

Assessing Intimacy: The Pair Inventory*

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PAIR, acronym for Personal Assessment of Intimacy in Relationships, was developed as a tool for educators, researchers and therapists. PAIR provides systematic information on five types of intimacy: emotional, social, sexual, intellectual and recreational. Individuals, married or unmarried, describe their relationship in terms of how they currently perceive it (perceived) and how they would like it to be (expected). PAIR can be used with couples in marital therapy and enrichment groups.

Intimacy is a term widely used by marriage counselors and educators. The explosion of the marriage and family enrichment movement, precipitated by the "human potential" or "growth" movement, has developed a continually growing awareness of intimacy in relationships. It seems that highly marketable enrichment programs teach the "how to's" of being intimate. Enrichment may, in fact, casually be equated with movement toward intimacy. "Marriage Enrichment" implies change, growth, enhancement and development of already present ingredients in a relationship; and the assumed direction of this change and growth is from the non-intimate to the intimate.

Intimacy is sometimes assumed to be characteristic of the ideal type of marriage and family relationships. It is a word used casually, but few have tried to conceptualize it, operationalize it, or assess its impact on relationships. Research literature mentions the term with some frequency, but has barely paused to clearly conceptualize it, nor validate the nature of its presence in human relationships.

Our culture, unlike others, places a high value on intimacy and, although not restricted to marriage, most get married to seek and maintain it. It is considered to be the reward and benefit of friendship. Many developmental theorists include intimacy as a vital ingredient in their hierarchy of needs (Maslow, 1954; Erikson, 1950; Sullivan, 1953). Research with primates infers that without some meager degree of intimacy, humans cannot adequately develop (Harlow, 1971). The overriding predominance of intimacy as a cultural value, whether mythical or actual in occurrence, suggests the need for a clear, well-defined operational concept.

This paper explores the nature and multi-dimensional aspects of intimacy; delineates fundamental assumptions about it; demonstrates what is known about intimacy and describes a newly developed assessment measure of the concept called the PAIR, (*Personal Assessment of Intimacy in Relationships*). Finally, it describes how the PAIR can be used in marriage counseling and enrichment programs.

*Copies of PAIR, a Counselor's Manual, Scoring Template, Answer Sheets and Profile Forms for five couples can be purchased for \$20.00 by writing the second author.

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Review of Literature

Historically, intimacy does not frequently appear in literature, but it is considered a significant dimension for some writers (Ferreira, 1964, Bowlby, 1958). Erikson (1950) includes it in his hierarchy of human development, referring to it as a critical developmental task in making the transition from adolescence to adulthood. Sullivan (1953) likewise associates "the need for intimacy" with the phases of life beginning in adolescence, describing it as the need "for collaboration with at least one other person." Angyal (1965) emphatically claims that the establishment and maintenance of a close relationship, whereby one "exists in the thought and affection of another" is the "crux of our existence from the cradle to the grave" (p. 19). He continues to outline the need to be "needed" in an intimate relationship as a fundamental precept to his theory.

Although lay persons and clinicians alike find Erikson's and Sullivan's insights to ring "true," how intimacy relates to any theory or what role it actually plays in development has proven to be difficult to define or to empirically test (Gruen, 1964). Harlow and Zimmerman (1959) have taken another track through their research on monkeys and human infants, demonstrating the need for affectionate responses with a more empirical approach.

Others include intimacy as a crucial variable in their work, but with few exceptions have not attempted to define it (Collins, 1974; Stone, 1973; Powers and Bultena, 1976; Strong, 1975). Often intimacy has been associated with dyadic patterns of conformity (Stone, 1973), the public nature of couple and parent-child relationships (Kanter, et al., 1975), or adolescent norms and peer expectations (Collins, 1974). Intimacy is often defined in terms of levels of sexual involvement, or level of courtship; that is, the greater the sexual involvement, the more intimacy.

In a social psychological vein, intimacy has been examined for its relationship to distance, eye contact, environment, and verbal behavior. Argyle and Dean (1965) assert that an equilibrium exists for any pair of individuals, and that the equilibrium point is a function of eye contact, physical proximity, discussion topic, amount of smiling, and assorted other related variables. They deduce that if one of these components of intimacy change, one or more of the others will shift in the reverse direction to maintain the equilibrium between the two individuals. Jourard and Friedman (1970) examined self-disclosure among strangers for its relationship to "distance." In one experiment they found that subjects increased disclosure time as distance decreased, and therefore concluded that the Argyle and Dean's "equilibrium" is not maintained when there is increasing trust and positive feelings toward the person that comes close (Cozby, 1973).

Intimacy has begun to gain attention in the field of aging and life-span analysis. Lowenthal and Haven (1968), in their analysis of interaction and adaptation in later stages of the lifespan, were "struck by the fact that the happiest and healthiest among them often seemed to be the people who were, or had been, involved in one or more close relationships" (p. 20). They claim that their data clearly supports the fact that there are other viable forms of intimacy which are not necessarily substitutes for, or supplements to, a stable heterosexual relationship. However, they do not attempt any alternate definitions.

While banking on some early work on friendship and aging (Resow, 1967; Arth, 1962; Blan, 1961), they explored the depth of friendship with so-called confidants. Although the methods were crude, they found support for their assertion that the depth of intimacy is a key correlate in a person's ability to adapt over the lifespan. Lowenthal and Weiss (1976) propose that most men and women find energy and motivation to live autonomous, self-generating and satisfying lives only through the presence of one or more mutually supportive and intimate dyadic relationships.

One of the areas of research most closely related to, or confused with, intimacy is that of self-disclosure. Jourard's studies of self-disclosure (1964, 1971) revealed that "the act of

revealing personal information to others" (Jourard and Jaffee, 1970) is characterized by mutual reciprocity (Jourard and Richman, 1963); that the perceived appropriateness of self-disclosure exerts a strong influence on recipients of it (Kiesler, Kiesler and Pallak, 1967); that high disclosures are characterized as having higher self-esteem than low disclosures (Shapiro, 1968); and that the most consistent intimate disclosure occurs in marital relationships (Jourard and Lasokow, 1958).

Whereas some references to self-disclosure seem to equate it with intimacy (e.g., Derlega and Chaikin, 1975), Altman and Haythorn (1965) and Gilbert (1976) distinguished the two concepts, with the latter calling for a rethinking of the current constructs of self-disclosure and intimacy. He suggests, along with Cozby (1973), that the relationship between self-disclosure and relationship satisfaction may be curvilinear, and that there may exist a point at which increased self-disclosure actually reduces satisfaction with the relationship. In vague support of this hypothesis are Chaikin and Derlega (1964) who concluded from their study that the appropriateness rather than the amount of self-disclosure is a salient variable associated with perceived adjustment of the discloser.

By intimacy Gilbert refers "to the depth of exchange, both verbally and/or non-verbally, between two persons, which implies a deep form of acceptance of the other as well as a commitment to the relationship." If relationship satisfaction is highly associated with intimacy, then self-disclosure may also have a curvilinear relationship with intimacy, or "intimacy may be a very special instance of self-disclosure." Whatever the concomitant variables, Gilbert poses several interesting conceptual links to intimacy; namely that reciprocity of disclosures is an insufficient explanation of intimacy; that acceptance and commitment of the person making the disclosure, as well as self-esteem and ability to resolve conflict, may exert a significant influence on the level of intimacy.

The most extensive and refined conceptual definitions purport intimacy to be . . . "a mutual need satisfaction" (Clinebell and Clinebell, 1970) and a closeness to another human being on a variety of levels (Dahms, 1972). Clinebell and Clinebell identify several facets of intimacy including: sexual, emotional, aesthetic, creative, recreational, work, crisis, conflict, commitment, spiritual, and communication intimacy. While their definition lacks theoretical conceptual clarity, (and it does not seem that they intended to develop such), Dahms proposes a conceptual hierarchy of three dimensions of intimacy: intellectual, physical, and emotional. Furthermore, he characterizes the concept with four inherently important qualities: mutual accessibility, naturalness, non-possessiveness, and the need to view it as a process.

Most attempts to conceptualize intimacy have not distinguished it from self-disclosure. Gilbert emphasizes that high self-disclosure may not be appropriate at times. It may not involve commitment, and most importantly, it may not take the individual's self-esteem into account. Many therapists would attest to the harsh pre-divorce period as being characterized by high self-disclosure, but the content and style of the disclosures may only prove to attack the self-esteem of the participants and not accomplish a resolution of conflict. The authenticity of a "cold truth" may serve only to separate individuals, resulting in non-intimacy.

An intact relationship may, in fact, be better off with some degree of idealization where some negative "facts" are ignored or withheld while the focus is on maintained positive images. Hall and Taylor (1976) conclude from their experiments that "marriage involves a validation and reaffirmation of a joint construct of reality, suggesting that a continued high evaluation of the other is critical, not only for survival of the marriage, but for the continuance of one's world view as well." The enhancement of the other's value through idealization and, therefore, not disclosing particular negatives, allows the spouse to continue to be a source of positive reinforcement for beliefs, attitudes, and values. Behaviorists would agree, as they have demonstrated, that the primary focus of a long-term relationship should be on the positive. The therapeutic effectiveness of Stuart's

(1976) "caring days" attests to the need of avoiding any unnecessary disclosures of negative responses during later stages of the therapeutic process while emphasizing positive actions, thereby providing for mutually reciprocated acceptance and support.

It should be emphasized, however, that conflict itself is not a block to intimacy (Clinebell and Clinebell, 1970). Rather, conflict can frequently facilitate intimacy, depending on the way in which it is resolved (Strong, 1975; Clinebell and Clinebell, 1970; Bach and Wyden, 1975). As communication theory has demonstrated, unresolved conflict can facilitate distancing the members of a dyad (Clinebell and Clinebell, 1970).

Another concept closely linked to intimacy, and also somewhat confused with it, is "cohesion." Olson, et al., (1979) extensively review the assorted concepts within family therapy, sociology, small group and social psychology literature and conclude that cohesion is a central dimension with the extremes of "separateness-togetherness." Whereas family cohesion is "the emotional bonding which members *feel* toward one another," it is a *resultant condition* of the dynamic processes within the group. Intimacy is actually part of the myriad of processes. A sharing of intimate experiences is a precondition for cohesion.

Another recently developed intimacy scale is the Waring Intimacy Questionnaire (WIQ) composed of the following eight variables: conflict resolution, affection, cohesion, sexuality, identity, compatibility, autonomy, and expressiveness. In a validity study of the WIQ and PAIR by Hanes and Waring (1979), they found these two scales were significantly related ($r = .77; p > .01$).

Conceptual Definition of Intimacy

Olson (1975; 1977) provides a conceptual definition of intimacy that seems to integrate the approaches currently found in the literature. He identifies seven types of intimacy by drawing mainly on the previous work of Dahms (1971) and Clinebell and Clinebell (1970). Olson focuses on the "process" aspects of intimacy by distinguishing between intimate experiences and an intimate relationship. An *intimate experience* is a feeling of closeness or sharing with another in one or more of the seven areas. It is possible to have intimate experiences with a variety of persons without having or developing an intimate relationship. An *intimate relationship* is generally one in which an individual shares intimate experiences in several areas, and there is the expectation that the experiences and relationship will persist over time.

The seven types of intimacy originally described by Olson (1975) were: (1) *emotional intimacy*—experiencing a closeness of feelings; (2) *social intimacy*—the experience of having common friends and similarities in social networks, (3) *intellectual intimacy*—the experience of sharing ideas; (4) *sexual intimacy*—the experience of sharing general affection and/or sexual activity; (5) *recreational intimacy*—shared experiences of interests in hobbies, mutual participation in sporting events; (6) *spiritual intimacy*—the experience of showing ultimate concerns, a similar sense of meaning in life, and/or religious faiths; (7) *aesthetic intimacy*—the closeness that results from the experience of sharing beauty.

Intimacy is a *process* that occurs over time and is never completed or fully accomplished. Couples may create false expectations if they assume that they have "achieved" intimacy or that they need not work at maintaining it. While intimate experiences are elusive and unpredictable phenomena that may occur spontaneously, an intimate relationship may take time, work, and effort to maintain.

Individuals desire differing degrees of each kind of intimacy. While studies have inferred that some degree of intimacy is necessary for normal human development and adaptive capability, we do not know the minimum or maximum required, nor do we know the ideal amount or degree of intimacy for any person. However, many developmental theorists (Maslow, 1970; Erikson, 1950) seem to indicate that highly developed individu-

als usually have several significant friendships. So, while some individuals may not be capable of sustaining an intimate relationship, and some choose reclusive, isolated lifestyles, one or more intimate dyadic relationships may be preferred by most individuals.

Operationalizing Intimacy

Past operational measures of intimacy have been either too global, such as marital satisfaction measures, or have measured closely related but dissimilar concepts, such as group cohesion or self-disclosure. Self-disclosure scales (Jourard, 1971; Taylor and Altman, 1966) tend to measure respondents' willingness to disclose intimate feelings, but do not indicate the kind, character, or frequency of intimacy experienced in the relationship. Intimacy is a *process* and an *experience* which is the outcome of the disclosure of intimate topics and sharing of intimate experiences. An inauthentic, inappropriate, or insensitive disclosure may produce conflict and anger more than a feeling of closeness.

In order to assess the degree of intimacy that an individual perceives he/she has with another, the PAIR (*Personal Assessment of Intimacy in Relationships*) Inventory was developed. This self-report inventory can be used at all levels of dyadic heterosexual relationships, from friendship to steady dating to marriage. It measures the *expected* versus *realized* degree in five areas of intimacy: *emotional intimacy*, *social intimacy*, *sexual intimacy*, *intellectual intimacy*, and *recreational intimacy*. *Spiritual* and *aesthetic* intimacy were dropped because they were conceptually and empirically unclear.

The PAIR attempts to: (1) identify the degree to which each partner presently feels intimate in the various areas of the relations (realized); (2) identify the degree to which each partner would like to be intimate (expected); and (3) is scored and plotted in such a fashion that direct feedback can be given to a therapist and the couple about their perceptions and expectations in the relationship.

The instrument does *not* assume any ideal or absolute degree of intimacy *per se*, although validity tests indicate that couples, in general, distribute themselves in a normal fashion around the mean. The scores have meaning in terms of the difference *within* each of the partner's perceived and expected degrees of intimacy and also in terms of the difference *between* the two partners.

Phase 1: Initial development of the PAIR. There were originally seven a priori conceptual dimensions of intimacy, including the five mentioned above and "aesthetic" and "spiritual" intimacy. We solicited statements from family professionals concerning the nature of intimacy in general, as well as statements about these seven dimensions in particular. Rather than presuming the nature of intimacy entirely from a professionally conceptual perspective, the first author facilitated and taped four discussions of intimacy with several different groups of lay persons who had completed marital enrichment programs. The tapes were analyzed for possible sub-dimensions of intimacy, resulting in the seven sub-dimensions mentioned.

In addition, statements about intimacy were solicited from graduate students in Family Social Science and from marriage and family therapists. Those statements, plus the analyzed tapes, were transformed into 350 potential items for the PAIR. These items were then classified by marriage and family professionals into the seven types of intimacy. Of those 350, 113 were selected that were conceptually related, clear, and appropriate to the categories.

A sample of males and females was then selected to complete the PAIR. The pilot sample (N = 85) had an age range from 18 to 61 years (median age = 29), 70 percent females, 30 percent males. Over 50 percent were married. They were selected from community enrichment groups (12 percent), one undergraduate day-class (28 percent), and several post-graduate extension classes (with spouses) at a large metropolitan university. While the pilot sample had a predominance of females and is therefore biased

to some degree, the actual study sample contained an equal number of males and females and was twice as large.

Several psychometric test construction criteria were used to select ten items for each scale. *First*, those items with the frequency split closest to 50%-50% were chosen. This avoids selecting items that do not adequately discriminate between respondents because of more-than-obvious choice. *Second*, items had to correlate higher with their own a priori scale than with other scales. *Third*, the items had to have a sufficiently high factor-loading to meet the criteria prescribed. Responses were factor analyzed using varimax rotation and principal factor rotation. With a factor loading criterion level of .20, both approaches clearly delineated six major factors with nearly half the items having a factor loading of .50+. *Fourth*, each of the sub-scales needed to have an equal number of items that are positively and negatively scored to control for an acquiescent response set.

Of the seven a priori dimensions only one dimension failed to meet the criterion (aesthetic intimacy), during this phase of the development. Although aesthetic intimacy seems to be a valid conceptual sub-dimension, we could not validly assess its presence with the subjective self-report that we developed. Of the 113 items in the original factor pool, 60 were selected for the inventory with ten items representing each sub-dimension. At this point the PAIR contained 75 items: ten items for each of the six types of intimacy and 15 items for a conventionality scale (adapted from Edmonds, 1967).

The procedure for taking the PAIR was arranged as follows. Each partner independently responds to the questionnaire in two consecutive steps. In the *first step*, the partner responds to the item "as it is now" (perceived) and in the *second step* the individual responds "how he/she would like it to be" (expected). For example, when indicating agreement-disagreement (on a 5-point Likert Scale) to the item "I often feel distant from my partner," in step one, the individual responds as he/she perceives the relationship to be at present, whereas in step two the respondent indicates how he/she would like to be able to respond, given the relationship could be any way they might want. All items are completed for step one before proceeding to step two to insure independent responses.

The scored PAIR is translated from raw scores into a score similar to a percentile (actual range = 0 to 96). Edmond's Conventuality Scale is also included and scored separately in order to assess how much the individual is attempting to create a good impression.

Phase 2: Validity and Reliability Testing. Using the 75-item inventory, the PAIR was administered to 192 non-clinical couples before they began an enrichment weekend offered by a national enrichment program. Data was gathered from 12 separate enrichment weekends, each having 12 to 20 couples participating. The PAIR was one instrument among several used in an overall evaluation of the effects and outcome of this program. A battery of instruments was administered before the weekend, one month after the weekend, and then a followup six months later. Only the Pre-test data was used for this validity and reliability analysis. The other instruments used included the Locke-Wallace Marital Adjustment Scale (Locke and Wallace, 1959) an adapted version of one of Jourard's "Self-disclosure" Scales (Jourard, 1964), and "Empathy" Scale developed by Truax and Carkhoff (Truax and Carkhoff, 1967), six of the Moos' ten "Family Environment Scales" (Moos and Moos, 1976), and a background form.

The sample consisted of 192 couples who had been married between one and 37 years (\bar{x} length of marriage = 11.8, SD = 8.3), ranging in age from 21 to 60-years-old (\bar{x} Age = 35.3, SD = 8.6), with 9% having been formerly married, and 55% having more than a high school education (\bar{x} years of education = 14.1, SD = 2.2). In finding a sample to make validity and reliability tests, we considered it essential to have a fairly representative population of married individuals who had experienced their relationship over an extended period of time and who also represented couples across a wide range of ages. The usual college dating relationship was, of course, not sufficient for meeting our criteria.

As in phase one, both an item analysis and factor analysis were conducted to test for adequacy of the items and the scales. Of the ten items in each intimacy scale and the 15 items in the conventionality scale, only those with the best factor loading in the a priori scales and those that met the item analysis criteria remained. Those items having a frequency split in responses closest to 50%-50% were considered the best discriminators. The items had to correlate higher with their own a priori scale than with other scales. The items had to have a sufficiently high factor loading.

Using the same method and criteria of factor analysis described in phase one and the information from the item analysis, six items were ultimately selected for each intimacy scale and the conventionality scale. Six items were chosen because they not only had the best results on the factor and item analysis, but also because the PAIR was intended to be as short as possible for quicker administration and scoring. Table I lists the final items with their factor loadings and distributions. All PAIR scores are generated in a "profile"

Table 1: PAIR Item and Factor Analysis By Each Subscale (N = 386)

	Direction	Factor Loading	Mean	SD	Freq. Split
I. Emotional Intimacy					
1. My partner listens to me when I need someone to talk to.	(a)	.48(II)	3.33	1.38	37-53
7. I can state my feelings without him/her getting defensive.	(a)	.48(II)	2.90	1.17	50-39
13. I often feel distant from my partner.	(s)	.58(II)	2.69	1.29	58-34
19. My partner can really understand my hurts and joys.	(a)	.52(II)	3.38	1.28	32-58
25. I feel neglected at times by my partner.	(s)	.46(II)	2.52	1.28	67-26
31. I sometimes feel lonely when we're together.	(s)	.41(II)	2.80	1.33	54-37
II. Social Intimacy					
2. We enjoy spending time with other couples.	(a)	.55(IV)	3.90	1.23	19-73
8. We usually "keep to ourselves."	(s)	.53(IV)	3.37	1.31	34-55
14. We have very few friends in common.	(s)	.53(IV)	3.76	1.33	25-67
20. Having time together with friends is an important part of our shared activities.	(a)	.63(IV)	3.76	1.24	23-69
26. Many of my partner's closest friends are also my closest friends.	(a)	.39(IV)	3.54	1.36	29-62
32. My partner disapproves of some of my friends.	(s)	.21(IV)	3.7	1.35	28-62
III. Sexual Intimacy					
3. I am satisfied with our sex life.	(a)	.78(III)	3.12	1.42	43-46
9. I feel our sexual activity is just routine.	(s)	.57(III)	3.19	1.37	41-47
15. I am able to tell my partner when I want sexual intercourse.	(a)	.38(III)	3.73	1.32	23-70
21. I "hold back" my sexual interest because my partner makes me feel uncomfortable.	(s)	.65(III)	3.63	1.41	30-60
27. Sexual expression is an essential part of our relationship.	(a)	.47(III)	3.52	1.28	26-60
33. My partner seems disinterested in sex.	(s)	.58(III)	3.78	1.39	25-65

	Direction	Factor Loading	Mean	SD	Frequency Split	
IV. Intellectual Intimacy						
4. My partner helps me clarify my thoughts.	(a)	.32(II)	3.23	1.30	33-51	
10. When it comes to having a serious discussion it seems that we have little in common.	(s)	.45(II)	3.26	1.38	40-52	
16. I feel "put-down" in a serious conversation with my partner.	(s)	.65(II)	3.46	1.38	33-56	
22. I feel it is useless to discuss some things with my partner.	(s)	.63(II)	2.67	1.40	60-31	
28. My partner frequently tries to change my ideas.	(s)	.47(II)	3.20	1.25	37-51	
34. We have an endless number of things to talk about.	(a)	.57(V)				
V. Recreational Intimacy						
5. We enjoy the same recreational activities.	(a)	.49(VII)	3.24	1.33	40-52	
11. I share in very few of my partner's interests.	(s)	.40(VII)	3.17	1.29	40-40	
17. We like playing together.	(a)	.34(VII)	3.78	1.13	18-68	
23. We enjoy the out-of-doors together.	(a)	.56(VIII)	3.60	1.21	24-69	
29. We seldom find time to do fun things together.	(s)	.28(VII)	3.06	1.40	45-48	
35. I think that we share some of the same interests.	(a)	.48(VII)	3.91	1.06	14-80	
VI. Conventionalty Scale *						
6. My partner has all the qualities I've ever wanted in a mate.	(a)	.55(I)	3.20	1.24	38-52	
12. There are times when I do not feel a great deal of love and affection for my partner.	(s)	.60(I)	2.55	1.28	67-27	
18. Every new thing that I have learned about my partner has pleased me.	(a)	.60(I)	2.66	1.19	57-29	
24. My partner and I understand each other completely.	(a)	.59(I)	2.38	1.20	62-26	
30. I don't think anyone could possibly be happier than my partner and I when we are with one another.	(a)	.66(I)	2.70	1.25	53-33	
36. I have some needs that are not being met by my relationship.	(s)	.57(I)	2.16	1.13	76-14	

*An additional factor analysis was conducted for this scale, wherein the conventionalty scale was included with the other PAIR scales. The other factor loadings represent a factor analysis of all PAIR scales without the conventionalty scale.

format with separate scores for each specific type of intimacy. Therefore, there is no "total" score. As on similar "profile" tests (e.x. MMPI, SPD) a single "total" score is meaningless.

In addition to the validity analysis already mentioned, the PAIR was analyzed for its ability to discriminate and converge with other variables in an expected fashion. To do

this, Pearson correlation coefficients were obtained to test post-hoc hypotheses. The most obvious hypothesis is that those couples who in general receive high scores on the *Locke-Wallace Marital Adjustment Scale* should also have rather high perceived scores on the PAIR, in that the tendency to describe one's relationship as presently being intimate is presumed to be associated with the tendency to be maritally adjusted. Table 2 lists the Pearson Correlation Coefficients for the Locke-Wallace with each PAIR subscale.

Except for the Spiritual subscale, all of the others positively correlate with the Locke-Wallace coefficients consistently exceeding .30. The most consistently high coefficients appear with the Emotional, Intellectual, and Recreational Intimacy.

Table 2: PAIR & Marital Adjustment, Self-Disclosure, Moos' Family Environment Scale and Reliability

	PAIR Subscales				
	<i>Emotional</i>	<i>Social</i>	<i>Sexual</i>	<i>Intellectual</i>	<i>Recreational</i>
<i>Marital Satisfaction</i>					
Husband	.47	.38	.34	.51	.51
Wife	.57	.44	.36	.55	.51
Couple	.62	.98	.41	.61	.59
<i>Self Disclosure</i>					
Couple	.27	.13*	.13*	.31	.27
<i>Family Environment Scales Cohesion</i>					
Husband	.42	.35	.25	.47	.45
Wife	.48	.30	.25	.47	.40
Couple	.53	.39	.30	.54	.49
<i>Independence</i>					
Husband			.15	.16	
Wife	.17		.14	.17	
Couple	.16			.20	
<i>Expressiveness</i>					
Husband	.29	.20	.20	.36	.30
Wife	.42	.27	.21	.46	.29
Couple	.42	.25	.24	.48	.35
<i>Conflict</i>					
Husband	-.35	-.17	-.15	-.31	-.33
Wife	-.30	-.14		-.31	-.28
Couple	-.39	-.18	-.13	-.35	-.36
<i>Control</i>					
Husband	-.15			-.22	-.20
Wife	-.20			-.23	-.20
Couple	-.22			-.26	-.23
<i>Reliability of PAIR</i>	.76	.71	.77	.70	.70

All correlations listed are significant at $p > .001$ except those starred (*) which are significant at $p > .01$.

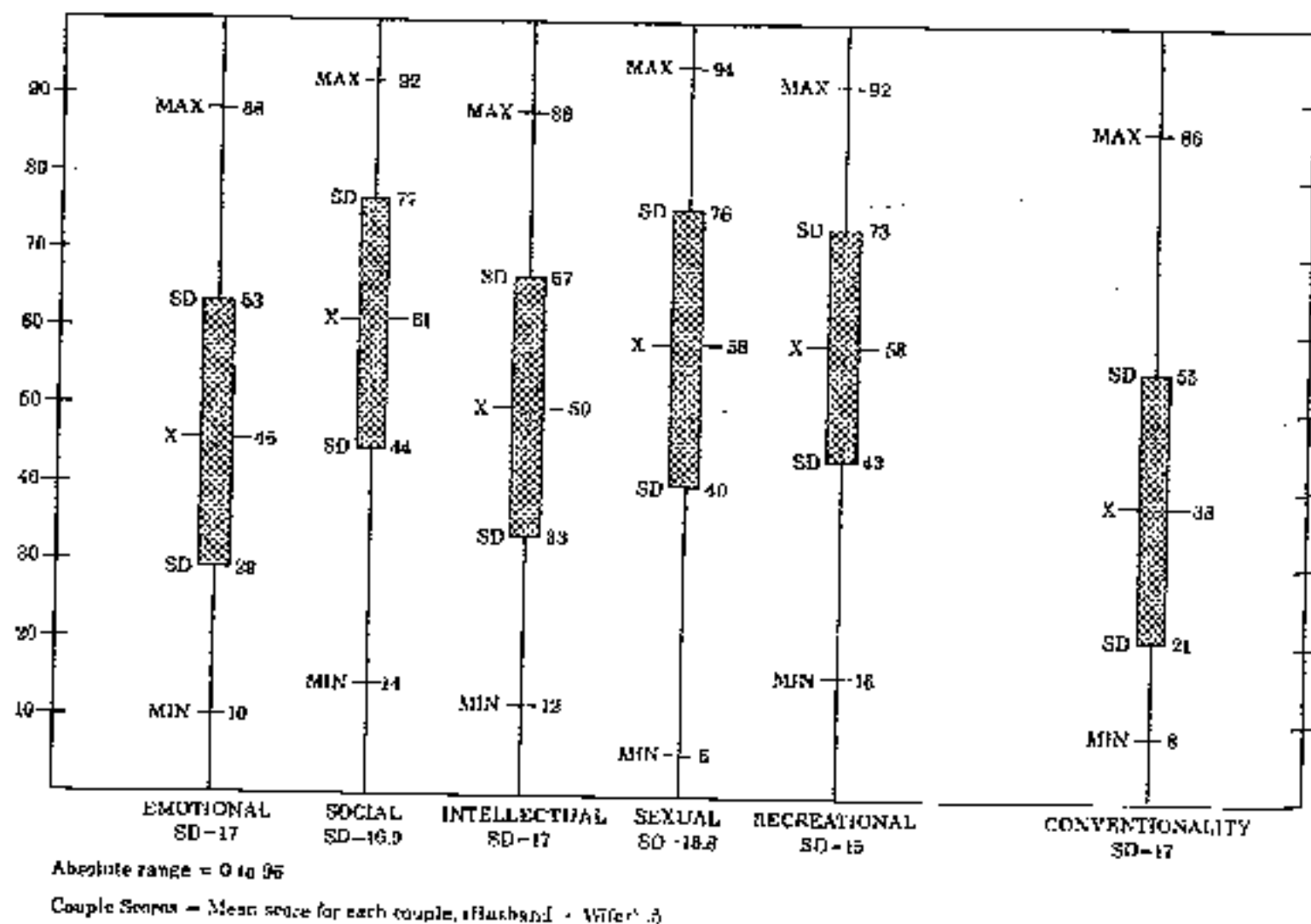
The *Truax and Carkhoff Empathy Scale* did not prove to be very useful. In addition to the insignificant and low correlations with the PAIR subscales, it did not correlate at any significant level with any other single scale or subscale in the battery. In post-administration discussion with some respondents, some seemed to indicate that they

"knew what the appropriate empathic response should be" to the vignette given but said they probably would not choose it in everyday life. Others were confused by the directions, not knowing how well they were to know the person in the vignette, who supposedly is sharing significant information with the respondent, and they did not understand what setting it was taking place in.

A post-hoc hypothesis concerning *self-disclosure* stemming primarily from the literature review above is that self-disclosure is a necessary ingredient in the development of intimacy, but that given the setting, too much self-disclosure can be counter-productive. The size and significance of the coefficients in Table 2 represent this positive correlation between the two concepts. Though not conducted, an analysis of curvilinearity may explain why the coefficients are not higher (e.g., nearer .60), for curvilinearity is the conceptual presumption of self-disclosure's relationship to intimacy.

The *Moos Family Environment Scale* was used to gather data from couples regardless of their having children living at home. If they did not have children, they were asked to view themselves as a "family" in responding to the items. In essence, the Moos was not used as a "family" environment measure, but a "household" environment measure. We would expect the PAIR to positively correlate with the "Cohesion Scale," bimodally with the "Independence Scale," positively correlate with the "Expressiveness Scale," negatively correlate with the "Conflict Scale," and negatively correlate with the "Control Scale." We cannot hypothesize how the "Organization Scale" should correlate. We presume the Independence Scale to be bimodal, or more precisely, to have an inverted

Table 3: Distribution of PAIR Couple Scores; Mean, Standard Deviation, Maximum and Minimum Scores (N=192 Couples)



curvilinearity in its correlation because the high extreme of the independence continuum is total separateness, or disengagement, in Minuchin terms. The other extreme would be total dependence or enmeshment. Therefore, neither extreme seems to allow for intimacy as we define it.

Every PAIR subscale correlates significantly in the positive direction with Moos' cohesion and expressiveness scale. Both the Control and Conflict Scales have significant negative correlations for the PAIR's Emotional, Intellectual, and Recreational Scale. Eighteen out of 20 PAIR-Scale-by-Moos-Scale correlations proved to be significant for the hypotheses that presumed positive and negative correlations, specifically.

Reliability testing consisted of a split-half method of analysis. No test-retest analysis had been conducted at the time of this writing. Table 5 reflects the impressively strong Cronbach's Alpha Reliability Coefficients achieved with the resulting six item scale. All of the six scales have coefficients of at least .70.

Another important finding is that most of the subscales have a fairly normal distribution. Table 3 graphically displays the distribution of each scale using its absolute range of 0 to 96 points.

The PAIR as an Assessment Measure

The PAIR was primarily developed to meet the growing demand for more specific assessment of relationships. It offers an assessment of the individual (intrapersonal system) and the relationship (interpersonal system) in terms of *perceived* and *expected* intimacy.

Marital counselors and family life educators can both use this profile: (1) to clearly articulate the various kinds of intimacy in their clients'/students' relationships, and (2) to give feedback about the levels of intimacy that they expect and experience in their relationship. The areas of intimacy that have a considerable discrepancy between what is experienced and what is expected may indicate concerns for both partners individually and conjointly, depending on how they *feel* about these discrepancies.

Clinical Use of the PAIR

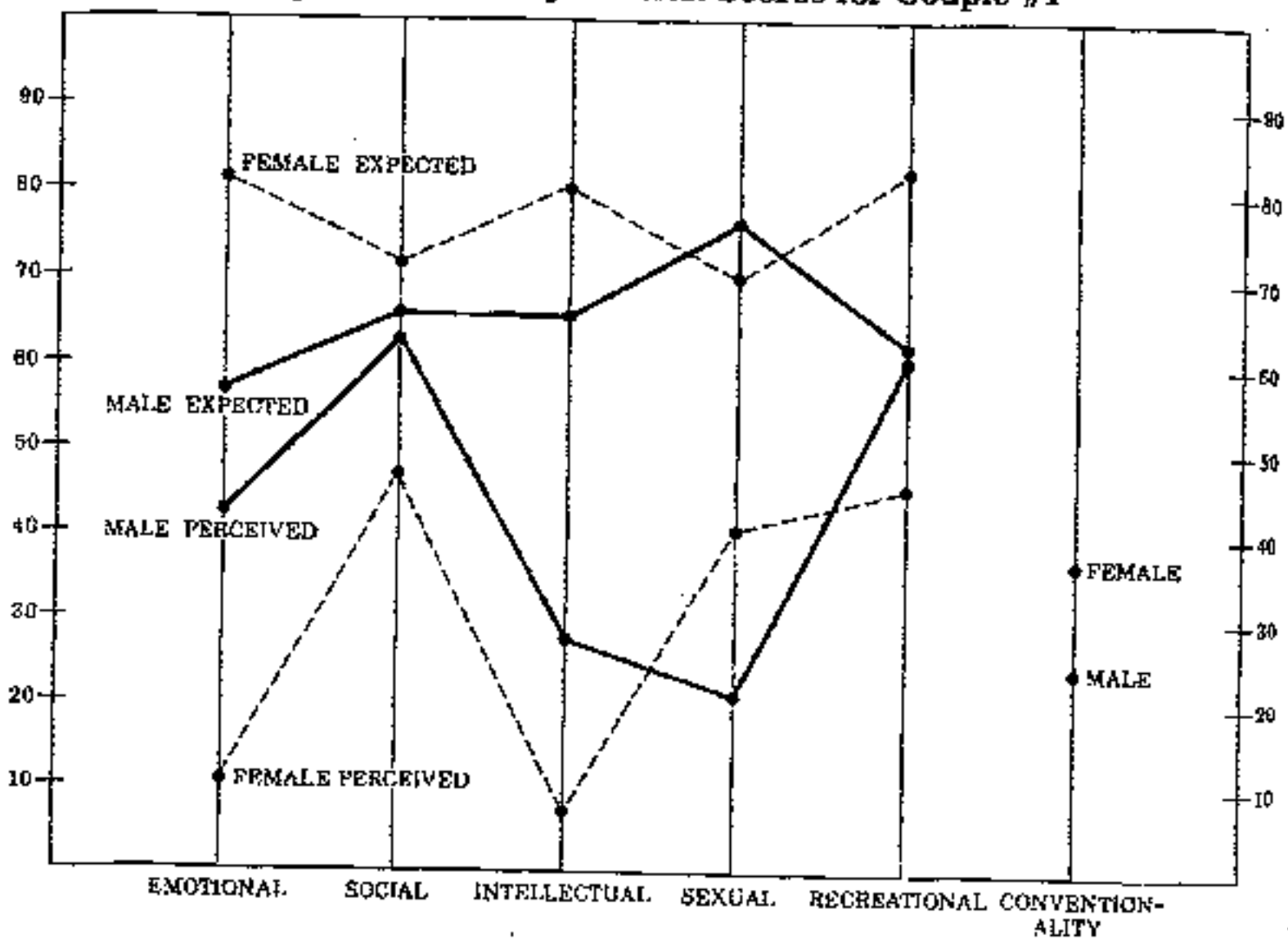
The PAIR is not a global measure of a person's general attitude about marriage. It is focused specifically on the couple's relationship and is, therefore, personalized. Comparison of the partner's scores of both "perceived" and "expected" intimacy can provide a measure of their goals, needs, or perhaps, expectations in the relationship, but also the couple's perceptual agreements and disagreements. The PAIR is easy to administer because of its short length of 36 items and is hand-scorable by the counselor to provide quick and inexpensive results. We have attempted to facilitate feedback by incorporating a method of visually displaying the plotted scores.

As Figure 1 indicates, a scored profile is a graphic representation of the degree of *perceived* and *expected* intimacy in each area for the couple. For illustrative purposes, we have graphed scores from one of the couples who have used the PAIR in a clinical setting.

Couple 1

John (39) and Ann (35) presented themselves for counseling with Ann making the initial contact. They were married 12 years. She complained of "not counting" in the relationship, of "not being important to John," and her not receiving any support from him. Although John admitted to not being as involved in the relationship as he knew she wanted him to be, he did not know how to change the situation. Ann had developed physical problems that were reported to be psychosomatic by several specialists.

Figure 1: Summary of PAIR Scores for Couple #1



The PAIR was administered after the intake session (along with other procedures) to provide the counselor with immediate information about the couple's perceptions and expectations.

As Figure 1 indicates, Ann demonstrates a severe discrepancy between her perceived and expected scores on her Emotional, Intellectual and Sexual Intimacy scales. A clear discrepancy also exists for the remaining two scales of Social and Recreational Intimacy.

John's scales likewise demonstrate a severe "deprivation" because of the large discrepancies on his Intellectual and Sexual Intimacy scales. These two areas are conjointly viewed as being areas that they are "not receiving what they would like to receive" and, therefore, are a necessary area of focus in therapy.

Their Conventi-ality score indicates that the information can be trusted in that neither one is higher than one standard deviation above the mean (see Table 5).

As the example illustrates, the PAIR is primarily used as a method of information gathering for both counselor and clients. The feedback can provide a source of emphasis and reinforcement for what the couple already knows about themselves and is a source of objective information about some things not presently in their awareness. It can be used for critical examination of their unmet needs and for support of their relationship's strengths. While focusing on perceptions of the relationship at present, it also helps articulate intentions or expectations. This seems to serve as a measure of hope for the couple, for while they may not know how to create a certain level of intimacy, it is often reassuring for them to at least know that their partner wants to work at it. A pre-therapy and end-of-therapy administration would serve to demonstrate change.

Use of the PAIR in Enrichment Groups

Enrichment groups can, perhaps, be more successful if they provide couples with the

opportunity to focus on specific strengths and limitations of their relationship. The PAIR allows for a clear articulation of a dimension that most enrichment programs seek to enhance: intimacy. It brings the nebulous, or perhaps magical concept of intimacy out of the clouds of romance and into the realm of realistic perception so as to assess each partner's needs and the degree to which they are being met. It provides for a specific delineation of the variety of types of intimacy. Rather than equating intimacy with only sexual sharing, it can be viewed as the experience of sharing in several different areas.

The PAIR also allows direct feedback to the participants about their specific relationship. If PAIR is administered early during the enrichment experience, the couples can use the feedback to focus on specific areas of the relationship, thereby making most efficient use of their time. The information may provide objective feedback and insight into their own unrealized perceptions and expectations.

REFERENCES

- Altman, I. & Haythorn, W. W. Interpersonal exchange in isolation. *Sociometry*, 1966, 28, 522.
- Angyal, A. *Neurosis and treatment: A holistic theory*. New York: John Wiley, 1965.
- Argyle, M. & Dean, J. Eye contact, distance, and affiliation. *Sociometry*, 1965, 28, 289-304.
- Arth, M. American culture and the phenomena of friendship in the aged. In C. Tibbitts and A. Donahue, (Eds.), *Social and Psychological Aspects of Aging*. New York: Columbia University Press, 1962, 529-534.
- Biau, Z. S. Structural constraints on friendship in old age. *American Sociological Review*, 1961, 26, 429-440.
- Bach, G. & Wyden, P. *The intimate enemy*. New York: William Morrow and Co., 1969.
- Bowlby, J. The nature of the child's tie to his mother. *International Journal of Psychoanalysis*, 1958, 39, 359-372.
- Carkhoff, R. R. *Helping and human relations*. Vol. I, New York: Holt, Rinehart and Winston, 1969.
- Clinebell, H. J. & Clinebell, C. H. *The intimate marriage*. New York: Harper and Row, 1970.
- Collins, J. K. Adolescent dating intimacy: Norms and peer expectations. *Journal of Youth and Adolescence*, 1974, 3, 68-78.
- Cozby, P. C. Self-disclosure: A literature review. *Psychological Bulletin*, 1973, 79, 73-91.
- Cromwell, R. E., Olson, D. H. & Fournier, D. G. Diagnosis evaluation in marital and family counseling. In D. H. Olson (Ed.) *Treating relationships*, Lake Mills, Iowa: Graphic Publishing, 1976, 517-562.
- Dahms, A. *Emotional intimacy*. Denver, Colorado: Pruett, 1972.
- Derlega, W. J. & Chaikin, A. L. *Sharing intimacy: What we reveal to others and why*. Englewood Cliffs, New Jersey: Prentice-Hall, 1975.
- Edmonds, V. H. Marital conventionalization: Definition and measurement. *Journal of Marriage and the Family*, 1967, 29, 681-688.
- Erickson, E. *Childhood and Society*. New York: W. W. Norton, 1950.
- Ferreira, A. J. The intimacy need in psychotherapy. *American Journal of Psychoanalysis*, 1964, 24, 189-194.
- Gilbert, S. J. Self-disclosure, intimacy and communication in family. *Family Coordinator*, 1976, 25, 221-231.
- Gruen, W. Adult personality: An empirical study of Erickson's theory of ego development. In B. L. Neugarten (Ed.) *Personality in middle and late life*. New York: Prentice Hall, 1964, 1-14.
- Hall, J. A. & Taylor, S. E. When love is blind and maintaining idealized images of one's spouse. *Human Relations*, 1976, 29, 751-762.
- Hanes, J. & Waring, E. M. Marital intimacy and nonpsychotic emotional illness. Unpublished manuscript. School of medicine: University of South Carolina, 1979.
- Harlow, H. F. & Zimmerman, R. R. Affectional responses in the infant monkey. *Science*, 1953, 116, 130.
- Jourard, S. M. *The transparent self*. Princeton, New Jersey: Van Nostrand Reinhold, 1964.
- Jourard, S. M. *Self disclosure*. New York: Wiley, 1971.
- Jourard, S. M. & Friedman, R. Experimenter-subject distance and self disclosure. *Journal of Personal and Social Psychology*, 1970, 15, 278-282.

- Jourard, S. M. & Jaffee, P.E. Influence of an interviewer's disclosure on the self-disclosing behavior of interviewers. *Journal of Counseling Psychology*, 1970, 17, 252-257.
- Jourard, S. M. & Lasokow, D. Some factors in self-disclosure. *Journal of Abnormal and Social Psychiatry*, 1958, 56, 91-98.
- Jourard, S. M. & Richman, P. Disclosure output and input in college students. *Merrill-Palmer Quarterly*, 1963, 14, 136-148.
- Kanter, R. M., Jaffee, D. & Wersberg, D. K. Coupling, parenting, and the presence of others: Intimate relations in communal households. *The Family Coordinator*, 1975, 24, 433-452.
- Kiesler, C. A., Kiesler, S. & Paliak, K. M. Effects of commitment to future interaction on reaction to norm violations. *Journal of Personality*, 1967, 35, 585-599.
- Locke, H. J. & Wallace, K. M. Short marital adjustment and prediction tests: Their reliability and validity. *Marriage and Family Living*, 1959, 21, 251-255.
- Lowenthal, M. F. & Haven, C. Interaction and adaption: Intimacy as a critical variable. *American Sociological Review*, 1968, 33, 20-30.
- Lowenthal, M. F. & Thurner, M. & Cheseboga, D. *Four stages of life*. San Francisco, California: Jossey-Bass, 1975.
- Lowenthal, M. F. & Weiss, L. Intimacy and crises in adulthood. *The Counseling Psychologist*, 1976, 6, 88-94.
- Mace, D. R. & Mace, V. C. Marriage enrichment concepts for research. *Family Coordinator*, 1975, 24, 171-173.
- Maslow, A. H. *Motivation and personality*. New York: Harper and Row, Publishers, 1970. Originally published in 1954.
- Moos, R. H. & Moos, B. A typology of family social environments. *Family Process*, 1976, 15, 357-372.
- Murstein, B. *Theories of attraction and love*. New York: Springer, 1971.
- Olson, D. H. *Communication and intimacy*. Unpublished monograph, 1974. University of Minnesota, 1977.
- Olson, D. H. Intimacy and the aging family. *Realities of aging*. College of Home Economics, University of Minnesota, 1975.
- Olson, D. H. Quest for Intimacy. Unpublished paper, University of Minnesota, 1977.
- Olson, D. H. Russell, C. S. & Sprenkle, D. H. Circumplex model of marital and family systems: I. Cohesion and Adaptability dimensions, Family types and clinical applications. *Family Process*, 1979, 18, 3-28.
- Rosow, I. *Social integration of the aged*. Glencoe, New York: Free Press, 1967.
- Shapiro, A. The relationship between self-concept and self disclosure. *Dissertation Abstracts International*, 1968, 39, 1180-1181.
- Stanley, J. C. Reliability. In R. L. Thorndike (Ed.), *Educational Measurement* (2nd ed.) American Council on Education, Washington, D. C., 1971.
- Stone, W. F. Patterns of conformity in couples varying in intimacy. *Journal of Personality and Social Psychology*, 1973, 27, 413-418.
- Strong, J. R. A marital conflict resolution model: Redefining conflict to achieve intimacy. *Journal of Marriage and Family Counseling*, 1975, 1, 269-276.
- Stuart, R. B. An operant interpersonal program for couples. *Treating relationships*. In D. H. Olson, (Ed.) Lake Mills, Iowa: Graphic Publishing, 1976, 119-132.
- Sullivan, H. S. *The interpersonal theory of psychiatry*. In H. S. Perry and M. C. Gowel (Eds.) New York: W. W. Norton, 1953.
- Taylor, D. A. & Altman, I. Intimacy-scaled stimuli for use in research in interpersonal relations. *Psychological Reports*, 1966, 19, 729-730.
- Truax, C. B. and Carkhoff, R. R. *Toward effective counseling and psychotherapy: Training and practice*. Chicago: Aldine Publishing Co., 1967.