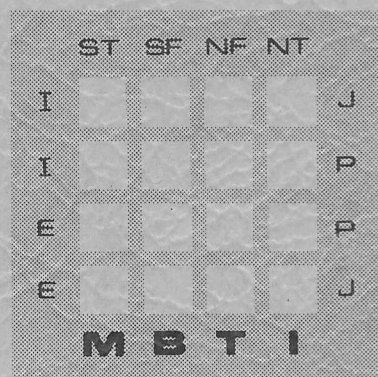


RESEARCH IN PSYCHOLOGICAL TYPE



Volume 6, 1983

IMPLICATIONS OF COMMUNICATION STYLE RESEARCH
FOR PSYCHOLOGICAL TYPE THEORY

Flavil R. Yeakley, Jr.

University of Tulsa

Previous studies concerning the effects of similarity in psychological type have used as the measure of similarity the number of MBTI scales on which two people have the same preferences. A different way of measuring type similarity was suggested by this writer in a 1982 *RPT* article. A brief review of material presented in that article is needed as an introduction to the present study.

In studies of interpersonal relationships, the important thing about the 16 psychological types is how they are expressed in communication style preference patterns. People use all four of the communication styles--sensing, intuition, thinking, and feeling--but not with equal preference, skill or effectiveness. Each of the 16 psychological types has a unique pattern of primary, secondary, tertiary, and least preferred communication styles. Two people must use the same communication style at the same time in order to communicate effectively. This often requires some communication adjustment on the part of one or both of the individuals involved. One or both dyad members may have to shift from their primary to their secondary, their tertiary, or even their least preferred communication style so that both dyad members will be using the same communication style.

The relative level of communication adjustment that is needed for a sender to communicate effectively with a receiver can be represented by a one-way communication adjustment index. This index is a four-digit number in which the four places reflect descending levels of importance for the sender's use of each of the receiver's four communication styles (the thousands place for the primary, the hundreds place for the secondary, the tens place for the tertiary, and the ones place for the least preferred style of the receiver). The numbers that go into the four places reflect the sender's preferences (1 = the primary, 2 = the secondary, 3 = the tertiary, and 4 = the least preferred style of the sender). There are 24 one-way communication adjustment indices ranging from 1234 to 4321. When two people have identical communication

style preference patterns, the one-way communication adjustment index is 1234 for each dyad member. When two people have opposite communication style preference patterns, the one-way communication adjustment index is 4321 for each dyad member. The higher the index the more difficult communication should be--all other things being equal. When these one-way communication adjustment indices are converted into rank scores representing relative levels of expressed type similarity, an index of 4321 yields a rank score of 1 indicating minimum expressed type similarity and maximum difficulty in one-way communication and an index of 1234 yields a rank score of 24 indicating maximum expressed type similarity and minimum difficulty in one-way communication.

Two-way communication adjustment indices are constructed by adding the one-way communication adjustment indices for both dyad members. A study of all 136 possible combinations of type reveals that there are 17 possible two-way communication adjustment indices. Seven of these indices occur in dyads with different one-way communication adjustment indices and thus one-way communication adjustment is more difficult for one member of the dyad than it is for the other. The other 10 indices for two-way communication adjustment occur in balanced dyads where one-way communication adjustment indices are the same for both members of the dyad. When two-way communication adjustment indices are converted into rank scores representing relative levels of expressed type similarity, an index of 8642 yields a rank score of 1 indicating minimum expressed type similarity and maximum difficulty in two-way communication and an index of 2468 yields a rank score of 17 indicating maximum expressed type similarity and minimum difficulty in two-way communication.

For review, Table 1 shows the primary, secondary, tertiary, and least preferred communication styles of each of the 16 types, along with the rules for determining them. Table 2 shows the communication rank scores for all possible one-way communication dyads (where only one person sends and only one person receives the communication) and two-way communication dyads (where each person both sends and receives communication), according to the types of the persons comprising the dyad. Remember that higher numbers (scores) indicate greater similarity of communication styles and thus greater predicted ease and effectiveness of communication. (A careful

Table 1

Communication Style Preferences
of the 16 Psychological Types

TYPE ^a	CHOICE ^{b,c} 1 2 3 4	TYPE	CHOICE ^{b,d} 1 2 3 4
<u>I</u> STJ	T S F N	ESTJ	T S N F
<u>I</u> SFJ	F S T N	ESFJ	F S N T
<u>I</u> STP	S T N F	ESTP	S T F N
<u>I</u> SFP	S F N T	ESFP	S F T N
<u>I</u> NFJ	F N T S	ENFJ	F N S T
<u>I</u> NTJ	T N F S	ENTJ	T N S F
<u>I</u> NFP	N F S T	ENFP	N F T S
<u>I</u> ntp	N T S F	ENTP	N T F S

^a Dominant function is underlined.
Auxiliary function is the one of the middle
two letters that is not underlined.

^b Choice 1 = primary communication style
Choice 2 = secondary communication style
Choice 3 = tertiary communication style
Choice 4 = least preferred communication style

^c For I's:
Primary communication style is the auxiliary.
Secondary communication style is the dominant.
Tertiary communication style is the opposite
of the auxiliary.
Least preferred communication style is the
opposite of the dominant.

^d For E's:
Primary communication style is the dominant.
Secondary communication style is the auxiliary.
Tertiary communication style is the opposite
of the auxiliary.
Least preferred communication style is the
opposite of the dominant.

Table 2

Communication Adjustment Rank Scores
For *One-Way* and Two-Way Dyads

R O B E R I C S E P I E T V R Y E S P R O E N	PSYCHOLOGICAL TYPE OF SENDER OR PERSON A															
	E	E	E	E	E	E	E	E	I	I	I	I	I	I	I	I
	S	S	S	S	N	N	N	N	S	S	S	S	N	N	N	N
	T	T	F	F	T	T	F	F	T	T	F	F	T	T	F	F
	J	P	J	P	J	P	J	P	J	P	J	P	J	P	J	P
ESTJ	<i>24</i>	<i>17</i>	<i>3</i>	<i>11</i>	<i>22</i>	<i>14</i>	<i>1</i>	<i>8</i>	<i>23</i>	<i>18</i>	<i>9</i>	<i>5</i>	<i>20</i>	<i>16</i>	<i>7</i>	<i>2</i>
ESTP	<i>17</i>	<i>24</i>	<i>14</i>	<i>22</i>	<i>11</i>	<i>3</i>	<i>8</i>	<i>1</i>	<i>18</i>	<i>23</i>	<i>16</i>	<i>20</i>	<i>5</i>	<i>9</i>	<i>2</i>	<i>7</i>
ESFJ	<i>3</i>	<i>11</i>	<i>24</i>	<i>17</i>	<i>1</i>	<i>8</i>	<i>22</i>	<i>14</i>	<i>9</i>	<i>5</i>	<i>23</i>	<i>18</i>	<i>7</i>	<i>2</i>	<i>20</i>	<i>16</i>
ESFP	<i>2</i>	<i>9</i>	<i>17</i>	<i>11</i>	<i>1</i>	<i>5</i>	<i>15</i>	<i>9</i>	<i>4</i>	<i>6</i>	<i>16</i>	<i>12</i>	<i>3</i>	<i>3</i>	<i>14</i>	<i>10</i>
ENTJ	<i>14</i>	<i>22</i>	<i>17</i>	<i>24</i>	<i>8</i>	<i>1</i>	<i>11</i>	<i>3</i>	<i>16</i>	<i>20</i>	<i>18</i>	<i>23</i>	<i>2</i>	<i>7</i>	<i>5</i>	<i>9</i>
ENTP	<i>9</i>	<i>15</i>	<i>11</i>	<i>17</i>	<i>5</i>	<i>1</i>	<i>9</i>	<i>2</i>	<i>10</i>	<i>14</i>	<i>12</i>	<i>16</i>	<i>3</i>	<i>3</i>	<i>6</i>	<i>4</i>
ENFJ	<i>22</i>	<i>14</i>	<i>1</i>	<i>8</i>	<i>24</i>	<i>17</i>	<i>3</i>	<i>11</i>	<i>20</i>	<i>16</i>	<i>7</i>	<i>2</i>	<i>23</i>	<i>18</i>	<i>9</i>	<i>5</i>
ENFP	<i>15</i>	<i>9</i>	<i>1</i>	<i>5</i>	<i>17</i>	<i>11</i>	<i>2</i>	<i>9</i>	<i>14</i>	<i>10</i>	<i>3</i>	<i>3</i>	<i>16</i>	<i>12</i>	<i>4</i>	<i>6</i>
ISTJ	<i>11</i>	<i>3</i>	<i>8</i>	<i>1</i>	<i>17</i>	<i>24</i>	<i>14</i>	<i>22</i>	<i>5</i>	<i>9</i>	<i>2</i>	<i>7</i>	<i>18</i>	<i>23</i>	<i>16</i>	<i>20</i>
ISTP	<i>9</i>	<i>2</i>	<i>5</i>	<i>1</i>	<i>11</i>	<i>17</i>	<i>9</i>	<i>15</i>	<i>6</i>	<i>4</i>	<i>3</i>	<i>3</i>	<i>12</i>	<i>16</i>	<i>10</i>	<i>14</i>
ISFJ	<i>1</i>	<i>8</i>	<i>22</i>	<i>14</i>	<i>3</i>	<i>11</i>	<i>24</i>	<i>17</i>	<i>7</i>	<i>2</i>	<i>20</i>	<i>16</i>	<i>9</i>	<i>5</i>	<i>23</i>	<i>18</i>
ISFP	<i>1</i>	<i>5</i>	<i>15</i>	<i>9</i>	<i>2</i>	<i>9</i>	<i>17</i>	<i>11</i>	<i>3</i>	<i>3</i>	<i>14</i>	<i>10</i>	<i>4</i>	<i>6</i>	<i>16</i>	<i>12</i>
INTJ	<i>8</i>	<i>1</i>	<i>11</i>	<i>3</i>	<i>14</i>	<i>22</i>	<i>17</i>	<i>24</i>	<i>2</i>	<i>7</i>	<i>5</i>	<i>9</i>	<i>16</i>	<i>20</i>	<i>18</i>	<i>23</i>
INTP	<i>5</i>	<i>1</i>	<i>9</i>	<i>2</i>	<i>9</i>	<i>15</i>	<i>11</i>	<i>17</i>	<i>3</i>	<i>3</i>	<i>6</i>	<i>4</i>	<i>10</i>	<i>14</i>	<i>12</i>	<i>16</i>
INFJ	<i>23</i>	<i>18</i>	<i>4</i>	<i>12</i>	<i>21</i>	<i>13</i>	<i>2</i>	<i>7</i>	<i>24</i>	<i>17</i>	<i>10</i>	<i>6</i>	<i>19</i>	<i>15</i>	<i>8</i>	<i>1</i>
INFP	<i>16</i>	<i>12</i>	<i>4</i>	<i>10</i>	<i>14</i>	<i>6</i>	<i>3</i>	<i>3</i>	<i>17</i>	<i>11</i>	<i>8</i>	<i>7</i>	<i>13</i>	<i>7</i>	<i>5</i>	<i>1</i>
ESTJ	<i>18</i>	<i>23</i>	<i>13</i>	<i>21</i>	<i>12</i>	<i>4</i>	<i>7</i>	<i>2</i>	<i>17</i>	<i>24</i>	<i>15</i>	<i>19</i>	<i>6</i>	<i>10</i>	<i>1</i>	<i>8</i>
ESTP	<i>12</i>	<i>16</i>	<i>6</i>	<i>14</i>	<i>10</i>	<i>4</i>	<i>3</i>	<i>3</i>	<i>11</i>	<i>17</i>	<i>7</i>	<i>13</i>	<i>7</i>	<i>8</i>	<i>1</i>	<i>5</i>
ESFJ	<i>4</i>	<i>12</i>	<i>23</i>	<i>18</i>	<i>2</i>	<i>7</i>	<i>21</i>	<i>13</i>	<i>10</i>	<i>6</i>	<i>24</i>	<i>17</i>	<i>8</i>	<i>1</i>	<i>19</i>	<i>15</i>
ESFP	<i>4</i>	<i>10</i>	<i>16</i>	<i>12</i>	<i>3</i>	<i>3</i>	<i>14</i>	<i>6</i>	<i>8</i>	<i>7</i>	<i>17</i>	<i>11</i>	<i>5</i>	<i>1</i>	<i>13</i>	<i>7</i>
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ENTP	<i>6</i>	<i>14</i>	<i>12</i>	<i>16</i>	<i>3</i>	<i>3</i>	<i>10</i>	<i>4</i>	<i>7</i>	<i>13</i>	<i>11</i>	<i>17</i>	<i>1</i>	<i>5</i>	<i>7</i>	<i>8</i>
ENFJ	<i>21</i>	<i>13</i>	<i>2</i>	<i>7</i>	<i>23</i>	<i>18</i>	<i>4</i>	<i>12</i>	<i>19</i>	<i>15</i>	<i>8</i>	<i>1</i>	<i>24</i>	<i>17</i>	<i>10</i>	<i>6</i>
ENFP	<i>14</i>	<i>6</i>	<i>3</i>	<i>3</i>	<i>16</i>	<i>12</i>	<i>4</i>	<i>10</i>	<i>13</i>	<i>7</i>	<i>5</i>	<i>1</i>	<i>17</i>	<i>11</i>	<i>8</i>	<i>7</i>
ISTJ	<i>12</i>	<i>4</i>	<i>7</i>	<i>2</i>	<i>18</i>	<i>23</i>	<i>13</i>	<i>21</i>	<i>6</i>	<i>10</i>	<i>1</i>	<i>8</i>	<i>17</i>	<i>24</i>	<i>15</i>	<i>19</i>
ISTP	<i>10</i>	<i>4</i>	<i>3</i>	<i>3</i>	<i>12</i>	<i>16</i>	<i>6</i>	<i>14</i>	<i>7</i>	<i>8</i>	<i>1</i>	<i>5</i>	<i>11</i>	<i>17</i>	<i>7</i>	<i>13</i>
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INTJ	<i>7</i>	<i>2</i>	<i>12</i>	<i>4</i>	<i>13</i>	<i>21</i>	<i>18</i>	<i>23</i>	<i>1</i>	<i>8</i>	<i>6</i>	<i>10</i>	<i>15</i>	<i>19</i>	<i>17</i>	<i>24</i>
INTP	<i>3</i>	<i>3</i>	<i>10</i>	<i>4</i>	<i>6</i>	<i>14</i>	<i>12</i>	<i>16</i>	<i>1</i>	<i>5</i>	<i>7</i>	<i>8</i>	<i>7</i>	<i>13</i>	<i>11</i>	<i>17</i>

Note: Rank scores for one-way dyads appear in italics.
Rank scores for two-way dyads are in regular print.
In two-way dyads both A and B send and receive.

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reading of the original 1982 RPT article is highly recommended for a thorough understanding of this material.)

The 1982 RPT article by this writer suggested that a 17-point ordinal scale for two-way communication and a 24-point ordinal scale for one-way communication should provide a more powerful statistical tool than the five-point similarity measure based on counting the number of MBTI scales on which two people have the same preferences. That article presented the results of six studies using communication adjustment rank scores as the measure of expressed type similarity. These six studies examined the relation of expressed type similarity to various indicators of communication effectiveness. The purpose of that article, however, was simply to explain this new approach and demonstrate its use. Results of the six studies reported in that article were presented only in terms of communication adjustment rank scores as the measure of expressed type similarity. Similarity scores were not calculated using the MBTI scale counting method.

Several researchers who are now using communication adjustment rank scores in studying effects of expressed type similarity have asked that the six studies reported in that 1982 RPT article be examined again--this time using the MBTI scale counting method. Such an approach would make possible a more direct comparison of these different ways of measuring type similarity. Results of this examination are presented below--along with a brief review of the earlier studies.

Direct Comparisons of Similarity Scales

In the first study reported in the 1982 RPT article by this writer, marriage counselors selected 90 couples who had been involved in marriage counseling for the previous six months: 30 couples judged by the counselors to have a worse relationship than they had six months earlier; 30 couples judged to have experienced no change in their relationship; and 30 couples judged to have a better relationship than they had six months earlier. These groups were assumed to reflect levels of communication effectiveness since the marriage counseling situation demands effective communication between marital partners. The prediction was that the greater the type similarity between marital partners the more likely they would be in the group with the improved relationships.

In the second study, manager-subordinate dyads in a large corporation were asked to rate the communication of that dyad as being "successful" or "unsuccessful." There were 10 dyads in which both rated their communication as being "unsuccessful," 10 dyads in which one rated their communication as being "unsuccessful" and the other rated it as being "successful," and 10 dyads in which both rated their communication as being "successful." The prediction was that the greater the type similarity between manager and subordinate the more likely their dyad would be in the group where both rated their communication as being "successful."

The third study involved 12 teachers and 266 students in discussion classes. Each student's final grade in that class was recorded and that student's over-all grade point average was subtracted from the final course grade resulting in an adjusted course grade. The prediction was that the greater the type similarity between teacher and student the higher that student's adjusted course grade would be.

A fourth study involved 12 teachers and 661 students in lecture classes. Adjusted course grades were calculated in the same manner as outlined above in a study with the same prediction: the greater the similarity in type between teacher and student the higher the student's adjusted course grade would be.

The fifth study involved ten sales representatives of a life insurance company who identified 20 prospects who had recently purchased life insurance and 20 prospects who had been exposed to a sales presentation but who had not purchased life insurance. The prediction was that the greater the type similarity between sales representative and prospect the more likely the prospect would be in the group that had purchased life insurance.

The final study was done in 16 local churches with ministers selected for the study such that all 16 psychological types were represented. In each of these local congregations, this study also involved a random sample of 50 adult members who had affiliated with that congregation during the tenure of that pulpit minister. The prediction was that in each congregation there would be an over-representation of new members similar to the minister in psychological type and an under-representation of new members who were very different from the

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Table 3 presents a comparison of significance levels obtained in these six studies using the two different methods of measuring similarity. In all six of these studies, the differences were always in the predicted direction regardless of which similarity measure was used. In each case, however, the similarity measure based on the number of MBTI scales on which dyad members had the same preferences produced non-significant results. Those same comparisons produced relatively high levels of statistical significance when expressed type similarity was measured by the 24-point one-way communication adjustment scale or the 17-point two-way communication adjustment scale.

Effects of the Less Preferred Communication Styles

Similarity scales based on communication adjustment rank scores reflect the assumption of descending levels of importance for the sender's use of the receiver's four communication styles. Presumably, a large part of the observed differences in communication effectiveness scores in the studies reported in the 1982 RPT article by this writer may have been due to the relative level of difficulty senders had in shifting into the primary style of the receivers. The theory behind this approach, however, suggests that some of the observed differences in communication effectiveness scores should be attributable to the relative level of difficulty senders had in using the secondary, tertiary, and least preferred styles of the receiver.

To test the effects of relative levels of difficulty in using the less preferred communication styles, it is necessary to focus on a narrow range of possible scores. The six studies reported in this writer's previous RPT article are not appropriate for studying effects of the less preferred styles. The samples were too small or the communication effectiveness scores were too limited for this kind of study. The classroom studies were inappropriate because they involved a communication context in which the use of a particular communication style may have been influenced more by the nature of the subject being studied than by the communication style preferences of either the teacher or the student.

The ideal context for this kind of study would be

Table 3

Comparisons of Significance Levels Obtained
Using Two Methods of Measuring Similarity

Studies and comparisons	Tests	Significance levels	
		MBTI scale counting method	Communi- cation adjust- ment rank scores method
Marital dyads			
Overall difference	Kruskal-Wallis	.12 NS	.01
Group comparisons			
Better-no change	Mann-Whitney U	NA	.05
No change-worse	Mann-Whitney U	NA	.05
Better-worse	Mann-Whitney U	NA	.01
Organizational dyads			
Overall difference	Kruskal-Wallis	.17 NS	.02
Group comparisons			
Successful-mixed	Mann-Whitney U	NA	.05
Mixed-unsuccessful	Mann-Whitney U	NA	.05
Successful-unsuccessful	Mann-Whitney U	NA	.01
Teacher-student dyads in discussion classes	Spearman's rho	.07 NS	.001
Teacher-student dyads in lecture classes	Spearman's rho	.06 NS	.001
Sales representative- prospect dyads	Mann-Whitney U	.14 NS	.01
Minister-member dyads	Kolmogorov- Smirnov one- sample test	.09 NS	.001

one in which dyad members have been involved in on-going relationships for a relatively long period of time and their relationships have been such as to call for the use of all four communication styles at various times. Marital dyads would be ideal. Supervisor-subordinate dyads in some business organizations would also meet the

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requirements. Some leader-member dyads in churches, community organizations, or other voluntary associations would also fit the criteria. A randomly selected sample of subjects involved in such communication situations could be tested with the MBTI and asked to rate the communication effectiveness of their dyad partners. It would then be possible to compare average communication effectiveness ratings for groups of dyads with relatively similar communication adjustment rank scores.

The only data presently available to this writer that come close to meeting the criteria for such a study are the results of a rather large sample of subjects who have been tested for psychological type and who have rated the communication effectiveness of their dyad partners--but for purposes other than this kind of research. The one area in which these data fail to meet the criteria for such a study is that these subjects were not selected randomly. The subjects include: couples who attended marriage seminars conducted by this writer; supervisors and subordinates in corporations where this writer was involved as a consultant; and individuals in churches, community organizations, and other voluntary associations where this writer did some kind of consulting or training. This non-random sample probably represents groups with more serious communication problems than those that would be found in a random sample of the general population. Communication effectiveness ratings in this body of data may have been more extreme than those that would be observed in a random sample. Because of these limitations, the following discussion is offered only as a tentative indication of what one might expect to find in a more rigorous study.

As a measure of communication effectiveness, subjects were asked to compare their dyad partner with everyone else they knew and rate that dyad partner as a communicator. They were specifically asked how good their dyad partners were at being flexible and adjusting their messages so as to talk to these individuals in a way that was easy for them to understand. Ratings were given on a seven-point scale in which 1 = Very Poor, 2 = Poor, 3 = Slightly Below Average, 4 = Average, 5 = Slightly Above Average, 6 = Good, and 7 = Excellent. These ratings were averaged for all cases at each of the communication adjustment rank scores. The average ratings associated with the various communication adjustment rank scores were then compared. Results of this comparison are presented in Table 4.

Table 4

Significance of Comparisons of Mean Communication Effectiveness Ratings Made by Subjects at Similar Communication Adjustment Rank Scores (See text.)

One-way communication adjustment ranks and indices for dyads being compared	Significance levels for observed differences in average communication effectiveness ratings
<i>Comparisons of different levels of difficulty in sender's adjusting to use receiver's primary communication style</i>	
19-24(1432...1234) vs. 13-18(2431...2134)	.005
13-18(2431...2134) vs. 7-17(3421...3124)	.01
7-12(3421...3124) vs. 1--6(4321...4123)	.025
<i>Comparisons of different levels of difficulty in sender's adjusting to use receiver's secondary communication style, when levels of difficulty of sender's adjusting to use receiver's primary communication style are the same for the two groups compared</i>	
23-24(1243 & 1234) vs. 21-22(1342 & 1324)	NS
21-22(1342 & 1324) vs. 19-20(1432 & 1423)	NS
17-18(2143 & 2134) vs. 15-16(2341 & 2314)	.05
15-16(2341 & 2314) vs. 13-14(2431 & 2413)	.06*
11-12(3142 & 3124) vs. 9-10(3241 & 3214)	.07*
9-10(3241 & 3214) vs. 7--8(3421 & 3412)	.05
5--6(4132 & 4123) vs. 3--4(4231 & 4213)	.05
3--4(4231 & 4213) vs. 1--2(4321 & 4312)	.05
<i>Comparisons of different levels of difficulty in sender's adjusting to use receiver's two least preferred communication styles, when levels of difficulty of sender's adjusting to use both receiver's primary and secondary communication styles are the same for the two levels compared</i>	
24(1234) vs. 23(1243)	NS
22(1324) vs. 21(1342)	NS
20(1423) vs. 19(1432)	NS
18(2134) vs. 17(2143)	.08*
16(2314) vs. 15(2341)	.01
14(2413) vs. 13(2431)	.05
12(3124) vs. 11(3142)	.07*
10(3214) vs. 9(3241)	.01
8(3412) vs. 7(3421)	.05
6(4123) vs. 5(4132)	.05
4(4213) vs. 3(4231)	.01
2(4312) vs. 1(4321)	.01

*approaches significance

In all 24 cases in this study, the average communication effectiveness ratings associated with the various communication adjustment rank scores were in the predicted direction. Furthermore, there was a strong positive correlation between the communication adjustment rank scores for these message senders and the communication effectiveness ratings assigned to them by the message receivers in these dyads (Spearman's $\rho = .76$, $p < .001$).

The first three rows in Table 4 focus on differences in the communication style senders must use to communicate in the primary communication style of the receivers (primary vs. secondary, secondary vs. tertiary, and tertiary vs. least preferred). All three of these comparisons were associated with statistically significant differences in communication effectiveness ratings.

The next eight rows of Table 4 compare dyads with identical patterns in regard to the adjustment that is needed for the senders to use the receivers' primary style, but different patterns in regard to the use of the receivers' secondary style. In those dyads where senders and receivers have the same primary communication style, differences in the secondary style were not associated with statistically significant differences in communication effectiveness ratings--perhaps because little style shifting is done in these dyads. In the other cases, however, the differences were statistically significant in four of the comparisons and approached significance in the other two comparisons.

The last 12 rows of Table 4 compare dyads with identical patterns in regard to the adjustment required for senders to use both the receivers' primary and secondary styles, but different patterns in regard to the use of the receivers' two least preferred styles. In the three comparisons involving dyads where senders and receivers have the same primary communication style, differences in the two least preferred styles were not associated with statistically significant differences in communication effectiveness ratings. In the three cases where the primary style of the sender matched the secondary style of the receiver in both of the comparison groups, differences in the two least preferred styles were associated with statistically significant differences in communication effectiveness ratings only once and in the two other cases only approached significance.

In seven out of these 12 comparisons, however, differences in the two least preferred styles were associated with communication effectiveness ratings that were significantly different.

These results should not be accepted uncritically. This kind of analysis should be done with a large random sample before the indications of this study could be accepted with any degree of confidence. As a preliminary indication, however, results of this study with a non-random sample add at least some support to the belief that differences in the less preferred styles account for some of the observed results associating communication adjustment rank scores with communication effectiveness ratings.

*The Relative Importance of the Four MBTI Scales
in Studying Expressed Type Similarity*

There are implications for psychological type theory in the results of the research reported in this writer's 1982 RPT article as elaborated and clarified in the previous sections of this present article. The first of these implications is that the four MBTI scales are not equally important in studying type similarity as it is expressed in interpersonal communication. Differences on some of the MBTI scales result in much lower similarity scores than is the case with differences on other scales. Table 5 outlines the relative importance of the four MBTI scales in studying expressed type similarity. This table displays the characteristics of dyads with the various communication adjustment rank scores.

When dyad members differ only on the E-I scale, their two-way communication adjustment rank score is 16 and that is next to the highest similarity score on this 17-point scale. When dyad members differ only in regard to their secondary communication style (S-N for J's or T-F for P's), their two-way communication adjustment rank score is 15 if both dyad members are extraverts and 13 if both are introverts. When dyad members differ only on the J-P scale, their communication adjustment rank score is 11. When dyad members differ only in regard to their primary communication style (S-N for P's or T-F for J's), their two-way communication adjustment rank score is 8 when both are introverts and 2 when both are extraverts. On this basis we may conclude that:

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Two-way
One-way

17-2468

24-123

24-123

16-2486

23-124

23-124

15-2684

22-132

22-132

14-2765

21-134

20-142

13-2861

19-14

19-14

12-4261

18-21

18-21

11-428

17-21

17-21

10-543

16-23

12-31

Table 5

Characteristics of Dyads with the Various
Communication Adjustment Rank Scores

Communication adjust- ment ranks & indices	Num- ber of dyads at each rank	Number of MBTI scales on which mem- bers differ	MBTI scales on which dyad members differ plus a list of all dyads at each rank	
Two-way <u>One-way</u>				
17-2468 24-1234 24-1234	16	0	identical dyads for all 16 types	
16-2486 23-1243 23-1243	8	1	E-I	
			ESTJ-ISTJ	ESTP-ISTP
			ESFJ-ISFJ	ESFP-ISFP
			ENTJ-INTJ	ENTP-INTP
			ENFJ-INFJ	ENFP-INFP
15-2684 22-1324 22-1324	4	1	S-N for J's or T-F for P's**	
			ESTJ-ENTJ	ESTP-ESFP
			ESFJ-ENFJ	ENTP-ENFP
14-2765* 21-1342 20-1423	8	2	E-I, & S-N for J's or T-F for P's	
			ESTJ-INTJ	ESTP-ISFP
			ESFJ-INFJ	ESFP-ISTP
			ENTJ-ISTJ	ENTP-INFP
			ENFJ-ISFJ	ENFP-INTP
13-2864 19-1432 19-1432	4	1	S-N for J's or T-F for P's**	
			ISTJ-INTJ	ISTP-ISFP
			ISFJ-INFJ	INTP-INFP
12-4268 18-2134 18-2134	8	2	E-I, and J-P	
			ESTJ-ISTP	ESTP-ISTJ
			ESFJ-ISFP	ESFP-ISFJ
			ENTJ-INTP	ENTP-INTJ
			ENFJ-INFP	ENFP-INFJ
11-4286 17-2143 17-2143	8	1	J-P	
			ESTJ-ESTP	ISTJ-ISTP
			ESFJ-ESFP	ISFJ-ISFP
			ENTJ-ENTP	INTJ-INTP
			ENFJ-ENFP	INFJ-INFP
10-5438* 16-2314 12-3124	8	3	E-I, S-N or T-F, and J-P**	
			ESTJ-INTP	ESTP-ISFJ
			ESFJ-INFP	ESFP-ISTJ
			ENTJ-ISTP	ENTP-INFJ
			ENTJ-ISFP	ENFP-INTJ

Table 5 (continued)

Communication adjust- ment ranks & indices	Number of dyads at each rank	Number of MBTI scales on which mem- bers differ	MBTI scales on which dyad members differ plus a list of all dyads at each rank	
Two-way <i>One-way</i>				
9-5555*	8	2	S-N or T-F, and J-P**	
14-2413			ESTJ-ESFP	ESTJ-ENTP
11-3142			ESTP-ESFJ	ESTP-ENTJ
			ESFJ-ENTP	ESFP-ENFJ
			ENTJ-ENFP	ENTP-ENFJ
8-6428	4	1	S-N for P's or T-F for J's**	
10-3214			ISTJ-ISFJ	ISTP-INTP
10-3214			ISFP-INFP	INTJ-INFJ
7-6464*	8	2	S-N or T-F, and J-P**	
15-2341			ISTJ-ISFP	ISTJ-INTP
6-4123			ISTP-ISFJ	ISTP-INTJ
			ISFJ-INFP	ISFP-INFJ
			INTJ-INFP	INTP-INFJ
6-6563	8	3	E-I, S-N or T-F, and J-P**	
13-2431			ESTJ-ISFP	ESTP-INTJ
5-4132			ESFJ-ISTP	ESFP-INFJ
			ENFJ-INFP	ENTP-ISTJ
			ENFJ-INTP	ENFP-ISFJ
5-6824	4	2	S-N, and T-F**	
8-3412			ISTJ-INFJ	ISTP-INFP
8-3412			ISFJ-INTJ	ISFP-INTP
	4	3	S-N, T-F, and J-P**	
			ESTJ-ENFP	ESTP-ENFJ
			ESFJ-ENTP	ESFP-ENTJ
4-7454*	8	2	E-I, and S-N for P's or T-F for J's	
9-3241			ESTJ-ISFJ	ESTP-INTP
4-4213			ESFJ-ISTJ	ESFP-INFP
			ENTJ-INFJ	ENTP-ISTP
			ENFJ-INTJ	ENFP-ISFP
3-7733*	8	3	E-I, S-N, and T-F	
7-3421			ESTJ-INFJ	ESTP-INFP
2-4312			ESFJ-ISFJ	ESFP-ISFP
			ENTJ-ISFJ	ENTP-ISFP
			ENFJ-ISTJ	ENFP-ISTP

(Entry continued on following page.)

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Table 5 (continued)

Communication adjust- ment ranks & indices	Num- ber of dyads at each rank	Number of MBTI scales on which mem- bers differ	MBTI scales on which dyad members differ plus a list of all dyads at each rank	
Two-way <u>One-way</u>				
(entry continued from preceding page)	8	4	E-I, S-N, T-F, any J-P	
			ESTJ-INFP	ESTP-INFJ
			ESFJ-INTP	ESFP-INTJ
			ENTJ-ISFP	ENTP-ISFJ
			ENFJ-ISTP	ENFP-ISTJ
2-8462	4	1	S-N for P's or T-F for J's**	
3-4231			ESTJ-ESFJ	ESTP-ENTP
3-4231			ESFP-ENFP	ENTJ-ENFJ
1-8642	4	2	S-N, and T-F**	
1-4321			ESTJ-ENFJ	ESTP-ENFP
1-4321			ESFJ-ENTJ	ESFP-ENTP
	4	3	S-N, T-F, and J-P**	
			ISTJ-INFP	ISTP-INFJ
			ISFJ-INTP	ISFP-INTJ

*unbalanced dyads in which one-way communication adjustment is easier for one dyad member than it is for the other.

**Dyads with the following pairs of communication adjustment rank scores have identical patterns in regard to MBTI scale differences, but they have different patterns in other ways:

Rank 15 includes only E-E dyads, while rank 13 includes only I-I dyads.

Rank 9 includes only E-E dyads, while rank 7 includes only I-I dyads.

Rank 8 includes only I-I dyads, while rank 2 includes only E-E dyads.

Rank 5a includes only I-I dyads, while rank 2 includes only E-E dyads.

Rank 5b includes only E-E dyads, while rank 1b includes only I-I dyads.

Rank 10 includes only dyads with the same tertiary communication style, while rank 6 includes only dyads with the same least preferred style.

- 1) Differences in regard to the primary communication styles are more important than differences on the J-P scale;
- 2) Differences on the J-P scale are more important than differences in regard to the secondary communication styles; and,
- 3) Differences in regard to the secondary communication styles are more important than differences on the E-I scale.

A similar pattern is revealed in a study of dyads that differ on two or three of the MBTI scales. In these cases it is possible to rank the relative importance of an MBTI scale or pattern by holding constant all other differences and comparing the related similarity scores. Such an examination reveals the following pattern in regard to the relative importance of the MBTI scales and combinations.

- 1) A difference on both the primary and secondary communication styles of dyad members is the most important difference.
- 2) A difference in regard to the primary communication styles alone is the second most important difference.
- 3) A difference involving the primary communication style of one and the secondary communication style of the other dyad member is the third most important difference.
- 4) A difference on the J-P scale is the fourth most important difference.
- 5) A difference involving only the secondary communication style of the dyad members is the fifth most important difference.
- 6) A difference on the E-I scale is the least important difference.

Measuring similarity by simply counting the number of MBTI scales on which two people have the same preference fails to take into consideration the relative importance of the various scales and scale patterns. That is why previous studies using the MBTI scale counting method in similarity studies have typically produced results that are not statistically significant.

There is one final implication of communication style research for psychological type theory that should be discussed. That implication has to do with the definition

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of "opposites." Lawrence (1979, pp. 8-9) defines "opposites" as being individuals with different preferences on all four of the MBTI scales as outlined below.

ESTJ--INFP	ESFJ--INTP	ENTJ--ISFP	ENFJ--ISTP
ESTP--INFJ	ESFP--INTJ	ENTP--ISFJ	ENFP--ISTJ

Communication style research, however, suggests a different definition of "opposites"--a definition based on how psychological type is expressed in interpersonal communication, as outlined below.

ESTJ--ENFJ	ESFJ--ENTJ	ISTJ--INFP	ISFJ--INTP
ESTP--ENFP	ESFP--ENTP	ISTP--INFJ	ISFP--INTJ

Material displayed near the end of Table 5 demonstrates the difference in the two definitions of "opposites." Out of the 136 possible combinations of type, there are eight dyads in which dyad members have different preferences on all four of the MBTI scales. These dyads have a communication adjustment rank score of 3. Eight other dyads, however, those that differ on E-I, S-N, and T-F) have exactly the same score. Furthermore, there are 12 other dyads that have lower similarity scores when similarity is measured by the communication adjustment rank scores method. There are four dyads in which both persons are extraverts and in which they differ only in regard to their primary communication styles (S-N for P's or T-F for J's) and their communication adjustment rank score is 2. There are four dyads in which both individuals are extraverts and in which they differ on S-N and T-F and their communication adjustment rank score is 1. Finally, there are four dyads in which both are introverts and they differ on S-N, T-F, and J-P and their communication adjustment rank score is also 1. Almost 15 percent of all the possible combinations of type have communication adjustment rank scores as low or lower than those dyads with different preferences on all four of the MBTI scales and yet 12 of these dyads differ on three of the MBTI scales, four differ on two of the scales, and four differ on only one of the scales.

Conclusion

The six studies reported in the 1982 RPT article by this writer--along with the additional studies, clarifications, and elaborations presented in this

present article--provide strong support for the conclusion that similarity in psychological type should be measured by the communication adjustment rank scores method rather than by the MBTI scale counting method. That conclusion, of course, is valid only if the assumptions on which that method is based are correct.

The most fundamental assumption of the communication adjustment rank scores method is that two people must use the same communication style at the same time in order to communicate effectively. Several researchers who have corresponded with this writer have questioned this assumption. One of these researchers argued by analogy from the example of a couple he knew with a husband who always spoke German and a wife who always spoke French--and yet they managed to communicate effectively. I would argue, however, that for such a couple to communicate at all, each would have to know the language spoken by the other and each would have to listen in the language the other used. In a similar way, communication would be possible in a marital dyad involving a husband who always spoke in the thinking style and a wife who always spoke in the feeling style--but only if the wife listened in the thinking style and the husband listened in the feeling style. The four communication styles are not just reflected in different ways of speaking, they are also reflected in different ways of listening--as outlined below.

Listening in the sensing style means interpreting at a very practical level and asking such questions as:

- What is the speaker saying?*
- How should the words be decoded?*
- How should the message be perceived?*

Listening in the intuitive style means understanding at a much deeper level and asking such questions as:

- What does the speaker really mean?*
- What are the assumptions underlying the message?*
- What are the implications of the message?*
- What are the possibilities suggested by the message?*

Listening in the thinking style means analyzing and organizing while asking such questions as:

- What is the structure of the message?*
- What is the central idea?*
- What are the main points?*
- What are the sub-points?*

How are the various points related?
Is there adequate evidence to justify each claim?
Is the reasoning logical?
Are the claims true or false?

Listening in the feeling style means evaluating and appreciating while asking such questions as:

What values are suggested by the message?
Should these values be accepted or rejected?
How do I feel about the message?
How do I feel about the speaker?

Communication is the process of creating an acceptable degree of shared meaning between people. For this process to work, it is absolutely essential for people to use the same communication style at the same time. If they do not, they cannot have a genuine dialogue. All that they could have would be what Kaplan (1961, p.39) called a "duologue" and that is just two monologues that go on at the same time without ever meeting.

References

- Kaplan, A. The new world of philosophy. New York: Random House, 1961.
- Lawrence, G. D. People types and tiger stripes: A practical guide to learning styles. Gainesville, Florida: Center for Applications of Psychological Type, 1979.
- Yeakley, F. R. Communication style preferences and adjustments as an approach to studying effects of similarity in psychological type. Research in Psychological Type, 1982, 5, 30-48.