

A COMPARISON OF PHYSICS AND PSYCHOLOGY
MAJORS ON FIRO-B VARIABLES

APPROVED:

Merle E. Bonney
Major Professor

Earl W. Harker
Minor Professor

Witt Blau
Director of the Department of Psychology

Robert B. Toulouse
Dean of the Graduate School

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THESIS

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John Rae McCown, B. S.

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CHAPTER I

INTRODUCTION

One aspect of personality which has received increasing attention in recent years is the concept of "self-other" attitudes--attitudes which influence the individual's characteristic way of relating to other people. There is reason to believe (7, 9) that the way an individual relates to others will be reflected in his selection of an occupation.

Every occupation has some interpersonal quality about it--the opportunity to enjoy interaction with other people, to dominate them, or to get away from them. It has also been shown that students are keenly aware of the importance of interpersonal factors in their careers (7, p. 11). In principle, then, the individual's self-other orientation might well have some bearing on his occupational choice. It is difficult to isolate this influence, since the same occupation potentially can satisfy so many different values for different people. Thus, interpersonal or personality factors alone can rarely determine a specific choice, although it may represent a channeling factor determining one's broad area of choices. In this vein Rosenberg states

In general, we would expect that if a student selects those values which are congenial to his

self-other orientation, he would also tend to choose an occupation in which, it is generally believed, these values can be satisfied (7, p. 44).

From another point of view, but expressing the same concept, Fenichel contends that men engaged in a particular occupation exhibit characteristic personality structures, and the vocations serve as convenient and purposeful tools for the satisfaction of their basic personality orientation (2).

If occupations have strong interpersonal elements, it is reasonable to assume that people entering an occupation will have certain needs in which they anticipate people in that occupation, or the occupation per se will satisfy. Schutz, in his FIRO, A Three-Dimensional Theory of Interpersonal Behavior, postulates three interpersonal needs which influence "virtually every choice made and opinion formed" (8, p. 67). These needs are inclusion, control, and affection. In regard to occupational choice, Schutz states, "In the choice of occupation there are great differences in the interpersonal characteristics in various jobs. Jobs may be classified according to their interpersonal requirements."

The theoretical basis of this study is the interpersonal behavior concept as advanced by Schutz (8). He contends, "Every individual has three interpersonal needs: inclusion, control, and affection." He further asserts that these needs constitute a sufficient set of areas of

interpersonal behavior for the prediction and explanation of interpersonal phenomena (8, p. 13). These needs, often called "social needs," have their origin in early parent-child relationships (8, p. 81). The implication is that man is a social being, and his social needs are satisfied by interpersonal relationships. As the choice of occupation usually determines what activity the individual will engage in for forty hours a week during the largest part of his life, the interpersonal need-satisfaction potential of the occupation must have some influence upon the choice.

Statement of the Problem

It is the basic assumption of this study that a relationship exists between the interpersonal needs of inclusion, control, and affection and occupational choice as indicated by college major. In consideration of the studies reported by Roe (5, 6) concerning the personality of physicists and psychologists, one could anticipate the following null hypotheses to clarify the above relationships:

1. There is no relationship between college major choice and the interpersonal need area of expressed inclusion.
2. There is no relationship between college major choice and the interpersonal need area of wanted inclusion.
3. There is no relationship between college major choice and the interpersonal need area of expressed control.

4. There is no relationship between college major choice and the interpersonal need area of wanted control.

5. There is no relationship between college major choice and the interpersonal need area of expressed affection.

6. There is no relationship between college major choice and the interpersonal need area of wanted affection.

Definition of Terms

The following definitions are from FIRO, A Three-Dimensional Theory of Interpersonal Behavior:

1. Interpersonal refers to relations that occur between people as opposed to relations in which at least one participant is inanimate.

2. Need is defined in terms of a situation or condition of an individual the nonrealization of which leads to undesirable consequences.

3. The interpersonal need for inclusion is defined behaviorally as the need to establish and maintain a satisfactory relation with people with respect to interaction and association. It has two determinants, wanted inclusion and expressed inclusion. Expressed inclusion refers to the degree to which the individual initiates relations with people. Wanted inclusion refers to the degree to which the individual wants others to include and associate with him.

4. The interpersonal need for control is defined behaviorally as the need to establish and maintain a satisfactory relation with people with respect to control and

power. It has two determinants, expressed control and wanted control. Expressed control refers to the degree to which the individual wants to control and dominate others. Wanted control refers to the degree to which the individual wants others to dominate and control him.

5. The interpersonal need for affection is defined as the need to establish and maintain a satisfactory feeling of mutual affection with others. It has two determinants, expressed affection and wanted affection. Expressed affection refers to the degree to which the individual expresses affection toward others. Wanted affection refers to the degree to which the individual wants others to act personally toward him.

Need for the Study

As the Fundamental Interpersonal Relations Orientations technique is a relatively new approach to the study of interpersonal relations, few studies are available which deal with the validity of this instrument. Studies in the area of vocational choice have largely dealt with people who are practicing the vocation, leaving doubt as to whether people are attracted to the vocation as a result of need-satisfaction behavior, or whether the people determine their orientation by practicing the occupation.

The need for further clarification of these questions was recognized, and this study was an effort to add to the evidence

for or against the validity of the concept of interpersonal need satisfaction as a factor in vocational choice.

Methodology and Description of Instrument

Subjects

The two categories of subjects used were physics majors and psychology majors. The physics majors consisted of the entire enrollment of sophomore, junior, and senior physics majors at North Texas State College, Denton, Texas. The number of students in this category was forty. The psychology majors consisted of male students at the same college on the sophomore, junior, and senior levels. The psychology majors were obtained from abnormal psychology, social psychology, and statistics classes. The number of students in this category was forty. Both groups had completed at least two courses in their major and enrolled for the third. Since the physics majors were all male, it was necessary to equate the groups on this factor to eliminate the possibility of sex differences distorting the data. No attempt was made to match the groups on age or intelligence quotients. The mean difference in age of the two groups was 1.5 years. Selective factors operating--such as the necessity of completing one year of college or more--would tend to equate the groups on intelligence quotients. Also, the relevance of these factors to the variables under consideration has not been demonstrated.

With the exception of six students, all subjects were administered the FIRO-B scale during the regular class period.

An additional information sheet was administered to supplement the FIRO-B data. (See Appendix.) All subjects were asked to indicate the degree to which they were certain of remaining in their major field. This was done by means of a five-item rating scale. The responses range from a positive, "I am absolutely sure I will remain in this field," to a negative, "I am absolutely sure I will not remain in this field." Thus a subgroup could be formed from each major field by the extraction of those students who indicated that they would probably not remain in the major field. Five subjects in each major category were excluded from the subgrouping as a result of this criterion. Both the original groups of psychology and physics majors and the subgroups will be compared in regard to FIRO-B variables. This subgrouping should present a more accurate picture of the "typical" physics or psychology student.

Statistical Technique

The t technique for unrelated groups was utilized. The null hypothesis was tested for each of the variables under consideration for both the groups and subgroups.

Description of the Fundamental Interpersonal
Relations Orientation-Behavior Scale
(FIRO-B)

FIRO-B (see Appendix) is designed to measure the individual's behavior toward others (expressed) and the behavior he wants from others (wanted) in three areas of interpersonal interaction. These areas are inclusion, control, and affection. Each of these six areas is measured by a nine-item Guttman scale (3). Scores vary from zero to nine on each dimension, with higher numbers meaning more of the dimension measured.

Validity

Validity of this scale is demonstrated in the three areas of content validity, concurrent validity, and predictive and construct validity.

Content validity of this technique is asserted through the employment of the Guttman technique of scale analysis (3). All items in the scale obtained or exceeded the requisite that they be 90 per cent reproducible in regard to the initial item.

This implies that any sample of items in this dimension would rank respondents in essentially the same way; therefore, the sampling of the universe of items yields a satisfactory content validity (3, p. 66).

Concurrent validity is established by demonstrating to what degree FIRO-B scores correspond to people with known attitudes. Studies of concurrent validity are reported in

the three areas of FIRO-B and political attitudes, FIRO-B and occupational choice, and FIRO-B and conformity behavior. In the area of political attitudes four hypotheses were constructed in an attempt to predict FIRO-B scores from groups with known attitudes. Three of the four predicted relations were significant at the 5 per cent level or better. "The probability of this occurrence, when three of the only four significant relations of sixteen possible relations are selected correctly, is less than 1 per cent." (8, p. 72).

Using FIRO-4, a forerunner of FIRO-B, four different occupational groups were studied. Air Force officers were low on affection, high on expressed control, and high on wanted control. Supervisors were high in all three areas. Teachers and nurses produced the same results; that is, high on affection and low on expressed control and wanted control. Although the significance of these results was not tested statistically, it was concluded that

Perusal of the results reveals them to be on the whole reasonable. That officers and supervisors should be high on control and officers low on affection seems congruent with stereotypes of their roles (8, p. 72).

Reliability

The usual method for obtaining internal consistency is the split-half technique, but since Guttman scales are utilized, reproducibility was the basic criterion. All FIRO-B scales were 90 per cent reproducible or better ($M = .94$) with the scale construction population.

Coefficient of stability refers to the correlations between test and retest with an intervening period of time. A coefficient of stability of .70 was established for the retention of any scale on FIRO-B. All scaled passed this requirement with a mean coefficient of .76.

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CHAPTER II

RELATED STUDIES

In reviewing the literature pertinent to this research, it was found that few studies had a direct bearing on the present study. However, studies concerned with individuals or groups who were involved in a particular vocation are numerous and furnished the background from which the hypotheses were formulated.

Among the research dealing directly with this study is the work done by Schutz (7). Mean scores of three groups were compared on the basis of FIRO-B scores. Significant differences were found between scores of business school students, Harvard freshmen, and Radcliffe freshmen in the area of expressed control, and between Harvard freshmen and Radcliffe freshmen in the area of expressed affection. It will be recalled that in the study presented in the section on reliability, differences were found in occupational groups practicing the occupation. These differences, as noted, were in correspondence with the common stereotypes of their roles. However, practicing the vocation may have contributed to the results, limiting the implications that can be drawn from these significant differences.

Roe (5, 6), in separate monographs, studied the psychological structure of eminent psychologists and eminent biologists. Characteristic of the group of psychologists was dependence upon parent figures and strong concern with interpersonal relations as elicited by the Thematic Apperception Test. Group Rorschach results yielded the following interpretations: "They [psychologists] are very sensitive, intensively concerned with persons, rather freely aggressive, and often troubled with conflicts over authority." (6, p. 81). Biologists, on the other hand, are viewed by Roe in the following manner:

These men are individuals not characterized by any completely consistent pattern of personality structure. There are, however, some trends which appear with fair consistency among them, and which would not characterize a group of adults at random.

They have somewhat greater than average tendency to see things as a whole. Social and personal relations tend to be at least superficially smooth, but often not warm. They are not very outgoing persons in a social sense, and would not rate very high in "masculinity" (6, p. 60).

Teevan (10) conducted a study to determine whether or not personality factors are correlated with choice of a major field in college. Three broad groupings of college majors and scores on the Blacky Pictures were used. The significant differences found were that those in literature had higher disturbance scores on oral eroticism than the other divisions; the social science division had higher disturbance scores on oral sadism, oedipal intensity, guilt feelings, and

anaclitic love object; and the science division had the lowest disturbance in personal relations. He concluded that the results with these groups seem quite in accord with other observations in regard to "occupational personalities." The fact that science division majors came out low on disturbance scores was explained by either their almost complete lack of interest in personal relationships or an effective retreat from them.

Feather (3) investigated the relation of personality maladjustments as measured by the Minnesota Multiphasic Inventory and occupational interests as measured by the Kuder Preference Record. Five hundred three University of Michigan students were divided into adjusted and maladjusted groups on the basis of an "F" score over 69 on any diagnostic scale. Significant differences between the normal and the maladjusted groups were found by the following criteria: The normal group was higher on mechanical, scientific, and mechanical-scientific areas. The maladjusted group scored higher on literary, musical, art and literary, and literary and musical areas. Contrary to expectations, there were no differences in social service interests as was postulated.

Dodge (2) studied fifty-five college sophomores using the Strong Vocational Interest Blank and the Minnesota Personality Scale. He found that the more a man tends to avoid large numbers of acquaintances and indiscriminate affairs,

the more likely he is to show the interest of the scientist. The more satisfaction the individual takes in social affairs and interpersonal contacts, the more he resembles the Strong profile of a salesman.

Another interesting experiment was designed to test the relationship between likes and dislikes and vocational interests. Berdie (1) concluded that the extent of likes or dislikes is closely related to vocational interests. He found that people in occupations primarily involving personal relationships are characteristically emotionally acceptant of their surroundings, but that people whose occupations are more concerned with objects and symbols tend to show rejection of their surroundings.

Kaback (4), in an attempt to ascertain whether the Rorschach Group Method responses were different for groups of men engaged in pharmacy as compared with groups of men engaged in accountancy, found that accountants were higher on W, d, R, P, O, Fc, M, FM, Fm, H_f, and Obj. Pharmacists average significantly higher on Fk and At. Although she concludes that "the two professional groups can be discriminated from each other," the exact nature of the difference is obscure and a matter of subjective interpretation (4, p. 76).

Super (9) reports an unpublished study by Small, Sweat, and Van Arnold in which personality characteristics of advertising art, retail merchandising, dental hygiene, and mechanical technology students were studied. Although

clinical methods of analyzing data were used and seemingly significant findings were not cross-validated to insure the results were not obtained by chance, the study is unique and warrants attention. Art students were found to be characterized as "withdrawn, narcissistic, emotionally flat, with a marked element of bizarrrity and anal traits." (9, p. 233). Dental hygiene students were characterized by strong needs to sympathize, to help and protect, to establish close personal relations with others, and to restrain impulses. In regard to the mechanical technology students Super concludes, "Like the dental hygienists, these men appear to have chosen an occupation which provides a satisfactory outlet for their controlled, aggressive needs, one which is appropriate also for the sex-related roles they wish to play." (9, p. 234).

Sternberg (8), using factor-analytic methods, studied personality trait patterns related to a major in college. The most prominent difference between psychology students and students in the science field was in the area of direct communication with people. Mathematics, chemistry, and physics students did not seem to be interested in aesthetic, social service, or personal contact activities. Psychology students were strong in the areas of personal contact, prestige, and power. The latter two factors were not expected since the primary motivation of men going into this profession is supposed to be a desire to work with people in order to help them. Every major field differed significantly in

mean factor scores from all other major fields on at least one of the test scales. These intergroup differences were in accord with "logical expectations" characteristic of a particular major group and the need satisfactions which would probably be found in the study field or in some closely related occupations.

As a whole, studies in the area of personality variables and occupational choice point out that there are patterns of needs which are characteristic of nearly every occupational grouping. Whether or not this relationship holds for FIRO-B variables will be seen in the following chapter.

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CHAPTER III

EXAMINATION OF FINDINGS

As mentioned in Chapter I, FIRO-B yields scores in six areas, those of expressed inclusion behavior (E^I), wanted inclusion behavior (W^I), expressed control behavior (E^C), wanted control behavior (W^C), expressed affection behavior (E^A), and wanted affection behavior (W^A). Statistical analysis will be presented in table form, but the findings will be discussed in relation to expectations derived from theoretical formulations.

Means and statistical comparisons for the groups, regardless of their intent to remain in the field, are presented in Table I (see page 20).

Means and statistical comparisons for the groups who are to a high degree intent upon remaining in the field are presented in Table II (see page 21). In order to discuss the results of the study, each hypothesis will be treated separately.

Hypothesis 1 stated that there is no relationship between physics and psychology majors' choice and the interpersonal need area of expressed inclusion. This hypothesis was rejected at the 1 per cent level of significance when

TABLE I
TESTS OF SIGNIFICANCE OF THE DIFFERENCE BETWEEN MEANS OF PHYSICS AND
PSYCHOLOGY MAJORS REGARDLESS OF THEIR INTENT TO REMAIN
IN THE FIELD

Need Area	M_1^*	M_2^{**}	$M_1 - M_2$	SE diff	t	df	P
E ^I	3.95	5.35	1.4	.51	2.8	78	.01
W ^I	2.725	3.75	1.025	.78	1.31	78	...
E ^C	2.725	3.55	.825	.48	1.7	78	.10
W ^C	4.225	5.05	.82	.45	1.82	78	.10
E ^A	3.25	3.45	.20	.479	.42	78	...
W ^A	3.825	4.90	1.075	.46	2.34	78	.05

* M_1 represents physics majors.

** M_2 represents psychology majors.

TABLE II
TEST OF SIGNIFICANCE OF THE DIFFERENCE BETWEEN MEANS OF PHYSICS
AND PSYCHOLOGY MAJORS WHO ARE TO A HIGH DEGREE INTENT
UPON REMAINING IN THEIR MAJOR FIELD
ON FIRO-B VARIABLES

Need Area	M_1^*	M_2^{**}	$M_1 - M_2$	SE diff	t	df	P
E ^I	3.80	5.42	1.62	.69	2.44	68	.05
I ^W	2.56	3.97	1.41	.83	1.70	68	..
E ^C	2.94	3.37	.43	.50	.80	68	..
C ^W	4.0	5.0	1.0	.47	2.16	68	.05
E ^A	3.22	3.57	.35	.51	.68	68	..
W ^A	3.88	4.94	1.06	.44	2.40	68	.05

*Indicates physics majors

**Indicates psychology majors

all students majoring in the fields were considered. When the groups were restricted to only those who were to a high degree certain of remaining in this field, the level of significance dropped to the 5 per cent level. In both groupings, then, the psychology majors scored significantly higher, meaning that more of this dimension was measured. As the general stereotype of the role of the psychologist is one that implies a great deal of personal contact, the possibility of its attracting people with this need is enhanced. The stereotype role of the physicists, however, is one that implies some form of restriction or isolation from personal contact. The findings suggest that these stereotypes do exert some influence upon college major choice.

One factor contributing to the concurrent validity of this statistically significant finding was in the number of organizations on the college campus in which the major groups actively participate. Only one physics major out of the forty in the sample belonged to a social organization such as a fraternity. In the psychology group, however, twenty of the forty belonged to a social organization.

Hypothesis 2 stated that there is no relationship between physics majors and psychology majors in the interpersonal need of wanted inclusion. This hypothesis was accepted, as no significant difference in either grouping was found. In this case it seems that the occupations

attract people who are similar in the amount of attention or interaction they want others to extend toward them.

Hypothesis 3 stated that there would be no difference between physics majors and psychology majors in the interpersonal need area of expressed control. This hypothesis was accepted, as the level of significance did not reach 5 per cent in either grouping. It appears that both occupational areas offer similar possibilities for the satisfaction of the need to control others. The act of completing college is capable of creating prestige or prominence, which is a form of control behavior. Perhaps both groups have similar strivings in this area.

Hypothesis 4 stated there would be no relationship between physics majors and psychology majors in the interpersonal need area of wanted control. When the groups consisted of those who were to a high degree intent upon remaining in the field, the level of significance was 5 per cent. When the groups consisted of all those majoring in the field, the 10 per cent level of significance was established. This hypothesis was rejected, as the more refined groupings of physics and psychology majors would seem to give a more accurate picture of the "typical" student in these areas. The direction of the difference in favor of the psychology majors would perhaps indicate a certain amount of rebellion against authority.

Hypothesis 5 stated there would be no relationship between physics majors and psychology majors in the interpersonal need area of expressed affection. This null hypothesis was accepted; the level of significance did not reach 5 per cent. As affection is considered by Schutz (2) as a dyadic relationship in that it can occur only between pairs of people at any one time, the theoretical expectations of a difference between the groups was not great. Marriage, too, is considered a form of affection behavior. A comparison of the groups revealed that 50 per cent of the physics majors and 45 per cent of the psychology majors were married. The slight difference in the groups on the question of marriage lends incidental validation to the lack of significance of this factor.

Hypothesis 6 stated that there is no relationship between physics and psychology majors in the interpersonal need area of wanted inclusion. This hypothesis was rejected at the 5 per cent level of significance with both groupings. It appears that psychology majors desire more affectionate behavior expressed toward them than do physics majors. The origin of this difference is vague. It could be that this difference is a result of "affect hunger" on the part of the psychologists, or a reflection of the emotionally distant personal ties that have been found characteristic of the physical scientist (1, p. 94).

Summary and Conclusions

Forty physics majors and forty psychology majors on the sophomore, junior, and senior levels at North Texas State College were compared to determine if there were differences in interpersonal relations as measured by the Fundamental Interpersonal Relations Orientation, Behavior Scale. The major theoretical hypothesis of this study was that the choice of an occupation, reflected by college major choice, is determined by the need-satisfaction potential of an occupation in reference to the needs of the individual. Furthermore, the FIRO-B inclusion, control, and affection needs should be able to detect differences in people preparing to enter apparently dissimilar fields. Two of the findings were significant when the criterion for inclusion in this study was only that they be majoring in physics or psychology. When the criterion for inclusion was that all subjects be majoring in their respective fields and express probability of remaining in that field, three significant relationships appeared. All relationships, significant or not, were in the direction predicted from the theoretical background.

These findings generally support the concept of "vocational personality types." Specifically, psychologists enter the field because it offers potential satisfaction of the interpersonal needs of expressed inclusion and wanted affection that are not offered in the field of physics. In view

of the results of this study and studies in related areas, the choice of physics as a major tends to be associated with a lack of interest in people or a retreating from personal relations of any type. Whether or not the lack of interest is a function of unhealthy withdrawal or a function of a strong interest in other areas remains an open question.

From the standpoint of future research in this area, it may be profitable to use broader categories of occupational groups. Perhaps the more salient differences are to be found between, for example, students in the social sciences and students in the physical sciences.

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APPENDIX A

Rating Scale of Choices

1. Name _____ Permanent student number ____
 Last First
2. Hours completed in major field _____
3. Classification: Sophomore, Junior, Senior (Circle one.)
4. Married: Yes, No (Circle appropriate word.)
5. How many brothers and sisters do you have? _____
6. In regard to my choice of _____ as a major:
 - (a) I am absolutely sure I will remain in this field.
 - (b) I will probably remain in this field.
 - (c) I am uncertain as to whether I will remain in this field or not.
 - (d) I will probably not remain in this field.
 - (e) I am absolutely sure I will not remain in this field.

APPENDIX B

Group _____

Name _____

Date _____

FIRO-B

Male ___ Female ___

Age _____

	I	C	A
c			
w			

Please place number of the answer that best applies to you in the space at the left of the statement. Please be as honest as you can.

___ 1. I try to be with people

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 2. I let other people decide what to do

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 3. I join social groups

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 4. I try to have close relationships with people

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 5. I tend to join social organizations when I have an opportunity

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

- 6. I let other people strongly influence my actions
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 7. I try to be included in informal social activities
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 8. I try to have close, personal relationships with people
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 9. I try to include other people in my plans
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 10. I let other people control my actions
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 11. I try to have people around me
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 12. I try to get close and personal with people
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- 13. When people are doing things together I tend to join them
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 14. I am easily led by people

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 15. I try to avoid being alone

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

___ 16. I try to participate in group activities

1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

PLEASE BE AS HONEST AS YOU CAN

___ 17. I try to be friendly to people

1. most 2. many 3. some 4. a few
people people people people
5. one or two 6. nobody
people

___ 18. I let other people decide what to do

1. most 2. many 3. some 4. a few
people people people people
5. one or two 6. nobody
people

___ 19. My personal relations with people are cool and distant

1. most 2. many 3. some 4. a few
people people people people
5. one or two 6. nobody
people

___ 20. I let other people take charge of things

1. most 2. many 3. some 4. a few
people people people people
5. one or two 6. nobody
people

- ___ 21. I try to have close relationships with people
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |
- ___ 22. I let other people strongly influence my actions
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |
- ___ 23. I try to get close and personal with people
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |
- ___ 24. I let other people control my actions
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |
- ___ 25. I act cool and distant with people
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |
- ___ 26. I am easily led by people
- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 27. I try to have close, personal relationships with people

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 28. I like people to invite me to things

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 29. I like people to act close and personal with me

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 30. I try to influence strongly other people's actions

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 31. I like people to invite me to join in their activities

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 32. I like people to act close toward me

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 33. I try to take charge of things when I am with people

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 34. I like people to include me in their activities

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 35. I like people to act cool and distant toward me

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 36. I try to have other people do things the way I want
them done

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 37. I like people to ask me to participate in their
discussions

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

___ 38. I like people to act friendly toward me

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

— 39. I like people to invite me to participate in their activities

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

— 40. I like people to act distant toward me

- | | | | |
|-------------------------|-------------------|-------------------|--------------------|
| 1. most
people | 2. many
people | 3. some
people | 4. a few
people |
| 5. one or two
people | 6. nobody | | |

PLEASE REMEMBER TO BE AS HONEST AS YOU CAN

— 41. I try to be the dominant person when I am with people

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

— 42. I like people to invite me to things

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

— 43. I like people to act close toward me

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

— 44. I try to have other people do things I want done

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

— 45. I like people to invite me to join their activities

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

- ___ 46. I like people to act cool and distant toward me
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 47. I try to influence strongly other people's actions
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 48. I like people to include me in their activities
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 49. I like people to act close and personal with me
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 50. I try to take charge of things when I'm with people
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 51. I like people to invite me to participate in their activities
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 52. I like people to act distant toward me
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never
- ___ 53. I try to have other people do things the way I want them done
1. usually 2. often 3. sometimes
4. occasionally 5. rarely 6. never

— 54. I take charge of things when I'm with people

- | | | |
|-----------------|-----------|--------------|
| 1. usually | 2. often | 3. sometimes |
| 4. occasionally | 5. rarely | 6. never |

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