

---

## The Inventory of Communication Patterns For Adolescents (ICPA)

---

Lloyd W. West and Harold A. Altmann

*University of Calgary*

---

### Résumé

Les débuts des instruments de mesure de la *révélation sur soi-même* et la confusion due à ce concept font l'objet de quelques remarques. Le rapport entre les communications interpersonnelles et le domaine, en pleine croissance, du soutien social, ainsi que la nécessité d'améliorer les procédures de classification des formules de communication se notent également. L'article présente une édition révisée de l'inventaire des révélations sur soi-même pour les adolescents (SDIA), connu maintenant sous l'appellation d'inventaire des formules de communication pour adolescents (ICPA), ainsi qu'une description de ses propriétés psychométriques. Sont également présentées, plusieurs applications de l'ICPA au counseling, et la suggestion d'un agenda de recherche relativement complet.

### Abstract

The early development of instruments to measure *self-disclosure* and the conceptual confusion related to that construct are briefly discussed. The relevance of interpersonal communication to the growing field of social support and the need for improved procedures to map communication patterns are noted. A revised edition of the Self-Disclosure Inventory for Adolescents (SDIA), which has been renamed the Inventory of Communication Patterns for Adolescents (ICPA), is presented and its psychometric properties are described. Several counselling applications of the ICPA are presented and a rather comprehensive research agenda is suggested.

Self-disclosure, as a measurable psychological construct, first appeared in the literature when Sidney Jourard and Paul Lasakow (1958) reported a somewhat novel approach to the study of interpersonal communication. Essentially these investigators administered to their subjects a self-report questionnaire designed to elicit information about self-disclosure that could be analyzed with reference both to *topic* (i.e., content or aspect-of-self) and to *confidant* (i.e., target or recipient of disclosure). Considerable research in the tradition of Jourard and his associates soon followed.

The potential contribution of self-disclosure research to the mainstream of psychological knowledge, however, was limited by two major factors. First, the instruments used to measure self-disclosure were relatively crude and virtually no empirical evidence supported their construct validity. Second, the samples selected for study were highly restricted and generalizability of findings was therefore limited. After reviewing 34 of the first published studies in self-disclosure, Benner (1969) noted that three-quarters of these studies had used the Jourard Self-Disclosure Questionnaire and about three-quarters had employed convenience samples of college students.

In an effort to overcome the major limitations of early research in the field, West and Zingle (1969) developed a Self-Disclosure Inventory for Adolescents (SDIA) and presented some empirical evidence for its reliability and validity. To further demonstrate the validity of the instrument, West (1971) administered the SDIA to a sample of 80 adolescents and simultaneously gathered isomorphic data from their mothers, fathers, friends of the same sex, and friends of the opposite sex.

During the 1970's, the SDIA enjoyed considerable use as a research tool both in Canada and abroad. Its counselling applications, however, were not extensive. Cumulative experience in research and counselling settings suggested that the content and language of some of the items of the SDIA were inappropriate or had become outdated. Moreover, our factor analytic studies, like those of other investigators (Officer, 1981), revealed that some items did not load significantly on their theoretically expected factors. Such observations indicated that continued utility of the SDIA was contingent upon a painstaking psychometric revision. We were not easily convinced, however, of the feasibility of that undertaking. Although well received in the early 1970's, self-disclosure inventories had lost much of their popularity as research tools by the middle of that decade.

#### *Need for Conceptual Clarification*

Research based on inventoried measures of self-disclosure has often produced unexpected and inconsistent results that are difficult to explain. In a study using the Jourard Self-Disclosure Questionnaire, for example, Hurley and Hurley (1969) found a correlation of .30 ( $p < .05$ ) between the JSDQ total self-disclosure score and the "most closed or self-concealing" nominations received from peers after 10 group counselling sessions. A superficial interpretation of these results would suggest not only that self-disclosure questionnaires lack convergent validity, but also that, contrary to their avowed purpose, they measure a generalized tendency toward "closed" or "self-concealing" behaviour. Less facile and more tenable explanations, however, can be offered. West (1971), for example, hypothesized that people who have strong natural support systems characterized by high levels of self-disclosure may in fact be less moved to self-revelation in counselling groups. From this theoretical perspective, the findings of Hurley and Hurley (1969) are quite expectable.

Research findings which appear counter-intuitive, ambiguous, or trivial on casual examination, have led us to question the traditional conceptualization of self-disclosure. We are now convinced that self-disclosure must be conceived as a situation specific *state* rather than a stable personality *trait*. Taking an ecosystemic perspective, West (1974) has suggested that self-disclosure must be construed not as a characteristic or attribute of an individual, but rather as a distinctive feature of an

interpersonal relationship. In concrete terms, this perspective implies that Tom's disclosure to his father reveals almost as much about his father as it does about Tom. Long ago, Jourard (1964) noted the *dyadic* nature of self-disclosure, yet most of the literature on the topic has construed the disclosure process to be an individual or *monadic* event. By reconstruing self-disclosure, from a systems perspective, as characterizing a relationship rather than an individual, the mapping of communication patterns is now proving to be highly productive in both counselling research and practice.

### *Interpersonal Communication in Social Support*

Another factor contributing to the resurgence of interest in mapping patterns of interpersonal communication has been the work of community psychologists in the area of *social support*. During the past five years, the pervasive relationship between social support on the one hand and physical health and psychological wellbeing on the other has been vigorously documented (Gottlieb, 1983; Saulnier, 1982). Moreover, the dominant role of interpersonal communication in the development and maintenance of social support networks has been recognized from the beginning. One of the first writers on the topic of social support, Gerald Caplan (1974), defined support systems as "social aggregates... that provide individuals with opportunities for feedback about themselves and for validations about others..." (p. 19). In a similar vein, Cassel (1974) has argued that social support consists of corrective feedback from significant others. Taking a somewhat different view, but nevertheless emphasizing the role of communication, Cobb (1976) has defined social support in terms of *information* that leads the subject to conclude that he/she is loved, esteemed, and valued and that he/she "belongs to a network of communication and mutual obligation" (p. 300). Several early empirical studies have demonstrated the importance of close confiding interpersonal relationships in the prevention of psychiatric disturbance (Brown, Bhrolchain, & Harris, 1975; Costello, 1982; Miller & Ingham, 1976; Roy, 1978; Slater & Depue, 1981; Winefield, 1979).

It must be noted that communication is not the whole of social support despite its substantial role in that phenomenon. We agree with Gottlieb (1983) that definitions of social support based exclusively on interpersonal communication fail to account for action oriented forms of support such as the provision of tangible goods and services. Nevertheless, we are convinced that an inventory of communication patterns constitutes an essential component of any careful and complete assessment of a client's *psychosocial assets*. Motivated by this conviction, we have substantially revised the Self-Disclosure Inventory for Adolescents (SDIA) and now present the revised form as the Inventory of Communication Patterns for Adolescents (ICPA). The change in name was carefully considered and is intended to focus attention upon communi-

cation as relationship or interaction rather than upon self-disclosure as individual or dispositional behaviour.

### *Description of the ICPA*

The Inventory of Communication Patterns for Adolescents consists of a set of 42 items. These items are presented in Table 1, grouped according to *topic* or aspect-of-self. The number in parentheses preceding an item indicates that item's relative position in the inventory. It will be observed that the ICPA surveys interpersonal communication over seven broad topic categories: (a) interests and tastes, (b) school, (c) sex and dating, (d) family life, (e) intrapersonal concerns, (f) health, and (g) economic matters. Communication related to each of these topic categories is gauged by a subscale comprised of six items. The similarity of ICPA topic categories to those of the *Mooney Problem Check List* will be noted. ICPA topic categories are also very similar to the potential areas of life stress selected by McFarlane, Neale, Norman, Roy, and Streiner (1981) in the development of a scale to measure social support.

TABLE 1

*Items of the Inventory of Communication Patterns for  
Adolescents, Arranged According to Topic Category*

*Item No.*

*Interests and Tastes*

- (1) The TV programs or movies I have seen.
- (8) The things I like to do.
- (15) My food preferences.
- (22) The books or articles I read.
- (29) The news or current events.
- (36) The sports I am interested in.

*School*

- (2) Which school subjects I like and which I don't.
- (9) How I get along with my teachers.
- (16) How I feel about tests.
- (23) How I feel about my school marks.
- (30) The school subjects which I find difficult.
- (37) How smart or stupid I am at school.

*Sex and Dating*

- (3) What I talk about when I go out with a boyfriend/girlfriend.
- (10) Which sex behaviours are "OK" and which are not.
- (17) Question or concerns about sex.
- (24) What I do at a party.
- (31) How to ask someone to go out with me.
- (38) The boy/girl whom I like very much.

*Family Life*

- (4) The ways in which my parents "bug" me.
- (11) How well my parents "know" me.
- (18) The way my parents treat me.
- (25) How well I get along with my father.
- (32) Whether my parents "put me down."
- (39) How well I get along with my mother.

*Intrapersonal Concerns*

- (5) My bad habits.
- (12) The things that make me feel sad or unhappy.
- (19) The problems I have.
- (26) The use of tobacco, alcohol, and drugs.
- (33) The embarrassing situations I have been in.
- (4) The things I have done which I regret.

*Health*

- (6) My appearance. How I look.
- (13) My height and/or weight.
- (20) My skin condition or complexion.
- (27) How weak or strong I am.
- (34) Concerns about my health.
- (41) The aches or pains I have.

*Economic Matters*

- (7) Whether I can afford to buy the things I need.
- (14) How much money I have.
- (21) Where I buy my clothes.
- (28) Whether I need more or better clothes.
- (35) How I earn my money.
- (42) The price or value of the things I have.

A maximum of four confidants may be designated on the answer sheet and scoring form of the ICPA. Through iterative usage, however, any number of confidants may be specified. Although choice and number of confidants are optional, a systematic procedure for their selection is suggested in a later section of this article.

In responding to the ICPA, the subject is directed to read each item carefully and then to indicate the frequency with which that topic is discussed in conversations with each of the confidants designated on his/her answer sheet. Figure 1 illustrates the format of the answer sheet. Confidants are specified at the top of each column of response options and are usually identified by their first name, initials, or relationship to the subject. The frequency with which an item becomes the focus of conversation with a specified confidant is denoted by circling one of the numerals 1, 2, 3, 4, or 5 representing *never*, *rarely*, *sometimes*, *often*, and *almost always*, respectively.

A subject's score for discussing a given topic with a given confidant may vary from 6 to 30. This score consists of the sum of the numerals

**An Inventory of Communication Patterns for Adolescents**

- 1 - never
- 2 - rarely
- 3 - sometimes
- 4 - often
- 5 - almost always

Name: \_\_\_\_\_

School: \_\_\_\_\_

Date: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: \_\_\_\_\_

1.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
2.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
3.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
4.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
5.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
6.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
7.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
8.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
9.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
10.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
11.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
~~~~~				
29.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
30.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
31.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
32.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
33.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
34.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
35.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
36.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
37.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
38.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
39.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
40.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
41.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5
42.	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5	1 - 2 - 3 - 4 - 5

FIGURE 1

circled in response to all six items of a topic category in reference to a specified confidant. A score of six indicates that the subject never discusses any of the items in a topic category with the specified confidant. In contrast, a score of 30 indicates that the subject almost always discusses the items in a topic category in conversations with a specified confidant.

The extent to which a subject discusses a given topic with a given confidant is conveniently tabulated using the scoring form presented in Figure 2. Confidants are listed as headings to the vertical columns of the scoring form. Referring to the subject's answer sheet, the numerals circled for Items 1, 8, 15, 22, 29, and 36 (i.e., every seventh item) in reference to the first named confidant are recorded in the large area of the "column 1 by row 1" cell. These numerals are then added and their sum

**AN INVENTORY OF COMMUNICATION PATTERNS FOR ADOLESCENTS**

**SCORING FORM**

Name: \_\_\_\_\_ Date: \_\_\_\_\_

School: \_\_\_\_\_ Age: \_\_\_\_\_ Sex: \_\_\_\_\_

	Target, i.e. significant other (Specify)					
Topic of Conversation						Topic Totals
1. Interests and Tastes (8, 15, 22, 29, 36)						
2. School (9, 16, 23, 30, 37)						
3. Sex and Dating (10, 17, 24, 31, 38)						
4. Family Life (11, 18, 25, 32, 39)						
5. Intrapersonal Concerns (12, 19, 26, 33, 40)						
6. Health (13, 20, 27, 34, 41)						
7. Economic Matters (14, 21, 28, 35, 42)						
<b>TARGET TOTALS</b>						

FIGURE 2

placed in the small square in the upper right corner of that cell. This entry indicates the extent to which the subject discusses *interests and tastes* with the first specified confidant. A similar procedure is used to compute the entries for each of the other cells of the scoring matrix.

The item responses which are to be summed for a specified topic are listed under the column headed "Topic of Conversation." Note that there are six items for each topic category. The first item of the topic category precedes the name of that topic category. Other items are listed in parentheses below the name of the topic category. *Topic total* can be calculated to indicate the degree to which the subject discusses a given topic cumulatively with all specified confidants. *Confidant totals* represent the degree to which the subject discusses items across all topic categories with a given confidant. The *grand total* (i.e., sum of marginal totals) provides an index of the subject's opportunity to discuss all relevant topics with the significant people in his/her life.

Data compiled using the scoring form may be graphically illustrated by plotting frequency scores against topic category. Comparisons in patterns of communication between the subject and selected confidants may be highlighted by plotting the patterns of communication with those confidants on the same graph or by using transparent overlays.

### *Selection and Number of Confidants*

In responding to the ICPA, the subject first must specify a set of confidants, here defined as the significant others with whom he or she has regular interaction. Although this task is not difficult for most adolescents, some guidance is usually helpful and much appreciated. Accordingly, we supply the following directions:

Almost everyone can name a few close friends and relatives. These are the people to whom we feel close and on whom we can depend. They are the people who have helped us in the past and to whom we would turn in the future for assistance or advice.

To help you identify your closest friends and relatives, read the following statements and think of the persons whom they best describe.

1. Gives you good advice.
2. Gives you helpful information.
3. Lets you know when you do something well.
4. Gives you compliments.
5. Provides you with transportation.
6. Helps with the difficult things you must do.
7. Spends a lot of time with you.
8. Invites you to go out with him/her.
9. Listens to you with understanding.
10. Cheers you up when you are feeling down.

After reflecting upon these statements, list up to 12 people whom you regard to be close friends or relatives and with whom you have regular interaction (i.e., at least one conversation every two or three weeks).

Based on a synthesis of earlier work in the field, Hirsch (1980) has delineated five forms of social support: (a) cognitive guidance, (b) social reinforcement, (c) tangible assistance, (d) socializing, and (e) emotional support. The ten attributes of close friends and relatives listed above were selected such that two attributes represent each of these five forms of social support. Attributes 1 and 2 are exemplars of cognitive guidance; attributes 3 and 4 are exemplars of social reinforcement, and so on.

Although subjects are normally requested to list up to but not exceeding 12 confidants, that number conveniently may be reduced to eight (a multiple of four). Gottlieb (1983) observes that when people are asked to name members of their family, close friends, neighbours, and work associates deemed most important in their life "about ten people are usually nominated as members of this personal community" (p. 53). Similarly the research of McFarlane et al. (1981) suggests that the supportive social network of the average person consists of about nine people. Since four confidants can be designated for each iteration of the ICPA, the selection of from 8 to 12 is both reasonable and feasible.

### *Psychometric Properties of the ICPA*

Since the ICPA is a revised version of the SDIA, it will be helpful to summarize, at this point, the major improvements made to that instrument. Notably, the SDIA was comprised of 48 items covering *six* topic categories. The ICPA is a somewhat shorter version comprised of only 42 items covering *seven* topic categories. Except for the new *tastes and interests* category of the ICPA, topic categories of the two instruments are identical. Three topic categories (school, health, and economic concerns) are classified as *instrumental* topics. Other topic categories (interests and tastes, sex and dating, family life, and intrapersonal concerns) are classified as *expressive* topics. This classification is especially useful in considering the role of communication in social support (see Lin, Dean, & Ensel, 1981).

Of the 48 items of the SDIA, 20 remain intact in the ICPA. Sixteen items have been slightly rephrased to make them more current or less ambiguous. The SDIA item, "Which school subjects I like and which I dislike," for example was changed to read simply "Which school subjects I like and which I don't." Twelve items with poor psychometric properties (e.g., low and scattered factor loadings) were dropped. The SDIA item, "The embarrassing situations I have been in" is an example of this type of item. Six new items were added to comprise the new topic category—interests and tastes. See Table 1 for a list of these items.

The Likert-type scales used to rate the frequency with which various topics are discussed with specified confidants also has been changed. The SDIA used a four-point scale: *never*, *hardly ever*, *sometimes*, and *often*. The ICPA uses a five-point scale: *never*, *rarely*, *sometimes*, *often*, and *almost*

*always*. Many users of the SDIA suggested this change to provide for greater differentiation or discrimination.

Careful selection and revision of SDIA items with known psychometric properties should assure that the ICPA, at minimum, is no less reliable and valid than its progenitor. As a check to this expectation, we replicated the validity study conducted by West (1971) using the ICPA and a sample of 43 subjects. Table 2 presents the observed convergent validity coefficients for scores and subscores of the ICPA. In this study, validity was operationally defined as the correlation between the differential ratings made by subjects and their confidants regarding the frequency with which they discuss various topics with each other. When this procedure is used, differences between subjects and their confidants in perception and response set are cumulative and treated as errors of measurement. Resulting validity coefficients, therefore, are excessively conservative. It is suggested that the square root of these coefficients would provide a more realistic index of validity. It is of particular interest to note that the coefficients presented in Table 2 do not differ significantly from those obtained for the SDIA (West, 1971).

TABLE 2

*Validity Coefficients for Scores and Subscores on An Inventory of Communication Patterns for Adolescents*

<i>Content Area (aspect-of-self)</i>	<i>Target-Person</i>				<i>TOTALS</i>
	<i>Mother</i>	<i>Father</i>	<i>Friend, same sex</i>	<i>Friend, opp. sex</i>	
Interest and Tastes	.59	.23	.43	.57	.43
School	.50	.18	.61	.49	.49
Sex and Dating	.47	.25	.63	.48	.62
Family Life	.50	.37	.39	.53	.45
Intrapersonal Concerns	.29	.26	.67	.56	.54
Health	.43	.26	.64	.49	.58
Economic Matters	.36	.16	.44	.51	.43
<b>TOTALS</b>	.50	.28	.62	.52	.88

*Assessing the Quality of Interpersonal Communications*

The ICPA is an instrument for taking stock of the frequency with which various potentially problematic or stressful topics are discussed with specified confidants. Although interrelated, *quality* and *quantity* of interaction must not be confused. Specifically, the quantitative scores provided by the ICPA, in and of themselves, must not be construed as valid

indicators of the quality of the subject's interpersonal communications. As research conducted by Fiore, Becker, and Coppel (1983) clearly demonstrates, social interactions not only may be a source of emotional support, but also the very generators of stress. Indeed, the work of these investigators prompts us to suggest that all administrations of the ICPA should include subject ratings of the affect that attends conversations with the designated confidants.

Using the Likert-type scale of the ICPA (*never, hardly ever, sometimes, often, and almost always*), we ask our subjects to rate their conversations with each of the confidants designated for the ICPA on two dimensions: (a) the frequency with which conversations are pleasant and/or helpful, and (b) the frequency with which conversations are disagreeable and/or stressful. The qualitative information resulting from this procedure often proves invaluable for interpreting (a) the quantitative data generated by the ICPA, and (b) the direction of relationships between quantitative ICPA data and other variables of psychological interest.

#### *Uses of the ICPA in Counselling Practice*

Communication bonds are social bonds. Hence, clients who are able to form networks of open communication with significant others can expect higher levels of social support and greater access to coping resources. Opportunities to discuss a broad range of personally relevant topics with people who are near and dear to them, therefore, should be counted among the client's most important psychosocial resources. Moreover, manifestations of deficient and/or constrained interpersonal communication should signal a state of "high risk" with questionable social support and limited access to coping resources in times of stress or crises.

In consideration of the foregoing assumptions, we do not hesitate to suggest that the ICPA can be used effectively to help clients (a) take stock of and develop an appreciation for their psychosocial assets, (b) increase their motivation to enhance and maintain open communication networks, and (c) identify and remediate limitations and disorders in their patterns of interpersonal communication. The ICPA also can be used effectively to help counsellors to (a) identify "high risk" clients who may profit most from preventative psychoeducational programs designed to develop communication and/or social skills, (b) monitor and evaluate learning transference of the "ultimate" success of such psychoeducational programs, (c) identify gaps in the client's communication (social support) system for which the counsellor must provide compensatory attention, and (d) identify the "natural helpers" in the client's social network whose support, in times of crises, may be recruited on behalf of the client.

Although the administration and scoring of the ICPA requires considerable time and effort, there can be no question of its utility in counselling, especially when included as a component of an intensive case

study. The list of uses provided above should not be regarded as exhaustive. Creative counsellors should have no difficulty generating further possibilities.

### *Agenda for Research and Evaluation*

It is our hope and expectation that the ICPA will stimulate a flurry of research and evaluation activity. Some of the more salient topics requiring extensive investigation are presented below:

1. The psychometric properties of the ICPA (i.e., its reliability, validity, factor structure, useability, etc.).
2. The differential effects of using alternative directions and rating scales with the ICPA items.
3. The utility of the ICPA for measuring "perceived communication deficits" (i.e., the discrepancy between the ideal or desired pattern of communication and the real or actual pattern).
4. The regression of ICPA scores on specified measures of social support in order to estimate the proportion of variance in social support that is mediated by or can be attributed to various aspects of interpersonal communication.
5. Descriptive, comparative, and cross-cultural studies using the ICPA to ascertain the differential expectations or communication "norms" of identifiable subgroups of the population.
6. Longitudinal studies to discern changes in communication patterns (a) throughout adolescence, or (b) over the duration of a specified relationship.
7. Proactive studies to determine the effects of situational variables (e.g., crises or stressful events) on patterns of interpersonal communication.
8. The use of the ICPA to measure the psychological "presence" of significant others (e.g., absent fathers of broken homes or alcoholic fathers at home). Also, its use in evaluating the adequacy with which *Big Brothers* and *Uncles* do in fact serve as surrogate fathers or confidants to fatherless boys.
9. The use of the ICPA to investigate the impact of the *ascribed role* and *training* of peer counsellors upon their "normal" pattern of interpersonal communication.
10. The use of the ICPA to measure interpersonal or psychological distance (see Kagan, 1980, pp. 87-88).

It must be emphasized that this list of researchable topics, like our list of counselling uses for the ICPA, is by no means exhaustive. The creative and productive scholar will have no difficulty generating further topics in which the ICPA can serve either as (a) a useful research tool, or (b) the object of scholarly investigation.

### References

- Benner, H. (1969). Self-disclosure as a construct. Unpublished PhD dissertation, Michigan State University.
- Brown, G., Bhrolchain, M., & Harris, T. (1975). Social class and psychiatric disturbance among women in an urban population. *Sociology*, *9*, 225-254.
- Caplan, G. (1974). Support systems. In G. Caplan (Ed.), *Support systems and community mental health*. New York: Basic Books.
- Cassel, J. (1974). Psychosocial processes and stress: Theoretical formulations. *International Journal of Health Services*, *4*, 471-482.
- Cobb, S. (1976). Social support as a moderator of life stress. *Psychosomatic Medicine*, *38*, 300-314.
- Costello, C. G. (1982). Social factors associated with depression: A retrospective community study. *Psychological Medicine*, *12*, 329-339.
- Fiore, J., Becker, J., & Coppel, D. (1983). Social network interactions: A buffer or a stress. *American Journal of Community Psychology*, *11*, 423-439.
- Gottlieb, B. H. (1983). *Social support strategies*. Beverly Hills: Sage Publications.
- Hirsch, B. (1980). Natural support systems and coping with major life changes. *American Journal of Community Psychology*, *8*, 159-172.
- Hurley, J., & Hurley, S. (1969). Toward authenticity in measuring self-disclosure. *Journal of Counselling Psychology*, *16*, 271-274.
- Jourard, S. (1964). *The transparent self: Self disclosure and well-being*. Princeton, NJ: Van Nostrand.
- Jourard, S., & Lasakow, P. (1958). Some factors in self-disclosure. *Journal of Abnormal and Social Psychology*, *56*, 91-98.
- Kagan, N. (1980). Perspectives on counselling psychology: Where are we? Who are we? In J. Whiteley, & B. Fretz (Eds.), *The present and future of counselling psychology*. Monterey, CA: Brooks/Cole, pp. 80-89.
- Lin, N., Dean, A., & Ensel, W. (1981). Social support scales: A methodological note. *Schizophrenia Bulletin*, *7*, 73-89.
- McFarlane, A., Neale, K., Norman, G., Roy, R., & Streiner, D. (1981). Methodological issues in developing a scale to measure social support. *Schizophrenia Bulletin*, *7*, 90-100.
- Miller, P., & Ingham, J. G. (1976). Friends, confidants, and symptoms. *Social Psychiatry*, *11*, 51-58.
- Officer, S. (1981). Self-disclosure to male and female coaches by high school female athletes. Unpublished PhD dissertation, The University of New Mexico.
- Roy, A. (1978). Vulnerability factors and depression in women. *British Journal of Psychiatry*, *133*, 106.
- Saulnier, K. (1982). Networks, change, and crisis: The web of support. *Canadian Journal of Community Mental Health*, *1*, 5-23.
- Slater, J., & Depue, R. A. (1981). The contributions of environmental events and social support to serious suicide attempts in primary depressive disorder. *Journal of Abnormal Psychology*, *90*, 275-285.
- West, L. (1971). A study of the validity of the Self-Disclosure Inventory for Adolescents. *Perceptual and Motor Skills*, *33*, 91-100.
- West, L. (1974). Mapping the communication patterns of adolescents. *Canadian Counsellor*, *8*, 54-65.
- West, L., & Zingle, H. (1969). A self-disclosure inventory for adolescents. *Psychological Reports*, *24*, 439-445.
- Winefield, H. R. (1979). Social support and the social environment of depressed and normal women. *Australian and New Zealand Journal of Psychiatry*, *13*, 335-339.

*About the Authors*

Lloyd West received his Ph.D. from the University of Alberta in 1968. He is currently Professor of Counselling Psychology at the University of Calgary. His professional interests include program evaluation, systems theory, group process, social support, and human nature.

Dr. Hal Altmann is the Program Chairman of Counselling Psychology at the University of Calgary. He has published widely in refereed journals on topics such as self-concept and interpersonal communication.

Address correspondence to Dr. Lloyd West and Dr. Hal Altmann, Department of Educational Psychology, University of Calgary, 2500 University Drive, Calgary, Alta. T2N 1N4.