

logical extreme of emotionality borders psychosis. It should be emphasized that any of the five factors are insufficient for any type of pathological diagnosis. A Temperament Profile Chart in constation of scores is recommended. Its composite of those presented in this

800 Senior High School Students 100 girls, Lincoln, Nebraska)

D	C	R	Centiles
0-5	9-8	69+	99
6-8	9-11	64-68	96-98
9-10	12-15	60-63	89-95
11-15	16-20	54-59	77-88
16-20	21-26	49-53	65-76
21-26	27-33	43-48	40-59
27-32	34-39	37-42	23-39
33-38	40-45	30-36	11-22
39-42	46-50	24-29	4-10
43-49	51-55	16-23	1-3
50+	56+	0-15	0

5 University of Nebraska Students

D	C	R	Centiles
0-1	0-5	75+	99
2-4	6-9	66-74	96-98
5-8	10-15	61-65	89-95
9-12	16-20	53-60	77-88
13-17	21-24	46-52	60-76
18-23	25-31	38-45	40-59
24-31	32-38	30-37	23-39
32-38	39-46	23-29	11-22
39-44	47-53	15-22	4-10
45-49	54-59	10-14	1-3
50+	60+	0-9	0

based upon 80 Adults aged 22 to 54 years, Los Angeles, Calif.)

D	C	R	Centiles
0-4	0-4	63+	99
5-8	5-7	56-62	96-98
9-13	8-11	48-55	89-95
14-19	12-16	42-47	77-88
20-26	17-22	37-41	60-76
27-30	23-30	32-36	40-59
31-34	31-37	25-31	23-39
35-41	38-45	20-24	11-22
42-49	46-52	16-19	4-10
50-53	53-59	14-15	1-3
54+	60+	0-13	0

and R. B. Guilford, *Personality Factors*, D. R. T. 2, 1939, 34, 21-36.

Johnson, *The Theory of the Estimation of Test Reliability*, 1931-1960.

Age Differences and Sex Differences in Some Interests, *Etiologic Factors in the Adjustment of Men*, 1943, 4, 129-139.

Statistics in Psychology and Education, New York, 1942, Ch. VII.

83. In social conversations, are you usually a listener rather than a talker? Yes ? No 83
84. Do you frequently feel that people around you are talking about you? Yes ? No 84
85. Do you like to have time to be alone with your thoughts? Yes ? No 85
86. Do you find it difficult to go to sleep at night because experiences of the day keep "running through your head"? Yes ? No 86
87. Are you inclined to take your work casually, that is, as a matter of course? Yes ? No 87
88. Are you inclined to avoid meeting certain people on the street (bill collectors and the like not included)? Yes ? No 88
89. Do you find it easy, as a rule, to make new acquaintances? Yes ? No 89
90. Are you inclined to be quick and sure in your actions? Yes ? No 90
91. Are you troubled about being self-conscious? Yes ? No 91
92. Do you often feel restless while listening to a lecture? Yes ? No 92
93. Do you believe that people often misunderstand what you say? Yes ? No 93
94. Do you limit your friendships mostly to members of your own sex? Yes ? No 94
95. Does your mind wander badly so you lose track of what you are doing? Yes ? No 95
96. Are you often in a state of excitement? Yes ? No 96
97. Do you dislike to talk about yourself, even to close friends? Yes ? No 97
98. Do you prefer to be conservative in the matter of dress and personal appearance? Yes ? No 98
99. Do you like to discuss the more serious questions of life with your friends? Yes ? No 99
100. Are you inclined to keep your opinions to yourself during group discussions (not class discussions)? Yes ? No 100
101. Do you enjoy thinking out complicated problems? Yes ? No 101
102. Are you inclined to be introspective, that is, to analyze yourself? Yes ? No 102
103. Are there times when you seek to be alone and you cannot bear the company of anyone? Yes ? No 103
104. Are you much concerned over the morals of others? Yes ? No 104
105. Do you frequently take time out just to meditate about things in general? Yes ? No 105
106. Are you usually unconcerned about the future? Yes ? No 106
107. Do you usually become so absorbed in watching an athletic contest that you completely forget yourself? Yes ? No 107
108. Can you relax yourself easily when sitting down? Yes ? No 108
109. Are you usually a "good mixer"? Yes ? No 109
110. Do you usually prefer a "slapstick" comedy to a serious drama at the movies? Yes ? No 110
111. Do you frequently find it difficult to go to sleep at night, even though you are tired? Yes ? No 111
112. Would you rate yourself as a happy-go-lucky individual? Yes ? No 112
113. Do you ever take your work as if it were a matter of life or death? Yes ? No 113
114. Do you often "have the time of your life" at social affairs? Yes ? No 114
115. Do you think there is a great deal more happiness in the world than misery? Yes ? No 115
116. Are you frequently "lost in thought"? Yes ? No 116
117. Have you often lost sleep over your worries? Yes ? No 117
118. Do you like to mix socially with people? Yes ? No 118
119. Do you believe that the morals of modern youth are generally superior to those of former generations? Yes ? No 119
120. Are you inclined to think over your failures long after they are past? Yes ? No 120
121. Are there times when your mind seems to work very slowly and other times when it works very rapidly? Yes ? No 121
122. Are you inclined to avoid all people whenever possible? Yes ? No 122
123. Do you enjoy participating in a showing of "Rah Rah" enthusiasm? Yes ? No 123
124. Do you usually feel disappointments so keenly that you cannot get them out of your mind? Yes ? No 124
125. Do you derive more real satisfaction from social activities than from anything else? Yes ? No 125
126. When you stop to consider your future, does it usually seem very optimistic? Yes ? No 126
127. Are you sometimes so "blue" that life seems hardly worth living? Yes ? No 127

THE GUILFORD-MARTIN PERSONNEL INVENTORY

Manual of Directions and Norms

..... deserves to	Yes	1	No	25
to be without	Yes	1	No	26
.....	Yes	1	No	27
accomplished?	Yes	1	No	28
a bit like you?	Yes	1	No	28
try to see what	Yes	1	No	30
est?	Yes	1	No	31
isly in need of	Yes	1	No	32
.....	Yes	1	No	33
.....	Yes	1	No	34
.....	Yes	1	No	35
.....	Yes	1	No	36
hobbies rather	Yes	1	No	37
even though	Yes	1	No	38
.....	Yes	1	No	39
re it?	Yes	1	No	40
.....	Yes	1	No	41
.....	Yes	1	No	42
void you?	Yes	1	No	43
" or to "tell	Yes	1	No	44
.....	Yes	1	No	45
.....	Yes	1	No	46
your feelings	Yes	1	No	47
to do things	Yes	1	No	48
disturbs your	Yes	1	No	49
.....	Yes	1	No	50
oif as to who	Yes	1	No	51
.....	Yes	1	No	52
quare deal in	Yes	1	No	53
et ahead?	Yes	1	No	54
ouchy?	Yes	1	No	55
.....	Yes	1	No	56
r to the plans	Yes	1	No	57
weak?	Yes	1	No	58
.....	Yes	1	No	59
.....	Yes	1	No	60
ow a leader?	Yes	1	No	61
venting some	Yes	1	No	62
.....	Yes	1	No	63
own game?	Yes	1	No	64
can without	Yes	1	No	65
nce?	Yes	1	No	66
.....	Yes	1	No	67
.....	Yes	1	No	68

Purpose of the Test.—This instrument was designed with two primary purposes in mind. It was first of all designed as a means of assisting supervisors of workers in business and industry to single out and to diagnose those individuals who are personally maladjusted in their jobs, particularly those who are discontented and likely to become troublemakers—hence the name, "Personnel Inventory." The locating of potential troublemakers in advance of their being hired, or if already employed, in advance of their overt difficulties, is undeniably a worth while goal. As a second motive, the test was designed to extend the list of temperamental traits already assessed by Guilford's "Inventory of Factors S T D C R." The temperamental area covered by the new inventory may be roughly designated by the term "paranoid," though only the extreme symptoms deserve that appellation borrowed from psychopathology. The new Inventory, therefore, has general clinical applications which extend beyond the industrial situation.

The Traits.—Factor analysis studies¹ and clinical experience² show that there are several aspects to the paranoid disposition, though it seems probable that these aspects are interrelated. These aspects may be described as (1) subjectivity (taking things personally; ideas of reference; touchiness), (2) belligerence (domineering attitude; craving for superiority), (3) suspiciousness, and (4) faultfinding or hypercriticalness. In setting up the lists of items diagnostic of these traits it was found that the last two could not be scored with sufficient independence to justify separate scores. The list of traits measured by the Inventory therefore reduces to three. Using the names of the more favorable end of the scale in each instance, they are:

O—objectivity (as opposed to personal reference or a tendency to take things personally)

Ag—agreeableness (as opposed to belligerence or a dominating disposition and an overreadiness to fight over trifles)

Co—cooperativeness (as opposed to faultfinding or overcriticalness of people and things)

Selection of the Items.—More than 200 items were constructed with the supposition that they would be diagnostic of one or more of the four aspects listed above. This list, stated in question form to be answered by either "Yes," "?", or "No," was administered to 250 men and 250 women workers who were or had been employed by a number of California industrial concerns, business offices, and civil service units. The age range was from 20 to 45. A minimum requirement of sixth-grade literacy assured adequate reading ability for all subjects. An effort was made to make the sample of 500 individuals truly representative of a diverse employed population. Preliminary scoring keys were prepared on the basis of the best statistical and clinical evidence at hand. Four hundred papers were scored with these keys and

after the test of internal consistency was applied to every item, approximately 150 items remained as significantly diagnostic as evidenced by their correlation with highest and lowest quarters of the sample.

Reliability of the Scores.—Scoring weights were assigned to responses of the items in accordance with a method devised by Guilford.⁴ The reliability of the three scoring keys was checked by applying them to the 100 papers not used in deriving the weights, including men and 50 women. The split-half method was employed, dividing the scored items into two random halves. Pearsonian coefficients of correlation were computed and reliabilities were estimated by means of the Spearman-Brown formula. These coefficients were .83 for trait O, .80 for trait Ag, and .91 for trait Co. Such reliabilities are sufficiently high for vocational and clinical purposes.

Intercorrelations of the Trait Scores.—As is usually true of inventories of this type, there are intercorrelations among the trait scores. Previous experience has shown that scorings may be intercorrelated even when the traits themselves are probably independent, due to the fact that items are not pure indicators of traits. Very few items were scored for more than one trait. The intercorrelations in the sample of 100 were: O and Ag, .64; O and Co, .55; and Ag and Co, .63. These interrelations are low enough to make separate scores useful.

Validity of the Scores.—It was possible to make a brief study with the new Inventory which throws some light on its validity in an industrial situation. A Southern California industry administered the test to 51 employees among whom were a large number whom the personnel executives regarded as troublemakers or malcontents. The remaining employees in the group were regarded by the same judges as being satisfactory from the same point of view. The scores for traits O, Ag, and Co yielded very flat distributions of the 51 cases, tending distinctly toward bimodality. Having no knowledge of the proportion of satisfactory and unsatisfactory workers in the group, and having no knowledge of which individuals belonged in each category, it was decided, in view of the form of the distributions, to accept the medians as the critical scores. Any individual who was below the median on two or more traits was predicted to be in the unsatisfactory group. Of the 22 workers judged unsatisfactory by management, 73% were detected as unsatisfactory in terms of the critical scores adopted for the purpose. Of the 29 judged as satisfactory by management, only 34% were mistakenly placed in the unsatisfactory category by the test. It is possible that the individuals had not all been correctly judged by the personnel observers. It is likely that critical scores derived empirically would have given better prediction. At any rate, a test which makes more than twice as many correct predictions as errors can be said to offer definite usefulness. It is strongly urged that

similar experiments be conducted in any particular industrial situation before the Inventory is put to the use of making this kind of discriminations. Critical scores based upon experience are best for each situation. In this way the maximal usefulness of the test can be assured, and its validity for the purpose intended can be demonstrated. The Test Division of the Sheridan Supply Co. is prepared to render advisory service on technical matters in connection with such validation studies.

Administration of the Inventory.—Best results will be obtained if the test is administered to subjects individually or in small groups under supervision. An appeal for full cooperation is desirable. Ideally, any implication that the individual's future status will hinge on the outcome should be avoided. The instructions as printed on the test booklet should not be altered by additions or amendments. Every person should be given sufficient time to complete the test. All can usually finish within 30 minutes.

Scoring the Inventory.—See page 1 of transparent scoring keys for directions for scoring. The score in each factor is the total number of points from the four pages for that factor. Record these three totals at the top of page 1 of the test booklet at the right of "Raw Scores." The raw scores may now be converted into scaled scores (C-scores) by reference to the table below:

C-Score	Raw Scores			C-Score	
	O	Ag	Co		
10	71+	56+	97+	10	(highest 1%)
9	68-70	53-55	89-96	9	(next 3%)
8	62-67	47-52	81-88	8	(next 7%)
7	56-61	42-46	72-80	7	(next 12%)
6	49-54	37-41	65-71	6	(next 17%)
5	42-48	32-36	54-64	5	(average—20%)
4	36-41	27-31	45-53	4	(next 17%)
3	28-35	22-26	35-44	3	(next 12%)
2	20-27	17-21	27-34	2	(next 7%)
1	13-19	12-16	20-26	1	(next 3%)
0	0-12	0-11	0-19	0	(lowest 1%)

Interpretation of the Scores.—Scores have meaning only when referred to certain landmarks, such as averages, highest scores and lowest scores. More definite ideas can be obtained from a set of norms such as those in the above table. This table of norms was derived from the 500 papers upon which the item selections and reliabilities were also based. A standard C-scale of 11 points is used for all three traits. Each person's raw score can be readily converted into the common C-scale in the following manner. Note that corresponding to each C-score the highest and lowest raw score is given for each trait. Thus, all raw scores from 54 through 64 in trait Co correspond to a C-score of 5. Raw scores from 0 through 12 on trait O correspond to a C-score of 0. Scores of 56 and up for trait Ag correspond to a C-score of 10. A person with raw scores of 28, 13 and 70 for traits O, Ag and Co, respectively, would have C-scores of 3, 1 and 6 in those same traits. From these C-scores it can readily be seen that this person is rather low in objectivity, in the lowest four percent of the group in agreeableness, and just slightly above average in cooperation (5 is always average). High scores here also mean favorable characteristics and low scores mean unfavorable characteristics. The C-scores have the distinct advantage of placing an individual with respect to the distribution of a large sample. It must be remembered, however, that the sample on which the norms were based was not seeking employment or promotion. In groups under other circumstances scores may not be at all comparable. The norms as given apply where rather full cooperation and honesty of the individual may be taken for granted.

69. Do you feel that many young people are thoughtless of others?
70. Are most people thoughtless of others?
71. Are you continually comparing yourself with others?
72. Do a lot of people you have known lately feel that they are better than you?
73. Generally speaking, do you believe that most people deserve to "take a beating" for the way they live?
74. Do you find that generally if you are nice to people, they are nice to you?
75. Can a person get ahead by being nice to everyone?
76. Do you consider yourself a rather nice person?
77. Do you think your generation is better than the generation had?
78. Do other people pay more attention to you than you deserve?
79. When things become dull do you get bored?
80. Do you think the educational system is fair to everyone?
81. Do you usually receive criticism from others?
82. Have you ever found out that you know as much as you did about something?
83. Is there anyone you know personally who is better than you?
84. Are there important changes you could have a substantial influence on?
85. Do you think that most people are better than you?
86. In most situations is it all right to be a friend?
87. Have you very much resented orders from others?
88. Are you as quick as other people to get angry?
89. Do people frequently talk about you?
90. Is it almost unbearable for you to be in a crowd?
91. Is it true that people will get tired of you if you are around too long?
92. Have you known many "two-faced" people?
93. Can most people be trusted to do what they say?
94. Do you derive considerable satisfaction from being able to get the best of others?
95. Do you believe that all public interests first?
96. Should the government take business decisions?
97. Are your feelings rather easily hurt?
98. Generally speaking, do you believe that most people are "cutthroats"?
99. Do you usually get more than you deserve?
100. Are there many kinds of work that you can do?
101. Do you think that a lot of people are sympathetic toward others?
102. Do people ever accuse you of being selfish?
103. Have you often felt that certain people are better than you?
104. Would you prefer a hard job to an easy one?
105. Have you frequently wished that you were better than you are?
106. Have you frequently become angry with members of your family?
107. Is it difficult for you not to be angry?
108. If you could have your way about everything, would you be a better person?

1. One unpublished study, and C. I. Mosier, A factor analysis of certain neurotic tendencies, *Psychometrika*, 1937, 2, 263-287.
2. R. H. Johnson, The inheritance of personality, *Education*, June 1941, 592-597.
3. Mosier, *Op. cit.* This trait probably corresponds with Mosier's factor of hypersensitivity.
4. J. P. Guilford, A simple scoring weight for test items and its reliability, *Psychometrika*, 1941, 4, 367-374.

109. Are many of your supposed friends really insincere?.....Yes ☐ No ☐ 109
110. Do many people think you are "hard-boiled"?.....Yes ☐ No ☐ 110
111. Does everything that happens seem to have a relationship to your own life or experience?.....Yes ☐ No ☐ 111
112. Do some people become so bossy or domineering that you want to do the opposite of everything they tell you to do?.....Yes ☐ No ☐ 112
113. Do other people often deliberately make things hard for you?.....Yes ☐ No ☐ 113
114. Are there times when it seems that everyone is against you?.....Yes ☐ No ☐ 114
115. When criminals make a daring escape from prison do you sometimes secretly hope that they will avoid capture?.....Yes ☐ No ☐ 115
116. Do you sometimes feel contempt for the opinions of others?.....Yes ☐ No ☐ 116
117. Does it bother you to have other people tell you what you should do?.....Yes ☐ No ☐ 117
118. Do you often feel that you are left out of things, perhaps unintentionally, in group activities?.....Yes ☐ No ☐ 118
119. Is it difficult for anyone to impose upon you for the reason that you are usually wise to their intentions?.....Yes ☐ No ☐ 119
120. Does the United States Government owe every one of its citizens a decent living?.....Yes ☐ No ☐ 120
121. Is the person who carelessly leaves valuable property lying around as much to blame as the person who appropriates it for his own use?.....Yes ☐ No ☐ 121
122. Have some people criticized you unjustly to others?.....Yes ☐ No ☐ 122
123. Will most people in business bear close watching when you are dealing with them?.....Yes ☐ No ☐ 123
124. Are you deserving of things far better than is your present lot?.....Yes ☐ No ☐ 124
125. Do you think no one would keep to the "straight and narrow path" were it not for the fear of being caught?.....Yes ☐ No ☐ 125
126. When you lose something do you often begin to suspect someone of either having taken it or having misplaced it?.....Yes ☐ No ☐ 126
127. Do you think that most people who allow themselves to come under the rule of a dictator are to blame for their plight?.....Yes ☐ No ☐ 127
128. Is there any subject on which you would like to hold a public indignation meeting for the purpose of organizing a mass protest?.....Yes ☐ No ☐ 128
129. Were you ever seriously double-crossed?.....Yes ☐ No ☐ 129
130. Do you believe the parole system works more to the advantage of the prisoner than to the advantage of society?.....Yes ☐ No ☐ 130
131. Do you tend to let people run over you more than you should for your own good?.....Yes ☐ No ☐ 131
132. Have you frequently felt like telling "nosey" people to mind their own business?.....Yes ☐ No ☐ 132
133. Have you often found it necessary to stand up for what you believe to be right?.....Yes ☐ No ☐ 133
134. Do you usually seek to become an officer in any organization to which you belong?.....Yes ☐ No ☐ 134
135. Were you ever so deeply in debt that you did not know where the money was coming from to pay what you owed?.....Yes ☐ No ☐ 135
136. In group undertakings do you usually manage to have your own plans put into effect?.....Yes ☐ No ☐ 136
137. Do other people often blame you for things unfairly?.....Yes ☐ No ☐ 137
138. In most cases is it important to get what you want even if you have to come into conflict with other people in order to get it?.....Yes ☐ No ☐ 138
139. Have other people been too ready to accept credit which rightfully belongs to you?.....Yes ☐ No ☐ 139
140. Do you sometimes feel sorry for all the people in the world?.....Yes ☐ No ☐ 140
141. Have you had more than your share of hard luck?.....Yes ☐ No ☐ 141
142. Do other people often try to put things over on you when you are not watching?.....Yes ☐ No ☐ 142
143. Is there any person whom you would particularly like to "put in his (or her) place"?.....Yes ☐ No ☐ 143
144. Do you believe that most people require someone to tell them what to do?.....Yes ☐ No ☐ 144
145. Is there any piece of music that usually makes you weep when you hear it?.....Yes ☐ No ☐ 145
146. Are people in general out to get more than they give?.....Yes ☐ No ☐ 146
147. Do you often find it necessary to return merchandise to a store because it turns out to be not as represented?.....Yes ☐ No ☐ 147
148. Do people near you sometimes whisper or look knowingly at one another when they think you are not noticing them?.....Yes ☐ No ☐ 148
149. If someone rudely crowds ahead of you in line, do you tell him where he belongs?.....Yes ☐ No ☐ 149
150. Have you marked an answer ("Yes," "I," or "No") for every one of the above questions?.....Yes ☐ No ☐ 150

INVENTO

Mr.
Mrs.
Name Miss _____
(Cross out two)

Nearest age (encircle):

15 20 25 30 35 40 45 50 55 60

DIRECTIONS: Below you will find 27 questions, each beginning with "I," or "No." Read each question carefully and draw a circle around the answer that you are unable to decide between the "Yes" and "No" answer to any of these questions except

1. Do you believe that you know more about the world than most people?.....
2. Does your personality stand out from the crowd?.....
3. When climbing stairs do you often forget the step?.....
4. Do you often feel the need for a change?.....
5. When you think you recognize someone, do you often find out that you have met him before?.....
6. Do you have one or more abilities that are unusual for most people?.....
7. Do you express such emotions as love, hate, etc., more than most people?.....
8. Do you feel that people almost always know what you are thinking?.....
9. Do you become very annoyed when you are interrupted?.....
10. Do you find it difficult to get things done when you are in a hurry?.....
11. Have you ever kept a personal diary?.....
12. When going somewhere in an automobile, do you often find yourself in slow-moving traffic?.....
13. Are you afraid of deep water?.....
14. Are you inclined to be quick in your decisions?.....
15. Do you frequently feel thwarted?.....
16. Do you usually hesitate to take action unless you are sure it will be successful?.....
17. Do you cry rather easily?.....
18. Do you believe you have been hurt by someone?.....
19. Are there ever times when you feel that you did not control yourself?.....
20. Do you always know what to do in a crisis?.....
21. At work or at play, do other people often look up to you?.....
22. Do you often wish you were stronger than you are?.....
23. Do you (or would you) ever have a crush on someone?.....
24. Do you often find that you can't get things done?.....
25. Do you find it easy to start a new project?.....
26. Do you often become irritated with people?.....
27. If an acquaintance of yours has a crush on you, do you usually "have" him or her?.....

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AN INVENTORY OF FACTORS S T D C R

by J. P. GUILFORD, Ph.D.

Manual of Directions and Norms

REVISED EDITION

The Factors Described.—This Inventory was developed on the basis of factor-analysis studies of items in personality questionnaires. The factors S, T, D, C, and R taken together were found to encompass the area of personality traditionally known as introversion-extraversion. Strictly speaking, only factors S, T, and R belong in this category, but they represent three distinct types of introversion-extraversion. Factors D and C are more appropriately designated as emotionality factors which were formerly confused with the Jungian categories. More specifically, the factors are defined in what follows immediately. Each factor usually represents a descriptive dimension of personality with opposite poles. The letter designation was adopted to stand for the more descriptive end of the scale in each case.

S—Social introversion-extraversion.—Shyness, seclusiveness, tendency to withdraw from social contacts, versus sociability, tendency to seek social contacts and to enjoy the company of others.

T—Thinking introversion-extraversion.—An inclination to meditative or reflective thinking, philosophizing, analysis of one's self and others, versus an extravertive orientation of thinking.

D—Depression.—Habitually gloomy, pessimistic mood, with feelings of guilt and unworthiness, versus cheerfulness and optimism.

C—Cycloid disposition.—Strong emotional fluctuations, tendencies toward flightiness and emotional instability, versus uniformity and stability of moods, evenness of disposition.

R—Rhythymia.—A happy-go-lucky, carefree disposition, liveliness, impulsiveness, versus an inhibited, over-controlled, conscientious, serious-minded disposition.

The Scoring Weights.—The 175 items of the Inventory were obtained after successive tests of internal consistency of the responses of 400 university students who were predominantly at the sophomore level. The Inventory is therefore best applied to similar individuals, and should give most valid results when there is reasonable cooperation from the testees. The keys for factors S, D, and C give all significant responses a weight of one point and those for factors T and R weight some responses two points. The demand for simplicity of scoring weights was dictated by the requirements of machine scoring. It was found that unweighted scoring had immaterial effects upon reliability as shown by the results.

Use of the Scoring Keys.—In scoring the Inventory, first lay the transparent key for page one, factor S, upon the column of responses. If the top and bottom of the key coincide with the top and bottom of the test booklet, with the three columns of 1's in line with the three responses "Yes, 1, No," then count the number of 1's that fall upon encircled responses. Repeat similarly for other factors, and other pages, adding one or two points for each significant response, as the key is marked. The score in each factor is the total number of points.

Reliability of the Scores.—The reliability of scoring an inventory of this type can only be estimated. A combination of alternate sixths of the items into two pools of approximately equal lists and a use of the Spearman-Brown formula gave estimated reliabilities of .92, .89, .91, .91, and .89 for factors S, T, D, C, and R, respectively in a population of 200 (100 men and 100 women) selected at random from the criterion group. In an entirely new group of 100 (50 men and 50 women) similarly estimated reliabilities were: .90, .84, .94, .88, and .90, respectively. Corresponding reliabilities in the same sample by the Kuder-Richardson² method were .92, .85, .90, .87, and .91.

Correlations Among the Scores.—Intercorrelations among the scoring keys occur, as is usually true with inventories of this type. The factorial studies revealed some actual correlations among factors S, T, and D, ranging as high as .50. A small correlation between factors D and R was also indicated. Previous experience has shown that the correlations of the five scorings of this Inventory vary somewhat from one population to another, but the following table is typical (the scores for R were reversed to yield consistency in algebraic sign):

	S	T	D	C
T	.15			
D	.40	.15		
C	.33	.14	.85	
R	.54	.21	.36	.02

Validity of the Scores.—The determination of validities of scores of personality tests is a most difficult problem. Good criteria are universally lacking. This statement merely expresses a situation realistically. There are two important varieties of validity data for any test. One pertains to its value as a measuring instrument of certain psychological variables, in this instance the purported factors. The other pertains to its value for predicting human success or failure in one phase of living or another. Validity figures of the former type have more of an

academic interest, though confidence in the test as such will depend upon them. Validity figures of the latter type will be derived from widely scattered sources, will have practical usefulness, and will be subject to interpretation and evaluation in the light of practical considerations apart from the test itself.

When rating-scale data (ratings by self and by others) were used as criteria, the validities of the scores for S, D, and R were of the order of .6, .5, and .5, respectively.³ Estimates of the reliabilities of ratings by others based upon a very limited sample were of the order .7, .7, and .5, respectively. Ratings for T and C factors proved to be too questionable to use as criteria.

The Inventory has been used in a wide variety of practical situations, chiefly in connection with counseling services in the following situations: high school and college personnel; penal institutions; family relations; hospitals for the insane; speech clinics; industrial plants; retail stores; in addition, in connection with a variety of research activities. Many expressions concerning the usefulness of the scores have been made in private communications. Few publications have presented data that can be quoted to indicate validity for one purpose or another.⁴

Norms.—In this revised Manual a new policy of presenting norms based upon recent statistical developments will be followed.⁵ A common C-scale of 11 units, and corresponding centile (generally redundantly called "percentile") levels are given. Another change which should be noted is that the high ends of the scale (C-scale scores of 10 and centiles of 99) universally stand for the socially approved ends of the personality dimensions—extraversion on the one hand and freedom from emotionality on the other. The raw scoring scales were unchanged in order to avoid the production of new keys and the confusions that might result therefrom. The C-scale system normalizes all distributions. In view of no information to the contrary regarding the true form of the distributions, this arbitrary decision seems desirable for practical reasons. The percentages of the norm groups (after smoothing of cumulative frequency distributions) which fall within each unit are as follows: 10, 1%; 9, 3%; 8, 7%; 7, 12%; 6, 17%; 5, 20%; 4, 17%; 3, 12%; 2, 7%; 1, 3%; 0, 1%. The norm tables are used by locating the obtained raw score in its appropriate group and then reading the corresponding C-score. The corresponding centile position may also be read but in most cases it lies within a given range. A single centile value can be obtained by interpolation.

Three sets of norms representing different general age groups are given. It has been found by experience that different college groups yield results comparable to those provided in the first form of this Manual so they are repeated here in revised form. The three groups exhibit certain interesting trends related to age, most outstanding of which is a decreasing rathymia with increasing age. When the Inventory is administered to prospective employees or to other groups in which there is motivation to make the best possible appearance, the norms given will not apply too well. Such individuals will appear in ranked order, however, so that their status relative to their group will be known. The ability of individuals to outguess the scoring key is often overrated but should always be taken into consideration as a possibility where personal motives are suspected as a factor.

Interpretation of Scores.—While high scales scores are generally regarded as the more socially desirable in these traits, exceptionally high scores may be indications of maladjustment in some kinds of situations. A person can be too socially extraverted, too extraverted in terms of thinking habits, too optimistic, too temperate in mood, or too happy-go-lucky for his own good or for the comfort of others around him, depending upon the circumstances. Scores of 10, and sometimes of 9 should therefore receive some concern. In general, scores in the range from 5 to 7 are probably indicative of best mental health and ease. Scores of 2 and 3 at the other ends of the scales probably indicate need for corrective measures of some kind, depending upon the circumstances, and scores of 1 and 0 may indicate something bordering on the pathological. The pathological extreme of introversion has been regarded as the schizoid disposition which borders on

schizophrenia. The pathological extreme of emotionality borders on the manic-depressive psychosis. It should be emphasized, however, that low scores on any of the five factors are insufficient in themselves to justify any type of pathological diagnosis. A use of The Guilford-Martin Temperament Profile Chart in connection with the interpretation of scores is recommended. Its norms are based upon a composite of those presented in this Manual plus others.

Norms based upon 800 Senior High School Students
(400 boys and 400 girls, Lincoln, Nebraska)

C-Score	S	T	D	C	R	Centiles
10	0-2	0-8	0-5	0-8	69+	99
9	3-5	9-12	6-8	9-11	64-68	96-98
8	6-9	13-17	9-10	12-15	60-63	89-95
7	10-13	18-22	11-15	16-20	54-59	77-88
6	14-18	23-27	16-20	21-26	49-53	60-76
5	19-23	28-32	21-26	27-33	43-48	40-59
4	24-28	33-37	27-32	34-39	37-42	23-39
3	29-33	38-42	33-38	40-45	30-36	11-22
2	34-38	43-46	39-42	46-50	24-29	4-10
1	39-43	47-51	43-49	51-55	16-23	1-3
0	44+	52+	50+	56+	0-15	0

Norms based upon 388 University of Nebraska Students

C-Score	S	T	D	C	R	Centiles
10	0-1	0-9	0-1	0-5	75+	99
9	2-3	10-15	2-4	6-9	66-74	96-98
8	4-7	16-21	5-8	10-15	61-65	89-95
7	8-9	22-26	9-12	16-20	53-60	77-88
6	10-13	27-32	13-17	21-24	46-52	60-76
5	14-19	33-38	18-23	25-31	39-45	40-59
4	20-26	39-44	24-31	32-38	30-37	23-39
3	27-34	45-48	32-38	39-46	23-29	11-22
2	35-37	49-53	39-44	47-53	15-22	4-10
1	38-40	54-57	46-49	54-59	10-14	1-3
0	41+	58+	50+	60+	0-9	0

Norms based upon 80 Adults

(40 men and 40 women, aged 22 to 54 years, Los Angeles, Calif.)

C-Score	S	T	D	C	R	Centiles
10	0	0-17	0-4	0-4	63+	99
9	1-3	18-21	5-8	5-7	56-62	96-98
8	4-7	22-25	9-13	8-11	48-55	89-95
7	8-12	26-31	14-19	12-16	42-47	77-88
6	13-19	32-37	20-26	17-22	37-41	60-76
5	20-25	38-42	27-30	23-30	32-36	40-59
4	26-30	43-46	31-34	31-37	25-31	23-39
3	31-35	47-51	35-41	38-45	20-24	11-22
2	36-39	52-55	42-49	46-52	16-19	4-10
1	40-44	56-59	50-53	53-59	14-16	1-3
0	45+	60+	54+	60+	0-13	0

- See particularly J. P. Guilford and R. B. Guilford, *Personality Factors*, D. R. T. and A. J. Abner, & Soc. Psychol., 1939, 34, 21-36.
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- J. P. Guilford and H. Martin, *Age Differences and Sex Differences in Some Introjective and Emotional Traits*, *J. Gen. Psychol.*, 1944, 31, 219-229.
- D. L. Steinberg and M. P. Wigmter, *Etiologic Factors in the Adjustment of Men in the Armed Forces*, *J. War Med.*, 1943, 4, 129-139.
- J. P. Guilford, *Fundamental Statistics in Psychology and Education*, New York: McGraw-Hill Book Co., Inc., 1942, Ch. VII.

83. In social conversations, are you usually a listener rather than a talker?.....Yes ? No 83
84. Do you frequently feel that people around you are talking about you?.....Yes ? No 84
85. Do you like to have time to be alone with your thoughts?.....Yes ? No 85
86. Do you find it difficult to go to sleep at night because experiences of the day keep "running through your head"?.....Yes ? No 86
87. Are you inclined to take your work casually, that is, as a matter of course?.....Yes ? No 87
88. Are you inclined to avoid meeting certain people on the street (bill collectors and the like not included)?.....Yes ? No 88
89. Do you find it easy, as a rule, to make new acquaintances?.....Yes ? No 89
90. Are you inclined to be quick and sure in your actions?.....Yes ? No 90
91. Are you troubled about being self-conscious?.....Yes ? No 91
92. Do you often feel restless while listening to a lecture?.....Yes ? No 92
93. Do you believe that people often misunderstand what you say?.....Yes ? No 93
94. Do you limit your friendships mostly to members of your own sex?.....Yes ? No 94
95. Does your mind wander badly so you lose track of what you are doing?.....Yes ? No 95
96. Are you often in a state of excitement?.....Yes ? No 96
97. Do you dislike to talk about yourself, even to close friends?.....Yes ? No 97
98. Do you prefer to be conservative in the matter of dress and personal appearance?.....Yes ? No 98
99. Do you like to discuss the more serious questions of life with your friends?.....Yes ? No 99
100. Are you inclined to keep your opinions to yourself during group discussions (not class discussions)?.....Yes ? No 100
101. Do you enjoy thinking out complicated problems?.....Yes ? No 101
102. Are you inclined to be introspective, that is, to analyze yourself?.....Yes ? No 102
103. Are there times when you seek to be alone and you cannot bear the company of anyone?.....Yes ? No 103
104. Are you much concerned over the morals of others?.....Yes ? No 104
105. Do you frequently take time out just to meditate about things in general?.....Yes ? No 105
106. Are you usually unconcerned about the future?.....Yes ? No 106
107. Do you usually become so absorbed in watching an athletic contest that you completely forget yourself?.....Yes ? No 107
108. Can you relax yourself easily when sitting down?.....Yes ? No 108
109. Are you usually a "good mixer"?.....Yes ? No 109
110. Do you usually prefer a "slapstick" comedy to a serious drama at the movies?.....Yes ? No 110
111. Do you frequently find it difficult to go to sleep at night, even though you are tired?.....Yes ? No 111
112. Would you rate yourself as a happy-go-lucky individual?.....Yes ? No 112
113. Do you ever take your work as if it were a matter of life or death?.....Yes ? No 113
114. Do you often "have the time of your life" at social affairs?.....Yes ? No 114
115. Do you think there is a great deal more happiness in the world than misery?.....Yes ? No 115
116. Are you frequently "lost in thought"?.....Yes ? No 116
117. Have you often lost sleep over your worries?.....Yes ? No 117
118. Do you like to mix socially with people?.....Yes ? No 118
119. Do you believe that the morals of modern youth are generally superior to those of former generations?.....Yes ? No 119
120. Are you inclined to think over your failures long after they are past?.....Yes ? No 120
121. Are there times when your mind seems to work very slowly and other times when it works very rapidly?.....Yes ? No 121
122. Are you inclined to avoid all people whenever possible?.....Yes ? No 122
123. Do you enjoy participating in a showing of "Rah Rah" enthusiasm?.....Yes ? No 123
124. Do you usually feel disappointments so keenly that you cannot get them out of your mind?.....Yes ? No 124
125. Do you derive more real satisfaction from social activities than from anything else?.....Yes ? No 125
126. When you stop to consider your future, does it usually seem very optimistic?.....Yes ? No 126
127. Are you sometimes so "blue" that life seems hardly worth living?.....Yes ? No 127

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THE GUILFORD-MARTIN PERSONNEL INVENTORY I.

Name..... Date.....

Sex..... Nearest age (encircle): 15 20 25 30 35 40 45 50 55 60

Raw Scores: O..... Ag..... Co.....

C-Scores:

DIRECTIONS: Below you will find some questions which are to be answered by encircling either "Yes," "No," or "No." Read each question in turn, think what your opinion or your behavior has usually been, and draw a circle around the answer that best describes your behavior or opinion. Encircle the "1" only when you are unable to decide between the "Yes" and "No." **BE SURE TO ANSWER EVERY QUESTION.** There is no right answer to any of these questions except the answer that tells how you think or feel about it.

1. Do you believe that each person is better fitted to succeed in one kind of job than he is in most other jobs?..... Yes 1 No 1
2. Do you believe it is more important for a person to like his work than it is for him to make a lot of money at it?..... Yes 1 No 2
3. Is a person likely to rise to the top in his kind of work if he is not suited to it?..... Yes 1 No 3
4. Do you believe that almost any kind of person can succeed in almost any kind of job if he tries hard enough?..... Yes 1 No 4
5. Are most people you know well suited to the jobs they hold?..... Yes 1 No 5
6. Do you prefer a supervisor who tells you clearly what to do rather than one who expects you to decide what to do next?..... Yes 1 No 6
7. Does it seem to you that human beings hardly ever learn to avoid making the same mistakes twice?..... Yes 1 No 7
8. Do you feel that there are too many useless laws which hamper an individual's personal freedom?..... Yes 1 No 8
9. Do you lack patience with the "shrinking violet" type of man?..... Yes 1 No 9
10. Are you inclined to be thinking about yourself much of the time?..... Yes 1 No 10
11. Do you think that most people who help others secretly dislike going to the trouble to do so?..... Yes 1 No 11
12. Do you feel disgusted when someone escapes paying the full penalty of the law through some technicality?..... Yes 1 No 12
13. Do you frequently seek the advice of other people?..... Yes 1 No 13
14. When you are criticized does it disturb you badly?..... Yes 1 No 14
15. Do you despise a "yes" man?..... Yes 1 No 15
16. Do you find that very few workmen nowadays do a job as it should be done?..... Yes 1 No 16
17. Does it bother you a lot to see someone else bungling a job that you know perfectly well how to manage?..... Yes 1 No 17
18. Have you found that, in general, people higher up tend to dodge the dirty work, leaving it for others to do?..... Yes 1 No 18
19. Are you annoyed when people tell you how you should do a thing?..... Yes 1 No 19
20. Do you get upset rather easily?..... Yes 1 No 20
21. Are you ever bothered by the idea that someone is reading your thoughts?..... Yes 1 No 21
22. Do you have days in which it seems that everything goes wrong?..... Yes 1 No 22
23. Generally speaking, do you think the head of a firm should have risen through the ranks, that is, having worked his way up in the business?..... Yes 1 No 23
24. Are you inclined to worry too long over humiliating experiences?..... Yes 1 No 24

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128.	Do you ever take the initiative to enliven a dull party?	Yes	?	No	128
129.	When you were a child were you usually made the "goat" by your playmates (such as being forced to be on the unpopular side while playing games)?	Yes	?	No	129
130.	Do you like to speak in public?	Yes	?	No	130
131.	Do you feel physically inferior to your associates?	Yes	?	No	131
132.	Would you rather be a dress designer than a forest ranger?	Yes	?	No	132
133.	Are you able to come back to a state of calm readily after an exciting situation is past?	Yes	?	No	133
134.	Do you like to bear responsibilities alone?	Yes	?	No	134
135.	Do you (or would you) like to go hunting with a rifle for wild game?	Yes	?	No	135
136.	When present, with others, at the scene of an accident, do you usually take an active part in helping out if needed?	Yes	?	No	136
137.	When you become angry, do you get over it rather quickly when the cause for anger is past?	Yes	?	No	137
138.	Do you tend to prefer quiet rather than exciting amusements?	Yes	?	No	138
139.	Do you often wish your appearance were different than it is?	Yes	?	No	139
140.	When you find that a piece of merchandise you have bought is defective, do you find it easy to demand an exchange or refund?	Yes	?	No	140
141.	Can you stick to a tiresome task for a long time without being prodded or encouraged?	Yes	?	No	141
142.	Does it make you jittery to handle a loaded gun?	Yes	?	No	142
143.	Are you frequently afraid that other people will not like you?	Yes	?	No	143
144.	Have you ever been regarded as a daredevil?	Yes	?	No	144
145.	Do you consider yourself a nervous person?	Yes	?	No	145
146.	When in a restaurant you are served stale or inferior food, do you usually make a vigorous protest about it?	Yes	?	No	146
147.	Does your mind often wander so badly that you lose track of what you are doing?	Yes	?	No	147
148.	Does it annoy you to see a person biting his fingernails?	Yes	?	No	148
149.	Are you easily discouraged when things become difficult?	Yes	?	No	149
150.	Does a difficult decision or emotional crisis ever leave you so exhausted that you cannot go on with your regular activities?	Yes	?	No	150
151.	Are you inclined to rush from one activity to another without pausing for rest?	Yes	?	No	151
152.	Do you always stand up for your rights when they are endangered?	Yes	?	No	152
153.	Do your friends seem to have a better time than you do?	Yes	?	No	153
154.	Does the sight of pus disgust you?	Yes	?	No	154
155.	Do you sometimes wish that you were more attractive than you are?	Yes	?	No	155
156.	Do you ever experience a feeling of vague uneasiness without knowing the reasons?	Yes	?	No	156
157.	Do you have any nervous habits like twitching your face, neck, or shoulders?	Yes	?	No	157
158.	Are you disgusted at the sight of an unshaven man?	Yes	?	No	158
159.	Are you able to play your best in a game or contest against an opponent who is much superior to you?	Yes	?	No	159
160.	Do long-continued noises "get on your nerves"?	Yes	?	No	160
161.	Do you generally prefer to take the lead in group activities?	Yes	?	No	161
162.	Do you often wish that you were physically stronger than you are?	Yes	?	No	162
163.	Are you fearful of burglars?	Yes	?	No	163
164.	Do you think you use up more energy than the average person in getting things done?	Yes	?	No	164
165.	Do you like to sell things (that is, to act as a salesman)?	Yes	?	No	165
166.	Do you have one or more hobbies or skills at which you are outstanding?	Yes	?	No	166
167.	Are you often so much "on the go" that sooner or later you wear yourself out?	Yes	?	No	167
168.	Does it annoy you to see a person clean his fingernails in public?	Yes	?	No	168
169.	Are there times when you feel as if your nerves were raw or "on edge"?	Yes	?	No	169
170.	Do people usually give you credit for having good judgment?	Yes	?	No	170
171.	Do you often feel bubbling over with excess energy?	Yes	?	No	171
172.	Are you easily disturbed by distracting stimuli when doing mental work?	Yes	?	No	172
173.	Do you often feel reluctant to meet the most important person at a party or reception?	Yes	?	No	173
174.	Do other people regard you as a lively individual?	Yes	?	No	174
175.	Do you have a strong dread of fire?	Yes	?	No	175
176.	Do you often feel that few obstacles can stand in the way of your reaching your final goals?	Yes	?	No	176
177.	As a child, did you often naturally fall into positions of leadership?	Yes	?	No	177
178.	Do you ever have the feeling that there is nothing to live for?	Yes	?	No	178
179.	Do you often find that you cannot make up your mind until the time for action is past?	Yes	?	No	179
180.	Do you prefer going to a dance rather than to a prize-fight?	Yes	?	No	180
181.	Do you seek to avoid all troublesome situations?	Yes	?	No	181
182.	Do you often show yourself up to your own disadvantage?	Yes	?	No	182
183.	Do you become upset rather easily?	Yes	?	No	183
184.	Are you willing to take a chance alone in a situation where the outcome is doubtful?	Yes	?	No	184
185.	Do you have any hesitation about calling down a person who does not play fair?	Yes	?	No	185
186.	Do you resent being "kidded" about your peculiarities?	Yes	?	No	186

BE SURE YOU HAVE ANSWERED EVERY QUESTION

Raw
Scores

C-Scores

C-Score	S	T	D	C	R	G	A	M	I	N	O	Ag	Co	C-Score
10	0	0	0	5	70+	24	35+	30+	48+	41+	71+	56+	97+	10
9	1	10	1	5	69	23	34	29	47	40	70	55	96	9
	3	11	2	6	64	22	33	28	45	38	68	53	89	

even a dull party?.....	Yes	?	No	128
made the "goat" by your playmates (such as while playing games)?.....	Yes	?	No	129
associates?.....	Yes	?	No	130
an a forest ranger?.....	Yes	?	No	131
of calm readily after an exciting situation is let?.....	Yes	?	No	132
g with a rifle for wild game?.....	Yes	?	No	133
of an accident, do you usually take an active part?.....	Yes	?	No	134
or it rather quickly when the cause for anger exciting amusements?.....	Yes	?	No	135
different than it is?.....	Yes	?	No	136
as you have bought is defective, do you find it ing time without being prodded or encouraged? ded gun?.....	Yes	?	No	137
ple will not like you?.....	Yes	?	No	138
evil?.....	Yes	?	No	139
state or inferior food, do you usually make a that you lose track of what you are doing?.....	Yes	?	No	140
his fingerprints?.....	Yes	?	No	141
become difficult?.....	Yes	?	No	142
his ever leave you so exhausted that you cannot ity to another without pausing for rest?.....	Yes	?	No	143
when they are endangered?.....	Yes	?	No	144
me than you do?.....	Yes	?	No	145
more attractive than you are?.....	Yes	?	No	146
neatness without knowing the reasons?.....	Yes	?	No	147
atching your face, neck, or shoulders?.....	Yes	?	No	148
chaven man?.....	Yes	?	No	149
ne or contest against an opponent who is much nerves?.....	Yes	?	No	150
d in group activities?.....	Yes	?	No	151
ally stronger than you are?.....	Yes	?	No	152
than the average person in getting things done? ct as a salesman?.....	Yes	?	No	153
his at which you are outstanding?.....	Yes	?	No	154
it soon? or later you wear yourself out?.....	Yes	?	No	155
his fingerprints in public?.....	Yes	?	No	156
ur nerves were raw or "on edge"?.....	Yes	?	No	157
aving good judgment?.....	Yes	?	No	158
stimuli when doing mental work?.....	Yes	?	No	159
most important person at a party or reception? individual?.....	Yes	?	No	160
an stand in the way of your reaching your final into positions of leadership?.....	Yes	?	No	161
e is nothing to live for?.....	Yes	?	No	162
ake up your mind with the time for action is than to a prize-fight?.....	Yes	?	No	163
situations?.....	Yes	?	No	164
own disadvantages?.....	Yes	?	No	165
in a situation where the outcome is doubtful? ling down a person who does not play fair?.....	Yes	?	No	166
our peculiarities?.....	Yes	?	No	167

Raw
Scores

C-Scores

C-Score	S	T	D	C	R	G	A	M	I	N	O	Ag	Co	C-Score
10	0	0 10	0 1	0 5	70+	24	35+	30+	48+	41+	71+	56+	97+	10
9	1 3	11 14	2 5	6 9	69 64	23 22	34 33	29 28	47 45	40 38	70 68	55 53	96 89	9
8	4 6	15 19	6 9	10 13	63* 58	21 20	32 30	27 26	44 43	37 35	67 62	52 47	88 81	8
7	7 11	20 25	10 13	14 18	57 51	19 17	29 26	25 24	42 40	34 32	61 55	46 42	30 72	7
6	12 17	26 31	14 18	19 24	50 44	16 14	25 23	23 20	39 36	31 28	54 49	41 37	71 65	6
5	18 23	32 37	19 25	25 31	43 38	13 12	22 19	19 18	35 33	27 24	48 42	36 32	64 54	5
4	24 28	38 42	26 31	32 38	37 30	11 9	18 15	17 13	32 28	23 20	41 36	31 27	53 45	4
3	29 33	43 47	32 38	39 46	29 23	8 7	14 12	12 11	27 22	19 16	35 28	26 22	44 35	3
2	34 39	48 53	39 45	47 52	22 16	6 5	11 8	10 8	21 15	15 11	27 20	21 17	34 27	2
1	40 46	54 61	46 53	53 58	15 10	4 3	7 5	7 6	14 11	10 7	19 13	16 12	26 20	1
0	47+	52+	54+	59+	9 0	2 0	4 0	5 0	10 0	6 0	12 0	11 0	19 0	0
C-Score	S	T	D	C	R	G	A	M	I	N	O	Ag	Co	C-Score

THE GUILFORD-MARTIN TEMPERAMENT PROFILE CHART

How to Use the Chart

For each trait indicated by the letter at the top of the column, find the class interval below in which the raw score for that particular trait falls and encircle in colored pencil or in ink the pair of scores representing that class interval. When all the traits are designated on the profile in this way, a line should be drawn connecting the circles for each neighboring pair of circles.

The C-scores (scaled scores) are indicated at the extreme left and right of the chart in an 11-point scale, 0 representing the lower 1% of the 500 cases used in deriving these norms, 1 the next 3%, 2 the next 7%, 3 the next 12%, 4 the next 17%, 5 (middle C-score) 20% of the cases, 6 the next 17%, 7 the next 12%, 8 the next 7%, 9 the next 3%, and 10 the highest 1% of the cases. Because the distribution of scores for trait M is bimodal, C-score 4 on the chart for trait M represents 20% of the cases, C-score 5, 14%, and C-score 6, 20%.

Interpretation of the Scores on the 13 Temperament Traits

From Guilford's Inventory of Factors STDCR

- S** — Social Introversion-Extraversion.—A high C-score indicates sociability, a tendency to seek social contacts and to enjoy the company of others. A low C-score indicates shyness, a tendency to withdraw from social situations and to be seclusive. A high C-score is more desirable for mental health than is a low C-score. A very low C-score on S indicates a need for guidance directed toward increased social participation.
- T** — Thinking Introversion-Extraversion.—A high C-score indicates a lack of introspectiveness and an extroverted orientation of the thinking processes. A low C-score indicates an inclination to meditative thinking, philosophizing, analyzing one's self and others, and an introspective disposition. The middle range of C-score is more desirable for mental health than either extreme on trait T. Each extreme, however, may have its value for certain types of occupation.
- D** — Depression.—A high C-score indicates freedom from depression, a cheerful, optimistic disposition. A low C-score indicates a chronically depressed mood including feelings of unworthiness and guilt. The higher the C-score on trait D, the better is likely to be the emotional adjustment of the individual.
- C** — Cycloid Disposition.—A high C-score indicates stable emotional reactions and moods, and freedom from cycloid tendencies. A low C-score means the presence of cycloid tendencies as shown in strong emotional reactions, fluctuations in mood, and a disposition toward flightiness and instability. The higher the C-score on trait C, the better will be the emotional adjustment of the individual, except that scores that are too high may indicate a cold, inert individual.
- R** — Rhythymia.—A high C-score indicates a happy-go-lucky or carefree disposition, liveliness, and impulsiveness. A low C-score indicates an inhibited disposition and an overcontrol of the impulses. Both extremes of C-scores may represent psychological maladjustments and a C-score in the middle range is desirable for mental health.

From the Guilford-Martin Inventory of Factors G A M I N

- G** — General Activity.—A high C-score indicates a tendency to engage in vigorous overt action. A low C-score indicates a tendency to inertness and a disinclination for motor activity. An extremely high C-score on trait G may represent a manic tendency while an extremely low C-score may be an indication of a hypothyroid condition or other causes of inactivity. Thus, for good mental health a C-score on G in the middle range is usually most desirable.
- A** — Ascendancy-Submission.—A high C-score indicates social leadership and a low C-score social passiveness. The C-score of a person on trait A must be interpreted in the light of his other characteristics of temperament as shown on the profile chart, and no general rule can be set forth as to what C-scores on trait A are most desirable for mental health. However, there is emphasis in our culture on the general desirability of a high C-score on trait A. Females tend to have distinctly lower C-scores on A than do males.
- M** — Masculinity-Femininity.—A high C-score on this trait indicates masculinity of emotional and temperamental make-up and a low C-score indicates femininity. The C-scores of the majority of males are above 5 and the majority of females have C-scores below 5. Males whose C-scores are very low are sometimes found either to lack their full quota of male hormones or to have an oversupply of female hormones.
- I** — Inferiority Feelings.—A high C-score indicates self-confidence and a lack of inferiority feelings. A low C-score indicates a lack of confidence, under-evaluation of one's self, and feelings of inadequacy and inferiority. The higher the C-score on trait I, the better for mental health, with the exception of extremely high cases in which clinical investigation may reveal a superiority compensation for hidden inferiority feelings. Many psychoneurotics have very low C-scores on trait I.
- N** — Nervousness.—A high C-score indicates a tendency to be calm, untroubled, and relaxed; a low C-score indicates jumpiness, jitteriness, and a tendency to be easily distracted, irritated, and annoyed. The higher the C-score on trait N, the better for mental health unless there are clinical indications that an overly sluggish and torpid condition is the basis for an extremely high C-score. Extremely low C-scores in some cases may involve a lack of calcium in the blood. In many cases, a mental conflict may be the basis for the emotional tension expressed in jitteriness and irritability.

From the Guilford-Martin Personnel Inventory I

- O** — Objectivity.—A high C-score on this trait indicates a tendency to view one's self and surroundings objectively and dispassionately. A low C-score indicates a tendency to take everything personally and subjectively and to be hypersensitive. The higher the C-score on trait O, the better for mental health. Pathological cases may develop paranoid ideas of reference and delusions of persecution.
- Co** — Cooperativeness.—A high C-score indicates a willingness to accept things and people as they are and a generally tolerant attitude. A low C-score indicates an overcriticalness of people and things and an intolerant attitude. The higher the C-score on trait Co, the better for mental health unless the C-score on G or clinical signs indicate a torpid and sluggish condition to be the basis of the lack of criticalness. Overcriticalness is often a compensation for hidden feelings of inadequacy. Pathological cases may exhibit a paranoid projection of their conflicts and impulses.
- Ag** — Agreeableness.—A high C-score indicates an agreeable lack of quarrelsomeness and a lack of domineering qualities. A low C-score indicates a belligerent, domineering attitude and an overreadiness to fight over trifles. Very low scores on trait Ag indicate an extreme craving for superiority as an end in itself developed as a compensation for some chronic frustration and in pathological cases may lead to paranoid delusions of grandeur. It is possible that a sadistic component may occur in some of the pathological cases. Further investigation should be made of the psychological structure of extremely low C-scores on traits O, Co, and Ag, as the paranoid area of temperament which they cover is predisposing toward troublemaking behavior in industry, marriage, and other social situations.

69. Do you feel that many young people get ahead today because they have "pull"? Yes 1 No 69
70. Are most people thoughtless of the rights of others? Yes 1 No 70
71. Are you continually comparing yourself with other people? Yes 1 No 71
72. Do a lot of people you have known tend to form "cliques" or closed groups? Yes 1 No 72
73. Generally speaking, do you believe that the boy who has not learned to defend himself deserves to "take a beating"? Yes 1 No 73
74. Do you find that generally if you want a thing done right you must do it yourself? Yes 1 No 74
75. Can a person get ahead by his own efforts if he does not look out for himself at every turn? Yes 1 No 75
76. Do you consider yourself a rather nervous person? Yes 1 No 76
77. Do you think your generation has as many opportunities for success as your parents' generation had? Yes 1 No 77
78. Do other people pay more attention to your earnings and goings than they should? Yes 1 No 78
79. When things become dull do you feel the urge to stir up some excitement? Yes 1 No 79
80. Do you think the educational system in this country is seriously wrong in many respects? Yes 1 No 80
81. Do you usually receive criticism of yourself without resenting it? Yes 1 No 81
82. Have you ever found out that a person who was supposed to be an expert did not know as much as you did about something? Yes 1 No 82
83. Is there anyone you know personally whom you would like to see behind prison bars? Yes 1 No 83
84. Are there important changes you would make immediately in your manner of living if you could have a substantial increase in income? Yes 1 No 84
85. Do you think that most people are overpaid for what they really contribute to society? Yes 1 No 85
86. In most situations is it all right to conceal the truth when by doing so you give aid to a friend? Yes 1 No 86
87. Have you very much resented having friends or members of your family give you orders? Yes 1 No 87
88. Are you as quick as other people to pay compliments when they are deserved? Yes 1 No 88
89. Do people frequently talk about you behind your back? Yes 1 No 89
90. Is it almost unbearable for you to see a close friend or relative suffering intense pain? Yes 1 No 90
91. Is it true that people will generally have contempt for a person who does not assert himself once in a while? Yes 1 No 91
92. Have you known many "two-faced" individuals personally? Yes 1 No 92
93. Can most people be trusted completely? Yes 1 No 93
94. Do you derive considerable satisfaction from making other people do as you want them to? Yes 1 No 94
95. Do you believe that all public office holders sooner or later look out for their own interests first? Yes 1 No 95
96. Should the government take over more and more the management of private business? Yes 1 No 96
97. Are your feelings rather easily hurt? Yes 1 No 97
98. Generally speaking, do you believe that people use a veneer of politeness to cover up what is usually "cutthroat" competition? Yes 1 No 98
99. Do you usually get more than your share of the blame when things go wrong? Yes 1 No 99
100. Are there many kinds of work that you would not consider doing because they are beneath you? Yes 1 No 100
101. Do you think that a lot of people exaggerate their hard luck in order to gain sympathy from others? Yes 1 No 101
102. Do people ever accuse you of being selfish, and with some reason? Yes 1 No 102
103. Have you often felt that certain persons are secretly trying to get the better of you? Yes 1 No 103
104. Would you prefer a hard job that is very interesting to an easy one that is uninteresting? Yes 1 No 104
105. Have you frequently wished for enough money or power to impress people who regard you as an inferior? Yes 1 No 105
106. Have you frequently become involved in conflicts in defense of your friends or members of your family? Yes 1 No 106
107. Is it difficult for you not to bear a grudge against someone who has injured you? Yes 1 No 107
108. If you could have your way about it would you change a lot of things about human nature? Yes 1 No 108

109. Are many of your supposed friends really insincere?.....Yes ? No 109
110. Do many people think you are "hard-boiled"?.....Yes ? No 110
111. Does everything that happens seem to have a relationship to your own life or experience?.....Yes ? No 111
112. Do some people become so bossy or domineering that you want to do the opposite of everything they tell you to do?.....Yes ? No 112
113. Do other people often deliberately make things hard for you?.....Yes ? No 113
114. Are there times when it seems that everyone is against you?.....Yes ? No 114
115. When criminals make a daring escape from prison do you sometimes secretly hope that they will avoid capture?.....Yes ? No 115
116. Do you sometimes feel contempt for the opinions of others?.....Yes ? No 116
117. Does it bother you to have other people tell you what you should do?.....Yes ? No 117
118. Do you often feel that you are left out of things, perhaps unintentionally, in group activities?.....Yes ? No 118
119. Is it difficult for anyone to impose upon you for the reason that you are usually wise to their intentions?.....Yes ? No 119
120. Does the United States Government owe every one of its citizens a decent living?.....Yes ? No 120
121. Is the person who carelessly leaves valuable property lying around as much to blame as the person who appropriates it for his own use?.....Yes ? No 121
122. Have some people criticized you unjustly to others?.....Yes ? No 122
123. Will most people in business bear close watching when you are dealing with them?.....Yes ? No 123
124. Are you deserving of things far better than is your present lot?.....Yes ? No 124
125. Do you think no one would keep to the "straight and narrow path" were it not for the fear of being caught?.....Yes ? No 125
126. When you lose something do you often begin to suspect someone of either having taken it or having misplaced it?.....Yes ? No 126
127. Do you think that most people who allow themselves to come under the rule of a dictator are to blame for their plight?.....Yes ? No 127
128. Is there any subject on which you would like to hold a public indignation meeting for the purpose of organizing a mass protest?.....Yes ? No 128
129. Were you ever seriously double-crossed?.....Yes ? No 129
130. Do you believe the parole system works more to the advantage of the prisoner than to the advantage of society?.....Yes ? No 130
131. Do you tend to let people run over you more than you should for your own good?.....Yes ? No 131
132. Have you frequently felt like telling "nosey" people to mind their own business?.....Yes ? No 132
133. Have you often found it necessary to stand up for what you believe to be right?.....Yes ? No 133
134. Do you usually seek to become an officer in any organization to which you belong?.....Yes ? No 134
135. Were you ever so deeply in debt that you did not know where the money was coming from to pay what you owed?.....Yes ? No 135
136. In group undertakings do you usually manage to have your own plans put into effect?.....Yes ? No 136
137. Do other people often blame you for things unfairly?.....Yes ? No 137
138. In most cases is it important to get what you want even if you have to come into conflict with other people in order to get it?.....Yes ? No 138
139. Have other people been too ready to accept credit which rightfully belongs to you?.....Yes ? No 139
140. Do you sometimes feel sorry for all the people in the world?.....Yes ? No 140
141. Have you had more than your share of hard luck?.....Yes ? No 141
142. Do other people often try to put things over on you when you are not watching?.....Yes ? No 142
143. Is there any person whom you would particularly like to "put in his (or her) place"?.....Yes ? No 143
144. Do you believe that most people require someone to tell them what to do?.....Yes ? No 144
145. Is there any piece of music that usually makes you weep when you hear it?.....Yes ? No 145
146. Are people in general out to get more than they give?.....Yes ? No 146
147. Do you often find it necessary to return merchandise to a store because it turns out to be not as represented?.....Yes ? No 147
148. Do people near you sometimes whisper or look knowingly at one another when they think you are not noticing them?.....Yes ? No 148
149. If someone rudely crowds ahead of you in line, do you tell him where he belongs?.....Yes ? No 149
150. Have you marked an answer ("Yes," "I," or "No") for every one of the above questions?.....Yes ? No 150

Author Baehr Melany Erna

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