examiner must refrain from remarks that might influence the nature of the drawing. He must also see to it that no suggestions come from the children. They should not hold up their drawings for admiration or comment. Young children sometimes accompany their work with a running commentary, such as: "I am giving my man a soldier hat," or "Mine is a big, big man." A firm but good-natured, "No one must tell about his picture now. Wait until everybody has finished," will usually dispose of such cases without affecting the general interest or suppressing the child's enthusiasm for his work.

There is no time limit for the test, but young children rarely take more than ten to fifteen minutes for all three drawings. If one or two children are slower than the rest, it is best to collect papers from those who have finished and allow them to go on with their regular work while the slower workers are finishing.

In older groups, above the fifth or sixth grade, it may be necessary to offer strong encouragement to some children, who will say they can't do the task. In these groups it may also be desirable to say:

You are to make three drawings, one on each of the three pages of this folder. The instructions are at the top of each page. When you have finished one drawing go right on to the next, until you have finished all three.

In this case, it is well to have two examiners who can walk about the room speaking to individuals who seem reluctant to attempt the task.
The following special circumstances should be noted: (1) A child may spoil his drawing and wish to start again. In such case he should be given a fresh test booklet and be allowed to try again. All such instances should be noted on the margin of the booklet after the child has finished his work. (2) Above the second grade (rarely below), a child may draw a bust picture only. When it is evident that this has been the intention, a fresh test booklet should be given, and the child told to, “Make a whole man.” Both drawings should be preserved for comparison.

General Scoring Instructions for the Point Scales

The test can be scored by any person capable of following instructions faithfully. Learning how to score is not difficult but does require study, patience, and willingness to follow instructions painstakingly. It cannot be emphasized too strongly that very careful study of this Manual is imperative if results are to be of any value. With practice, the gain both in speed and accuracy is very considerable. The experienced person can score twenty or thirty drawings an hour, although the beginner may complete no more than five an hour.

Because subjective judgment is required to score some items, perfect agreement between two scorings cannot be expected. In practice, however, agreement will be quite high. (See Chapter V for inter-scorer studies.) On the more subjective items, a scorer will develop his own standards and reduce the “random error” in his score. He will, however, introduce a small “constant error” with respect to another scorer’s judgment.

These general scoring instructions should be followed:

1. To learn to score the Man Point scale, study carefully the illustrative drawings on pages 264–269 of this Manual. Read the requirements for scoring the different items for the Man scale on pages 248–263. Note in the illustrations whether a score has been given for the item under consideration and fix clearly in mind the principles governing this scoring. After these principles are adequately understood, turn to the drawings on pages 270–272 and practice independent scoring.

The section dealing with requirements for scoring the Woman scale, pages 276–291 should be similarly studied. The drawings of the female figure on pages 79–86 of Chapter IV can then be used for practice. (The accepted scoring of these drawings appears in the Appendix, pp. 322–327.)

The scorer should refer to the sections on scoring requirements when there is any doubt. Even after considerable experience, restudying a point occasionally is necessary, since there is a tendency to reinterpret some scoring items; particularly those that allow for more subjective judgment.

2. Each item is scored as pass or fail, according to the rules set forth in this Manual. A credit of 1 is allowed for each “pass” with no half credits given.

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The raw score is the sum of these credits, and is the score which is used to find the standard score in the appropriate tables.

3. It facilitates work considerably if the standard test blank or booklet is used. Spaces are provided next to each drawing for entering the scoring. Mark a “plus” or “check mark” for each item passed; a “zero” for each item failed. This record makes possible the rechecking of scores point by point—a procedure always desirable when inexperienced scorers are used. It also guarantees that items will not be omitted in the scoring.

4. A Special Short Scoring Guide for each Point scale appears on pages 275 and 292 of this Manual. These Guides are for the use of experienced scorers only. After a reasonable amount of practice, the numbers and cue phrases contained in the Guides may suffice; continual reference to the detailed scoring requirements becomes unnecessary.

5. In practice, drawings will be found that the examiner is unable to score at all. According to standardization studies, these excessively bizarre drawings occur no more frequently than once or twice per thousand cases over age five. When such cases are found, it is well to question the children individually to obtain their own explanations of their drawings. Often, seemingly unusual features merely reflect a child’s inability to portray his ideas clearly.

Goodenough designated as “Class A” those drawings in which the subject matter could not be recognized. Her description follows:

In drawings of this class the subject cannot be recognized. The total possible score is either 0 or 1. If the drawing consists merely of aimless, uncontrolled scribbling . . . [see Fig. 51, p. 244] the score is 0. If the lines are somewhat controlled and appear to have been guided by the child to some extent, the score is 1. Drawings of this type most frequently take the form of a rough square, triangle, or circle, very crudely done. Not infrequently several of these forms are included in a single drawing . . . [Fig. 52]. If a drawing of this kind contains much detail, it is always well to call upon the child for an explanation, since occasionally it will be found that such a drawing belongs in Class B, rather than in Class A. Figure . . . [53] is an example.

In questioning a child about his drawing, great care must be taken to avoid suggesting the expected answer. Be sure that his confidence has been gained before asking any direct questions. Then, after praising his drawing, say, “Now tell me about your picture. What are all these things you have made?” If this does not elicit a response, point to one of the items and say in an encouraging tone, “What is this?” If he is still unable to respond, or if, as is frequently the case, he calls each part in turn “a man” then the drawing should be scored as Class A; but if, on the other hand, he names the various parts in a logical fashion, it should be scored according to the rules given for Class B . a (1926, pp. 90–91).

---

* Figures in brackets refer to figures in the present volume.
* Goodenough’s “Class B” drawings include all those that can be recognized as attempts to represent the human figure, no matter how crudely. Figure 54 is an example.
Fig. 51. Man, by boy, 4-2. Class A. Raw Score 0; Standard Score 55 or less; Percentile Rank 1

Fig. 52. Man, by girl, 4-2. Class A. Raw Score 1; Standard Score 62; Percentile Rank 1

Fig. 53. Man, by boy, 4-11. Class B. Raw Score 6; Standard Score 83; Percentile Rank 13
Items credited: 4, 5, 9, 11, 24, 55

Fig. 54. Man, by girl, 5-0. Raw Score 8; Standard Score 73; Percentile Rank 4
Items credited: 4, 9, 30, 35, 39, 46, 47, 53
6. The cover sheet of the standard test booklet provides spaces for entering the raw scores, the standard score equivalents, the percentile ranks and the averaged standard scores, which represent a combined estimate of the child's intellectual maturity. It is not permissible to combine partial scores selected from two drawings for the total score, nor is it permissible to combine scorings of the better features of two drawings. The total raw scores must first be obtained on each drawing separately.

7. Various qualitative aspects of the drawings, such as pressure of the pencil, placement on the page, size, and erasure, are not scored, but should be noted. In the absence of other evidence, it is better to interpret erasures as a sign of the child's dissatisfaction with his work than as evidence of personal insecurity or self-dissatisfaction. Virtually all children will at some time erase and redraw some feature of their drawing; particularly older children who are more critical of their work. Some children do a great deal of erasing and redrawing, and it is probable that in these cases the score obtained is an underestimate of their true intellectual maturity.

Uses of the Drawing Test

While almost any adult can learn to score drawings with reasonable accuracy, psychological training is necessary to adequately understand the results. Such training should include, at the very least, college course work in statistics and theory of tests and measurements, as well as supervised practice in administering and scoring various psychological tests. Moreover, as the examiner gains experience in using a variety of tests, his understanding of the potentialities and limitations of particular tests will grow. His own research with tests and his study of the published research will add immeasurably to his understanding.

This Drawing Test does not yield a score that is identical with the IQ derived from a well-administered individual intelligence test. Although the correlation between an individual intelligence test result and the Goodenough-Harris Drawing Test score is quite substantial for children between the ages of five and ten, the examiner should not be misled. When important decisions are to be made about children, such as placement in a special class, or provision of financial aid, the most complete and accurate psychological measurements should be available. One or more individual intelligence tests administered by a certified or licensed psychologist should be given. The results of the Drawing Test may be used to select those children who should receive more detailed attention. The Drawing Test may supply important additional evidence of severe intellectual and conceptual retardation.

A psychologist may use the Drawing Test to get an initial impression of a young child's general ability level. Because most children like to draw, the test may be used to gain a child's cooperation for more complex tasks to follow. The psychologist may wish to gain some idea of the potentiality of a deaf child who cannot be tested with the usual verbal tests. Anthropologists and psychologists have used this test to get a crude index of mental development of children for whom no appropriate standardized tests are available. However, as has been pointed out in Chapter VIII, such results may to an unknown extent be attenuated by the children's lack of educational experiences.

A primary teacher who wishes quickly to arrange her children in order of intellectual maturity can use the Quality scale. She will obtain a more accurate order if she uses the Point scale. By either scale she may misjudge a few children in her group; but if she is an alert observer who understands various signs of intellectual and conceptual maturity, she will quickly correct these initial misjudgments. Some test results that underestimate a child's ability are due to the child's carelessness, inadequate motivation, or his lack of interest. A somewhat larger proportion of test measurements that differ from each other are probably due to differences in patterns of abilities. In these cases the difference between two test results is not a product of momentary circumstances but a "real" difference—one that keeps correlations between tests from being very close to 1.0.

Psychologists often make judgments about children based on the discrepancies between test scores, particularly where the tests differ in their type of content. When a variety of tests are given, differences in the relative exceptionality from test to test for any one child is sometimes taken to indicate "patterns" of ability or even to suggest the operation of special personality characteristics. The Drawing Test lends itself particularly to this thinking because its content is so different from the usual intelligence test.

As has been pointed out in this book, discrepancies between test scores, considered to be test "patterns," are of doubtful value. Research often shows that many hypotheses related to such usages are not substantiated, even when the interpretations are made by well-trained clinical psychologists. For example, it is thought that severely brain-damaged children may do much more poorly on the Drawing Test than on a well-standardized measure of vocabulary. Such may indeed be the case, but not invariably. Only a person thoroughly acquainted with the peculiarities of particular tests, and aware of the vagaries of psychological measurement generally, should attempt to interpret discrepancies between the Drawing Test score and some other test of mental ability.

There has been a tendency in recent years to interpret a child's drawings in terms of his "creativity," special interests, or deep psychological problems or conflicts. The literature review in Chapter III shows that there is little confirmed basis for such use of children's drawings. Rather, as the evidence in this book amply shows, the child's drawing reflects his concepts which grow with his mental level, experience, and knowledge. Consequently, the Goodenough-Harris Drawing Test is best used as a measure of intellectual maturity and should not be used for other purposes.
Requirements for Scoring the Draw-a-Man Scale

**ITEM**

1. Head present
   **DESCRIPTION**
   Any clear method of representing the head. Features alone, without any outline for the head itself, are not credited for this point.

2. Neck present
   **DESCRIPTION**
   Any clear indication of the neck as distinct from the head and the trunk. Mere juxtaposition of the head and the trunk is not credited.

3. Neck, two dimensions
   **DESCRIPTION**
   Outline of neck continuous with that of the head, of the trunk, or of both. Line of neck must “flow” into head line or trunk line. Neck interposed as pillar between head and trunk does not get credit unless treated definitely to show continuity between neck and head or trunk or both, as by collar, or curving of lines.

   ![Credit](image)

   **No Credit**

4. Eyes present
   **DESCRIPTION**
   Either one or two eyes must be shown. Any method is satisfactory. A single indefinite feature, such as is occasionally found in the drawings of very young children, is credited.

5. Eye detail: brow or lashes
   **DESCRIPTION**
   Brow, lashes or both shown.

6. Eye detail: pupil
   **DESCRIPTION**
   Any clear indication of the pupil or iris as distinct from the outline of the eye. Both must appear if both eyes are shown.

7. Eye detail: proportion
   **DESCRIPTION**
   The horizontal dimension of the eye must be greater than the vertical dimension. This requirement must be fulfilled in both eyes if both are shown; one eye is sufficient if only one is shown. Sometimes in profile drawings of a high grade the eye is shown in perspective. In such drawings any triangular form approximating the following examples is credited.

8. Eye detail: glance
   **DESCRIPTION**
   Full Face: The eyes obviously glancing. There must be no convergence or divergence of the two pupils, either horizontally or vertically.

   ![Credit](image)

   **Profile**
   The eyes must either be shown as in the preceding point, or, if the ordinary almond form is retained, the pupil must be placed toward the front of the eye rather than in the center. The scoring should be strict.

9. Nose present
   **DESCRIPTION**
   Any clear method of representation. In “mixed profiles,” the score is plus even though two noses are shown.

10. Nose, two dimensions
    **DESCRIPTION**
    Full Face: Credit all attempts to portray the nose in two dimensions, when the bridge is longer than the width of the base or tip.

   ![Credit](image)

   **No Credit**

11. Mouth present
    **DESCRIPTION**
    Any clear representation.

12. Lips, two dimensions
    **DESCRIPTION**
    Full Face: Two lips clearly shown.

   ![Credit](image)
Profile:
Credit

No Credit

13. Both nose and lips in two dimensions
Bonus point given when Items 10 and 12 are passed.
See preceding items for accepted forms.

14. Both chin and forehead shown
Full Face: Both the eyes and mouth must be present, and sufficient space left above the eyes to represent the forehead; below the mouth to represent the chin. The scoring should be rather lenient. Where neck is continuous with face, placement of mouth with respect to narrowing of lower portion of head is important. The sketches below illustrate mouth placement.

Credit

No Credit

15. Projection of chin shown; chin clearly differentiated from lower lip
Full Face: Modeling of chin must be indicated in some way, as by a curved line below the mouth or lip, or point of chin indicated by appropriate facial modeling, or dot or line placed below mouth near lower limit of face. Beard obscuring chin does not score. Note: Distinguish carefully from Item 16. There must definitely be an attempt to show a "pointed" chin to credit this item. This point is credited most frequently in profiles.

Credit

No Credit

Items 15 and 16

Item 15 but not 16

Item 16 but not 15

16. Line of jaw indicated
Full Face: Line of jaw and chin drawn across neck but not squarely across. Neck must be sufficiently wide, and chin must be so shaped that the line of the jaw forms a well-defined acute angle with the line of the neck. Score strictly on the simple oval face.

Credit

No Credit

17. Bridge of nose
Full Face: Nose properly placed and shaped. The base of the nose must appear as well as the indication of a straight bridge. Placement of upper portion of bridge is important; must extend up to or between the eyes. Bridge must be narrower than the base.

Credit

No Credit

Profile: Nose at angle with face, approximately 35-45 degrees. Separation of nose from forehead clearly shown at eye.

Credit

No Credit
18. Hair I
Any indication of hair, however crude.

19. Hair II
Hair shown on more than circumference of head and more than a scribble. Nontransparent, unless it is clear that a bald-headed man is portrayed. A simple hairline across the skull on which no attempt has been made to shade in hair does not score. If any attempt has been made, even in outline or with a little shading, to portray hair as having substance or texture, the item scores.

Credit

No Credit

20. Hair III
Any clear attempt to show cut or styling by use of side burns, a forelock, or conformity of base line to a “style.” When a hat is drawn, credit the point if hair is indicated in front as well as behind the ear, or if hairline at back of neck or across forehead suggests styling.

21. Hair IV
Hair shaded to show part, or to suggest having been combed, or brushed, by means of directed lines. Item 21 is never credited unless Item 20 is; it is thus a “high-grade” point.

Credit

No Credit

22. Ears present
Any indication of ears.

23. Ears present: proportion and position
The vertical measurement must be greater than the horizontal measurement. The ears must be placed somewhere within the middle two-thirds of the head.

Full Face: The top of the ear must be separated from the head line, and both ears must extend from the head.

Credit

24. Fingers present
Any suggestion of fingers, separate from hand or arm. In drawings by older children, where there is a tendency to “sketch,” credit this point if any suggestion of fingers occurs.

Both hands necessary if both hands are shown. Credit this point in “sketchy” drawings by older children, even though five digits may not be definitely discerned.

“Grasp” or “sticks” do not score. Length of individual fingers must be distinctly greater than width. In well-executed drawings, where hand may appear in perspective, or where fingers are indicated by “sketching,” credit this point. Credit also those cases in which, because the hand is obviously clenched, only the knuckles or part of the fingers appear. This last will occur only in high-quality drawings where there is considerable use of perspective.

Fingers must be indicated, with a clear differentiation of the thumb from the fingers. Scoring should be very strict. The point is credited if one of the lateral digits is definitely shorter than any of the others (compare especially with the little finger), or if the angle between it and the index finger is not less than twice as great as that between any two of the other digits, or if its point of attachment to the hand is distinctly nearer to the wrist than that of the fingers. Conditions must be fulfilled on both hands if both are shown; one hand is sufficient if only one is shown. Fingers must be present or indicated; “mitt” hand does not score, unless figure is definitely in winter garb, wearing mittens.
28. Hands present

Any representation of the hand, apart from the fingers. When fingers are shown, a space must be left between base of fingers and edge of sleeve or cuff. Where no cuff exists, arm must broaden in some way to suggest palm or back of hand as distinct from wrist. Characteristic must appear on both hands if both are shown.

Marginal Credit

29. Wrist or ankle shown

Either wrist or ankle clearly indicated as separate from sleeve or trouser. A line across the limb to indicate the end of sleeve or trouser, although credited in Item 55, is not sufficient here.

Credit

No Credit

30. Arms present

Any method of representation clearly intended to indicate arms. Fingers alone are not sufficient, but the point is credited if any space is left between the base of the fingers and that part of the body to which they are attached. The number of arms must also be correct, except in profile drawings when only one arm may score.

Credit

No Credit

31. Shoulders I

Full Face: A change in the direction of the outline of the upper part of the trunk which gives an effect of concavity rather than convexity. The point is scored rather strictly. The ordinary elliptical form is never credited, and the score is always minus unless it is evident that there has been a recognition of the abrupt broadening out of the trunk below the neck which is produced by the shoulder blade and the collar bone. A perfectly square or rectangular trunk does not score, but if the corners have been rounded, the point is credited.

Credit

No Credit

32. Shoulders II

Full Face: Score more strictly than previous item. Shoulders must be continuous with neck and arms, and "square," not drooping. If arm is held from the body, the armpit must be shown.

Profile: Shoulder joint in approximately correct position. Arm must be represented by double line.

Credit

No Credit

33. Arms at side or engaged in activity

Full Face: Young children generally draw the arms stiffly out from the body. Credit this point when at least one arm is down at the side, making an angle of no more than 10 degrees with the general vertical axis of the trunk, unless the arms are engaged in some definite activity, such as carrying an object. Credit when hands are in pockets, on hips, or behind back.
34. Elbow joint shown

There must be an abrupt bend (not a curve) at approximately the middle of the arm. One arm is sufficient. Modeling or creasing of the sleeve is credited.

Full Face:
Credit

Profile:
Credit

No Credit

35. Legs present

Any method of representation clearly intended to indicate the legs. The number must be correct: two in full-face drawings, either one or two in profiles. Use common sense rather than a purely arbitrary scoring. If only one leg is present, but a rough sketch of a crotch is included, showing clearly what the child has in mind, score the item. On the other hand, three or more legs, or a single leg without logical explanation should be scored minus. A single leg to which two feet are attached is scored plus. Legs may be attached anywhere to the figure.

36. Hip I (crotch)

Full Face: Crotch indicated. This is most frequently shown by inner lines of the two legs meeting at point of junction with the body. (Young children usually place the legs as far apart from each other as possible, and this never scores.)

37. Hip II

Preceding item earns with credit to spare. Drawing gives a better idea of the hip than required for passing preceding item. Examples (b) and (d) on Item 36 are credited here also; (a) and (c) are not.

38. Knee joint shown

There must be, as in the case of the elbow, an abrupt bend (not curve) at about the middle of the leg, or, as is sometimes found in very high-quality drawings, a narrowing of the leg at this point. Knee-length trousers are not sufficient. Crease or shading to indicate knee is scored plus.

39. Feet I: any indication

Feet indicated by any means: two feet in full-face, one or two in primitive profile. Young children may indicate feet by attaching toes to the end of the leg. This is credited.

40. Feet II: proportion

The feet and legs must be shown in two dimensions. Feet must not be "clubbed"; that is, the length of the foot must be greater than its height from sole to instep. The length of the foot must be not more than one-third or less than one-tenth the total length of the leg. The item is also credited in full-face drawings in which the foot is shown in perspective, longer than wide, provided the foot is separated in some way from the rest of the leg, and not merely indicated by a line across the leg.
41. Feet III:
heel

Any clear method of indicating the heel. In full-face drawings, credit the item arbitrarily when the foot is shown as below, provided there is some demarcation between the foot and the leg. In the profile, the instep must be indicated.

Credit

No Credit

42. Feet IV:
perspective

Foreshortening attempted in at least one foot.

Credit

No Credit

43. Feet V:
detail

Any one item of detail such as lacing, tie, strap, or shoe sole indicated by a double line.

44. Attachment of arms and legs I

Both arms and both legs attached to the trunk at any point, or arms attached to the neck, or at the juncture of the head and the trunk when the neck is omitted. If the trunk is omitted, the score is always zero. If the legs are attached elsewhere than to the trunk, regardless of the attachment of the arms, the score is zero. If only one arm or leg is shown, either in full-face or in profile drawings, credit may be given on the basis of the limb that is shown. If both arms and legs are shown, the members of each pair must be attached approximately symmetrically. Arms attached to the legs score zero.

45. Attachment of arms and legs II

Legs attached to trunk, and arms attached to the trunk at the correct point. Do not credit if arm attachment occupies one-half or more of the chest area (neck to waist). When no neck is present, the arms must definitely be attached to the upper part of the trunk.

Full Face: When Item 31 is plus, the point of attachment must be exactly at the shoulders. If Item 31 is zero, the attachment must be exactly at the point which should have been indicated as the shoulders. Score very strictly, especially in those cases where Item 31 is zero.

Profile: Do not credit if both the lines delineating the arm extend from the outline of the back, or if the point of attachment either reaches the base of the neck, or falls below the greatest expansion of the chest line.

46. Trunk present

Any clear indication of the trunk, either one or two dimensional. Where there is no clear differentiation between the head and the trunk, but the features appear in the upper end of a single figure, the point is scored plus if the features do not occupy more than half the length of the figure; otherwise, the score is zero, unless a cross line has been drawn to indicate the termination of the head. A single figure placed between the head and the legs is always counted as a trunk, even though its size and shape may suggest a neck rather than a trunk. (This ruling is based on the fact that, when questioned, a number of children whose drawings showed this peculiarity, called the part a trunk.) A row of buttons extending down between the legs is scored zero for trunk but plus for clothing, unless a cross line has been drawn to show the termination of the trunk.

47. Trunk in proportion, two dimensions

Length of the trunk must be greater than breadth. Measurement should be taken at the points of greatest length and of greatest breadth. If the two measurements are equal, or so nearly so that the difference is not readily determined, the score is zero. In most instances the difference will be great enough to be recognized at a glance, without actually measuring.

48. Proportion: head I

Area of the head not more than one-half or less than one-tenth that of the trunk. Score rather leniently. See below for a series of standard forms of which the first is double the area of the second in each pair.
49. Proportion: head II
Head approximately one-fourth trunk area. Score strictly; over one-third or under about one-fifth fails the item. Where crotch is not shown, as in some profiles, consider belt or waist at about two-thirds down total trunk length.

Credit

50. Proportion: face
Full Face: Length of head greater than its width. Should show a general oval shape.
Profile: Head definitely elongated. Face longer than "dome" of skull.

51. Proportion: arms I
Arms at least equal to the trunk in length. Tips of hands extend to middle of hip but not to knee. Hands need not necessarily extend to or below the crotch, especially if arms are unusually short. In full-face drawings, both hands must extend. Score by relative length, not position, of arms.

52. Proportion: arms II
Arms taper; forearm narrower than upper arm. Any tendency to narrow the forearm except right at the wrist, is credited. If both arms show clearly, tapering must occur in both.

53. Proportion: legs
Length of the legs not less than the vertical measurement of the trunk nor greater than twice that measurement. Width of either leg less than that of the trunk.

54. Proportion: limbs in two dimensions
Both arms and legs shown in two dimensions. If the arms and legs are in two dimensions, the point is credited, even though the hands and feet are drawn in linear dimension.

55. Clothing I
Any clear representation of clothing. As a rule the earliest forms consist of a row of buttons running down the center of the trunk, or of a hat, or of both. Either alone scores. A single dot or small circle placed in the center of the trunk is practically always intended to represent the navel and should not be credited as clothing. A series of vertical or horizontal lines drawn across the trunk (and sometimes on the limbs as well) is a fairly common way of indicating clothing, and should be so credited. Marks to indicate pockets or sleeve-ends also get credit.

56. Clothing II
At least two articles of clothing (as hat and trousers) nontransparent; that is, concealing the part of the body which they are supposed to cover. In scoring this point it must be noted that a hat which is merely in contact with the top of the head but does not cover any part of it is not credited. Buttons alone, without any other indication of the coat, are not credited. Two of the following must be present to indicate coat: sleeves, collar or neckline, buttons, or pockets. Trousers must be clearly intended by belt, fly, pockets, cuff, or any separation of feet or leg from bottom of trouser leg. Foot as an extension of leg does not score, when a line drawn across the leg is the only way of indicating the separation of foot and leg.

57. Clothing III
Entire drawing free from transparencies of any sort. Both sleeves and trousers must be shown as distinct from wrists or hands and legs or feet.

58. Clothing IV
At least four articles of clothing definitely indicated. The articles should be among those in the following list: hat, shoes, coat, shirt, collar, necktie, belt, trousers, jacket, sport shirt, overalls, socks (pattern). Note: Shoes must show some detail, as laces, toe cap, or double line for the sole. Heel alone is not sufficient. Trousers must show some features, such as fly, pockets, cuffs. Coat or shirt must show either collar, sleeves, pockets, lapels, or distinctive shading, as spots or stripes. Buttons alone are not sufficient. Collar should not be confused with neck shown merely as insert. The necktie is often inconspicuous and care must be taken not to overlook it, but it is not likely to be mistaken for anything else.

59. Clothing V
Costume complete without incongruities. This may be a "type" costume (e.g., cowboy, soldier) or costume of everyday dress. If the latter, it should be clearly recognized as appropriate; e.g., sport shirt on man, cap appropriate to hunting outfit, overalls for farmer. This is a "bonus" point, and must show more than necessary for Item 58.

60. Profile I
The head, trunk, and feet must be shown in profile without error. The trunk may not be considered as drawn in profile unless the characteristic line of buttons has been moved from the center to the side of the figure, or some other indication, such as the position of the arms, pockets, or necktie shows clearly the effect of this position. The entire drawing may contain one, but not more than one, of the following three errors:
DRAWINGS AS MEASURES OF INTELLECTUAL MATURITY

1. One body transparency, such as the outline of the trunk showing through the arm.

2. Legs not in profile. In a true profile at least the upper part of the leg which is in the background must be concealed by the one in the foreground.

3. Arms attached to the outline of the back and extending forward.

61. Profile II

The figure must be shown in true profile, without error or any body transparency.

62. Full face

(Include partial profile, where attempt is to show figure in perspective.) All major body parts in proper location and correctly joined unless hidden by perspective or clothing.

Essential items: Legs, arms, eyes, nose, mouth, ears, neck, trunk, hands and feet. Parts must be in two dimensions. Feet may be in perspective, but not in profile, unless they turn "out" in opposite directions.

63. Motor coordination: lines

Look at the long lines in arms, legs, and trunk. Lines should be firm, well-controlled and free from accidental wavering. A few long lines may be retraced or erased. The drawing need not achieve very smoothly "flowing" lines to earn credit. Young children sometimes "color in" with their pencils; examine carefully the fundamental lines of their drawings. Older children frequently use a "sketching" technique readily distinguishable from the uncertain, wavering lines resulting from immature coordination. If the general effect is that of firm, sure lines showing that the pencil was under control, credit the item. The drawing may be quite immature and still score on this point.

64. Motor coordination: junctures

Look at the juncture points of lines. They must meet cleanly without a marked tendency to cross or overlap, or leave gaps between the ends. A drawing with few lines is scored more strictly than one with frequent changes in direction of line. A "sketchy" drawing is ordinarily credited even though the junctures of lines may seem uncertain, since this is a characteristic common almost entirely to drawings of a mature type. Some erasures may be allowed.

65. Superior motor coordination

This is a "bonus" point for good pencil work on details as well as on major lines. Look at the small detail as well as at the character of the major lines. All lines should be firmly drawn, with correct joining. Pencil work in fine detail—facial features, small items of clothing, etc.—indicates a good control of the pencil. Scoring

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should be quite strict. Erasures and/or redrawing invalidate this item.

66. Directed lines and form: head outline

Outline of head must be drawn without obviously unintentional irregularities. The point is credited only in drawings where the shape has developed beyond the first crude circle or ellipse. In profile drawings, a simple oval to which a nose has been added does not score. Scoring should be rather strict; the contour of the face must be developed as a unit, not by adding parts.

67. Directed lines and form: trunk outline

Same as for the preceding item, but here with reference to the trunk. Note that the primitive "stick" circle, or ellipse does not score. The body lines must show an attempt to follow an intentional deviation from the simple ovoid form.

68. Directed lines and form: arms and legs

Arms and legs must be drawn without irregularities, as in above item, and without tendency to narrowing at the points of junction with the body. Both arms and legs must be in two dimensions.

69. Directed lines and form: facial features

Facial features must be symmetrical in all respects. Eyes, nose, and mouth must all be shown in two dimensions.

Full Face: The features must be appropriately placed, regular and symmetrical, giving a clear appearance of the human form.

Profile: The eye must be regular in outline and located in the forward one-third of the head. The nose must form an obtuse angle with the forehead. The scoring should be strict; a "cartoon" nose is not credited.

70. "Sketching" technique

Lines formed by well-controlled short strokes. Repeated tracing of long line segments is not credited. "Sketching" technique appears in the work of some older children and almost never occurs under age eleven or twelve.

71. "Modeling" technique

"Lines" or shading must indicate one or more of the following: garment creases, wrinkles or folds, other than trouser press; fabric; hair; shoes; "coloring in"; or background features.

72. Arm movement

Figure must express freedom of movement in both shoulders and elbows. One arm suffices. Credit hands on hips or in pockets, if both shoulders and elbows are apparent. A definite activity need not be indicated.

73. Leg movement

Freedom of movement portrayed both in hips and knees of the figure.

* Items 63, 64, and 65 concern the quality of the child's control of the pencil. These items evaluate the firmness and sureness of line, quality of line junctions, "corners," etc. Items 66-69 concern the child's deliberate direction of the pencil to produce a good form. The child's work must show that he has exercised control, firmly and surely.
Scoring Examples

Fig. 55.  Man, by girl, 3-11. Raw Score 5; Standard Score 87; Percentile Rank 19
Items credited: 1, 4, 11, 30, 35

Fig. 56.  Man, by girl, 5-0. Raw Score 19; Standard Score 105; Percentile Rank 63
Items credited: 1, 4, 6, 9, 11, 18, 22, 23, 24, 25, 27, 28, 30, 35, 39, 44, 46, 48, 55
There are clearly five digits on each hand, one of which is oriented quite differently from the others, in each case.

Fig. 57.  Man, by girl, 9-6. Raw Score 34; Standard Score 104; Percentile Rank 61
Items credited: 1, 2, 3, 4, 9, 11, 14, 18, 22, 23, 24, 28, 29, 30, 31, 32, 35, 39, 40, 44, 45, 46, 48, 50, 51, 52, 53, 54, 55, 56, 57, 58, 63, 64
Figure considered to show snowsuit.

Fig. 58.  Man, by boy, 12-6. Raw Score 53; Standard Score 117; Percentile Rank 87
Items credited: 1, 2, 3, 4, 5, 7, 9, 10, 11, 14, 15, 16, 17, 18, 19, 20, 24, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 50, 51, 52, 53, 54, 55, 56, 57, 59, 62, 63, 64, 65, 67, 68, 71
Since this drawing shows the hand in profile, a compromise scoring is effected; strict on number of fingers (Item 25), but liberal on their shape (Item 26) and on the presence of a hand (Item 28).
Fig. 59. Man, by girl, 6-6. Raw Score 9; Standard Score 72; Percentile Rank 3

Items credited: 1, 4, 9, 11, 14, 22, 30, 35, 39

Stanford-Binet (L) IQ 82

Fig. 60. Man, by boy, 6-9. Raw Score 4; Standard Score 62; Percentile Rank 1

Items credited: 1, 4, 9, 11

Stanford-Binet (L) IQ 65. Child in special class.

Considerable incoordination with tentative diagnosis of mild cerebral palsy. Handedness not differentiated. The examiner repeated the request to "Draw a whole man" after original figure was produced. This request led to perseverative circular drawing. The circular drawing seemed to mean "the whole man" to him.

Fig. 61. Man, by boy, 7-10. Raw Score 4; Standard Score 59; Percentile Rank 1

Items credited: 1, 24, 46, 47

Stanford-Binet (L) IQ 47. Child in special class. Speech and motor control very poor.

Could have credited Items 30 and 35; Item 24 was credited because so many marks suggest the impression of "many digits."

Fig. 62. Man, by boy, 8-6. "Class A" drawing; cannot be scored.

Stanford-Binet (L) IQ 34. Child in special class.
Fig. 63. Man, by boy, 9-11. Raw Score 15; Standard Score 74; Percentile Rank 4
Items credited: 1, 4, 9, 11, 18, 22, 24, 26, 30, 33, 35, 44, 46, 47, 55
Stanford-Binet (M) IQ 81. Child in special class; spastic paralysis.

Fig. 64. Man, by boy, 12-5. Raw Score 31; Standard Score 87; Percentile Rank 19
Items credited: 1, 2, 4, 5, 9, 10, 11, 24, 29, 30, 31, 33, 35, 36, 39, 40, 41, 44, 45, 46, 50, 51, 53, 54, 55, 56, 57, 58, 59, 63, 64
Stanford-Binet (L) IQ 80
Note: Bridge of nose (Item 17) is questionable; cannot tell how high it extends.

Fig. 65. Man, by girl, 15-8. Raw Score 48; Standard Score 105; Percentile Rank 63
Items credited: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 17, 18, 19, 20, 22, 24, 25, 27, 28, 29, 30, 31, 32, 33, 35, 36, 39, 40, 44, 45, 46, 47, 48, 52, 54, 55, 56, 57, 58, 63, 64, 66, 69, 70
Stanford-Binet (L) IQ 76; WISC 72 (V, 69; P, 82). Child in special class. Note the discrepancy in test results.

Fig. 66. Man, by boy, 16-6. Raw Score 12; Standard Score 53; Percentile Rank 1
Items credited: 1, 4, 9, 11, 30, 35, 44, 45, 46, 55, 63, 64
WISC IQ '5 (V, 46; P, 43). Child in class for “trainables.”
Note segmented character of arms and legs; a perseverative characteristic not uncommon among retarded children. Coordination quite good.
Children older than the norms provided in Tables 32–35 should be considered as age '15.
Scoring Practice (Accepted scoring on pp. 273-274)

Fig. 67. Man, by girl, 3-9
Fig. 68. Man, by girl, 5-6
Fig. 69. Man, by boy, 10-9
Fig. 70. Man, by boy, 10-6
Fig. 71. Man, by boy, 10-9
Fig. 72. Man, by boy, 10-8
Fig. 73. Man, by girl, 12-9
Fig. 74. Man, by boy, 8-9
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**Fig. 67.** Man, by girl, 3-9. Raw Score 12; Standard Score 117; Percentile Rank 87
Items credited: 1, 4, 9, 11, 18, 19, 24, 28, 30, 44, 46, 63

**Fig. 68.** Man, by girl, 5-6. Raw Score 12; Standard Score 85; Percentile Rank 16
Items credited: 1, 4, 9, 11, 14, 18, 22, 30, 35, 39, 55, 63

**Fig. 69.** Man, by boy, 10-9. Raw Score 41; Standard Score 110; Percentile Rank 75
Items credited: 1, 2, 3, 4, 6, 9, 10, 11, 14, 18, 19, 24, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 39, 40, 43, 44, 45, 46, 47, 48, 50, 52, 54, 55, 56, 57, 64, 66, 67, 68, 72
Note that the shape of fingers (Item 26) is credited even though the correct number of fingers (Item 25) is not.

**Fig. 70.** Man, by boy, 10-6. Raw Score 50; Standard Score 124; Percentile Rank 95
Items credited: 1, 2, 3, 4, 7, 9, 10, 11, 14, 15, 16, 18, 19, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 35, 36, 39, 40, 41, 42, 44, 45, 46, 47, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 62, 63, 64, 70

**Fig. 71.** Man, by boy, 10-9. Raw Score 4; Standard Score 54; Percentile Rank 1
Items credited: 1, 11, 18, 35
Stanford-Binet (M) IQ 42; (L) 41. Child in class for “trainable” children.
The sole feature of the face could be scored either as mouth or nose; a mouth is more commonly intended.

**Fig. 72.** Man, by boy, 10-8. Raw Score 28; Standard Score 90; Percentile Rank 25
Items credited: 1, 2, 4, 9, 11, 18, 19, 22, 23, 24, 25, 27, 28, 30, 31, 35, 39, 40, 44, 45, 46, 47, 51, 53, 54, 55, 63, 64
Stanford-Binet (M) IQ 88; WISC 76 (V, 84; P, 72). Child in special class.

**Fig. 73.** Man, by girl, 12-9. Raw Score 7; Standard Score 45 (estimated); Percentile Rank 1
Items credited: 1, 2, 30, 35, 39, 44, 46
Stanford-Binet (L) IQ 45; (M) IQ 39. Child in class for “trainable” children.
Fig. 74. Man, by boy, 8-9. Raw Score 14; Standard Score 77; Percentile Rank 6

Items credited: 1, 4, 9, 11, 18, 24, 30, 35, 39, 44, 45, 46, 47, 54

Stanford-Binet (L) IQ 53. Child in special class.

Fig. 75. Man, by boy, 15-8. Raw Score 56; Standard Score 115; Percentile Rank 84

Items credited: 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 22, 23, 24, 26, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 54, 55, 62, 63, 64, 66, 68, 69, 70, 71

WISC IQ 89 (V, 79; P, 102)

This is a superior drawing by a boy whose verbal performance on an individual intelligence test is considerably lower.

Fig. 76. Man, by boy, 17-2. Raw Score 19; Standard Score 63; Percentile Rank 1

Items credited: 1, 2, 4, 5, 9, 10, 11, 18, 24, 30, 35, 36, 39, 40, 41, 44, 45, 46, 64

WISC IQ 54 (V, 55; P, 54). Child in special class.

Eyebrow (Item 5) is faintly indicated on original, in addition to supraorbital ridge. Youth older than norms is interpreted in relation to values of fifteen-year-olds.

Fig. 77. Man, by girl, 17-10. Raw Score 15; Standard Score 50; Percentile Rank 1

Items credited: 1, 4, 5, 6, 22, 24, 30, 35, 39, 44, 46, 54, 55, 63, 64

Stanford-Binet (M) IQ 18; WISC 30 (V, 43; P, 38). Child in class for "trainable" children.

Fig. 78. Man, by boy, 19-0. Raw Score 8; Standard Score 47 (estimated); Percentile Rank 1

Items credited: 1, 4, 9, 11, 18, 22, 30, 46

Stanford-Binet (M) IQ 51

Indication of hair was perseverated around entire head and around contours of trunk. Arms are questionable but were credited, liberally.

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Short Scoring Guide *

MAN POINT SCALE

1. Head present
2. Neck present
3. Neck, two dimensions
4. Eyes present
5. Eye detail: brows or lashes
6. Eye detail: pupil
7. Eye detail: proportion
8. Eye detail: glance
9. Nose present
10. Nose, two dimensions
11. Mouth present
12. Lips, two dimensions
13. Both nose and lips in two dimensions
14. Both chin and forehead shown
15. Projection of chin shown; chin clearly differentiated from lower lip
16. Line of jaw indicated
17. Bridge of nose
18. Hair I
19. Hair II
20. Hair III
21. Hair IV
22. Ears present
23. Ears present: proportion and position
24. Fingers present
25. Correct number of fingers shown
26. Detail of fingers correct
27. Opposition of thumb shown
28. Hands present
29. Wrist or ankle shown
30. Arms present
31. Shoulders I
32. Shoulders II
33. Arms at side or engaged in activity
34. Elbow joint shown
35. Legs present
36. Hip I (crotch)
37. Hip II
38. Knee joint shown
39. Feet I: any indication
40. Feet II: proportion
41. Feet III: heel
42. Feet IV: perspective
43. Feet V: detail
44. Attachment of arms and legs I
45. Attachment of arms and legs II
46. Trunk present
47. Trunk in proportion, two dimensions
48. Proportion: head I
49. Proportion: head II
50. Proportion: face
51. Proportion: arms I
52. Proportion: arms II
53. Proportion: legs
54. Proportion: limbs in two dimensions
55. Clothing I
56. Clothing II
57. Clothing III
58. Clothing IV
59. Clothing V
60. Profile I
61. Profile II
62. Full face
63. Motor coordination: lines
64. Motor coordination: junctures
65. Superior motor coordination
66. Directed lines and form: head outline
67. Directed lines and form: trunk outline
68. Directed lines and form: arms and legs
69. Directed lines and form: facial features
70. "Sketching" technique
71. "Modeling" technique
72. Arm movement
73. Leg movement

* For use only after the scoring requirements have been mastered.
### Requirements for Scoring the Draw-a-Woman Scale

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head present</td>
<td>Any clear method of representing the head. Features alone, without any outline for the head itself, are not credited for this point.</td>
</tr>
<tr>
<td>2. Neck present</td>
<td>Any clear indication of the neck as distinct from the head and the trunk. Mere juxtaposition of the head and the trunk is not credited.</td>
</tr>
<tr>
<td>3. Neck, two dimensions</td>
<td>Outline of neck continuous with that of the head, of the trunk or of both. Line of neck must &quot;flow&quot; into head line or trunk line. Neck interposed as pillar between head and trunk does not get credit unless treated definitely to show continuity between neck and head or trunk or both, as by collar, or curving of lines.</td>
</tr>
<tr>
<td>4. Eyes present</td>
<td>Either one or two eyes must be shown. Any method is satisfactory. A single indefinite feature, such as is occasionally found in the drawings of very young children, is credited. Credit also, in mature drawings attempting perspective, any indication of the eye by contour of the profile, as:</td>
</tr>
<tr>
<td>5. Eye detail: brow or lashes</td>
<td>Brow, lashes or both shown. Full Face:</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Eye detail: pupil</td>
<td>Pupil shown. Credit any clear indication of the pupil or iris as distinct from the outline of the eye. Both pupils must appear if both eyes are shown.</td>
</tr>
<tr>
<td>7. Eye detail: proportion</td>
<td>The horizontal measurement of the eye must be greater than the vertical dimension. This requirement must be fulfilled in both eyes if both are shown; one eye is sufficient if only one is shown. In profile drawings, any triangular forms which approximate the example below are credited.</td>
</tr>
<tr>
<td>8. Cheeks</td>
<td>Credit modeling or &quot;shading&quot; on cheeks or at mouth corners. Credit also &quot;cosmetic checks&quot;—circular spots on cheeks. In drawings which attempt perspective, credit any indication in contour of face.</td>
</tr>
<tr>
<td>9. Nose present</td>
<td>Any clear method of representation. In &quot;mixed profiles,&quot; the score is plus even though two noses are shown.</td>
</tr>
<tr>
<td>10. Nose, two dimensions</td>
<td>Full Face: Credit all attempts to portray the nose in two dimensions, when the bridge is longer than the width of the base or tip.</td>
</tr>
</tbody>
</table>
Profile: Credit all crude attempts to show the nose in profile, provided tip or base is shown in some manner. Do not credit simple "button."

No Credit

11. Bridge of nose
Full Face: Nose properly placed and shaped. The base of the nose must appear as well as the indication of a straight bridge. Placement of upper portion of bridge is important; must extend up to or between the eyes. Bridge must be narrower than the base.

Credit

No Credit

Profile: Nose at angle with face, approximately 45 degrees. Separation of nose from forehead clearly shown at eye.

Credit

No Credit

12. Naeorils shown
Any attempt to portray naeorils as holes, dots, or to show "wings."

Credit

No Credit

13. Mouth present
Any clear representation.

14. Lips, two dimensions
Two lips clearly shown.

Full Face:

Credit

15. "Cosmetic lips"
Any clear attempt to show "Cupid's bow." Score based on the outer shape. Two lips need not be shown.

Credit

16. Both nose and lips in two dimensions
Bonus point given when both Items 10 and 14 are passed.

17. Both chin and forehead shown
Full Face: Sufficient space must be left above the eyes to represent the forehead, and below the mouth to represent the chin. The scoring should be rather lenient. Where neck is continuous with face, placement of mouth with respect to narrowing of lower portion of head is important.

Credit

No Credit

18. Line of jaw indicated
Profile: The point may be credited when the eyes and mouth are omitted, if the outline of the face shows clearly the limits of the chin and forehead. Score leniently if forehead is covered by hat brim; more strictly if covered by hair.

Full Face: Line of jaw and chin drawn across neck but not squarely across. Neck must be sufficiently wide, and chin must be so shaped that the line of the jaw forms a well defined acute angle with the line of the neck. Score strictly on the simple oval face.
19. Hair I

Any indication of hair, however crude.

20. Hair II

Scribble closely conforming to head, or

Full Face: Shaped masses suggesting braids or locks each side of face.

Profile: Mass dependant in back.

21. Hair III

Style suggested by indentation at temple, or bangs, or shaped at lower ends, or both. General "style" achieved. Distinctly better design than Item 20.

22. Hair IV

Use of directed lines to indicate a part, texture, or combing. Superior style achieved.

Caution: Score strictly; superior style may be achieved with outline sketching, but this does not score. Directed lines to indicate hair texture must appear, and be better than "coloring in."

23. Necklace or earrings

Any clear indication. Distinguish necklace from neck-line or collar of dress. Earrings without ears (which may be concealed by hair) should be credited.

24. Arms present

Any method of representation clearly intended to indicate arms. Fingers alone are not sufficient, but the point is credited if any space is left between the base of the fingers and that part of the body to which they are attached. The number of arms must be correct, except in profile drawings when only one arm may score.

25. Shoulders

Full Face: A distinct change in the direction of the upper part of the trunk, which gives the effect of a "rounded corner." The ordinary elliptical form is never credited. There must be an abrupt broadening of the trunk below the neck, which then turns downward into the arms or sides of the trunk. Square corners fail.

26. Arms at side (or engaged in activity or behind back)

Profile: Somewhat more lenient where the trunk as well as the head is shown in profile. If the lines that form the upper part of the trunk diverge from each other, show the expansion of the chest, credit the point.

Full Face: Young children generally draw the arms held stiffly out from the body. Credit this point when at least one arm is down at the side, making an angle of no more than 10 degrees with the general vertical axis of the trunk, unless the arms are engaged in some definite activity, such as carrying an object. Credit when hands are placed on hips or behind the back.
28. Fingers present

Any indication of fingers. Mitt hand does not score even if thumb is shown.

29. Correct number of fingers shown

If both hands are shown, the correct number on each is necessary, unless there is a clear attempt to portray hand activity which would conceal the correct number. Credit drawings produced by older children who try a "sketching" technique, even though five digits may not be definitely discerned.

Credit

30. Detail of fingers correct

"Grapes" or "sticks" do not score. Length of individual fingers must be distinctly greater than width. In well-executed drawings, where hand may appear in perspective, or where fingers are indicated by "sketching," credit this point. Credit also those cases in which, because the hand is obviously clenched, only the knuckles or part of the fingers appear. This last will occur only in high-quality drawings where there is considerable use of perspective.

31. Opposition of thumb shown

A clear differentiation of the thumb from the fingers. Scoring should be very strict. The point is credited if one of the lateral digits is definitely shorter than any of the others (compare especially with little finger), or if the angle between it and the index finger is not less than twice as great as that between any two of the other digits, or if its point of attachment to the hand is distinctly nearer to the wrist than that of the fingers. Conditions must be fulfilled on both hands if both are shown, unless hand is grasping something; one hand is sufficient if only one is shown. Five digits are necessary for thumb to score. Fingers must be present or indicated; "mitt" hand does not score unless subject is definitely shown in winter garb, wearing mittens.

Credit

32. Hands present

Any representation of the hand, apart from the fingers. When fingers are shown a space must be left between base of fingers and edge of sleeve or cuff. Where no cuff
exists, arm must broaden in some way to suggest palm or back of hand as distinct from wrist. Characteristic must appear on both hands, if both are shown. "Mitt" hand with thumb does not score unless figure obviously is wearing mittens.

33. Legs present

Any method of representation clearly intended to indicate the legs. There must be two legs in full-face drawings, and either one or two, in profiles. Credit where long skirt hides legs or feet.

34. Hip

Full Face: The principal axes of the legs must form a distinct angle. The distance between the ankles must be greater than the distance between the inner surfaces of the legs at the skirt line, and the difference must be more than can be accounted for by contours of the calf and ankle. Do not credit in the case of a long gown.

35. Feet I: any indication

Feet indicated by any means: two feet in full-face, one or two in profile. In the case of a long gown, credit this item.

36. Feet II: proportion

Full Face: Feet must be longer than wide, or drawn in perspective.

Profile: Horizontal dimension of fore-part of foot must be greater than vertical dimension. In the case of a long gown, credit only when foot is indicated in some way, as by the tip appearing beneath the edge of the gown, etc.

37. Feet III: detail

Foot or shoe must show some ornamentation, such as a buckle, tie, strap, or sole. In the case of a long gown, do not credit unless foot is shown.

38. Shoe I: "feminine"

Credit any clear attempt to depict a feminine shoe as opposed to "brogan" or other thick, solid shoe. Note especially attempts to depict slender toe or arch, high heel, open toe, or straps. If heel is crucial point, it should be at least one-third of total height of shoe at that point. Shoe must be marked off from leg, either by a line or by profile shaping. In the case of a long gown, credit only when shoe is shown.

39. Shoe II: style

Shoe must be clearly feminine and "styled," i.e., clearly a pump, tie, open toe, wedge, saddle-shoe, etc. In the case of a long gown, credit only when clearly shown.
40. Placement of feet appropriate to figure

Full Face: Feet turned “in” or “out,” or in perspective. Do not credit primitive feet.

No Credit

Profile: Credit both feet turned in direction of head. Do not credit when feet are absent, except where long gown hides feet.

41. Attachment of arms and legs I

Both arms and legs attached to the trunk at any point, or arms attached to the neck, or at juncture of head and trunk when neck is omitted. Do not credit if either arms or legs are missing. Credit where dress hides legs and/or feet. If the trunk is omitted, the score is always zero. If the legs are attached elsewhere than to the trunk, regardless of the attachment of the arms, the score is zero. If only one arm or leg is shown, either in full-face or profile drawings, credit may be given on the basis of the limb that is shown. If both arms and legs are shown, the members of each pair must be attached approximately symmetrically. Credit where long dress hides legs and/or feet. Be careful to distinguish this item from Item 25.

Credit

42. Attachment of arms and legs II

Arms attached to the trunk at the correct position. Legs attached to the bottom of the trunk or skirt and not continuous with vertical line or drape of the skirt. Credit this point if both feet and legs are hidden by long gown.

Legs:

Credit No Credit

Arms: Full Face: Where Item 25 is failed, attachment must be exactly at the point where the shoulders should have been indicated. Score very strictly, especially when Item 25 is zero. Do not credit if arms at their place of attachment occupy as much as one-half or more of the distance from the neck to the waist. The following sketch illustrates when Item 41 but not Item 42 scores:

(See also Item 25, a, c, h, for examples which credit Item 41 but not 42.)

Arms: Profile: The attachment of the arms must be indicated at a point approximately on the median line of the trunk, at a short distance below the neck, this point coinciding with the broadening of the trunk which indicates the chest and shoulders. If the arms extend from the line which outlines the back, or if the point of attachment reaches the base of the neck, or falls below the greatest expansion of the chest, the point is not credited. Credit Item 41 but not Item 42.

43. Clothing indicated

Clothing indicated by buttons or pockets on the simple ellipse, triangle, or trapezoid figure. Credit if there is definitely a skirt, even if no buttons or pockets are shown.

44. Sleeve I

Indicated by any means.

45. Sleeve II

Indicated by more than a simple cross line. Must show button, cuff, double line, puffed sleeve (long or short), or sleeve definitely wider than the arm which protrudes from it. Where a strap or strapless gown is clearly indicated, credit both Items 44 and 45. When hands are so placed that possible cuff is hidden, do not credit unless short sleeve is clearly indicated. Note: Be careful not to confuse bracelet or wristwatch with sleeve.

46. Neckline I

Any dress line at neck other than that produced by chin or jaw. Any crude single line, straight or semicircular. Distinguish carefully from neckline.

47. Neckline II: collar

Collar indicated. Neckline must be “V’d” or definitely shaped in some other manner.

48. Waist I

Whether or not a belt is shown, the direction of the body contour must change perceptibly at and/or below the waist. If no belt or waist is drawn, a gentle,
continuous curve does not score; there must be an abrupt change in body line.

**Credit**

![Image of a figure with a continuous curve]

**No Credit**

![Image of a figure with a straight line]

49. **Waist II**

A distinct belt (two lines), sash, sweater, or blouse hem must be indicated by means better than a single horizontal line.

50. **Skirt "modeled" to indicate pleats or draping**

Irregular hemline not sufficient; lines, shading, or sketching must appear.

**Credit**

![Image of a figure with a modeled skirt]

51. **No transparencies in the figure**

There must be a garment on the figure that is clear and complete. Clothing must show neckline, sleeves, skirt hem, or slacks. No body lines may show through clothes that would ordinarily conceal them.

52. **Garb feminine**

**Young Children (under 8):** Skirt must be a distinct feature, and the body must appear in two distinct segments.

**Credit**

![Image of a figure with a skirt and a distinct body]

**No Credit**

![Image of a figure with a straight body]

53. **Garb complete, without incongruities**

Garb must contain all these elements: shoes, sleeves (hands must protrude), dress and neckline or sleeves, or skirt and blouse (or jacket). **Exceptions:** Slacks, blue jeans, sports garb, formal dress which may obstruct shoes. These are credited.

54. **Garb a definite "type"**

Types may include: formal gown, sports garb (shorts, slacks), "school garb," "dress up," house dress (should include apron), or "suit" (jacket and skirt).

55. **Trunk present**

Any clear indication of the trunk, either one or two dimensional.

56. **Trunk in proportion, two dimensions**

Length of trunk greater than breadth. In drawings by younger children, where the trunk may not be clearly differentiated from the skirt, judge body area as including skirt.

57. **Head-trunk proportion**

**Young Children (under 8):** Score in relation to body area, excluding head when no differentiation between waist and terminus of trunk or no indication of skirt is shown.

**Older Children (8 and over):** Credit drawings that indicate a garment but do not suggest a waistline, if the head is no larger than one-fourth or smaller than one-eighth of the body (including garment) area.

Profile: Score more leniently. Judge more on the length of head in relation to the length of chest area. If two lengths are about equal, or if head is the shorter length but not less than one-fourth the chest length, credit the item.

58. **Head: proportion**

**Full Face:** Length of head greater than its width. Should show a general oval shape.

Profile: Same requirement as full-face drawing, but exclude hair in estimating width.

59. **Limbs: proportion**

Length of arms and legs greater than width. When arms score, credit the item even if feet are concealed by long dress.

60. **Arms in proportion to trunk**

Both arms longer than length of trunk from shoulder (or base of neck) to waist, but not more than twice this length.

**Young Children (under 8):** Arms must be equal to body length.
61. Location of waist

This item evaluates child's ability to locate the waist. Waist located below one-third of total length of figure, crown to toe, but not below one-half of total length. (Crown is considered the top of the head, including hair but not hat.) Waistline must be indicated by belt, or by some distinct change in body contour. Do not credit when trunk and dress are indicated by uninterrupted curve, with no indication of waistline.

62. Dress area

Dress area below waist must be as large or larger than trunk area above waist but not more than twice as large (three times as large in profile). Credit if formal gown is clearly represented. For slacks, include the area occupied by the legs but not the feet. Define as waist a waistline however indicated, or estimate location from an obvious narrowing of body, or widening of hips. Do not credit in drawings by young children showing no trunk or body contours.

63. Motor coordination: junctures

All lines meet cleanly, without overlap or intervening space. Emphasis is on the juncture of lines, regardless of the character of lines.

64. Motor coordination: lines

Lines are firm, cleanly made, continuous and "controlled." If "sketchy" judge the basic character of the body lines created by the shorter pencil strokes. Both curved and straight lines must be handled with assurance. Do not credit in a drawing with extensive redrawing and erasures.

65. Superior motor coordination

Credit this point in all cases where Item 64 is achieved without redrawing or erasures, and where the total effect of lines is neat, clean, and "sure."

66. Directed lines and form: head outline

The drawing must show the contours of the head and/or face. Simple circle or ellipse to which projecting features have been added does not score.

67. Directed lines and form: breast

Any attempt, by modeling or by contour, to indicate the feminine breast. In full-face drawings, credit strapless gown if top is curved.

68. Directed lines and form: hip contour

Full Face: Hips indicated by distinct convexity below waistline. This must occur on both sides. Note that wide, uniformly curved bell-shaped flaring skirt does not score.

Profile: Convexity must be indicated over hips and buttocks.

69. Directed lines and form: arms taper

Wrist and/or forearm distinctly narrower than upper arm. Credit the point whether achieved by narrowing of sleeve or by shaping the bare arm. Where long, full sleeves are clearly indicated, credit this item.

70. Directed lines and form: calf of leg

Leg shaped better than a taper. Definite calf must be shown. Score strictly.

71. Directed lines and form: facial features

Facial features must be symmetrical in all respects. Eyes and mouth must be shown in two dimensions; nose may be indicated by dots.

Full Face: Features must be appropriately placed, regular and symmetrical, giving a clear appearance of the human form.

Profile: The eye must be regular in outline and located in the forward one-third of the head. The bridge of the nose must form an obtuse angle with the forehead. The scoring should be strict; a "cartoon" nose does not get credit.
## Short Scoring Guide *

**WOMAN POINT SCALE**

<table>
<thead>
<tr>
<th>Woman Point</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Head present</td>
<td>27. Elbow joint shown</td>
</tr>
<tr>
<td>2. Neck present</td>
<td>28. Fingers present</td>
</tr>
<tr>
<td>3. Neck, two dimensions</td>
<td>29. Correct number of fingers shown</td>
</tr>
<tr>
<td>4. Eyes present</td>
<td>30. Detail of fingers correct</td>
</tr>
<tr>
<td>5. Eye detail: brow or lashes</td>
<td>31. Opposition of thumb shown</td>
</tr>
<tr>
<td>6. Eye detail: pupil</td>
<td>32. Hands present</td>
</tr>
<tr>
<td>7. Eye detail: proportion</td>
<td>33. Legs present</td>
</tr>
<tr>
<td>8. Cheeks</td>
<td>34. Hip</td>
</tr>
<tr>
<td>9. Nose present</td>
<td>35. Feet I: any indication</td>
</tr>
<tr>
<td>10. Nose, two dimensions</td>
<td>36. Feet II: proportion</td>
</tr>
<tr>
<td>11. Bridge of nose</td>
<td>37. Feet III: detail</td>
</tr>
<tr>
<td>12. Nostrils shown</td>
<td>38. Shoe I: &quot;feminine&quot;</td>
</tr>
<tr>
<td>13. Mouth present</td>
<td>39. Shoe II: style</td>
</tr>
<tr>
<td>14. Lips, two dimensions</td>
<td>40. Placement of feet appropriate to figure</td>
</tr>
<tr>
<td>15. &quot;Cosmetic lips&quot;</td>
<td>41. Attachment of arms and legs I</td>
</tr>
<tr>
<td>16. Both nose and lips in two dimensions</td>
<td>42. Attachment of arms and legs II</td>
</tr>
<tr>
<td>17. Both chin and forehead shown</td>
<td>43. Clothing indicated</td>
</tr>
<tr>
<td>18. Line of jaw indicated</td>
<td>44. Sleeve I</td>
</tr>
<tr>
<td>19. Hair I</td>
<td>45. Sleeve II</td>
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<tr>
<td>20. Hair II</td>
<td>46. Neckline I</td>
</tr>
<tr>
<td>21. Hair III</td>
<td>47. Neckline II: collar</td>
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<tr>
<td>22. Hair IV</td>
<td>48. Waist I</td>
</tr>
<tr>
<td>23. Necklace or earrings</td>
<td>49. Waist II</td>
</tr>
<tr>
<td>24. Arms present</td>
<td>50. Skirt &quot;modeled&quot; to indicate pleats or draping</td>
</tr>
<tr>
<td>25. Shoulders</td>
<td>51. No transparencies in the figure</td>
</tr>
<tr>
<td>26. Arms at side (or engaged in activity or behind back)</td>
<td>52. Carb feminine</td>
</tr>
<tr>
<td></td>
<td>53. Carb complete, without incongruities</td>
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<tr>
<td></td>
<td>54. Carb a definite &quot;type&quot;</td>
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<tr>
<td></td>
<td>55. Trunk present</td>
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<td></td>
<td>56. Trunk in proportion, two dimensions</td>
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<tr>
<td></td>
<td>57. Head-trunk proportion</td>
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<td></td>
<td>58. Head: proportion</td>
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<tr>
<td></td>
<td>59. Limbs: proportion</td>
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<td></td>
<td>60. Arms in proportion to trunk</td>
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<tr>
<td></td>
<td>61. Location of waist</td>
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<td></td>
<td>62. Dress area</td>
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<td></td>
<td>63. Motor coordination: junctures</td>
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<td></td>
<td>64. Motor coordination: lines</td>
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<td></td>
<td>65. Superior motor coordination</td>
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<tr>
<td></td>
<td>66. Directed lines and form: head outline</td>
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<td></td>
<td>67. Directed lines and form: breast</td>
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<tr>
<td></td>
<td>68. Directed lines and form: hip contour</td>
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<tr>
<td></td>
<td>69. Directed lines and form: arms taper</td>
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<tr>
<td></td>
<td>70. Directed lines and form: calf of leg</td>
</tr>
<tr>
<td></td>
<td>71. Directed lines and form: facial features</td>
</tr>
</tbody>
</table>

* For use only after the scoring requirements have been mastered.

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### Instructions for Converting Raw Scores to Standard Scores

To find the standard score equivalents for a given child, certain values are needed—the child's age and his raw score on each drawing. Calculate his age in years and months. Score each drawing to find his raw score—the total number of points he has earned. On the face page of the test booklet, enter a separate raw score for each drawing. Turn to the appropriate conversion table in this section (Tables 32-35). Separate tables are provided for boys and girls, and for the Man and Woman scales. Because the standardization samples were constructed so as to center at the mid-year in each age group, a child six years and no months old, and a child six years and eleven months old is each considered to be six years old. Enter the conversion table in the appropriate age column and in the row corresponding to the calculated raw score. The value in the table at the intersection of the row and column is the child's standard score. As explained in Chapter IV, this score expresses the child's relative standing on the test in relation to his own age and sex group, in terms of a mean of 100 and a standard deviation of 15. Thus, a standard score of 120 tells us at once that a child is one and one-third standard deviations above the average of his age and sex group.

Because standard measures can be averaged directly, it is possible to obtain an average measure on the Man and Woman drawings by summing the two standard scores and dividing by two. The result is a more reliable estimate of the child's maturity as measured by drawings than his score on either test alone. However, because the correlation of the two measures is somewhat below the reliability of either scale, measured on a test-retest basis, the two scales may be considered to evaluate somewhat different functions. The psychologist may wish, therefore, to keep the two estimates distinct.

It is possible to score the Self drawing with the Point scale of the appropriate sex and use it as a third estimate of intellectual maturity as measured by the Drawing Test. There is less precedent for doing this, however, since the empirical relationships have not been worked out on the Self figure, using the Point scales. The self-portrait has not been standardized and must, therefore, be considered as only a tentative measure of maturity.
### Table 32 (continued)

<table>
<thead>
<tr>
<th>RAW SCORE</th>
<th>CHRONOLOGICAL AGE IN YEARS</th>
<th>RAW SCORE</th>
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<td>146 130 119 109 102 98 94 91 88 87</td>
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<td>73</td>
<td>149 145 143 140 139 139 139 139 99 123</td>
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</table>
### Table 33: Table for Converting Raw Scores to Standard Scores

**Drawing of a Man, by Girls**

<table>
<thead>
<tr>
<th>RAW SCORE</th>
<th>CHRONOLOGICAL AGE IN YEARS</th>
<th>RAW SCORE</th>
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* These values have been calculated from samples which are not as representative as the age samples from 5 through 16 years. They are likely to be a little high for unselected or more adequately representative samples. They are offered as tentative guides for use with preschool groups.
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* These values have been calculated from samples which are not as representative as the age samples from 9 through 15 years. They are likely to be a little high for unselected or more adequately representative samples. They are offered as tentative guides for use with preschool groups.
### Table 35

**Drawing of a Woman, by Girls**

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*These values have been calculated from samples which are not as representative as the age samples from 5 through 15 years. They are likely to be a little high for unselected or more adequately representative samples. They are offered as tentative guides for use with preschool groups.*

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### Table 35 (continued)

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The Test Manual
Instruction for Using the Quality Scales

The Quality scales, described fully in Chapter VII, permit a much more rapid evaluation of drawings than the Point scales, but results are not so precise. When a rough estimate of the child’s level of maturity will suffice, these scales are useful.

Arrange the plates of each scale before you, one sex at a time, or pin them in order on the wall in front of your desk. Each drawing in the scale represents a level of maturity; from 1.0, representing the least mature drawing, to 12.0, representing the most mature drawing.

First study the scale for a few minutes. Look at each drawing in turn. Notice that there is a progression in accuracy of detail and proportion from the first drawing to the last.

Take each drawing to be scored and compare it with the sample pictures in the scale. When you decide which drawing in the scale is most like the one you are judging, give the value of the scale example to the drawing you have before you. Enter the value on the face sheet of the test booklet under Quality scale for Man or Woman, as the case may be.

If there are many drawings to be scored, place them in groups on the table before you, according to the values assigned. Thus you will have several stacks of drawings with all those rated 2.0 placed together, all those rated 3.0 placed together, etc. When you have assigned values to all the drawings, take each stack in turn and go through it, to make sure that the drawings in that group are more or less equal in scale value. Change the value given any drawing until you have placed it in the category most representative of its maturity.

No Quality scale has been constructed for the Self drawing, and it seems inappropriate to use the plates for the Man and Woman scales to judge it. Children above seven or eight years include many juvenile features in their self-portraits—items of clothing, accessories, and the like—which may influence the global impression of the drawing, essentially the basis of the Quality scale method. The effect of these juvenile features on the judgment of such drawings has not been studied, but may be considerable.

The Quality scale plates are reproduced on the pages that follow; M-1 through M-12 for the Man scale, and W-1 through W-12 for the Woman scale.
Instructions for Converting Quality Scale Scores to Standard Scores

Standard score equivalents for Quality scale values are listed in Tables 36 through 39. These tables are used as described on page 293 in reference to Tables 32-35. The standard score obtained from a Quality scale score is comparable to the standard score obtained from a Point scale raw score.

### Table 36
**Standard Score Equivalents for Quality Scale Scores**

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### Table 37
**Standard Score Equivalents for Quality Scale Scores**

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### TABLE 38

#### Standard Score Equivalents for Quality Scale Scores

**Drawing of a Woman, by Boys**

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### TABLE 39

#### Standard Score Equivalents for Quality Scale Scores

**Drawing of a Woman, by Girls**

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### Table 40

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Completed Test Booklet

A completed test booklet is reproduced on the following four pages to illustrate its use. Although these particular drawings are superior, the same method of completing the booklet would apply to any drawings.

Goodenough-Harris Drawing Test

By Florence L. Goodenough and Dale B. Harris

Name: Karen Smith
School: Parkway School
Grade: Second
Age: 8
Birth Date: May 3, 1955
Father’s Occupation: Herdsman at University Farm

Date of Drawing: May 3, 1953
Sex: Girl

Examiner’s Notes

Summary

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Make Your First Drawing Here

Draw a picture of a man. Make the very best picture you can. Be sure to make the whole man, not just his head and shoulders.

Make Your Second Drawing Here

Draw a picture of a woman. Make the very best picture you can. Be sure to make the whole woman, not just her head and shoulders.
Make Your Third Drawing Here

Make the very best picture you can. Be sure to make your whole self, not just your head and shoulders.

Raw Score: 42
An Introduction to the Projective Uses of Children’s Human Figure Drawings

By Marvin Klepsch and Laura Logie
CHAPTER 4

DRAWINGS AS A MEASURE OF PERSONALITY

RESEARCH TO DATE

Introducing the Draw-a-Person Test (DAP)

Karen Machover (1949) was the first to analyze human figure drawings (HFDs) with a view to measuring the projected self. Her analyses were based on the body-image hypothesis. She believed the human figure drawn by the individual directed to "draw a person" related intimately to the impulses, anxieties, conflicts, and compensations characteristic of that individual. In a way, the figure drawn is the person, and the paper, the environment.

According to this hypothesis, various sensations, perceptions, and emotions are located in certain body parts. As a result, the body-image is developed. Prytula, Phelps, Morrissey and Davis (1978) say this image, since it is formed out of the individual's unique experiences, guides the drawer, providing a natural vehicle for the expression of body needs and conflicts.

Machover paid particular attention to certain aspects of a drawing, such as: size of figure; placement on the page; rapidity of graphic movement; pencil pressure; solidarity and variability of lines used; the succession of parts drawn; the use of background; spontaneity or rigidity; whether the figure was drawn in profile or frontal view. In analysis, she considered the properties of each part of the body, the tendency toward incompletion, the amount of placement of detail,
the amount and focus of line reinforcements, erasures and line changes, the degree of symmetry, the treatment of the midline, the mood expressed in the face or posture of the figure. Certain meanings became attached to specific body parts. The head, for example, was considered the location of the self and the center of intellectual power, social dominance, and control of body impulses. Large heads might be drawn by those suffering from organic brain damage or by those placing great importance on intellectual achievement.

In a later work, Machover (1953) focused on the drawings of children and traced their development with children aged five through 11. The drawings of public school middle-class children, public school black children and Jewish private school children were compared.

**Scoring and Interpreting the DAP Test**

The body-image hypothesis gave rise to a number of scoring and interpretative systems. Urban (1963) produced a catalogue for the interpretation of the Draw-a-Person (DAP) Test, deriving much of his material from Bender, Buck, Goodenough, Hämmer and Machover. A similar catalogue was devised by Jolles (1971) for the House-Tree-Person (HTP) Test. While his interpretations are presented somewhat dogmatically, Jolles does point out that many of them are only hypotheses and must be used in the context of all other factors of the HTP Test, together with a case history and complete background of the individual.

More recently, a handbook was written by Ogden (1975) to assist practitioners in evaluating personality. The section on projective drawings was well researched. Ogden stressed that his book should be used only by persons with a thorough grounding in clinical and projective psychology. As to the use of a specific indicator, he warned against doing this in isolation and out of context.

Some researchers have focused on the HFDs of special children. Basing their interpretations on the findings of Machover and Koppitz, authors Schildkrout, Shenker and Sonnenblick (1972) examined specifically the personality traits of disturbed youngsters, aged 12 to 18. The problems they studied were those of sexual identity, physical illness, organicity, neurosis, psychosis, and depression as manifested in the adolescents' drawings. Di Leo (1973), on the other hand, uses the drawings of the learning-disabled, dyslexic, mentally retarded, neurologically impaired, sensory-impaired and physically disabled to gain a deeper insight into these children's special concerns and to diagnose deviations from normality.

Actually, it was Koppitz (1966a, 1968) who developed the first
refined scoring system for evaluating the drawings of young children. In differentiating children with emotional problems from normals, she considered 30 emotional indicators significant. In a validity study, she found that the emotional indicators occurred more often in the drawings of children attending a guidance clinic than in the drawings of well-adjusted students. The presence of two or more of these indicators was found to be highly suggestive of emotional problems and unsatisfactory interpersonal relationships. The Koppitz system scores three types of items:

1. Items that relate to the quality of the drawing, such as the type of line, integration, shading, asymmetry of lines, size of figures, slant of figure and transparencies;
2. Items or features not usually found on HFDs, including tiny or large heads, crossed eyes, teeth, short or long arms, big hands, clinging arms, legs pressed together, genitals, monster-like figures and clouds, snow or rain;
3. Omissions of items, such as eyes, nose, mouth, body, arms, legs and neck.

Pate and Nichols (1971) developed a scoring sheet to help those already familiar with the Koppitz scoring procedures. In 1970, Engle and Suppes developed a weighted scoring system. Indicators, instead of just being scored as present or absent, were weighted according to their previously demonstrated predictive power. In all, they identified 27 items as anxiety indicators. The total HFD score was correlated with the Test Anxiety Scale for Children, a self-report measure of anxiety. A low but significant relationship was found. When this system was used in a study of children's responses to dental treatment, Sonnenberg and Vehnham (1977) also found a low but significant correlation between the HFD score and the score on a self-report measure. The HFD score also related significantly to heart rate, basal skin response, and clinical ratings of anxiety.

The Evanston Early Identification Scale (EIES) was devised by Dillard and Landsman (1968) to predict school problems from the HFDs of kindergarten children. Through this early screening device, the authors hoped to identify pupils who should be referred for special help because of academic, perceptual, or emotional difficulties. The 10 items (scored if missing) and their respective weights were: Hair (1), eyes (2), nose (2), mouth (3), arms (2), hands (2), legs (1), feet (2), body (4), correct position of body parts (2). When the respective mean EIES scores of those referred and those not referred were compared, the referred children had significantly higher means. Since
there were no significant differences between the mean IQs of the two
groups, the results were not influenced by intelligence.

Apfeldorf, Walter, Kaimen, Smith and Arnett (1974) devised a
method of evaluating affective responses to HFDs. In contrast to other
systems, this method took into account the number of affective
responses present when a rater was first presented with a drawing. Ac-
cording to the authors, while two drawings may contain the same for-
mal scoreable content, they may elicit different impressions and
evaluations from the rater. The need for training prospective raters
was discussed.

Sexual Identification on the DAP

It is generally believed that an HFD is an expression of self- or body-
image. When asked to draw a person, children usually draw their own
self sex. They also draw those to whom they feel close, as is the case
with very young children who often draw their mother. Machover
(1949) believed that if a child drew a figure of a different sex than his
own, he could be experiencing difficulties with normal sexual iden-
tification.

Schildkrot et al. (1972) maintained that girls have less sense of
sexual identity than boys. They suggested that adolescent girls go
through a period of bisexuality when they are less defended than boys
in regard to this sexual confusion. Phelan (1964) claimed that sixth
grade boys who drew the opposite sex were from homes with a weak
father, were dependent and viewed themselves as being dominated,
felt inadequate, had a poor attitude toward their father, and/or were
from homes with dominating mothers.

Research studies consistently tell us that the majority of boys and
girls draw their own sex when asked to draw a person. Heinrich and
Tribe (1972) found this to be true in every one of the 19 studies they
reviewed. They also found sex differences beginning at around age
11, with adolescent boys more frequently drawing same-sex figures
than adolescent girls. Bieliauskas (1950) examined 1000 HFDs from
children aged four through 14 years. He, too, found that both sexes
favored their own sex when drawing a person. The tendency to do
this increased with age, particularly after age nine, although the
developmental pattern was more stable for boys than girls. An earlier
study by Weider and Nolles (1953) had resulted in the same finding.
However, in this case, there were differences between the boys and
the girls: 70 percent of the boys drew their own sex first, while 94 per-
cent of the girls drew their self-sex first. The differences were statisti-
cally significant. Tolor and Tolor (1974) gave the Draw-a-Person task
to 232 public school children. The results indicated that 91 percent of the boys drew their own sex, while 94 percent of the females drew their own sex. The authors attributed the large number of girls drawing their own sex to the Women's Liberation Movement. Brown (1979), in a study using 366 children ages five through 11, found that girls drew female figures 88 percent of the time, while boys drew male figures 94 percent of the time. Younger boys drew more females, perhaps because of greater involvement with the mother. Girls ages nine and 10 drew more males. The authors speculated that the reason might be either more involvement with their fathers or an attempt to compete with their brothers for their father's affection. Fisher (1961) found that delinquent adolescent boys, who drew female figures first when asked to "draw a person and then a person of the opposite sex," had a significantly greater incidence of nudity in both figures.

Sexual ambiguity in HFDs was the concern of Rierdan and Koff (1981). When 461 children in grades five through nine were asked to draw a person and indicate the sex of the person, eight percent of them were unable to classify their drawings as to sex. The researchers attributed this to an ill-defined sexual identity. In their opinion, the children who express uncertainty about their drawings require further investigation.

Hammer and Kaplan (1964a) were particularly interested in examining the reliability of the sex drawn. They found that children who draw an opposite-sex figure one time do not necessarily do this the next time. Litt and Margoshes (1956) replicated this study, except that the children were asked to draw on three different occasions instead of only two. Like Hammer and Kaplan, they found considerable variability in their drawings and urged caution in interpreting opposite-sex drawings as a measure of sexual identification.

Validity of the DAP

For Scoring Systems

The validity of the Koppitz scoring system has been tested by several investigators. Snyder and Gaston (1970) advised caution in its use, particularly in drawing inferences about personality from specific indicators. They reported finding elevated and rigid figures (both considered by Koppitz as indicators of anxiety) in 31 to 62 percent of the 680 drawings of the entire first-grade population from nine schools. Pfihl and Nimrod (1976) found relatively high correlations between raters using the Koppitz system but questioned the validity of the procedure. No relationship was found between the score on a drawing
and all but one subtest score of the Children's Personality Questionnaire (Porter and Cattell, 1963). The exception was the anxiety score, which had a low correlation. Hall and Ladriere (1970) compared six different systems for scoring young children and found that only the Koppitz and Evanston Early Identification Scale (EEIS) systems significantly distinguished between problem and non-problem children. The authors said that the choice between the two must be based on considerations such as normative developmental orientation, which is the strength of the Koppitz system, or scoring ease and brevity, which are the advantages of the EEIS.

The validity of the Machover DAP technique was studied by Blum (1954). The DAP score was compared with ratings by psychiatrists, a battery of psychological tests, and rating scales. The DAP was found to have questionable validity but proved no worse than the other common clinical assessment procedures used.

For Shy and Aggressive Children: According to Koppitz (1966b), nine HFD indicators significantly differentiated shy and aggressive children. These were gross asymmetry of limbs, the presence of teeth, long arms, big hands, genitals, tiny figure, hands cut off, and the omission of the nose and mouth. The first five appeared only in the drawings of aggressive subjects. A similar study by Lingren (1971) did not replicate these results, perhaps due to sampling differences. The Koppitz sample was drawn from children in a Mental Health Clinic, while Lingren used a sample of non-clinic children.

For Predicting Acting-out Behavior: Hammer (1980), from his years of clinical experience and research, finds drawing useful in predicting “acting-out” behavior. He regards other projective tests such as the Thematic Apperception Test (TAT) or the Rorschach as inadequate for this purpose. The information gained from the stories told in response to the TAT pictures is often about what the subject dreams of doing but never actually does. The Rorschach, while useful for describing what a person is like, is not useful for predicting what a person will do in the future. Only drawings, Hammer maintains, will give us clues to what a person will do at a later date. Drawings are a means of psychomotor release and what is drawn on the page is likely to result in action later on. Indicators viewed as clues to later “acting out” behavior are: size — when a drawing is pressing out against the sides of the page, the drawer has difficulty with limits; sequence — when drawings start out controlled but end up uncontrolled; pressure — heavy pressure; strokes — short, aggressive strokes; symmetry — a lack of symmetry; dissociation — when, for example, a child draws an ag-
gressive person and his verbal description of the drawing shows that he is quite unaware of this.

For Black vs. White Personality Adjustment: Hammer (1953) compared the House-Tree-Person (HTP) drawings of black and white normal children in grades one through eight. He found black children more maladjusted, hostile and aggressive than white. A significantly higher percentage of drawings by black children were space-constricted, too large for the page, without adequate space framing them, and touching or almost touching the edge of the page. McHugh (1963) studied the drawings of black, Puerto Rican, and white children. While she found that Puerto Ricans drew smaller persons than whites, she found no indications of frustration and aggression. The evidence for the greater space constriction in blacks' drawings was minimal. McHugh concluded that blacks were not more frustrated and aggressive than whites. A replication of Hammer's study was carried out by Kuhlman and Sthellaukas (1976), who, however, matched their groups for intelligence and socioeconomic status. No significant differences were found between black and white groups' HTP IQ measures or on personality adjustment ratings.

For Organicity: Back in 1956, Reznikoff and Tomblen investigated the degree to which 15 indicators suggestive of organicity characterized the drawings of patients with organic problems, in comparison with drawings of those with psychiatric problems. Five indicators turned up more often among the "organic" group: weak synthesis; parts misplaced; shrunken arms and legs; parts other than the head and extremities distorted; and petal or scribbled fingers. The authors, however, cautioned against relying solely on a sign approach when analyzing drawings.

For Socioeconomic Differences: Using her scoring system, Koppitz (1969) tried to find out if differences in socioeconomic background were related to specific emotional indicators on HFDs. She found that the usual characteristic differences between boys and girls were greater than the differences due to socioeconomic status. It is interesting to note that, in 1980, Szasz, Baade, and Paskewicz found that socioeconomic status was a better predictor of success in kindergarten than either the Koppitz emotional or developmental scores. While cautioning against the exclusive use of drawings in screening for school readiness, they do suggest their use with some populations.

For Anxiety: Several studies have examined the validity of certain specific indicators used to determine the presence of anxiety. Johnson
(1971b) explored the validity of upper lefthand paper placement as an indicator of anxiety. The subjects were administered the Draw-a-Person (DAP) Test and the Institute for Personality and Ability Testing (IPAT) Anxiety Scale. Upper lefthand placement was found significantly more often in those with higher anxiety scores on the IPAT. Opposite results were obtained in a study by Swartz, Laosa and McGavern (1976), who found no relationship between Sarason's Test Anxiety Scale for Children (Sarason et al., 1960) for children and upper lefthand drawing placement. Other variables, such as conceptual maturity, cognitive inhibition, and the ability to estimate time, were considered to be related to spatial placement.

The HDFs of "high" and "low" anxious children were studied by Fox, Davidson, Lighthall, Watke, and Sarason (1958). The drawings of the high anxious subjects showed more mutilation and rigidity, and those of low anxious subjects more playfulness, humor, smiling, and arms in down position. While high anxious boys had more shading than low anxious boys, low anxious girls had more shading than the girls who were high in anxiety.

In another study, by Prytula and Hiland (1975), Sarason's General Anxiety Scale for children correlated with specific indicators on the DAP. No significant relationships were found between these measures. The study offered no support for maintaining that head-body ratio, erasures, omissions, and transparencies accurately differentiated normal elementary school children on the basis of general anxiety.

HDFs have been used by Sonnenberg and Venham (1977) to measure children's response to dental treatment. The response to each dental visit was assessed using the HDF as well as five additional measures: heart rate, basal skin response, picture test of anxiety, clinical ratings of anxiety, and a clinical rating of cooperative behavior. The HDF score was significantly related to all the other measures except the cooperative behavior ratings. An interesting finding was that children suppress signs of overt fear and anxiety with increasing age, and this gives a misleading impression of older children's feelings toward their dental experience.

Using the IPAT Anxiety Scale, Johnson (1971a) investigated the validity of three indicators—shading, erasures, and line reinforcement. A significant relationship was found between shading and the IPAT score, but nonsignificant relationships were found for erasures and line reinforcement.

Handler and Reyher (1965) reviewed 51 studies of HDFs with reference to 21 anxiety indicators. The research results seemed to uphold the validity of a number of them—specifically, omission,
distortion, detail loss, line pressure increase, heavy line, size increase and decrease, head simplification, and trunk simplification. Evidence was less consistent for reinforcement, line discontinuity, light line, vertical imbalance, line absence, and transparency. Some of the studies reviewed recorded significantly less shading, erasure, reinforcement, placement in the upper lefthand corner, and emphasis than had been expected.

In a study of the drawings of both children and their parents, Sopchak (1970) found little relationship between the scores of the two groups. Since differences in development could explain differences between age groups, Saarni and Azara (1977) compared the anxiety indicators found in the drawings of adolescents, young adults, and middle-aged adults. They discovered that the adolescents were much more likely to present more anxiety indicators than the adult groups. There was no difference in this regard between young and middle-aged adults.

For Stress: Handler and Reyher (1964) examined the effect of stress on the drawings of 57 college students. The subjects made drawings of a male, female, and automobile under both stress and non-stress conditions. More anxiety indicators were present in the drawings done under stress than in the non-stress situation. The two drawing patterns that emerged under the stress conditions were constriction and expansion. If anxiety indicators were present in both figures and the automobile, the authors speculated that the anxiety was probably due to external stress. If anxiety indicators were present in the human figure drawings but not in the automobile, the source of anxiety was due to internal stress (subjects use erasure, reinforcement, etc., to cope with, rather than avoid, threatening material). If anxiety indicators were present in the automobile but not the figures, the source of anxiety was due to internal stress but the defensive style was avoidant rather than coping. The study also found significantly more anxiety when drawing a person than the car.

In another study of the effects of stress on drawings, Stumer and Rothbaum (1980) took as their subjects 68 children, ages four to 12, who were hospitalized for elective surgery. The group of children prepared in advance for stress (in this case a blood test) were able to cope better and had significantly fewer emotional indicators in their drawings than the group who were unprepared for the blood test.

On the subject of stress, Koppitz (1960) had something to say too. She found that the HFD of first-graders whose teacher was tense, unsmiling, and rigid contained more emotional indicators than the drawings of children who had a warm, loving, friendly teacher. We
suggest a more direct way to assess the children's attitude toward their teacher would have been to ask them to draw their teacher.

For Self-Esteem: Do human figure drawings actually express self-esteem, and if so, in what way? Coopersmith, Sakai, Beardslee, and Coopersmith (1976) set themselves the task of finding out. On the basis of the Coopersmith Self-Esteem Inventory and a teacher behavior rating scale, they identified five types of self-esteem groups. The HFDs were scored on 15 variables describing their different aspects. There were five significant differences between the higher and lower self-esteem groups. The drawings of those higher in self-esteem contained well-drawn hands, indicated affect, and appropriate social role. They gave an overall impression that they were free from pathology and drawn by a likeable person. It was found, too, that the subjects' behavioral expressions of self-esteem more closely matched the HFD characteristics than did their subjective evaluations. The authors concluded that, while HFDs are indeed associated with self-esteem, the association is not as clear-cut as generally believed.

There have been several studies investigating the relationship between size of drawing and self-esteem. Machover claimed that children with high self-esteem drew larger figures than those with low self-esteem. However, Dalby and Vale (1977) found no significant relationship between fifth grade children's scores on the Coopersmith Self-Esteem Inventory and the height of the HFDs. They also found no relationship between the teacher's ratings of self-esteem and the height of the HFDs. They then compared the subject's drawing of himself with the drawings of two friends of the same age. The relative size of the figures appeared unrelated to self-esteem.

Prytula and Thompson (1973) also found no relationship between size of figure and the score on the Coopersmith Self-Esteem Inventory. In their study, children ages 10 through 13 were asked to draw self, man, woman, and Eskimo. They tended to draw the Eskimo larger than the other figures, perhaps (the authors thought) due to the fact that they were unfamiliar with the Eskimo figure. In 1978, Prytula et al. confirmed the previous findings. The variables of size used in the study were body height and width, head size, and total area. Self-concept was measured by the Piers-Harris Scale and the Coopersmith Self-Esteem Inventory.

In his studies, Black (1972) found that the HFD height definitely correlated with chronological age, with actual height, and with perceived height of the subject. He concluded that, while psychodynamic factors may have some influence, age, height, and perceived height were more significantly related to HFD size. Wilee and Davis
(1976) took the discussion in a different direction. They pointed out that the size of the HFD could be a function of group versus individual administration! When tested individually, subjects high in self-esteem drew taller and larger figures than those low in self-esteem. When tested in a group, however, there were no differences in size between the HFDs of the two types of subjects.

For Learning-disabled: The drawings of learning-disabled children attracted the special attention of Bachara, Zaba, and Raskin (1975), who found that they contained more emotional indicators than a control group with no learning problems. The learning-disabled group paid more attention to the eyes. Since many of them were perceptually impaired, this suggested a possible awareness of their particular problem.

Wagner (1980), who also studied the HFDs of learning-disabled children, found in them signs of a poor self-image. He divided the drawings into four descriptive categories: Category I, “Developmental Immaturity,” drawings are typical of those done by younger children. Category II, “Aggression/Withdrawal Tendencies,” drawings may be either tiny, insignificant figures or boisterous, ebullient ones. Category III, “Organicity,” drawings are sketchy, with empty spaces filled in with shading. Category IV, “Grotesqueness or Bizarreness,” drawings contain disproportionate body size, eccentric accessories, or magnified detail.

The reading-disabled were the subjects of a special investigation by Stavrionos (1970). Using the House-Tree-Person (HTP) Test, this researcher compared good readers, deficit readers with emotional problems, deficit readers with neurological problems, and deficit readers without neurological problems. Compared with the good readers, the groups with reading problems exhibited fewer normal and more withdrawn, constricted, dependent, and organic patterns. Among the problem readers, the greatest differences were found in the younger boys of average intelligence without neurological impairment! Stavrionos concluded that projective test data can help in the differential diagnosis of reading deficit.

For Deaf and Hearing-impaired: A study comparing the HTP drawings of young deaf and hearing-impaired children was done by Davis and Hoopes (1975). Since the ears and mouth are the special trouble sites for deaf children, the authors expected to see some differences in their representations of these particular features. There were none. Davis and Hoopes suggested that future research of the HTP Test should be directed to the qualitative aspects of the drawings rather than to the development of a checklist of single indicators.
For Obese Subjects: In the case of obese children, Nathan (1973) found that the subjects' drawings of male and female figures were no larger than those of their matched controls. However, qualitative analysis revealed that the drawings of obese children were more undifferentiated and contained more stick figures and a large number of bizarre, distorted representations.

For Physically Handicapped: The studies which follow are based on the assumption that a child will represent his physical self in his drawings, and if he has some kind of physical handicap, he will indicate that in some way.

Wysocki and Whitney (1965) confirmed this assumption and found that crippled children indicated their deformity in some manner. They also found that crippled children expressed more aggression in their drawings but that the intensity of aggression depended on the specific nature of their handicap. Centers and Centers (1963) also found that the majority of limbless children represented themselves realistically and either left out a limb or included a prosthetic device. While their body images differed from those of normal children, their drawings did not contain more indicators of conflict or anxiety. Silverstein and Robinson (1956) used three different methods to determine whether drawings reflected the physical disability of subjects. According to their own examination of the drawings, more than three-quarters of the children represented their disability. However, a comparison of the drawings of the handicapped with those of normals, using 55 indicators, showed a nonsignificant number of differences. Also, experienced judges were unable to differentiate the drawings of disabled and normal children. Johnson and Wawrzaszek (1961) found that drawings which received higher IQ ratings (greater detail and perspective) were often considered as normal, when comparing drawings of the physically handicapped with normals. The drawings of handicapped children tended to be somewhat larger.

In order to find out if the drawings of poliomyelitis patients reflected their disability, Johnson and Greenberg (1978) gave the Draw-a-Man Test to polio patients and their matched controls. No significant differences were found between the two groups when the drawings were rated for quality. Of the 17 variables rated in an analysis of variance, only one was significant for the disability group. The authors concluded that quality may sometimes mask the projective aspect in HFDs.

The verbal descriptions of handicapped and normal children's drawings of a house, tree and person were compared by Wawrzaszek, Johnson, and Sciera (1958). They found no differences between the two groups.
For Congenital Heart Disease Children: The size of the drawings of children with cardiac disease was compared with the size of drawings of normal, retarded and emotionally disturbed children. Children with heart disease typically depicted themselves smaller than the normal children. This finding led authors Green and Levitt (1962) to infer that children with heart disease have a constricted view of their bodies.

For Encephalitic Children: Bender (1940) found the drawings of non-retarded children with encephalitis similar to those done by the mentally retarded. The drawings were lacking in detail and showed poor eye-hand skills.

For Mentally Retarded: The body image of normal and retarded children was investigated by Wysocki and Wysocki (1973). The children ranged in age from nine to 13 years. Mean IQ for the retarded group was 61 and for the normal group 102. The drawings of the retarded group were larger in size; contained fewer erasures, less clothing, less detail; were less symmetrical; demonstrated a rigid, horizontal positioning of arms. Normal children's drawings were smaller in size; contained more erasures, more clothing and more detail; were more symmetrical; and the arm position was more fluid. Bellamy and Daly (1969) also found a relationship between size of figure and IQ. With an increase in IQ, there was a corresponding decrease in the size of the HFD. Ottenbacher (1981) found that the size of the figure drawn was related to self-concept. Females tended to have better self-concepts than males, and the size of the figure, as well as the overall DAP score, was related to self-concept as measured by the Piers-Harris Self-Concept Scale. Subjects with poorer self-concepts tended to produce smaller drawings. Finally, De Martino (1954), in comparing the drawings of retarded, homosexual males with those of retarded, heterosexual males, found more eyelashes and high heels in the homosexuals' drawings.

For Emotionally Handicapped: Kopitz demonstrated the validity of 30 drawing indicators in differentiating emotionally handicapped clinic patients from well-adjusted school children. A cross-validation study of Fuller, Preuss and Hawkins (1970) supported her contention that emotional indicators occur more often in the drawings of disturbed children, but did not support the view that two or more indicators suggested emotional problems and poor interpersonal relationships. Fifty-eight percent of the emotionally disturbed group either had one indicator or none in their drawings. They would have qualified as normal if two or more indicators had been the cut-off point.

Springer (1941), using the Goodenough scale, was unable to dif-
ferntiate between the drawings of the adjusted and the maladjusted. He did, however, find a tendency for the maladjusted to include more detail in their drawings, while the adjusted were slightly better on items involving motor coordination and correct proportions. The drawings of different kinds of emotionally disturbed children were compared by McHugh (1966). Neurotics drew small, slight figures and placed them farther from the bottom of the page that did the children with conduct disturbances. While all of the conduct disturbance children drew their self-sex, neurotic boys often drew female figures.

Machover suggested that eye-ear emphasis on the DAP was suggestive of paranoia. However paranoid hospitalized patients did not emphasize these parts in their drawings, so the validity of this indicator was seriously questioned by Griffith and Peyman (1959) and Ribler (1957).

Reliability of the DAP

Many of the HFD scoring systems can be used reliably with high interrater reliability. In the Klepsch (1979) study, 264 drawings were scored independently by two raters. Each drawing was scored for 13 indicators and the percentage of agreement between the two raters was 91 percent.

Hammer and Kaplan (1966) were interested in another aspect of reliability. They had over 1300 children in grades four, five, and six draw a person and then a person of the opposite sex. One week later, they had the children repeat this task. The investigators wanted to find out if the children drew the figures the same both times. The following indicators were found to be reliable, i.e., the same on both administrations: missing fingers; heads without bodies; upper, lower and left placement on a page; shading; erasures; type of mouth; frontal view drawings. Indicators found unreliable or different on each administration were: the omission of hands, feet and nose; placement on the right side of the page; the drawing of teeth; right profile drawings. With regard to sex differences, boys exceeded girls in shading, drawing heads without bodies, drawing teeth, and right-facing profile drawings. Girls exceeded boys in leaving out body parts and had a tendency to erase more.

Effect of Training

Effect of Perceptual Training: Some researchers have examined the influence of perceptual training on children's drawing scores. Coyle, Clance, and Joesting (1977) found that perceptual enrichment ac-
tivities did not significantly increase scores on the Goodenough-Harris Draw-a-Man Test. The activities consisted of body awareness exercises, imaging of body parts, and air tracing of these parts. Miller, Sabatino, and Miller (1977) also found that special training in visual perception did not influence scores. The 14 visual-perceptually impaired children who received 30 minutes of daily instruction for a 12-week period received no better scores than their matched controls. Bachara and Zaba (1976) reported that four to six months of training did, in fact, influence drawing scores. While pretest results indicated that 35 children had more Koppitz emotional indicators than their controls, the posttest emotional indicators were similar for both groups.

Effect of Art Factors: Solar, Bruehl, and Kovacs (1970) found a significant correlation between artistic ability as rated by artists on a nine-point scale and the score on the DAP Test. Using fifth grade students, Burns and Velicer (1977) found that art instruction increased Goodenough-Harris drawing test scores. The drawing test was administered once before art instruction began and twice after instruction was completed. While no differences were found in the controls between pretest and both posttests, the treatment group showed significant gains on both posttests, as well as a significant decline from the first posttest to the second. There was some question as to how long the results would hold up. Bielastias and Bristow (1959) found that art training did influence drawing scores. Two groups of college students, one with two or more years of art training and one with no training, were given the HTP test, and the IQs derived from the drawings were scored. While the groups were matched for age, sex and intelligence, the group with art training obtained significantly higher IQ scores. Both Whitmyre (1953) and Sherman (1958) found that the ability to draw influences psychologists' ratings of adjustment. The drawings of normal and psychiatric adult groups were intermingled and psychologists were asked to pick out those made by normal and abnormal individuals. The drawings were also rated for art quality by artists. Figures rated poor in art quality tended to be chosen as abnormal in psychological adjustment, while drawings rated good in art were considered normal in adjustment.

Trained vs. Untrained Interpreters: Several researchers have been interested in comparing the respective abilities of trained and untrained persons to interpret human figure drawings. Arkell (1976a) found no significant differences among teachers, secretaries, seventh grade students, school administrators, and psychologists in differentiating the drawings of maladjusted children from the normal. Striker (1967)

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found university students more effective than experienced psychologists in correctly classifying the drawings of normal and psychiatric patients. Hiler and Nesvig (1965) found no differences between psychologists and non-psychologists in discriminating the drawings made by a normal and a psychiatric group of adolescents. Psychologists tended to overestimate pathology since they used so many invalid criteria. The authors concluded that more research must be conducted into these criteria. Tolor (1955) found that psychologists were successful at judging popularity from HFDs. Teachers, as a group, were far less successful at this than psychologists, although some individual teachers attained surprisingly good levels of differentiation.

In a study designed to assess the validity of the DAP in differentiating between children with good or poor social adjustments, Ziv and Shechori (1970) found that psychologists did no better than non-psychologists. Psychologists based their judgment on criteria such as proportion, the placement of figure on the page, rigidity, and size, while non-psychologists simply described drawings as neat or nice or correct. Cressen (1975) found no differences between clinical psychologists and college students in correctly classifying the drawings of schizophrenics and normals, and he seriously questioned the validity of the technique.

Highly Trained Interpreters: The validity of clinical judgments based on HFDs was also studied by Wanderer (1969). With the assistance of Machover, Wanderer designated 20 of the highest ranking experts in the U.S.A. as judges. Each judge was asked to choose from among five pairs of drawings – those done by a psychotic, a neurotic, a mental defective, a homosexual and a normal – and to rank each drawing from one to five in the group to which they thought it belonged. The experts were able to identify the mental defectives with an accuracy which ruled out chance, but could not identify the other four groups, even when given a second chance to make a correct diagnosis. The expertness of the judges, as determined from the ranks they were accorded by their peers, was unrelated to their actual performance. Hammer (1969a) criticized the concept behind the Wanderer study and the methods it used. He said that neither Machover nor anyone else had ever intended the DAP to be anything more than a supplement to the verbal techniques.

Since the expert judges in Wanderer's (1969) study were able to pick out the drawings of mental defectives, Adler (1970) studied the cognitive component in HFDs. In a factor analytic study, Adler found that the figure drawing procedure is essentially a test of the cognitive factor only. He therefore concluded that drawing tests should be used to evaluate cognitive maturity, not personality development.
Morris (1955) assessed a group of normal 13-year-old children using the DAP and then assessed them five years later when they were 18 years old. Here are some of his findings: Children at both ages consistently drew their own sex; boys at all ages produced more profile drawings; both boys and girls spent less time on their drawings at age 18; there was a decline in the use of bright colors with increasing age; more girls at both ages tended to omit and hide essential parts of the figures; the body parts most often selected for special treatment were the arms and hands; at 18, boys demonstrated an interest in secondary sexual characteristics, while girls did not.

The age children assigned to their drawings was of particular interest to McHugh (1965). Six hundred normal children ages seven through 11 were asked to draw a person, a person of the opposite sex, and then to indicate the sex and age of each figure. Ages assigned by girls to both sex figures increased progressively with age, while those assigned by boys increased but not progressively. There was a consistent relationship between age assigned to the drawings and the child's own age.

Hammer and Kaplan (1964b) were interested in whether children in grades four, five, and six draw profile or front facing drawings. Girls drew more front views than boys and boys drew more right facing profiles. There were no differences among the drawings of children in the various grades.

Zuk (1962) found that the height and width of drawings increased with age. When examining the drawings of 89 males with a mental age of six through 14, he found the height of figures doubled from mental age six to 14, while the width increased about 50 percent.

A longitudinal study of the development of the body concept was undertaken by Faterson and Witkin (1970). The HFDs of two groups of males and females were examined at ages eight and 13 in one group and at ages 10, 14, 17, and 24 in another. The drawings were rated on the Articulation-of-Body-Concept (ABC) scale, a nine-point scale in which higher ratings are assigned to the more articulated drawings. ABC scores increased between ages eight and 14, with little change thereafter. At the same time, there was marked individual stability in ABC scores, even over a 14-year span. The authors found these results to run parallel to the findings on the development of differentiation in the areas of perception and defenses.

Suns are frequently found on HFDs. They are often thought to represent dependency feelings in the person who draws it. Loney (1971), in examining the drawings of first-graders and sixth-graders, found more suns in the drawings of girls and younger children.
Reviews of Literature

There have been several extensive reviews of literature on the figure drawing technique. Swenson’s reviews (1957, 1966) have been unusually thorough and comprehensive. They have dealt with reliability; the validity of the body image hypothesis; methods of evaluating drawings; structural and formal aspects of drawings; and the significance of content in drawings. His earlier review (1957) cast considerable doubt on the value of drawings for personality assessment and diagnostic purposes, since little research supported the underlying basic theory, i.e., Machover’s body-image hypothesis. However, Swenson’s later review, in 1968, which covered the literature between 1957-1966, was more positive. He concluded that the research published in those intervening years was much more sophisticated, and “...provided more support for the Machover theory, and for the use of human figure drawings as a diagnostic instrument.” In drawing analysis, he considered global or overall ratings more reliable than those based on specific signs. If signs were to be used, he suggested that several drawings be obtained so that clinical judgment could be based on a larger sampling of drawing behavior.

Somewhat similar conclusions were reached by Roback (1968) in his review of the literature for the same time period, 1956-1967. While he, too, felt that global ratings were more reliable than those based on specific indicators, he was not as pleased as Swenson about the quality of research in that period. He stressed the need for standardized and validated scoring systems and emphasized that only competent future research would determine the specific uses of figure drawing tests.

Hammer (1959), in a critique of Swenson’s 1957 review, claimed that Swenson misinterpreted the findings of several studies and was not familiar enough with Machover’s work. In particular, he objected to Swenson’s use of group comparisons, e.g., normals vs. other groups, since he felt group comparisons, on any variable, tend to obscure extreme occurrences which are clinically significant. Swenson’s notion of the self, Hammer though, was quite unsophisticated. The self is complex and includes what we are, what we wish to be, and what we fear we might become.

Klopfer and Taulbee (1976), in a review of the literature from 1971 through 1974, concluded that drawings can only be regarded as “a suggestive kind of graphic behavior that will take on meaning as it is discussed with the subject and viewed in the context of other information.” They felt that the problems with many of the studies they reviewed were due to the difficulty of inferring at a conscious level that which is an unconscious process.
Variations of the DAP

*House-Tree-Person (HTP) Test* was developed by Buck (1948, 1964) and advances in the technique were reviewed by Buck and Hammer (1969). In our review of the literature, we have included HTP studies but have concentrated on the person drawings. As the title of the test indicates, drawings of a house and a tree are requested in addition to that of a person. The developers of this technique maintain that the drawings of the house and tree dig deeper into the personality. Indeed, they have found that tree drawings are often the most revealing of all. A drawing scoring system has been developed and the authors advocate the use of color drawings and post-drawing questioning.

**Chromatic or Color Drawings:** Much of the work on the use of color in drawings has been done by developers and users of the House-Tree-Person Test (Buck, 1948, 1964; Hammer, 1953, 1969b, 1980; Jolles, 1971). Hammer maintains that color drawings reveal even more about the personality than pencil drawings. Hammer, Jolles and Precker (1950) have all talked about the significance of color. What follows is a brief summary of their findings:

- **Red** — may be related to violence or excessive emotion; it has also been associated with cheerfulness; nursery level children who emphasized it are happier, well-adjusted, and more emotional in their personal reactions.
- **Yellow** — suggestive of hostility, dependency, and infantile behavior. Yellow used with green to depict grass or a landscape is normal.
- **Orange** — often suggests a good relationship with surroundings; may suggest areas of discomfort.
- **Blue** — controlled reactions and self-restraint.
- **Green** — blue and green are similar and represent controlled behavior. If much blue and green are used together, it indicates that the child feels secure as long as he is able to maintain control.
- **Black** — controlled reactions, intellectual, compulsive.
- **Brown** — timidity; may be used in times of regression. Brown and black used together suggest anxiety and depression.

When looking at the color in drawings, particular attention should be paid to excessive use of any one color. Sometimes excessive use of green, blue, or orange suggests a yearning for what the colors represent. Well-adjusted children use a variety of color in their pictures, while constricted and emotionally unstable children often use only a few.
Marzolf and Kirchner (1973) found that the significance of color is different for males and females. They suggest caution in inferring too much from color.

**DAP and Questioning:** To obtain more information about a drawing, a child may be questioned about it when the task is completed. Questions may be asked about any drawing, but the verbal responses are likely to be fuller and richer if the original drawing instructions are less specific. Children are more inclined to talk about drawings of a teacher, a doctor, a family, than about drawings of your teacher, your doctor, your family. "A" is less personal than "your" and its use reduces the chances of falsification. It is assumed, of course, that children will, in fact, be talking about their own teacher, their own doctor, their own family.

With some children, a request like "Tell me a story about your picture" will produce what the interpreter wants to know. Other children will require more prodding and more direct questioning about specific concerns. Some sample questions follow.

For family drawings: How do this mother and father get along? How do the boy (girl) and his mother (father) get along? How does this boy (girl) get along with his (her) sisters and brothers? Do the mother and father love him (her) just as much as they love his (her) brothers and sisters? Which parent punishes the little boy?

For school drawings: What does the little boy (girl) like best about school? What does he (she) hate most about school? Do other children like him (her)? Does this boy (girl) get along well with his (her) teacher? If he (she) could change school in some way, how would he (she) do it?

For individual person drawings: Is the picture happy (unhappy)? What makes the boy (girl) unhappy? What makes him (her) happy? Does the boy (girl) like himself (herself)?

For individual drawings of others (i.e. doctor, nurse, dentist): Is the doctor happy? Does he (she) like his patients? Does he (she) help people? Is he (she) in a hurry or does he (she) take his time?

**DAP for Three- and Four-year-olds:** Very young children are difficult to assess. They typically produce drawings with little detail, such as "tadpole" figures. These usually consist of a circle, with lines protruding from it and possibly some indication of eyes, nose or a mouth.
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In addition to producing simple drawings, children at this age are often unable to understand the usual test instructions which are "Draw a picture of a person. You can draw any kind of person you want—a man or a woman or a boy or a girl." It is better in their case to gather several drawings, asking them to draw (one at a time) others they know well, like their mom, dad, sister or brother. Drawing analysis is then done by comparing the drawing of the self (which most children of this age are quite willing to do) with the drawings of the others. Any differences, omissions, emphases, etc. in the drawing of the self are considered significant.

**DAP for Perceptually Impaired:** Uhlin and Dickson (1970) compared two sets of drawings of spastic, cerebral-palsied children. In one set, children were required to draw HTP figures using a black crayon on white paper, while in the other, they were given a white crayon and black paper. The white-on-black drawings were significantly better in terms of detail, organization, form and relation of figure to ground. It seems that the perceptually handicapped find white paper backgrounds confusing and, when drawing on white, become easily disoriented with the form of the figure they are drawing.

**The Self-Portrait:** Berryman (1959) suggested an extension of drawing procedures by asking her subjects to "Draw a self-portrait, a picture of yourself." She used this in a battery along with drawings of a house, tree, person, and person of the opposite sex. She found it added extra information about the subject's self-concept and body-image. It was also useful in delineating the problem and planning the therapy.

**Additional Persons:** In several studies, drawings of figures in addition to that of the self or a person have been used to evaluate the personality of the drawer. Prytula et al. (1978) asked for drawings of a man, woman, and self in one study, and a man, woman, self, and Eskimo in another. In the first study, the drawing of the man was taller and erased more than the drawing of the self. The drawing of a man also contained more detail and body parts than that of a woman. In the second study, the drawing of the Eskimo was taller, wider, and greater in area than the drawing of a man or self. While there were more erasures in the drawing of the self than in that of the Eskimo, there were more body parts omitted from the Eskimo than from the other drawings. In neither study was an attempt made to examine the reasons for the differential treatment of the figures.

In an earlier study, Prytula and Hiland (1975) required their subjects to draw a man, a woman, and self. Fifth and sixth grade children
drew the figure of the woman significantly taller and larger than the figure of the self. The authors speculated that this could indicate children's perceptions of dominant significant others in their lives, specifically the woman or symbolic mother.

In still another study, Prytula and Thompson (1973) compared adolescents' drawings of self, man, woman, and Eskimo. The Eskimo figure was drawn larger and wider and contained fewer erasures than the other three drawings. More omissions were found in the drawings of the woman and Eskimo than in the self or man. The investigators hypothesized that the relatively neutral, less familiar figure of the Eskimo may arouse less anxiety than the other figures, and this may account for its greater height, width, and area. Another explanation was that the attire of the Eskimo would increase its size and this could account for some of the expansiveness. Neither of these hypotheses was tested.

Dalby and Vale (1977), in a study comparing self-esteem with HFDs, instructed 115 fifth-graders to draw a picture of themselves and two friends of their own age. The three drawings were compared to find out if self-esteem was related to the relative size of figures. The size of the self figure relative to peer figures appeared unrelated to self-esteem. In this experiment, no attempt was made to find out the drawers' attitudes to or perceptions of their friends by further examining the drawings made of them.

The effects of different stimulus conditions on size variability on the DAP were investigated by Shanan (1962). Subjects were asked to draw a teacher, a person, and a person of the opposite sex. It was found that there was greater variability in the height of the three figures on the first administration than on the second administration six months later. While this study chose a teacher as a person in a specific social role, no attempt was made to examine the drawing in order to find out the subject's feelings about the teacher.

*Draw-a-Person-in-the-Rain Test*: Verinis, Lichtenberg, and Henrich (1974) adapted the DAP technique to measure the amount of stress a person was undergoing and how well he was able to deal with this stress without psychotic decompensation and regression. The subjects were asked to draw a person in the rain. The assumption was that the rain represented stress and that the quality of the rain drawn would indicate the amount of stress felt by the person. The person's defenses against stress would then be symbolized by the defenses drawn against the rain, e.g., an umbrella, coat or tree. While the Draw-a-Person-in-the-Rain Test may have some validity in the case of hospitalized psychiatric patients, it was not found useful for the general population.
The experimenters evaluated the drawings of 139 normal adolescents and found 49 percent of the drawings indicated neurosis, while 43 percent fell into the borderline psychotic category.

**Draw-a-Car Test:** Some researchers have substituted car drawings for HFDs. When Loney (1971) found that some children who refused to draw people liked to draw cars, she developed the Draw-a-Car Test as a method of studying enuresis and encopresis in children. Loney felt cars resemble people insofar as both are machines with nutritional-eliminative systems to accommodate fuel, store fuel, convert fuel to energy, and eliminate waste. Handler and Reyher (1964) also used a car in their drawing procedure, along with the drawings of male and female figures. Using the car, which they considered to be low in projective input as a comparison, they evaluated the projective factors, style, and quality of the HFDs.

**Drawings of Animals:** The meaning and significance of the drawings of animals were considered by Pustel, Sternlicht and De Respinis (1972). In examining the animal drawings of over 700 institutionalized retardates, more happy than unhappy drawings were found. The authors suggested the use of animal drawings for the study of personality.

**Inside-of-the-Body Test:** Tait and Ascher (1955) introduced a variation of the DAP Test which they called the Inside-of-the-Body Test. While the DAP focused mainly on the concept of physical exterior, the new test dealt with the concepts of what is inside the human body. The authors, both physicians, were curious about the development of these concepts and their possible distortions in illness. Subjects in their study were hospitalized psychiatric patients, candidates for admission to the Naval Academy, medically ill hospitalized patients without psychiatric problems, and a class of sixth grade students. They found that a higher-than-average percentage of medical and surgical patients drew the organ or system involved in the illness for which they were hospitalized. However, since Academy candidates in good health also emphasized a particular system in their drawings, the significance of this became less clear. The drawings of children and adults were different; adults dealt with various body systems in about the same frequency, while sixth graders typically omitted sexual organs and prominently emphasized the skeletal muscular system. Generally, all the drawings were anterior views which represented several anatomical items with an average of six to nine labels. The heart was the most frequently drawn organ and the gastrointestinal system was the most fre-
quently represented system. The authors concluded that this test could be used as a screening tool in the investigation of psychosomatic problems.

In a study comparing children with congenital heart problems with a group of normal children, Offord and Aponte (1970) administered the HTP, Sentence Completion, and Inside-of-the-Body Tests. While themes about health-illness were more prevalent in the congenital heart group on the HTP and Sentence Completion Tests, this group did not draw a greater number of hearts on the Inside-of-the-Body Test than the controls. They did draw relatively larger hearts and relatively fewer other organs. The investigators concluded that the body distortion of the congenital heart child pertains more to his perceptions of the inside of the body than to his view of the external body. They suggested that the Inside-of-the-Body Test be added to other projective tests investigating distortions of body image by the physically handicapped.

Brumback (1977) investigated the performance of 150 normal elementary school children on the Inside-of-the-Body Test. He found that a child initially perceives the interior of his body as composed mainly of heart, bones, hips, arms, and legs. As the normal child became older, he began to view the body as composed of many other internal organs and had a more exact idea of anatomic relationship of the body organs. Brumback viewed the Inside-of-the-Body Test as a potentially valuable adjunct in the psychological assessment of children, since it detected early any abnormalities in the development of the child’s internal body perception. Further research was recommended to correlate Inside-of-the-Body Test results in children with various physical, emotional, or intellectual disorders.

Fifty adult patients with neuromuscular diseases were given the Inside-of-the-Body Test to examine the effect of a specific disability on test performance. The test was carried out by Brumback, Bertorini, and Liberman (1978) who found that the mean number of body parts identified in the drawings was 18. While some patients gave prominence to their diseased body structures, others omitted them. The authors noted that the patients showed greater body self-awareness than subjects evaluated 20 years ago.

Blum (1978) used drawings to study women’s concepts of the anatomy of their sexual-reproductive organs. When 68 women, ages 20 through 78, were asked to draw their internal and external sexual organs, Blum found more than twice as many inadequate drawings as adequate ones. She attributed this lack of knowledge about the anatomy of the sexual organs to the physician’s attitude toward women patients.
INSTRUCTIONS FOR ADMINISTRATION

Instructions for administering the human figure drawing test come in a number of variations. While they are all very similar, their slight differences may determine the kind of drawing produced. Some researchers have specified the drawing of a man or a woman or a boy or a girl. Others have asked for the drawing of a person in the rain. Still others, like Tait and Ascher (1955) whose major interest is in the inside-of-the-body, have instructed their subject to draw the inside of the body (including all of the organs), to draw a line from each organ to the outside and then to label that organ.

We believe that the less specific the instructions, the richer the drawings will be in terms of projective material. Here is our usual procedure: A child is given a sheet of letter-size paper (8½"x11") and a medium soft pencil, and is simply asked to "draw a picture of a person." If the child asks for more specific instructions or some kind of direction, the original instructions are repeated, or a non-directive type of remark is made indicating that he can draw any kind of person he wants. If the child draws only a part of the person, for example, the head, thank him for it and then ask him to draw a whole person. (The part of a person drawn may be significant. If a child draws only a head when requested to draw a person, he may be placing too much emphasis on this part of the body or it may be an area of concern. The head represents thinking processes, and this child may be concerned about mental adequacy.)

For a child who is very young or who does not understand what the word "person" means, the instructions should be repeated as follows:

"Draw a picture of a person. You can draw any kind of person you want — a man, or a woman, or a boy or a girl."

Never ask a child, "Can you draw a picture of a person?" Some children will refuse or deny that they are able to draw.

If a child draws the examiner, this should be noted. Insecure children often search for models to copy. What they may be saying is that they are not important enough to draw (we assume most children draw themselves when asked to draw a picture of a person). These insecure children will draw others, such as examiners, teachers, parents, whom they view as more important than themselves.

When asking groups of children to draw, care should be taken to seat the children as far apart as possible to minimize copying. Again, it is the insecure child, lacking confidence in his own production, who is more likely to copy.
INTERPRETATION OF DRAWINGS

Once again the importance of using a multiple-measures approach must be emphasized. When assessing personality (or perceptions, values, attitudes), one should not use drawings in isolation, but along with other sources of information about the child.

When interpreting drawings, one should look at the overall impression the drawing gives and then look at specific signs, i.e., size, omissions, emphases, etc. The overall or global impression the drawing portrays or projects is more important than information given by one specific sign. One specific sign should not be viewed as indicative of a problem or concern. Several signs are required before inferences like that can be made about a child.

When we ask an individual to draw a person, we assume he is drawing himself. It is important to remember that sometimes a child draws his physical self. A child with a missing arm who draws a picture of a person with a missing arm is projecting his physical self into his drawing. It is a drawing of himself as he is. Other times, it is the psychological self which is projected into drawings. The psychological self is expressed through wishes or symptoms or defenses. If the child with a missing arm draws a picture of a person with two arms, he is expressing a wish which, in this case, is to have two arms. A physically intact child who draws a tiny picture of a person without arms may be expressing a symptom in his drawing. His drawing may indicate a fragile self-concept or difficulties in dealing with his environment. Yet another child may draw a picture of an overly confident person as a defense against feelings of insecurity.

It should be pointed out that a drawing represents what a person is like on the day he does the drawing. He may not have been like that yesterday, and we cannot predict how he will be in a month or two from now. Only by periodic collecting of his HFDs will we get some idea of a child’s enduring or persistent characteristics.

Overall Impression

The first impression one receives from a drawing is important. One way of “getting into the drawing” is to put oneself in the position or stance represented in that drawing. This kinesthetic feedback should give some idea of overall affect. For example, a person drawn with hands on hips, his feet wide apart, and a cigarette in his mouth tends to give feelings of aggressivity, grandiosity, and expansiveness. On the other hand, a tiny drawing with arms at the side, knees together and ankles touching tends to portray shyness, constriction and perhaps a poor self-concept.
The overall affect of the drawing can be ascertained by looking at the drawing and asking questions such as:

Is the drawer likeable? Unlikeable?
Is he happy? Or sad?
Is he friendly? Unfriendly?
Does he get along well with others?
Is he carefree, calm or pleasant?
Is he uptight or tense?
Can he control his emotions or do they control him?
Is he active or energetic?
Is he passive or dull?
Is he strong? Weak?

The reader can probably think of other types of affect which could be deduced from a drawing.

Specific Signs

1. Size: Very large or very small drawings may be significant.
   
a) Large drawings that take up the entire page are often drawn by aggressive children with poorly developed inner controls. They are suggestive of grandiose feelings. Overactive, uninhibited children with poor controls overrun the boundaries of the page and have to leave off parts of the person. Occasionally, shy and timid children with poor self-concepts draw large figures, expressing the wish to be more powerful and noticeable.

   b) Small drawings, one to two or three inches in height, are drawn by timid, shy, or withdrawn children and the small size reflects their insecurity. These children feel insignificant or tiny. Occasionally, overtly aggressive children with a poor self-image will draw small figures. While appearing aggressive and bold to the observer, inwardly these children are insecure and anxious.

2. Emphases and Exaggeration: Parts of the body that concern a child are often either overemphasized or underemphasized. Overemphasis may be seen through enlarging body parts, providing excessive detail of a body part, making the body part with a heavy line, etc. Underemphasis may be seen through making a body part smaller relative to other parts, lack of detail given to a part, or making a part with faint or sketchy lines.

   a) Heads—both large and small heads are drawn by individuals who feel intellectually inadequate. Large heads are often seen in
drawings of those who wish they were smarter or better able to achieve.

b) **Mouths** — either overemphasis or underemphasis of the mouth suggests a concern about this body part. Since the mouth is a major source of communication, children with language and speech disorders who are concerned about their handicap may enlarge the mouth or make it stand out more by heavy lining. Overly dependent children may also emphasize the mouth area.

c) **Eyes** — vacant eyes with no pupils may be drawn by children with visual processing learning problems.

d) **Arms** — large or long arms may be drawn by children who want to control or those who want strength and power. At times, large powerful arms are drawn by children with physical handicaps which affect their limbs. In these cases, the treatment given to the arms represents a wish to be more powerful. Small arms or faintly drawn arms are often drawn by children who fear power, who see themselves as weak and ineffective, and who perceive a lack of personal achievement. Often adolescent boys will draw muscular arms and muscular figures. This is due to their concerns about masculinity which are common at that age.

e) **Feet** — large feet are drawn by those who want security or a firm footing (security).

f) **Noses** — asthmatic children often enlarge or emphasize the nose because of their respiratory problems.

g) **Ears** — enlarged ears may be drawn by children with hearing problems. Some suspicious children, who perceive others as talking about them, may also emphasize the ears.

3. **Omissions**: Children concerned or anxious about specific body parts may omit them. Omissions are similar to underemphasis.

a) **Hands** — omission of the hands suggest insecurity and difficulty in dealing with the environment (home, school, people).

b) **Arms** — when arms are omitted, the child feels inadequate and ineffective. Since arms represent power and strength, their omission represents a perceived lack of power and strength.

c) **Legs** — legs provide support to the body; when they are omitted, the child perceives a lack of support and feels immobile.

d) **Feet** — when feet are omitted, the child may lack security and feel helpless.

e) **Nose** — the nose is often viewed as a symbol of power-striving, and, if it is omitted, the child may feel powerless. Asthmatics may also omit the nose.

f) **Mouth** — omissions of this organ of communication may suggest
difficulty in relating to others. Some asthmatic children may omit mouths from their drawings.

4. Teeth: Teeth represent aggressiveness. While some aggression may be considered normal, teeth may represent abnormal aggressivity.

5. Sex Organs: When sex organs are drawn, they may be considered indicators of aggressiveness. Actually, we have often noticed genitals in the drawings of four- to six-year-old children whose parents have walked around the house nude to help their offspring develop a healthy attitude toward their bodies. However, Koppitz (1968), who often found genitals in the drawings of severely disturbed children, relates genitals to acute body anxiety and poor impulse control.

6. Buttons—Belly Button: Buttons represent dependency and are often drawn by young children up to the age of six or seven. This is normal since they are dependent on their parents. The belly button represents the early dependency on the umbilical cord. Buttoning is one of the more difficult tasks in early childhood, and many children are forced to rely on their mother’s help. After age six or seven, the inclusion of buttons on the drawings may suggest too much dependency.

7. Sun: When the sun is included in a child’s picture, it is usually representative of parental love and support. The sun is a source of warmth, as are nurturing parents. At times, clouds may block or hide the sun. If this is the case, there is a possibility the child is not receiving parental love.

8. Mouth Treatment (smile-frown): Happy or sad faces may reflect happy or sad people.

9. Unusual Ways of Drawing People:
   a) Stick Figures – these figures are often drawn by children who are reluctant to reveal themselves. They want to be safe and avoid all risk-taking. When stick figures are produced, they are accepted, but the child is asked to draw another figure which is not a stick figure.
   b) Cowboys – cowboys are drawn by children who want to be masculine and tough.
   c) Clowns – clowns are often drawn by children with poor self-concepts and self-depreciating thoughts.
   d) Monsters and Witches – these figures are drawn by children with very poor self-concepts and feelings of depersonalization.
10. *Poorly Integrated Figures*: Poor integration refers to figures in which the head, arms and legs do not join the body or where hands do not join the arms, etc. These figures may be drawn by children with motoric types of learning disability and/or those who are doing poorly in school.

11. *Erasures*: Some erasing is normal if it improves the drawing. However, excessive erasing without improvement of the drawing is related to anxiety and uncertainty. At times a particular body part is erased. This is the part which is of concern to the drawer. If the entire figure is erased, the anxiety is likely more generalized.

12. *Shading*: Shading refers to pencil strokes which are designed to fill in an area as in coloring or darkening a shirt, or in illuminating the contour of the body. Shading is always related to anxiety. If all the body is shaded (some disturbed children even shade the face), the anxiety may be considered as generalized overall anxiety. If only a specific body part is shaded, then the anxiety may be related to that part.

13. *Line Pressure*: Heavy line pressure is often associated with aggressive, forceful, high-energy individuals. Light line pressure may be indicative of low energy, inhibition, and shyness. Generally, boys tend to use heavier pressure than girls.

14. *Baselining and Placement on the Bottom Edge of the Paper*: Children requiring security or support will often draw a line or grass under their figures. The line is a base which provides them with a firm footing. Other children in need of support and security will draw their figure at the bottom of the page with feet touching the bottom edge.

15. *Slanting Figure*: Slanted figures (slanted more than 15° from the vertical) are suggestive of feelings of imbalance, and the lacking of a secure footing. The drawing seems on the verge of falling over, creating a toppling feeling.

16. *Placement of Figure on the Page*: Where a child places his figure may be significant. Placement near the top or high on a page suggests that the drawer may use fantasy to achieve goals or may, in fact, be striving for achievement or finding it difficult to reach goals. Placement near the bottom or low on the page may indicate insecurity or a person who is reality-oriented. Left-side placement suggests an orientation towards the past, while right-side placement is more future-oriented.
Apéndice A. Manual de tabulación para los 30 ítems evolutivos del DFH infantil

Se indican algunos ejemplos de ítems evolutivos en las ilustraciones dadas entre paréntesis.

1. Cabeza: cualquier representación, se requiere un bosquejo claro de la cabeza.

2. Ojos: cualquier representación de los mismos.

3. Pupilas: círculos o puntos definidos, dentro de los ojos. Un punto con una raya encima se computa como ojos y cejas. (Ilustraciones 5; 8; 9; 13b, c; 14; 17; 34 y 35).

4. Cejas o pestañas: cejas o pestañas o ambas. (Ilustraciones 8; 13a, b; 14; 19; 20; 25a, 27; 29 y 34).

5. Nariz: cualquier representación. (Ilustraciones 2; 3; 4; 6; 8; 9; 13a, b, c y 14).

6. Foros nasales: puntos agregados a la representación de la nariz. (Ilustraciones 13a, c; 17; 53; 54; 69; 86; 102a; 106 y 107).

7. Boca: cualquier representación de la misma. (Ilustraciones 2; 3; 4; 6; 8; 13a, b, c; 14 y 15).

8. Dos labios: dos labios cebozados y separados por una línea; no se computan dos hileras de dientes. Item computado: ilustraciones 13c; 14; 17; 39; 41a, c; 54; 56; 103 y 111. Item no computado: ilustraciones 35 y 62.

9. Orejas: cualquier representación de las mismas. (Ilustraciones 5; 13a, c; 17; 19; 20; 25a, b, d y 35).

10. Cabello: cualquier representación. (Ilustraciones 2; 4; 5; 9; 13a, b; 14; 15; 16; 17) o sombrero o gorra cubriendo la cabeza y ocultando el cabello. (Ilustraciones 8; 23; 37; 42; 47; 69; 77 y 109).

11. Cuello: Es necesario que haya una separación neta entre la cabeza y el cuerpo. (Ilustraciones 3; 4; 6; 8; 13a, b, c; 14; 16; 17 y 19).


14. Brazos en dos dimensiones: cada uno de los brazos representado por más de una línea. (Ilustraciones 3; 4; 6; 8; 9; 13a, b, c; 14; 15).

15. Brazos apuntando hacia abajo: uno o ambos brazos apuntando hacia abajo, en un ángulo de 30° o más con respecto a la posición horizontal. (Ilustraciones 3; 4; 6; 8; 9; 13a, b, c; 15; 16; 19) o brazos levantados adecuadamente para la actividad que está realizando la figura (Ilustraciones 17; 18; 20). No se computa cuando los brazos se extienden horizontalmente y luego se inclinan hacia abajo a cierta distancia del cuerpo. (Ilustración 48.)
16. Brazos correctamente unidos al hombro: para computar este item es necesario que el hombro esté indicado, y los brazos deben estar firmemente conectados al tronco. (Ilustraciones 4; 13a, b; 15; 16; 20; 35; 40; 41a, b.)

17. Codo: se requiere que haya un ángulo definido en el brazo. (Ilustraciones 13a; 25d; 28; 39; 41b; 47; 83 y 111.) No se computa una curva redondeada en el brazo. (Ilustraciones 17 y 29.)

18. Manos: Es necesario que haya una diferenciación de los brazos y de los dedos, tales como un ensanchamiento del brazo o una demarcación con respecto al brazo mediante una manga o pulsera. (Ilustraciones 4; 5; 9; 10; 13b, c; 14; 15; 17 y 19.)

19. Dedos: cualquier representación que se distinga de los brazos o las manos. (Ilustraciones 4; 6; 7; 8; 13c; 15; 17; 19; 25a, b, c.)

20. Número correcto de dedos: cinco dedos en cada mano o brazo, a menos que la posición de la mano oculte algunos dedos. (Ilustraciones 13a; 19; 28; 35; 40; 41b, c; 54; 69 y 70.)

21. Piernas: cualquier representación; en el caso de figuras femeninas con faldas largas, se computa este item si la distancia entre la cintura y los pies es lo suficientemente larga como para permitir la existencia de piernas debajo de la falda.

22. Piernas en dos dimensiones: cada una de las piernas señalada mediante más de una línea. (Ilustraciones 3; 4; 6; 9; 13a, b, c; 14; 15 y 17.)

23. Rodilla: un ángulo neto en una o ambas piernas (presentación lateral) o dibujo de la rótula (presentación de frente). (Ilustraciones 4; 20; 28; 41b; 73; 98c y 109); no se computa cuando hay sólo una curva en la pierna (ilustraciones 17 y 47).

24. Pies: cualquier representación (Ilustraciones 2; 5; 6; 13a, b, c; 15; 17; 18; 19).

25. Pies bidimensionales: pies que se extienden en una dirección a partir de los talones (presentación lateral) y mostrando mayor largo que ancho, o pies dibujados en perspectiva (presentación de frente). (Ilustraciones 3; 4; 13a, b, c; 15; 17; 19; 37 y 38.)

26. Perfil: cabeza dibujada de perfil, aunque el resto de la figura no esté íntegramente de perfil. (Ilustraciones 4; 17; 18; 29; 39; 40; 41a; 42; 53 y 57.)

27. Ropa: una prenda o ninguna: ninguna prenda indicada, o sólo sombrero, botones o cinturón, o bosquejo de vestimenta sin detalles. (Ilustraciones 2; 4; 5; 13c; 14; 19; 28; 42; 43 y 55.)

28. Ropa: dos o tres prendas: se computan como ropa los siguientes items: pantalones o calcas, faldas, camisa o blusa (la parte superior de un vestido, separada por un cinturón es computada como blusa), saco, sombrero, casco, cinturón, corbata, cinta de cabello o vincha, hebilla o broche para sujetar el cabello, collar, reloj, anillo, pulsera, pipa, cigarrillo, paraguas, bastón, arma de fuego, rastrillo, zapatos, calcetines, libro de bolsillo, maletín o portafolios, bate (de beisbol), guantes, etc. (Ilustraciones 3; 8; 9; 20; 25a, b; 29; 37; 41b, c.)

29. Ropa: cuatro items o más: cuatro o más de los items citados anteriormente. (Ilustraciones 13a, b; 15; 16; 34; 35; 39; 40; 41a y 45.)

30. Buenas proporciones: la figura "está bien", aun cuando no sea

[Texto incompleto]
| Table 3. Porcentaje de niñas que incluyen cada ítem evolutivo en los DFH |
|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 5 años | 6 años | 7 años | 8 años |
| N 128 | N 133 | N 125 | N 130 |
| **Esperados** | **Esperados** | **Esperados** | **Esperados** |
| Cabeza | 100 | Cabeza | 100 | Cabeza | 100 | Cabeza | 100 |
| Ójios | 100 | Ójios | 100 | Ójios | 100 | Ójios | 100 |
| Nariz | 100 | Nariz | 100 | Nariz | 100 | Nariz | 100 |
| Boca | 100 | Boca | 100 | Boca | 100 | Boca | 100 |
| Cuerpo | 100 | Cuerpo | 100 | Cuerpo | 100 | Cuerpo | 100 |
| Piernas | 100 | Piernas | 100 | Piernas | 100 | Piernas | 100 |
| Brazos | 100 | Brazos | 100 | Brazos | 100 | Brazos | 100 |
| **Comunas** | **Comunas** | **Comunas** | **Comunas** |
| Cabello | 85 | Cabello | 85 | Cabello | 85 | Cabello | 85 |
| Pies | 75 | Pies | 75 | Pies | 75 | Pies | 75 |
| Brazos 2d. | 52 | Brazos 2d. | 52 | Brazos 2d. | 52 | Brazos 2d. | 52 |
| Dedos | 59 | Dedos | 59 | Dedos | 59 | Dedos | 59 |
| Piernas 2d. | 46 | Piernas 2d. | 46 | Piernas 2d. | 46 | Piernas 2d. | 46 |
| Cuello | 25 | Cuello | 25 | Cuello | 25 | Cuello | 25 |
| Manos | 39 | Manos | 39 | Manos | 39 | Manos | 39 |
| Cejas | 33 | Cejas | 33 | Cejas | 33 | Cejas | 33 |
| Pupílulas | 19 | Pupílulas | 19 | Pupílulas | 19 | Pupílulas | 19 |
| Braz. h. abaj. | 29 | Braz. h. abaj. | 29 | Braz. h. abaj. | 29 | Braz. h. abaj. | 29 |
| Orejas | 29 | Orejas | 29 | Orejas | 29 | Orejas | 29 |
| 5 dedos | 18 | 5 dedos | 18 | 5 dedos | 18 | 5 dedos | 18 |
| **Excepcionales** | **Excepcionales** | **Excepcionales** | **Excepcionales** |
| Pies 2d. | 7 | Pies 2d. | 7 | Pies 2d. | 7 | Pies 2d. | 7 |
| Proporción | 2 | Proporción | 2 | Proporción | 2 | Proporción | 2 |
| Fosas nasal. | 6 | Fosas nasal. | 6 | Fosas nasal. | 6 | Fosas nasal. | 6 |
| 2 labios | 4 | 2 labios | 4 | 2 labios | 4 | 2 labios | 4 |
| Codos | 9 | Codos | 9 | Codos | 9 | Codos | 9 |
| Perfil | 1 | Perfil | 1 | Perfil | 1 | Perfil | 1 |
| Braz. u. hom. | 5 | Braz. u. hom. | 5 | Braz. u. hom. | 5 | Braz. u. hom. | 5 |
| Rodillas | 2 | Rodillas | 2 | Rodillas | 2 | Rodillas | 2 |
| **Ropa** | **Ropa** | **Ropa** | **Ropa** |
| 0-1 item | 70 | 0-1 item | 52 | 0-1 item | 35 | 0-1 item | 27 |
| Común | 27 | Común | 23 | Común | 16 | Común | 9 |
| 2-3 items | 27 | 2-3 items | 40 | 2-3 items | 42 | 2-3 items | 46 |
| B. común | 23 | B. común | 23 | B. común | 23 | B. común | 23 |
| 4 items | 3 | 4 items | 8 | 4 items | 23 | 4 items | 27 |
| **Excepcionales** | **Excepcionales** | **Excepcionales** | **Excepcionales** |
| **Table 3. (Continuación)** |
| 9 años | 10 años | 11 años | 12 años |
| N 134 | N 108 | N 112 | N 55 |
| **Esperados** | **Esperados** | **Esperados** | **Esperados** |
| Cabeza | 100 | Cabeza | 100 | Cabeza | 100 | Cabeza | 100 |
| Ójios | 100 | Ójios | 100 | Ójios | 100 | Ójios | 100 |
| Nariz | 93 | Nariz | 93 | Nariz | 93 | Nariz | 93 |
| Boca | 99 | Boca | 99 | Boca | 99 | Boca | 99 |
| Cuerpo | 94 | Cuerpo | 94 | Cuerpo | 94 | Cuerpo | 94 |
| Piernas | 99 | Piernas | 99 | Piernas | 99 | Piernas | 99 |
| Brazos | 99 | Brazos | 99 | Brazos | 99 | Brazos | 99 |
| **Comunas** | **Comunas** | **Comunas** | **Comunas** |
| Cabello | 80 | Cabello | 80 | Cabello | 80 | Cabello | 80 |
| Pies | 75 | Pies | 75 | Pies | 75 | Pies | 75 |
| Brazos 2d. | 52 | Brazos 2d. | 52 | Brazos 2d. | 52 | Brazos 2d. | 52 |
| Piernas 2d. | 46 | Piernas 2d. | 46 | Piernas 2d. | 46 | Piernas 2d. | 46 |
| Cuello | 76 | Cuello | 76 | Cuello | 76 | Cuello | 76 |
| Manos | 60 | Manos | 60 | Manos | 60 | Manos | 60 |
| Cejas | 79 | Cejas | 79 | Cejas | 79 | Cejas | 79 |
| Pupílulas | 74 | Pupílulas | 74 | Pupílulas | 74 | Pupílulas | 74 |
| Pies 2d. | 53 | Pies 2d. | 53 | Pies 2d. | 53 | Pies 2d. | 53 |
| Braz. u. hom. | 52 | Braz. u. hom. | 52 | Braz. u. hom. | 52 | Braz. u. hom. | 52 |
| **Comunas** | **Comunas** | **Comunas** | **Comunas** |
| Braz. h. abaj. | 78 | Braz. h. abaj. | 78 | Braz. h. abaj. | 78 | Braz. h. abaj. | 78 |
| Manos | 60 | Manos | 60 | Manos | 60 | Manos | 60 |
| Cejas | 79 | Cejas | 79 | Cejas | 79 | Cejas | 79 |
| Pupílulas | 74 | Pupílulas | 74 | Pupílulas | 74 | Pupílulas | 74 |
| Pies 2d. | 53 | Pies 2d. | 53 | Pies 2d. | 53 | Pies 2d. | 53 |
| Braz. u. hom. | 52 | Braz. u. hom. | 52 | Braz. u. hom. | 52 | Braz. u. hom. | 52 |
| **Ropa** | **Ropa** | **Ropa** | **Ropa** |
| 0-1 item | 16 | 0-1 item | 16 | 0-1 item | 16 | 0-1 item | 16 |
| Común | 14 | Común | 14 | Común | 14 | Común | 14 |
| 2-3 items | 40 | 2-3 items | 40 | 2-3 items | 40 | 2-3 items | 40 |
| B. común | 30 | B. común | 30 | B. común | 30 | B. común | 30 |
| 4 items | 44 | 4 items | 44 | 4 items | 44 | 4 items | 44 |
| B. común | 56 | B. común | 56 | B. común | 56 | B. común | 56 |
Tabla 2. (Continuación)

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La hipótesis subyacent en el estudio se refiere a la presencia de los elementos esperados. En los niños normales, en el niño de una edad de 5 años, se observa la presencia de elementos que se pueden esperar encontrar en los dibujos de los niños de una edad de 5 años. Sin embargo, la presencia de elementos que no se esperan en dichos dibujos se considera más significativa. La segunda categoría incluye todos los elementos que se encuentran en la categoría 'esperada', indica inmadurez excesiva, retraso, o la presencia de regresión debida a problemas emocionales.

La segunda categoría incluye todos los elementos que se encuentran en el estudio. A estos elementos se los considera "comunes". Están presentes elementos que no se esperan en los dibujos de los niños normales. La presencia de elementos que no se esperan en dichos dibujos se considera más significativa. La segunda categoría incluye todos los elementos que se encuentran en la categoría 'esperada', indica inmadurez excesiva, retraso, o la presencia de regresión debida a problemas emocionales.

La segunda categoría incluye todos los elementos que se encuentran en la categoría 'esperada', indica inmadurez excesiva, retraso, o la presencia de regresión debida a problemas emocionales.
Los denomina items esperados. Desde que estos items están presentes en los DFH de casi todos los niños normales, constituyen el mínimo de items que uno puede esperar encontrar en los dibujos de los niños de una edad dada. En consecuencia, se considera más significativa la presencia de los items esperados. La hipótesis subyace...  

<table>
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<td>Cejas</td>
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<tr>
<td>Pupilas</td>
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Tabla 2. (Continuación)  

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<td>Cuerpo</td>
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<td>B. comuniones</td>
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La omisión de cada item evolutivo incluido en la categoría esperada indica o inmadurez excesiva, retraso, o la presencia de regresión debida a problemas emocionales.

La segunda categoría incluye todos los items que se dan en el 51-85 por ciento de los DFH. A estos items se los considera comunes. Están presen-
Apéndice E. Manual de tabulación para los 30 indicadores emocionales del DFH infantil.

(Todos los indicadores emocionales se consideran válidos para varones y niñas de 5 a 12 años; a menos que expresamente se indique lo contrario. Se dan algunos ejemplos de los indicadores emocionales en las ilustraciones citadas entre paréntesis).

Signos cualitativos:

1. **Integración pobre de las partes** (Varones, 7 años; niñas, 6): una o más partes no están unidas al resto de la figura, una de las partes sólo está unida por una raya, o apenas se toca con el resto (Ilustraciones 2, 6, 10, 14, 15, 29, 36, 42, 52, 55, 96).

2. **Sombreado de la cara**: sombreado deliberado de toda la cara o de parte de la misma, inclusive "peca", "sarsamplón", etc.; un sombreado suave y parejo de la cara y las manos para representar el color de la piel no se compuerta (Ilustraciones 3, 25a, 28, 43, 50, 52a, 76, 96; ilustración 44 no compuesta).

3. **Sombreado del cuerpo y/o extremidades**: (Varones, 9 años; niñas, 8): sombreado del cuerpo y/o extremidades (Ilustraciones 6, 9, 15, 28, 29, 34, 56, 81, 95, 100).

4. **Sombreado de las manos y/o cuello**: (Varones, 8 años; niñas, 7): (Ilustraciones 4, 6, 45, 59).

5. **Asimetría general de las extremidades**: un brazo o pierna difiere marcadamente de la otra en la forma. Este ítem no se compuerta si los brazos o las piernas tienen forma parecida, pero son un poco desparejos en el tamaño (Ilustraciones 7, 14, 25a, 52a, 57, 58, 74, 75, 82, 98a; no se compuertan: ilustraciones 6, 28, 106).

6. **Figuras inclinadas**: el eje vertical de la figura tiene una inclinación de 15° o más respecto a la perpendicular (Ilustraciones 2, 3, 5, 6, 9, 28, 38, 61, 82, 95).

7. **Figura pequeña**: la figura tiene 5 cm. o menos de altura (Ilustraciones 2, 4, 5, 19, 25d, 38, 49, 58, 60, 67).

8. **Figura grande**: (Desde los 8 años, tanto en niñas como en los varones): figuras de 23 cm. o más de altura (Ilustraciones 16, 27, 28, 29, 36, 37, 39, 65, 69, 96).

9. **Transparencias**: se computan las transparencias que comprenden las porciones mayores del cuerpo y las extremidades (Ilustraciones 9, 27, 28, 43, 53, 57, 82, 82a, b, 102a, b, c). No se computan las sombras o cuando las líneas de los brazos atraviesan el cuerpo (Ilustraciones 4, 26, 19).

Detalles especiales:

10. **Cabeza pequeña**: la altura de la cabeza es menos de un décimo de la figura total (Ilustraciones 36, 46, 50, 77).

11. **Ojos béricos o desviados**: ambos ojos vuelven hacia adentro o desviados hacia afuera (Ilustraciones 16, 107); miradas de reojo no se computan (Ilustraciones 5, 13b, c).

12. **Dientes**: cualquier representación de uno o más dientes (Ilustraciones 35, 60, 61, 62, 80, 96, 98b, 101a, 107, 109).

13. **Brazos cortos**: apéndices cortos a modo de brazos, brazos que no llegan a la cintura (Ilustraciones 15, 34, 56, 66, 76, 84, 97, 104, 109, 112).

14. **Brazos largos**: brazos excesivamente largos, por su longitud pueden llegar debajo de las rodillas, o donde éstas deberían estar (Ilustraciones 6, 25b, 29, 36, 58, 71, 73, 110).

15. **Brazos pegados al cuerpo**: no hay espacio entre el cuerpo y los brazos (Ilustraciones 16, 40, 56, 57, 95, 107, 112).

16. **Manos grandes**: manos de un tamaño igual o mayor al de la cara (Ilustraciones 6, 46, 52, 58, 71, 74).

17. **Manos omitidas**: brazos sin manos ni dedos (Ilustraciones 3, 16, 25d, 42, 49, 50, 55, 96, 97); no se computan las manos ocultas detrás de la figura o en los bolsillos (Ilustraciones 12, 13a, 39, 95).

18. **Piernas juntas**: las piernas están pegadas, sin ningún espacio entre sí; en los dibujos de perfil se muestra sólo una pierna (Ilustraciones 40, 54, 66, 94, 95, 96, 101).

19. **Genitales**: representación realista o inconformablemente simbólica de los genitales (Ilustraciones 27, 59, 77).

20. **Monstro o figura grotesca**: figura que representa una persona ridícula, degradada o no humana; lo grotesco de la figura debe ser buscado deliberadamente por el niño, y no el resultado de su inmadurez o falta de habilidad.
<table>
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<th>Problemas emocionales</th>
<th>Timidos</th>
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<th>Psicosomáticos</th>
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</table>

**Omisión de:**
- Ojos
- Nariz
- Boca
- Cuerpo
- Brazos
- Piernas
- Pies
- Cuello

X: Este ítem se da significativamente más a menudo en los DFH del grupo indicado.
O: Este ítem se da más a menudo en los DFH del grupo indicado.
Cont. Apéndice E.


21. Dibujo espontáneo de tres o más figuras: varias figuras que no están interrelacionadas o realizando una actividad significativa; dibujo repetido de figuras cuando se le solicitó sólo “una” persona (Ilustraciones 7, 8, 105); no se computa el dibujo de un varón y una niña, o el de la familia del examinado (Ilustraciones 51, 104).

22. Nubes: cualquier representación de nubes, lluvia, nieve o pájaros volando (Ilustraciones 19, 36, 108).

23. Omisión de los ojos: ausencia total de ojos (Ilustraciones 7, 12, 18, 25c, 52a, 73, 84); ojos cerrados o vacíos no se computan (Ilustraciones 10, 13a, 25b).

24. Omisión de la nariz: (Varones, 6 años; niñas, 5): (Ilustraciones 5, 7, 12, 15, 25a, 34, 55, 60, 73, 75).

25. Omisión de la boca: (Ilustraciones 5, 7, 12, 18, 25c, 46, 55, 67, 73, 77).


27. Omisión de los brazos: (Varones, 6 años; niñas, 5): (Ilustraciones 2, 11, 27, 52b, 55, 65, 94, 98c, 108).


29. Omisión de los pies: (Varones, 9 años; niñas, 7): (Ilustraciones 9, 14, 27, 65, 68, 69, 74, 96).

30. Omisión del cuello: (Varones, 10 años; niñas, 9): (Ilustraciones 18, 27, 38, 68, 74, 76, 96, 109, 110).
### TABLA 2

**Prueba de Inteligencia Goodenough, Dibujar un Hombre**

**Normas para Puerto Rico**

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<td>16 - 24</td>
<td>20 - 29</td>
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**Número total de casos**: 190 : 223 : 265 : 293 : 291

* Se refiere a la edad al último cumpleaños.
PUEBDA DE INTELIGENCIA GOODENOUGH

por:

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INSTRUCCIONES PARA LA ADMINISTRACION
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Antes de empezar, asegúrese de que todos los niños tienen lápiz y de que han guardado sus libros y libretas. Trate entonces de motivarlos para el trabajo que van a hacer.

El aspecto de motivación es importante, ya que para la validez de la prueba es esencial que cada niño haga el mejor esfuerzo de que sea capaz. El examinador se dará cuenta de que mientras más pequeño el niño más necesaría se hace la motivación.

Para motivarlos podría decírseles más o menos así: "¿A cuántos les gustaría dibujar? Vamos a pensar en algo que todos podamos dibujar". Algunos niños probablemente harán sugestiones. Si alguien sugiere dibujar "un hombre", elabore la idea inmediatamente. Si no sugieren "el hombre", el examinador puede sugerirlo, más o menos de este modo, "¿y a cuántos les gustaría dibujar un hombre? Dada la naturaleza del niño es de esperarse que respondan que sí.

Proceda entonces a distribuir los papeles y pida a los niños que escriban sus nombres en el espacio indicado para ello. Si ellos no saben hacerlo el examinador les escribirá el nombre. La información adicional debe dejarse para más tarde.

Dé entonces las siguientes instrucciones:

"En estos papeles vamos a hacer el dibujo de un hombre. Hagan el mejor dibujo que ustedes puedan. Háganlo con calma y con cuidado. Yo quiero ver si los niños de este salón pueden hacer dibujos tan buenos como los niños de otras escuelas. Traten y verán que dibujos buenos ustedes van a hacer."
Mientras los niños hacen los dibujos, el examinador debe pasearse por el salón para ver si están siguiendo las instrucciones, y para dar estímulo a aquellos que lo necesiten. Al hacer esto, evítense llamar la atención al trabajo de algún individuo en particular. Si se hace algún comentario debe ser de naturaleza general, tal como éste: "Estos dibujos están quedando muy buenos, lo están haciendo muy bien." Es importante que no se hagan comentarios adversos y BAJO NINGUNA CIRCUNSTANCIA DEBE LLAMARSE LA ATENCIÓN DEL NIÑO HACIA ERRORES U OMISIONES. Conteste a cualquier pregunta de este modo: "Hazlo con tú creas."

La prueba no tiene límite de tiempo, pero casi nunca toma más de cinco o diez minutos. Si hay uno o dos niños que sean más lentos que los demás, es mejor recoger los papeles de aquellos que hayan terminado primero, mientras los demás terminan.

Si a un niño se le estropea su trabajo borrando o de cualquier otro modo, es aconsejable darle otro papel. Si un niño dibuja solamente un busto, debe dárselle otro papel y pedirle que dibuje "un hombre completo". Ambos papeles deben conservarse para efectos de comparación.
CRITERIOS PARA LA VALORACION
CRITERIOS PARA LA VALORACION

Hay dos tipos de dibujos: los que son tan infantiles que no pueden reconocerse como la figura de un hombre y los que indican una tentativa para representar la figura humana, no importa lo cruda que parezca. En estos últimos cada punto se valora positivo o negativo. Se le cuenta un crédito por cada punto que se evalúe positivamente. No se dan medios créditos. A continuación los puntos a tomarse en consideración:

1. **Cabeza**
   Requisito: Cualquier método claro de representar la cabeza es aceptable. Las facciones nada más, sin el contorno de la cabeza, no se acreditan.

2. **Piernas**
   Requisito: Cualquier método claro de representación. El número debe estar correcto. Debe tener dos piernas si el dibujo es de frente, y una o dos (dependiendo de la posición) si el dibujo es de perfil.

   Hay dibujos con una sola pierna y una muleta. Esto se valora positivo porque está claro lo que el niño tuvo en mente. Una sola pierna, sin explicación lógica, o tres piernas se valoran negativamente. Sin embargo, una sola pierna con dos pies se valora positivamente.

3. **Brazos**
   Requisito: Cualquier método claro que represente brazos. Los dedos solamente no son suficientes. Debe tener dos brazos si el
dibujo está de frente y uno o dos (dependiendo de la posición) si el dibujo es de perfil.

Algunos dibujos tienen los brazos en sitios que no son el correcto, pero si tiene brazos, se le acredita el punto no importa donde estén colocados. (véase figuras 9-12).*

4a. **Tronco**

Requisito: Cualquier método claro de representación, ya sea una línea o una figura de dos dimensiones. En aquellos casos en que no hay diferenciación clara entre la cabeza y el tronco, pero las facciones aparecen en la parte de arriba, se le acredita el punto siempre y cuando que las facciones no ocupen más de la mitad de lo que es cabeza y tronco juntos. Si la cabeza y el tronco forman una sola figura pero divididas por una raya, también se acredita el punto aunque el tronco sea más pequeño que la cabeza. Una línea de botones entre las piernas se acredita como ropa pero no como tronco, a menos que debajo de los botones haya una raya horizontal indicando que ahí terminó el tronco.

4b. **Tronco más largo que ancho**

Requisito: Las medidas deben tomarse en los puntos de mayor longitud y mayor anchura. Si las dos medidas son iguales o casi iguales que se hace difícil determinar la diferencia con el uso de una regla de milímetros, no se le acredita el punto. En la mayor parte de los casos la diferencia entre ancho y largo puede notarse sin necesidad de medir. El tronco debe estar en dos dimensiones

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para poder valorar este punto como positivo.

4c. **Hombros**

**Requisito:** En los dibujos en que la figura está de frente debe haber un cambio en la dirección del contorno de la parte superior del tronco, de tal modo que dé un efecto de concavidad. Este punto se valora estrictamente. Al tronco de **forma elíptica** nunca se le acreditan los hombros. La valoración es negativa a menos que se note claramente el ensanchamiento de la parte superior del tronco. Un tronco cuadrado o rectangular no cuenta, a menos que se hayan redondeado las enneas en arriba. (véase figura 6).

En los dibujos de perfil se debe ser más tolerante al corregir este punto, ya que es más difícil representar los hombros en dibujos de esta clase. Bastará con que no note expansión del pecho.

5a. **Unión de Brazos y Piernas al Tronco**

**Requisito:** Los brazos y piernas unidos al tronco en cualquier punto o los brazos adheridos al cuello, o los brazos pegados a la unión de la cabeza y el tronco cuando se ha omitido el cuello.

Si se ha omitido el tronco, la valoración es cero. Si las páginas no están adheridas al tronco, aunque los brazos lo estén, la valoración es cero. Si se ha omitido un brazo o una pierna, ya sea el dibujo de frente o de perfil se puede dar crédito por el brazo o pierna que aparece pero si tiene los dos brazos y las dos piernas y una aparece adherida al tronco y la otra no, la valoración es cero. Los brazos adheridos a las piernas no reciben crédito.
5b. Piernas Unidas al Tronco, Brazos unidos al Tronco en el Lugar Correcto

Requisito: En los dibujos de frente en los que 4c es positivo, los brazos deben estar pegados exactamente a los hombros. Si 4c es negativo, los brazos deben estar pegados al sitio donde se supone estarían los hombros. Valore rigurosamente, especialmente en aquellos casos en que 4c es negativo.

En los dibujos de perfil, los brazos deben ser colocados aproximadamente en el punto medio del tronco visto de lado, y un poco más abajo del cuello, donde el pecho y los hombros ensanchan. Si los brazos salen de la línea que marca el contorno de la espalda, si están pegados de la base del cuello o si están adheridos más abajo del punto de mayor expansión del pecho, el punto no se acredita. (véase el 5a en cuanto a piernas o brazos omitidos o un brazo o pierna fuera de sitio).

6a. Cuello

Requisito: Cualquier indicación clara del cuello separando la cabeza del tronco. La cabeza y el tronco pegados uno al otro no valen para este punto.

6b. Contorno del cuello continuo con el de la cabeza, el tronco o ambos. Véase figuras 6 y 7 como ejemplos de éxito con este punto.

7a. Ojos

7b. **Nariz**

Requisito: Cualquier método claro de representación. En los dibujos que son una mezcla de dibujo de perfil y dibujo de frente, se acredita este punto aunque aparezcan dos narices.

7c. **Boca**

Requisito: Rigen los mismos requisitos que para el dibujo anterior.

7d. **Nariz y Boca en Dos Dimensiones. Boca con Dos Labios**

Requisito: Véase la figura 8 para normas aceptables. En el dibujo en que la cara está de frente cualquier figura de dos dimensiones que se asemeje en forma a la nariz es aceptable. Un triángulo más o menos equilátero con la base para abajo se acredita, pero no tiene crédito si está con la base para arriba. Una línea, un punto o un círculo no reciben crédito. Dos puntuos solamente no se acreditan aquí, pero valen para el 7c.

En el dibujo de frente se le da crédito por la boca, si tiene dos dimensiones y si hay una línea indicando la separación de los dos labios. Este es el factor que con más frecuencia determina éxito o fracaso con la boca. FALTA LA PAGINA 10 al garabateo elemental; que no sea transparente, esto es, que no se vea la cabeza a través del pelo.

Requisito: Los tres requisitos mencionados son esenciales para poder acreditar este punto.

Las figuras 18, 19 y 20 son ejemplos de dibujos con crédito para este punto. Las figuras 21 y 22 son ejemplos de fracaso en este punto.
9a. **Ropa**

Requisito: Cualquier representación clara de ropa. Las formas más mentales de ropa consisten de una línea de botones a lo largo del tronco y un sombrero. Un solo punto en medio de tronco representa casi siempre el ombligo y no se acredita para ropa. Una serie de líneas horizontales o verticales sobre el tronco o las piernas es una forma de indicar tela a rayas y se acredita como ropa.

9b. Por lo menos dos piezas de ropa que no sean transparentes, esto es, que cubran la parte del cuerpo que se supone deben cubrir.

Si el sombrero está sobre la cabeza pero separado de ésta sin cubrirla en parte, no se acredita para este punto. Botones solamente, sin indicación de chándal o camisa, tampoco se acreditan.

9c. El dibujo todo libre de transparencias. Debe tener mangas y pantalones. Este punto es fácil de corregir, ya que las mangas no aparecen hasta un nivel bastante avanzado en el desarrollo mental del niño.

9d. Por lo menos cuatro piezas de ropa indicadas definitivamente. Las piezas de ropa pueden estar entre las siguientes: sombrero, zapatos, gabán, camisa, cuello, corbata, correas, tirantes, pantalones.

Nota: Los zapatos deben tener algún detalle como cabetes, suela, etc. El taco solamente no es suficiente. El gabán y la camisa deben tener un detalle tal como mangas, bolsillo, solapa o rayas.

9e. Vestuario completo sin incongruencias
Requisito: Un vestuario que se pueda identificar específicamente, como un traje de calle, uniforme de soldado o marino, traje de vaquero, etc. El vestuario debe estar completo en sus detalles y no debe haber confusiones tales como un gorro de marinero con un traje de soldado, etc. La valoración para este punto es estricta. Deben seguirse las siguientes reglas en cuanto al número de piezas de vestir requeridas:

a) El sombrero es esencial si forma parte del vestuario, por ejemplo, si es un uniforme.

b) Las mangas son esenciales, ya sean de gabán o camisa. Si el cuello y la corbata son partes esenciales del vestuario, deben aparecer en el dibujo.

c) Siempre debe tener pantalones.

d) Siempre debe tener zapatos. (véase nota debajo de 9d.)

10a. Dedos

Requisito: Cualquier método claro de representación. Si tiene dos manos, debe tener dedos en las dos, pero si solo tiene una mano se le da crédito por los dedos de ésta.

Nota: Los niños pequeños ponen los dedos en sitios curiosos y debe tenerse cuidado de no pasar éstos por alto. Véase las figuras 13-17, y la nota bajo 8a.

10b. Número correcto de dedos

Requisito: Cinco dedos en ambas manos, si tiene las dos o cinco en una mano cuando tiene una sola. Si una mano aparece escondida como agarrando algo, es lógico que los dedos no se vean, por lo tanto se le da crédito en este caso, si los dedos de la mano
que se ve están completos.

10c. Detalle correcto de los dedos

Requisito: Los dedos deben aparecer en dos dimensiones; deben ser más largos que anchos y el ángulo entre ellos no debe ser de más de 180 grados. Los tres requisitos son esenciales para la valoración positiva. Si una mano está escondida, se da crédito por la que se ve.

10d. Posición del Pulgar

Requisito: Una diferenciación clara entre el pulgar y el resto de los dedos. La valoración para este punto es estricta. Se acredita el punto si uno de los dígitos laterales es definitivamente más corto que uno de los demás --compárese específicamente con el dedo meñique-- o si el punto de unión del pulgar con la mano está más cerca de la muñeca que el punto de unión de los demás dedos. Estas condiciones rigen para ambas manos, si se ven las dos o para una, si es una sola la que se ve.

10e. La mano diferenciada de los dedos o el brazo

Véase las figuras 23-27 para las maneras más corrientes de dibujar la mano.

Este punto es fácil de valorar. Si el sujeto ha dibujado el hombre con la mano en el bolsillo, désele crédito por 10a, 10b y 10c; no se le dé crédito por 10d. Désele crédito por 10e sólo en aquellos casos en que la parte de arriba de la mano se ve fuera del bolsillo.


Requisito: Si la articulación del codo se toma como base para
la valoración, debe haber un doblez abrupto (no una curva) más o menos en la mitad del brazo. Un brazo es suficiente en este caso. Si se toma el hombro como base para la valoración, los brazos deben caer al lado del tronco más o menos paralelo a éste. Un brazo que señala rígidamente hacia abajo no se acredita. Debe haber una curva en el punto de unión del brazo con el tronco para indicar la articulación del hombro. Aunque hay relación entre este punto y el 4b y 5c, éxito en uno no implica éxito en el otro. Para efectos de claridad se da la distinción entre estos puntos.

4c. depende de la forma de la porción de arriba del tronco.
5b. depende del punto de unión de los hombros.
11a. depende del modo de adherir los brazos y el ángulo entre los brazos y el ángulo entre los brazos y el tronco.

Hay dibujos en que aparece un brazo levantado como agarrando algo. En este caso se acredita el punto, ya que hay reconocimiento de parte del sujeto de que existe la coyuntura del hombro.

En los casos de dibujos de niños pequeños y niños retardados a veces aparecen las rodillas y los codos marcados, sin aparente reconocimiento de su función como articulaciones. En este caso, la valoración es negativa. (véase figuras 33-34)


Requisito: Si se toma la rodilla como base para la valoración, la pierna debe estar doblada abruptamente más o menos en el medio, o debe ser más estrechá en este punto, aunque esto último sólo ocurre en los dibujos más refinados. El hecho de que el hombre del dibujo lleve pantalones cortos no acredita el punto
para la rodilla.

Si se toma la cadera como base para la valoración, se acredita el punto si las líneas de adentro de las piernas están unidas en el punto en que se unen con el tronco.

12a. Proporción

Cabeza

Requisito: El área de la cabeza no debe ser más de la mitad ni menos de la décima parte del área del tronco. Corríjase con indulgencia. (véase la figura 32)

12b. Brazos

Requisito: Brazos igual que el tronco de largos o un poco más largos, pero nunca llegando a las rodillas. El ancho de los brazos debe ser menos que el ancho del tronco.

12c. Piernas

Requisito: El largo de las piernas no debe ser menos que el largo del tronco, ni más del doble de esta medida. El ancho de las piernas menos que el ancho del tronco.

12d. Pies

Requisito: Las piernas y los pies deben estar en dos dimensiones. El pie debe ser más largo que ancho y que alto. El largo del pie no debe ser más de una tercera parte ni menos de una décima parte del largo de la pierna. El punto también se acredita en dibujos de frente en que el pie aparece en perspectiva, tomando en cuenta que el pie aparezca separado del resto de la pierna. (véase figura 35).

12e. Dos dimensiones
Requisito: Las piernas y brazos deben estar en dos dimensiones. El punto se acredita, aunque los pies y las manos estén en dimensión lineal solamente.

13. Talón

Requisito: Cualquier método claro de representar el talón. (véase figuras 36-38). En los dibujos de frente se acredita el punto cuando el pie aparece en perspectiva. (véase figura 35).

14a. Coordinación Motora Líneas A

Requisito: Todas la líneas deben ser razonablemente firmes, sin tendencia a cruzarse, o a dejar huecos en el sitio donde deben unirse. El grado de complejidad del dibujo debe tomarse en consideración en este respecto, ya que un dibujo sencillo, de pocas líneas debe corregirse más estrictamente que un dibujo que envuelve muchos detalles y cambios en la dirección de las líneas.

Para valorar este punto y los cinco subsiguientes es conveniente que se consulten las páginas 112-161.

14b. Coordinación Motora Líneas B.

Requisito: Todas las líneas deben estar trazadas firmemente. Este punto se basa en una interpretación mucho más rígida de las reglas dadas para el punto anterior. Es obvio que no se puede acreditar, si no se acredita el 14a.

14c. Coordinación Motora. Cabeza.

Requisito: El contorno de la cabeza no debe tener irregularidades no intencionales. Este punto se acredita sólo en aquellos dibujos en que la forma de la cabeza ha evolucionado más allá de la forma elemental de círculo o de elipse, ya que es en los
dibujos más elaborados donde se requiere control consciente de los movimientos de la mano.

14d. Coordinación Motora. Tronco.

Requisito: Los mismos que para el punto anterior, aplicados al tronco. El tronco con forma de círculo o ellipse no se acredita para este punto.

14e. Coordinación Motora. Brazos y Piernas

Requisito: Los brazos y las piernas no deben tener irregularidades, ni tampoco la tendencia a adelgazarse en el sitio de unión con el tronco. Las piernas y los brazos estar en dos


Requisito: Las facciones deben ser simétricas en todos respectos. Los ojos, la nariz y la boca deben estar en dos dimensiones. En los dibujos que están de frente los ojos deben estar quidistantes de la nariz y de las comisura de los labios. La nariz debe ser simétrica y debe estar colocada sobre el centro de la boca. Si la nariz está representada por dos puntos, éstos deben estar quidistantes de las comisuras de los labios. Los dos lados de la boca deben ser iguales y la boca debe estar en ángulo recto con el eje de la cabeza. En los dibujos de perfil, el ojo debe tener forma regular y la distancia entre el centro del ojo; y la parte de atrás de la cabeza no debe ser menos del doble de la distancia entre el centro del ojo y el puente de la nariz. La nariz debe formar un ángulo obtuso con la frente y su tamaño debe estar en proporción con el resto de las facciones.

La valoración de este punto es muy estricto y se acredita con
más frecuencia en dibujos de perfil que en dibujos de frente.
15a. **Orejas**

Requisito: Dos orejas si el dibujo está de frente, una si está de perfil. Cualquier método claro de representación es aceptable.

Debe tenerse cuidado de no pasar por alto orejas incospícuas. (véase figuras 43-46). En los dibujos de niños pequeños es fácil a veces confundir las orejas con los brazos. Es bueno recordar que por regla general los brazos aparecen a nivel más temprano de desarrollo que las orejas, de modo que en caso de duda con una facción inexplicable, es más seguro asumir que es un brazo en vez de una oreja.

15b. Las orejas en proporción y posición correcta

Requisito: La medida vertical de las orejas debe ser mayor que la horizontal. En los dibujos de perfil debe haber algún detalle tal como un punto para representar el canal auditivo. Este detalle puede o no puede aparecer en los dibujos de frente. Las orejas deben estar colocadas más o menos en el tercio del medio de la cabeza vista desde el lado. La parte de forma de caracol de la oreja debe extenderse hacia atrás. Muchos niños, especialmente los retardados, invierten esta pate de la oreja y hay que tener cuidado con este detalle.

16a. **Detalles del Ojo. Cejas, Pestañas o ambas.**

Requisito: Cualquier método claro de representación. En la mayor parte de los casos, la ceja se indica por medio de una línea curva sobre el ojo, y las pestañas por medio de una serie de líneas
que se proyectan del ojo.
16b. Detalle del ojo. Pupila

Este es un aspecto fácil de valorar. Nótese que un punto con una raya curva encima no se valora, ya que este punto se considera con el ojo. Si el dibujo tiene dos ojos, ambos deben tener pupilas.

16c. Detalles del ojo. Proporción

Requisito: La medida horizontal del ojo debe ser mayor que la vertical. Si tiene dos ojos, el requisito incluye a ambos, y a uno sólo si es que tiene un solo ojo. En algunos dibujos elaborados en que la figura está de perfil, el ojo aparece en perspectiva, esto es, en vez de la forma de almendra tiene la forma de un sector de un círculo. En estos casos se acredita el punto.

16d. Detalles del ojo. La Mirada

Requisito: La cara debe estar de perfil. Para acreditar este punto el ojo debe estar en perspectiva, o puede tener la forma de almendra, pero en este último caso se requiere que la pupila esté hacia el frente y no en el medio del ojo. Debe corregirse estrictamente.

17a. Barbillav frente

Requisito: En los dibujos en que la figura aparece de frente, debe haber suficiente espacio arriba de los ojos para representar la frente y bajo la boca representar la barbilla. Corrijase con tolerancia. En los dibujos de perfil puede acreditarse, aunque los ojos y la boca estén omitidos, siempre que los contornos de la cara indiquen claramente los límites de la frente y la barbilla. Si no
hay separación entre la barbilla y el cuello en dibujos en que la figura está de frente, no se acredita el punto. (véase la figuras 47-50 para ejemplos de éxito y fracaso con este punto)

17b. Proyección de la barbilla, la barbilla diferenciada del labio inferior.

Este punto se acredita muy raras veces excepto en dibujos de perfil. En dibujos en que la figura aparece de frente, se puede acreditar el punto si la barbilla aparece modelada de algún modo, como por ejemplo, con una línea curva bajo el labio.

18a. **Perfil A**

Requisito: La cabeza, el tronco y los pies deben estar de perfil, sin error. Debe haber una indicación de que el tronco está de perfil, tal como la posición de los botones de la camisa, la posición de los brazos, de los bolsillos, chalina, etc.

El dibujo puede contener uno, pero solamente uno, de los siguientes errores.

1. Una transparencia, como por ejemplo, que el tronco se vea a través del brazo.

2. Que las piernas no estén de perfil. (En el verdadero perfil, la parte de arriba de la pierna que está en el fondo, debe estar escondida por la que aparece en frente.)

3. Los brazos adheridos al contorno de la espalda y extendiéndose hacia el frente.

18b. **Perfil B**

Requisito: La figura debe estar de verdadero perfil sin error, ni transparencia, excepto que pueda ignorarse la forma del ojo.
Las normas que presentamos a continuación están basadas en las instrucciones para la administración de la prueba y los criterios para la valoración tal como aparecen en este manual.

Para obtener estas normas, se administró el examen a un grupo de cada grado de primero al quinto en siete escuelas públicas y cuatro escuelas privadas de San Juan. Estas escuelas son las siguientes: Martín G. Brunbaugh, José Juálián Acosta, Pedro Goyco, Juálián E. Blanco, Emilio Castellar, Manuel Boada, Sagundo Ruiz Belvis, Liceo Puertorriqueño, Academia Catedral Episcopal, Academia Santa Teresita y Colegio Puertorriqueño de Niñas. Se obtuvieron de este modo 11 grupos de cada grado. Todos estos grupos, de acuerdo con el criterio de sus maestros, hacían trabajo promedio para el grado. Se administró el examen además a cuatro grupos de kindergarten de las cuatro escuelas privadas. Esto elevó el número de sujetos a quienes se administró la prueba a 2,100, cuyas edades fluctuaron entre 4 y 16 años. De estos 2,100 se seleccionaron para evaluar los exámenes de aquellos alumnos que tenían la edad apropiada para el grado en que estaban, esto es, de 5 y 6 años en kindergarten, de 6 y en primer grado, de 7 y 8 en segundo grado, hasta llegar al alumnos de 10 y 11 años en quinto grado. De esta manera, se redujo el número de sujetos al 1,757, ya que se eliminaron los exámenes de los alumnos que estaban retardados o situados en el grado de acuerdo con su edad. Finalmente se excluyeron los exámenes de los niños de cinco y once años. Se
NORMAS PARA PUERTO RICO
eliminaron los de cinco años porque éste era un grupo selecto obtenido de escuelas privadas. y se eliminaron los de once años para usar como límite superior de edad el mismo usado por la Dra. Goddencough.

Luego se obtuvo el promedio de valoración de todos los niños de cada edad y el error probable. (véase Tabla 1.) El promedio se usó como punto de partida para establecer demarcaciones entre las diferentes categorías de inteligencia y el error probable (E.P.) para definir los límites entre las distintas categorías. (véase Tabla 2)

Se notará que el criterio utilizado para la clasificación ha sido la valoración obtenida por el alumno en el examen, ya que no hemos intentado convertir estas valoraciones a edad mental o cociente intelectual. El lector notará que nos hemos apartado de la clasificación tradicional de los distintos niveles de la inteligencia con el propósito expreso de eliminar tales categorías como deficiente mental, morón, torpe, fronterizo, etc. En ausencia de un acuerdo general para la adopción de una definición estadística de lo que es deficiencia mental, y en ausencia de un criterio exacto para adoptar un determinado cociente de inteligencia como el límite inferior de lo normal," hemos creído preferable usar las categorías de promedio bajo, inferior y muy inferior.

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David Brower and Lawrence E. Abt. (Editors) Progress in Clinical Psychology Vol. 1, (Section 2) 170-451.
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Promedio, Desviación Standard y Error Probable de Valoraciones por Edad