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ABSTRACT

The author attempts to categorize the methodological approaches which have been used in self-disclosure research, identify some of the important problems that attend these research procedures, and propose some alternative strategies for future research on self-disclosure. He discusses correlational and experimental research strategies. The following six factors, frequently ignored in recent research, receive consideration: (1) identifying the intended target audience; (2) specifying the nature of the relationship; (3) isolating the communication modes; (4) determining the authenticity of disclosures; (5) determining the intimacy of disclosures; and (6) using individual differences data. The author concludes that two research strategies, arranging the environment to evoke disclosures and using models that evaluate self-disclosure as a sequential process, hold promise for the future. (Author/LAA)

Methodological Issues in Self-disclosure Research:

"Would You Like Being a Prostitute: Why or Why Not"

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Methodological Issues in Self-disclosure Research:

"Would You Like Being a Prostitute? Why or Why Not?"¹

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The process of self-disclosure, that is, the ways by which people make themselves known to significant others, is of increasing interest to social psychologists, personality theorists and clinicians. The impetus for much of the current interest in this topic can be traced to the work of Sidney Jourard and his colleagues; their early correlational studies, while methodologically flawed, produced provocative results and suggested, among other things, that self-disclosure is an important factor in mental and physical health.

I will not attempt to review the self-disclosure literature here; this has already been done elsewhere (Jourard, 1971a, 1971b; Cozby, 1973). Rather, I will attempt to (1) categorize the methodological approaches which have been used in this research, (2) identify some of the important problems that attend these research procedures, and (3) propose some alternative strategies for future research on self-disclosure.

Why Do People Disclose "Personal" Information?

A particular methodological approach is appropriate or inappropriate only to the extent that it permits the researcher to unambiguously test propositions that have been derived from an implicit or (hopefully)

¹Question asked of female subjects in an experiment reported by Worthy, Gary and Kahn (1969).

explicit model of self-disclosure. One of the primary shortcomings of this area of research is that we lack a clearly articulated model of self-disclosing behavior. Most of the published research to date has been an atheoretical cataloging of the correlates of disclosures and the situations which increase or decrease information exchanges. A model is needed to tie these findings together, and there appear to be two candidates for this task. One model explains self-disclosure in terms of cathartic value for the discloser; the other holds that disclosures facilitate social exchange.

The catharsis model. A commonly held belief, especially among those who practice psychotherapy, is that self-disclosure is cathartic. That is, the disclosing individual is freed from having to keep information private, and this new found freedom or reduction of tension is reinforcing. The argument is this: Man is afraid to reveal himself to significant others because he fears their negative sanctions for what he believes are undesirable aspects of himself. Much energy must be expended to keep information about these aspects of the self from becoming public, and this energy drain inflicts a cost on mental and physical health. Making disclosures and learning that they are not punished is tension reducing and thus pleasant. Of course, this assumes that the revelations are not punished by others.

The catharsis model also figures prominently in the writings of Sidney Jourard. He suggests that relative to the female role, the stereotypic male role in our society does not permit disclosures; males' attempts to keep their secrets private result in an earlier death than women (Jourard, 1971a, p. 34).

The social exchange model. An alternative explanation to the catharsis argument can be derived from social exchange theory as posited by Thibaut and Kelley (1959) and others (Homans, 1954, 1961; Blau, 1961). This model holds that self-disclosure is functional because it can, if appropriate, maximize the joint outcomes of interacting individuals by helping them to (a) agree upon common ends (goals) which they wish to achieve, (b) decide upon appropriate means for achieving these goals, and (c) synchronize their instrumental and consumatory behavior. A simple example may be appropriate here. Suppose a man wishes to buy a present for a woman friend; if he knows a great deal about her values, interests and tastes, he will have no trouble selecting an appropriate gift -- one that will please her very much. On the other hand, if he knows little about her tastes, he will have a very difficult time trying to guess what she would like, and she stands a good chance of getting something she doesn't care for at all. How does the woman make her values, interests and tastes known? By self-disclosure. Providing information of this kind to the gift-buyer makes his task easier and maximizes the chance that the woman will receive a gift which she really wants. Clearly, self-disclosure is functional for both the sender and the receiver in this case.

Disclosures cut the costs of interacting and improve the outcomes that individuals take from the interaction; and because disclosures are so often followed by improved outcomes (increased rewards or reduced costs), they come to have secondary reinforcement value of their own. Thus, it is not surprising to find that disclosures can serve as a reinforcer in operant learning situations. This secondary reinforcement

property also is important in laboratory demonstrations of the so-called dyadic effect or reciprocity effect. I suspect that many of the experimental studies which are constrained to a very brief time frame owe their results to this secondary reinforcement property of disclosures, and that a subject's disclosures in these situations would eventually fall off if they simply led to more disclosures from a confederate instead of real outcome improvements. Unfortunately, one shot, short-term laboratory experiments do not last long enough to observe this effect.

Note that information does not necessarily have to be positive in order to be valued or to be instrumental. In fact, considerable evidence suggests that negative information is weighted more heavily than positive information in forming evaluations (Kanouse and Hanson, 1972; Anderson, 1971). Similarly, Jones and Davis (1965) have argued that an individual's socially undesirable behavior or out of role behavior (see Jones, Davis and Gergen, 1961) is much more informative to observers than more positive or expected behavior. Self-disclosure of negative information may be functional for both parties even though it leads to the early termination of their relationship. Of course, this depends upon the alternative relationships that the two individuals have available; negative information is more likely to be disclosed if many alternative relationships are available.

Another version of the social exchange model, social penetration theory (Altman and Taylor, 1973; Taylor, Altman and Sorrentino, 1969), is specifically concerned with how reciprocal disclosures facilitate social exchanges. This theory holds that the probability of future

disclosures depends upon the outcomes (rewards less costs) that individuals receive or expect to receive from past and present disclosures. Note too that disclosures are not limited simply to verbal behavior, but include all of the ways by which people make themselves known to others. The gist of this theory is that dyadic disclosures are patterned across time, and that they proceed from non-intimate to intimate exchanges.

Now that we have sketches of explicit models of why people disclose personal information, let us examine the methods which have been used in self-disclosure research and see how well they represent these models or, for that matter, any clearly articulated model.

Research Strategies

Work during the fifties and early sixties was largely correlational, and self-reports of disclosures were correlated with variables such as demographic characteristics and symptoms of physical illness. Recent work has been largely experimental and self-disclosure has been examined as both an independent variable and a dependent variable.

Correlational strategies. The chief self-report measure of self-disclosure has been -- and continues to be -- Jourard's Self-disclosure Questionnaire (JSDQ) (Jourard and Landsman, 1959). In its original form, this inventory consists of ten items about each of six categories of disclosure (money, body, attitudes, personality, work or studies, tastes and interests) and for each item the respondent indicates how much he/she has revealed to four targets: mother, father, best male friend, best female friend. The respondent indicates a complete and authentic disclosure by the number 3, a moderate disclosure by the number 2, a small disclosure by the number 1, and no disclosure by a zero. A lie or untruth is indicated by an "X" which

is scored as a zero. A respondent's self-disclosure score for a given target is simply the sum of his 60 item ratings for that target.

A newer version of the JSDQ contains fewer items (40), but uses essentially the same format as the original scale plus ratings of how much the respondent would disclose to a stranger (Jourard, 1971b). Several other measures are available, but the JSDQ continues to be the most widely used. The defects in this scale should be obvious, but a brief comment on two problems may be useful.

First, the JSDQ weights each of the 60 items equally, and it is clear from even a casual examination of the topics that some are more salient than others. Moreover, the summed ratings mask the pattern of the individual's disclosures (assuming that the reports of disclosures are valid). Consider the example shown below.

	<u>Topic</u>	<u>Person A</u>	<u>Person B</u>
Item 1	Sexual activities	3	0
Item 2	Debts	0	1
Item 3	Grades in school	<u>0</u>	<u>2</u>
		3	3

Person A has the same total disclosure score as Person B, but are they really comparable in their disclosures? Summated ratings of individual topics fail to tap the different patterns of disclosure.

Second, the scale is a retrospective self-report measure and what we may be measuring is the respondent's willingness to report disclosures, not actual disclosures. This amounts to nothing more than an index of "how good" the respondent believes it is to reveal oneself. The available evidence (e.g., Ehrlich and Graeven, 1971; Burhenne and Mirels, 1970; Himmelstein

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and Lubin, 1965; Himmelstein and Kimbrough, 1963; Lubin and Harrison, 1964; Vondracek, 1970; Harley and Harley, 1969; Pedersen and Breglio, 1968) strongly suggests that the Jourard Self-disclosure Questionnaire is uncorrelated with actual self-disclosures, and Cozby (1973, p. 80) seems quite correct when he argues that "It must be concluded that the continued use of the JSDQ will only perpetuate the confusion that already exists in the literature." The distressing point, however, is that many of the alternative measures suffer from the same technical flaws, and we should expect little more from them than we have received from the original Jourard inventory.

Experimental strategies. The results of the early correlational studies suggested that the self-disclosure process was important, and this set in motion the search for the factors which increase and decrease the tendency to disclose oneself. One of the major factors that apparently influences an individual's behavior is the disclosure that others provide, and to test this proposition means that disclosure must be both an independent and a dependent variable in the same study.

A prototypic example of this approach is a study by Worthy, Gary and Kahn (1969). Groups of four coeds were seated around a table in a laboratory. Each subject had ten sheets of paper which contained seven questions, and the questions varied in rated intimacy. The subtitle to this paper, "Would you enjoy being a prostitute? Why or why not?" was one of these questions. On each of the ten trials, the subject answered one question of her choosing and sent the written answer to one of the other three subjects. The amount that each subject disclosed during the study was computed by summing the intimacy ratings of groups of questions she answered.

Self-disclosures were also examined from the receiver's viewpoint by computing how much was disclosed by all sources to a subject and how this affected the subject's subsequent behavior.²

A second experiment illustrates how self-disclosure has been used as a manipulated independent variable in a true experimental design. Ehrlich and Graeven (1971) had a confederate make disclosures which varied in their intimacy and pattern and then measured the subjects' reciprocal disclosures and attraction to the confederate.

Controlled experiments, particularly laboratory deception experiments, will probably be the strategy most widely used in the immediate future, although pressure for more naturalistic experiments which trade off some internal validity for greater external validity seems to be increasing. Let us consider some of the issues that these studies must face, and consider some desiderata for future experiments on self-disclosure.

Research Considerations

In this section we will consider six issues which have not been given adequate attention in the planning and interpretation of self-disclosure experiments. These issues involve the: (a) intended target audience, (b) nature of the relationship between discloser and receiver, (c) communication modes used, (d) "authenticity" of disclosures, (e) "intimacy" of disclosures, and (f) use of individual differences measures.

²The experimental manipulations in this study involved the possibility of eye contact. The amount of information that different subjects received was not manipulated.

Identifying the intended target audience. The intended or perceived target audience of a disclosure is usually underestimated in laboratory experiments. When a sender (S) discloses information to a receiver (R), he is also disclosing to an experimenter and unknown others who will be privy to the communication. In general, the intimacy of disclosures a sender will make decreases monotonically with the size of the perceived target audience.

The sender's beliefs about the trustworthiness of the target audience also influences how much will be disclosed. We might refer to the sender's expectations about the diffusion of the disclosure as the perceived fluidity of the disclosure, and presumed fluidity is decreased when targets are isolated physically or socially (e.g., by role requirements such as the relationship between a physician and patient).

The subject's perception of the fluidity of his disclosures may be influenced by the way the disclosures are transmitted or recorded. For example, Roberts and Renzaglia (1965) found that the presence of a tape recorder during a counseling session increased the number of positive self-references; the most negative self-references were made when no recorder was present. Having a respondent write out disclosures probably has an even greater "interference effect" than recording (see Weick, 1968, p. 371-375).

Specifying the relationship. We have mentioned the importance of precisely identifying the parties to the interaction -- or at least what the subject perceives to be the target audience -- and now the issue is: How are these people related or more precisely, how does the subject see their relationship? What does the subject perceive as the objective(s) of the relationship? What are the potential outcomes from the interaction? The answers to these questions can be discovered through direct queries or inferred from choice behavior.

Frequently our experimental manipulations produce a situation where the subject's relationship to the target audience seems to be far removed from any reasonable social exchange. This criticism cannot be easily passed off as a limitation to external validity alone, for it hits at the very purpose of the experiments. For example, what (besides the press of experimental demands) would motivate a coed to "disclose" in writing to classmates (and experimenters who are lurking nearby) her feelings about how she would enjoy being a prostitute? How would the answer to this question be expected to improve the joint outcomes of most coed dyads? Hopefully, future experiments will include some measures of what the subjects see as the nature of their relationship with the target individual or audience.

Most experiments, and virtually all laboratory experiments, focus on what Levinger and Snoek (1972) call surface relationships. These situations are controlled largely by role demands, and are typical of casual or beginning interactions. Of far greater interest to us are relationships of mutuality or great interdependence. To investigate these enduring relationships we must either consider longitudinal studies (e.g., panel survey designs) or rely upon retrospective self-reports of disclosures. Of course, the use of retrospective reports returns us to the problems of questionnaires like the Jourard Self-disclosure Questionnaire, and means that we are vulnerable to consistency pressures, levelling and sharpening tendencies in memory and all of the other problems which degrade retrospective reports.

Panel designs offer some superiority in this regard, although here we must be careful to control for testing effects. That is, the process

of asking about disclosures may change the pattern of future disclosures if the subject believes that he or she will be reinterviewed or may cause the subject to attend to information that otherwise would have been ignored.

Isolating the communication mode(s). People communicate in many ways: verbally through manifest content and extralinguistic characteristics of speech (e.g., rate of speech, rate of "ahh's"), and nonverbally through facial cues, posture and social distance. Self-disclosure research has focused largely on one mode of communication, manifest content, although some attempts have been made to detect the effect of information communicated via other modes (e.g., Worthy, Gary and Kahn, 1969, manipulated the possibility of eye contact). One strategy has been to block some modes (e.g., isolating subjects and requiring messages to be written and passed to an unseen target person), however, most researchers have simply ignored the issue of communication modes altogether. Ignoring the mode of communication is a tenable strategy only if one is interested in the global effects of the sender's disclosures on the receiver's behavior and if one is willing to assume that the information communicated by different modes is highly, positively correlated.

The degree of congruence between disclosures communicated by different modes is probably an important indicator of the disclosure's authenticity. That is, the information received by a target from different modes may or may not be redundant, and the more similar the messages the target receives, the more he will judge the disclosure to be authentic. This suggests that one way of getting at authenticity through behavioral measures is to study multiple communication modes simultaneously.

Obviously, there are several sources of information about communication which are relevant to the process of self-disclosure but have yet to be incorporated in our research. In the psychopathology literature there is the research on the double bind hypothesis (Bateson, Jackson, Healy and Weakland, 1956) and the substantial research on how families with disturbed children communicate with each other (e.g., Alkire, 1969; Bugental, et al., 1970, 1971). Also, the literature on the communication and perception of emotions is relevant (see, for example, Davitz, 1965). Buchman (1972) has recently demonstrated that there are substantial sex and cultural differences in how well people send and perceive emotional states through different communication channels. And finally, the work of academic departments of Speech and Public Speaking has broadened in recent years and now embraces the entire range of communication modes, not simply speech. (See for example, Borden, Gregg and Grove, 1969).

The message I wish to communicate is simply this: People communicate in many ways, and all of these modes are used in self-disclosure, yet we have concentrated on only one mode (verbal behavior) and only a portion of the information that is communicated via this mode (i.e., manifest content). It is time that we enlarge our picture of self-disclosure to include more of these channels of communication. One of the first products of this multi-mode approach may be a better understanding of how authenticity is communicated.

Determining the "authenticity" of disclosures. Self-disclosures vary in their authenticity, i.e., veracity, and this must be considered in experiments where disclosures are a dependent variable. While there are undoubtedly some individual differences in the tendency to be truthful,

probably most of the variance in truthfulness is due to situational factors which either constrain the individual to tell the truth or motivate him to lie. There is a strong parallel here between research on cheating (e.g., Hartshorne and May, 1928, 1929, 1930) and the study of authenticity in self-disclosure, and one thing we should learn from that early experience is to spend less time in individual differences and more time on situational variables which determine truthfulness.

A parallel can also be drawn between the issue of authenticity and the question of "attitude-behavior" consistency (e.g., Wicker, 1969; Kiesler, Collins and Miller, 1969; Fishbein and Ajzen, 1972). The question: When are verbal reports of attitudes ("attitude behavior") consistent with overt, nonverbal behavior? is similar to the question: When are self-disclosures consistent with the actual state of affairs or with earlier disclosures?

To say that a disclosure is "authentic" implies that there is an objective standard against which the disclosure can be judged. This may be true of some characteristics of the individual (e.g., age, educational background, etc.), but most of the disclosures which are of value to a relationship probably involve information which cannot be easily verified against external criteria. In this case, consistency across time and situations become one index of how truthful or representative a particular disclosure is.

The importance of situational factors cannot be overemphasized. Clearly, people present different pictures of themselves in order to meet the demands of various social settings; this has been well described by Goffman (1959) in The presentation of self in everyday life. The empirical literature on self-presentation (Gergen, 1965; Gergen and Wishnov,

1965; Gergen and Morse, 1970) is also relevant here, and we would do well to integrate these findings into our theories of self-disclosure. The two topics clearly overlap, as this statement by Gergen and Wishnov (1965, p. 348) suggests: "The information we present to others about ourselves is seldom selected at random. We constantly face the dilemma of choosing from a vast storehouse of self-knowledge the appropriate items for public display. One of the more crucial periods for such decision making is during the formative stage of a relationship." Thus, it might be useful to view self-presentation as a subtopic of an enlarged theory of self-disclosure. Judging by the reference cited in the self-disclosure literature, this linkage has not been recognized to date.

Up to this point we have been considering authenticity from the sender's viewpoint. That is, we have asked the question: What determines whether a sender reveals himself truthfully or at least believes he is revealing himself honestly? But authenticity can also be examined from the other direction, from the receiver's vantage point. Here the question is: What determines the degree of authenticity a receiver attributes to a sender's disclosures? Obviously the literature on attribution theory (e.g., Jones and Davis, 1965; Kelley, 1967, 1973), person perception (e.g., Hastorf, Schneider and Polefka, 1970), and source credibility in attitude change are relevant here. Earlier I mentioned that the congruence with which information is communicated through different channels may be a major indicator of the "authenticity" of a disclosure.

Determining the "intimacy of disclosures. No piece of information is intrinsically intimate or nonintimate. The intimacy of a disclosure is determined by the situational context in which the disclosure is made. Something that is rated only moderately intimate in one situation may be considered extremely disclosing in another.

The concept of intimacy is poorly defined conceptually, and those who use it rely upon our commonsense experience to lend meaning to the term. One way of looking at it is to argue that intimacy is merely a convenient label for the notion that in a given relationship or setting, certain clusters of information are less likely than others to be disclosed; but the content of these clusters -- that is, what is intimate -- will change across situations.

What determines the likelihood that a piece of information will be disclosed? The relevance of the information to the social exchange is obviously one factor. The probability that information will be disclosed is probably a function of the sender's beliefs about how the information will cause or permit the receiver to change his or her outcomes in a positive or negative direction. This again focuses our attention on the nature of the relationship between the discloser and receiver and the extent to which they are interdependent.

Using individual differences data. A number of self-report measures, of which the Jourard Self-disclosure Questionnaire is the best known, are available for measuring individual differences in self-disclosure,³ but to date none of these measures have distinguished themselves in terms of reliability or predictive validity across a broad spectrum of respondent populations. Undoubtedly, we can expect some improvement in these scales as a product of the psychometric tinkering that will occur as the field becomes more established and attracts people who will transfer the technology of other specialties into this area. But assuming that we had

³See Cozby, 1973, p. 74-75 for a summary of these instruments.

perfect measures of self-disclosure as a personality trait, we must still ask how these measures should be used.

If we assume, as most of us do (cf. Cozby, 1973, p. 74) that situational variables account for more of the variance in self-disclosure than individual differences, it follows that our attention should be concentrated on self-disclosure as a social process rather than as a personality trait. This suggests that in experiments, individual differences measures should be used as covariates or blocking variables in treatment by blocks designs. That is, they should be used to account for within cell variance that would otherwise be only error variance. The real value of these designs rests in their potential for showing interactions between situational factors and individual differences.

Future Research Strategies

Experience with other areas of social psychological research (e.g., interpersonal attraction) suggests that topics undergo a definite pattern of development beginning with provocative correlational studies and rather grandiose claims about the importance of a very loosely conceptualized process. The methodological shortcomings of these early studies usually fan the fires of experimentation, and following this stage there is usually a period of generalization and increased interest in external validity. If my estimates are correct, we are now in the period of intense laboratory experimentation which probably will not peak for two or three years. Eventually we will begin the process of generalization, and this will require some hard thinking about alternative research strategies for conducting slightly less methodologically rigorous but substantially more informative research on self-disclosure.

Two alternative strategies which might be pursued include: (a) actively arranging the natural environment to evoke different levels of disclosure and then taking this disclosure level as an independent variable, and (b) applying appropriate sequential statistical models to longitudinal data (e.g., panel survey data, observational data) to test hypotheses about the dynamics of the self-disclosure process.

Evoking disclosures. Situational variables loom large as determinants of what and how much is disclosed, and therefore it makes sense to structure the environment so as to elicit different amounts of disclosure and then measure the effects of these disclosures on relevant dependent variables. This has been done in a series of ingenious experiments conducted by Irving Janis (1972) and his colleagues at Yale University. In one experiment, they randomly assigned over-weight women subjects to either a high or a low disclosure condition where the target of the disclosures was a clinical interviewer in a weight control program. In the high disclosure condition, the interviewer asked highly personal questions, and in the low disclosure condition, the interviewer asked questions which few people would find embarrassing. The dependent variable concerned how well the subjects maintained a weight loss diet, and the results suggest that subjects who made high disclosures performed better than subjects who made only low disclosures.

Lewis and Krauss (1971) also manipulated self-disclosure by asking either very personal or very innocuous questions. Subjects who were asked highly personal questions rated the interviewer as slightly higher in empathy, level of regard, congruence, and willingness to be known than did subjects who were asked innocuous questions.

This method of evoking self-disclosure through arrangement of the environment (e.g., definition of the setting) and direct question-asking could be easily generalized to nonlaboratory settings, for example, the offices of physicians, therapists, counselors or even small group settings.

Disclosure as a sequential process. If we are to take seriously the temporal aspect of self-disclosure, it may be useful to formally describe the self-disclosure process as a sequential or stochastic process. Many of the experiments which have been reported in the literature could be recast in terms of sequential models. For example, the Worthy, Gary and Kahn (1969) experiment which was described earlier asked four coeds to send and to receive disclosures on ten different trials, and the intimacy ratings of these disclosures were aggregated to form indices of the disclosures made by and sent to each subject. This aggregation procedure, of course, destroys the patterns of disclosures.

As a second example, consider the experiment conducted by Erhlich and Graeven (1971). In this case, a confederate followed one of three patterns of disclosure to a subject whose subsequent disclosures constituted one of the dependent variables. Again, the intimacy of the subjects' disclosures was computed for the entire series of trials and thus the pattern was masked by aggregation. The pattern of disclosures could easily be represented in terms of a sequential process, and statistical methods for doing this are available.⁴

⁴For a general introduction to mathematical models of sequential processes, see Rosenberg (1968), Coombs, Dawes and Trevisky (1970), Coleman (1964a, 1964b), Abelson (1968), and Suppes and Atkinson (1960). For a specific example of sequential models applied to social interactions, see Rainio's (1965) "stochastic theory of social contacts."

The process of disclosing oneself may be path independent, that is, a stationary Markov process (Markov chain) where the probability of a given event (state) occurring is a function only of the immediately preceding event. For example, if the reciprocity of disclosures is merely a case of matching, we would expect a subject's disclosures to be determined almost entirely by the intimacy level of the discloser's most recent disclosure. On the other hand, we may find that the process of disclosure is not a true Markov chain process, but rather that the disclosures that one makes are determined by the sequence of previous events. For example, we might ask: Is an individual more likely to make a highly disclosing statement after receiving a high disclosure that was preceded by (a) a series of low disclosures, (b) a series of high disclosures, or (c) a mixture of high and low disclosures?⁵

Viewing self-disclosure as a sequential process has implications for the analysis of data from controlled experiments, but this approach will probably have its greatest impact on the analysis of data from naturalistic experiments and panel surveys. However, with these multi-wave data we should expect the noise in the data to be affected by the time between interviews or observations; the longer the time, the greater the noise. Nonetheless, it seems that there is much to be gained by analyzing nonexperimental data in a sequential framework,

⁵Benedict's (1970) research on patterns of disclosure and interpersonal trust, Elliott Aronson's (1969) "gain-loss mini-theory" of interpersonal attraction and the literature on deprivation-satiation effects of social reinforcers (e.g., see Eisenberger, 1970) are relevant here because they involve patterned social interactions which are identical to or similar to the process of self-disclosure.

and there are some encouraging models in other areas of research which support this belief.⁶

Two problems must be overcome if the statistics used in sequential models are to be applied to the self-disclosure process. First, we must clearly define what states may exist in the research setting. Examples of possibly relevant states include: subject's disclosures (high, moderate, low); subject's attraction or liking for receiver (high, moderate, low); or continuation of interaction (continuation vs. breaking off). Second, we must carefully consider how the stream of interaction in natural settings can be meaningfully segmented into discrete trials or acts.

⁶Rausch (1965), for example, observed groups of hyperaggressive and normal boys in six different situations, and then analyzed the pattern of friendly and unfriendly acts in terms of a sequential process. He found that the occurrence of friendly or unfriendly behavior was not an independent event, but was influenced by the entire sequence of earlier events. In other words, the occurrence of friendly or unfriendly acts did not follow a strict Markov chain model although variations from this theoretical model were easily explained.

Summary

Research on self-disclosure is growing at a rapid rate. In 1971, more than twice as many self-disclosure articles were published than in the entire period from 1935 through 1961.⁷ Six factors which have frequently been ignored in recent research, most of which involves laboratory experiments with college student subjects, include the following:

- o The intended target audience has been underestimated in most laboratory studies where the subject's disclosures are the dependent variable.
- o The nature of the relationship influences the type of disclosures which will be relevant to the joint outcomes of the sender and receiver(s) of disclosures. Research to date has concentrated on surface relationships and has ignored the more important relationships of mutuality or strong interdependence.
- o Isolating the communication modes, or at least specifying them more precisely, is important because people communicate in many ways and most experiments have recorded only the manifest content of speech. The congruence with which disclosures are communicated via many channels is probably an indicator of the "authenticity" of the disclosure. Multiple measures of multiple modes of communication are needed in future research on self-disclosure.
- o Determining the authenticity of disclosures is impossible where there is no "true" standard against which to judge authenticity or truthfulness. Therefore, authenticity is probably best viewed as consistency across presentations, and situational factors are probably the major determinant of consistency of self-presentation.
- o The "intimacy" of disclosures depends upon the social context in which the revelation occurs. No piece of information is intrinsically intimate or non-intimate, and it makes little sense to scale the "intimacy value" of certain topics in abstracto.
- o Individual differences measures would be used as covariates or as "blocking variables" in treatment by blocks designs in order to account for what would otherwise be error variance. Continuing to correlate self-disclosure measures with other personality measures, as has been done for the last decade, will probably not prove especially fruitful. Self-disclosure should be investigated as a social process, not simply an individual differences dimension.

⁷ An annotated bibliography of the self-disclosure literature (through 1972) is available from the author.

Future research will probably place more emphasis on external validity and will more frequently occur in nonlaboratory settings. Two alternative research strategies which hold promise are (a) the arrangement of the environment to evoke disclosures, and (b) the use of stochastic models to evaluate the dynamics of the self-disclosure process over time. The theoretical assumptions guiding self-disclosure research should shift toward viewing self-disclosure as but one aspect of self-presentation.

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