Changes in the Level of Insight in a Psychoanalysis

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Abstract

This study presents data on the curve of insight in the first 100 sessions of a psychoanalysis. It was found that the patient's insight did not steadily increase over the course of the treatment, but rather showed a regular cyclical pattern. Periods of high insight alternated with periods of low insight. In addition the therapist's interpretations were examined for the degree to which they would help the patient reach his goals, and it was found that they had a similar cyclical pattern. Furthermore there was significant correlation between the helpfulness of the therapist's interpretations and the patient's level of insight.

Changes in the level of Insight in a Psychoanalysis

The presence and relevance of psychological insight in a person's mental life and in the psychotherapy process has been of long standing interest to psychotherapists. Beginning with Freud, psychoanalytic literature has emphasized the curative role of insight with the assumption that in a successful therapy, patients develop insights that are crucial to cure (Abrams, 1971; Bibring, 1954; Davanloo, 1980; Jones, Parke & Pulos, 1992; Malan, 1976; Sifenos, 1992; Strupp & Binder, 1984; Ferenczi, 1950). Rank (1936) discussed the development of curative insights provided to the patient, who due to a positive transference is able to accept these interventions. The Glossary of Psychoanalytic Terms (Moore & Fine, 1990) emphasizes the attainment of insight as essential for therapeutic change.

While insight is generally credited as an agent for change in the psychoanalytic literature, the actual process of how insight develops is not well understood (Wallerstein, 1983). One popular though non-empirical assumption has been that insight develops in a linear manner, starting low and developing steadily over time. Rangell (1982) concluded from informal observation that his patients' insights followed a parabolic curve over the course of an analysis, starting very low, rising, and dropping again with the working through of the insights towards the end of treatment. The few empirical studies of this question do not present a consistent picture. Jones, Parke & Pulos (1992) found an increase in insight in brief psychotherapy: examining 30 patients' 16 session psychodynamic therapies, they found an increase in insights and new understandings from session 1 to session 5 to session 14. In a study of five brief psychodynamic therapies, O'Connor, Edelstein, Berry, and Weiss (1994) reported insight to follow an opposite parabolic curve, beginning high, dropping in the middle of therapy, and going up again towards the end of treatment. Thus in these reports the findings are either inconclusive (Luborsky, Crits-Christoph, Minty & Auerbach, 1988) or do not demonstrate the commonly expected linear pattern.

One acknowledged difficulty in ascertaining the pattern of insight in therapy has been a lack of agreement over how to define and measure insight (Gill, 1963; Ludvig, 1966; Marrot, 1981; Wheelis, 1969). In many studies, insight was defined in a generic manner without regard for a

patient's unique history and life circumstances (Luborsky et al., 1988). It was assumed that some ideas constitute insight for everyone, regardless of each person's unique package of issues and personal history. Specifically, it was considered "insightful" to demonstrate awareness of and willingness to discuss one's psychological problems. A different limitation of some earlier work was that it was based on self-report measures and was therefore of questionable validity due to the probable effects of self-deception (Funder, 1980; Smith, 1975).

In an effort to focus on case-specific definitions of insight, several recent studies have been conducted by Luborsky et al. (1988) and by investigators from the San Francisco Psychotherapy Research Group (formerly the Mount Zion Psychotherapy Research Group) (Coleman, 1989; Linsner, 1987; Edelstein, 1993; O'Connor et al., 1994), each using a case-specific approach to the definition and measurement of insight.

The present study is informed by the theory of psychopathology and psychotherapy developed by Joseph Weiss and follows the prior investigation of the pattern of insight in brief time-limited therapy (O'Connor et al., 1994). Using a case-specific method of assessing insights for a patient in psychoanalysis, similar to that used to study time-limited psychotherapies, this exploratory study was specifically designed to investigate the development and pattern of insight in a longer and more intensive treatment. It was expected that in this type of treatment, the pattern of insight might differ from that found in a time limited brief treatment.

Background

The research reported here is based on a theory of the mind, of psychopathology and of psychotherapy developed by Joseph Weiss (1993a, 1993b) and investigated by Weiss, Sampson and the San Francisco Psychotherapy Research Group (1986) through the use of formal quantitative methods. According to Weiss's theory, people are able to think unconsciously, to make inferences, to assess reality, and to make and carry out decisions and plans. People develop psychopathology in early childhood from traumatic experiences with their caretakers. From such experiences they may infer grim unconscious beliefs (referred to here as pathogenic) which warn them that if they pursue certain normal desirable goals they will put themselves in danger. The

danger may be internal. People may come to believe that if they pursue their goals, they will be faced with fear, anxiety, guilt, shame or remorse. Or the danger may be external. People may infer from parental reactions to their successes that if they are successful they will hurt others. They may then, in obedience to their pathogenic beliefs, unconsciously avoid success.

People are highly motivated to overcome their problems. In therapy they work to accomplish this. They work by testing their pathogenic beliefs in the hope that the therapist will pass their tests. For example, patients who unconsciously believe that if they are successful they will hurt others may tell their therapist about a success in the hope that the therapist will not be hurt. If patients experience the therapist as not hurt, they may take a small step toward disproving the pathogenic belief. As they succeed in disproving the pathogenic belief, they feel less threatened by it, and so become more conscious of it. Patients may also work by using the therapist's interpretations to get insight into their pathogenic beliefs and to realize that these beliefs are false and maladaptive.

Patients in therapy develop a plan for overcoming their problems. Their plan tells them at each stage of therapy which pathogenic beliefs to test and how to test them. Our concepts of pathogenic belief and plan enable us to define useful insight. Useful insight is insight that the patients may use in their efforts to carry out their plans to disprove their pathogenic beliefs.

The therapist's task is to help their patients carry out their plans to disprove their pathogenic beliefs. Interventions which patients may use to do this are referred to as "pro-plan". Interventions which hinder patients from doing this are referred to as "anti-plan".

Review of San Francisco Psychotherapy Research Group Research

Members of the San Francisco Psychotherapy Research Group have conducted a series of interrelated studies examining insight, interpretations, and psychotherapy outcome, designed to test Weiss's theory of the unconscious mind and of psychopathology. Insight is defined as the psychological understanding of one's thoughts, feelings and/or behavior that will facilitate therapeutic progress toward case-specific goals. These goals are consistent with the patient's plan as outlined in the individual's plan formulation. The case-specific approach to the definition of

insight sets this research apart from most previous research on insight other than that of Luborsky (Luborsky et al., 1988; Crits-Christoph, Barber, Miller & Beebe, 1993).

The San Francisco Psychotherapy Research Group has conducted a number of psychotherapy process studies related to the present research. Broitman (1985) studied the relationship between insight and interpretation in brief psychotherapy. This study, and many of the others, was carried out using psychotherapy transcripts collected by the Mount Zion Brief Psychotherapy Research Project directed by George Silberschatz and John Curtis. Clinical raters were asked to evaluate insight segments of patient speech preceding and following the interpretations. Broitman used a revised version of the Morgan Patient Insight Scale, a generic insight measure. Studying three brief time-limited 16-session therapies, Broitman (1985, 1995) found that the greater the compatibility of the therapist's interpretations with the patient's unconscious plan (as measured with the plan-compatibility method [Silberschatz & Curtis, 1986]), the greater the immediate increase in insightfulness following an interpretation. Norville's research (1989) on seven time-limited brief 16-session therapies, demonstrated a relationship between the average level of planfulness of the interpretations given to the patient and therapy outcome as measured six months after termination.

The concept of the patient's unconscious plan makes clear that some insights will be particularly powerful in moving the patient toward individual goals. In studying a single short-term psychotherapy, Linsner (1987) found that in segments following the therapist passing the patient's test, the patient showed an immediate increase in insight as defined by the patient's plan (pro-plan insight).

O'Connor et al. (1994) conducted a pilot study of the level of insight in each session of five sixteen session brief psychotherapies. These cases were selected to include cases with good, moderate, and poor outcomes. They were selected from a larger pool of cases collected by the Mt. Zion Brief Psychotherapy Research Project. The pilot study found that patients initially demonstrated a relatively high level of insight which decreased sharply in the middle of the therapy, falling to zero around session 9, and rising again toward the end of the therapy. The

pattern in each case was fit by a quadratic (parabolic) curve. The average level of insight across each therapy was found to be related to outcome. We assume that patients initially present an insightful picture to their therapist, so as to enable the therapist to help them. They then test their pathogenic beliefs in order to disconfirm them, with a consequent precipitous drop in measurable insight. (In putting certain types of tests to the therapist, patients may appear to lose insight). In the therapies with a good outcome, the patients received a substantial level of pro-plan interpretations and showed insight at a relatively high level again at the conclusion of therapy. In therapies in which the patients received fewer pro-plan interpretations patients concluded their therapies with a much lower level of insight.

Method

Participant

The participant was a 28 year old, single, African-American male, who will be referred to as "Mr. A". Mr. A entered treatment with several presenting complaints: he felt that he had no right to relaxation or enjoyment; he had attacks of self-doubt at work; and he expressed concern at not being able to have a girl friend. He grew up the only child of two parents both of whom he perceived as weak, in an urban, lower middle class family. His mother was an incapacitated, promiscuous alcoholic, who died relatively young of alcohol-related problems. His father was a rigidly disciplined, socially withdrawn, under-achieving college graduate. Mr. A's father provided alcohol for the mother. In contrast, Mr. A attempted as a child to block his mother's access to alcohol. Mr. A was taught by his father that a rigidly obsessive approach to daily tasks was the only way to do things. For example, in cleaning the bathroom, one must begin with cleaning a certain item, and continue in a fixed order to other items, never deviating from the routine.

Mr. A made a clear, early presentation of his major issue: survivor guilt, that is guilt about being better off than others, especially members of his family. This is an issue which continued to be important over the duration of the analysis. Mr. A expressed the belief that he had no right to pleasure while others were suffering; he was not supposed to be happy, relaxed or successful. He also stated early in the telling of his story that it is very important to him to get the approval of

women. He cannot be himself with women: he "goes out of focus" and tries to be completely compliant. He idealized the figure of his maternal grandmother, out of the need to have a good identification figure, since neither parent was satisfactory. He believed that she wanted the best for him and that she could take pleasure in his successes, even if his cousins were unsuccessful. Also, Mr. A suffered from an inhibition about becoming independent from his father, so as not to threaten him. In addition, he was burdened by an unrealistic sense of responsibility for his parents' problems.

Therapist

The therapist was an experienced psychoanalyst of European-American background. He had no knowledge of the research design.

Instruments

Plan Formulation. A plan formulation was developed for Mr. A, using the empirical method of generating plan formulations detailed in Caston (1977), Rosenberg, Silberschatz, Curtis, Sampson, and Weiss (1988), Curtis, Silberschatz, Sampson, Weiss, and Rosenberg (1988). Five experienced clinicians read sessions 2 through 11 of the transcribed sessions (session 1 was not recorded, for unknown reasons). Each rater independently generated a list of the patient's goals, pathogenic beliefs, possible tests, and needed insights. A master list was produced by combining all items from all raters, and the same raters were asked to rate the degree of relevance of each item on a 5 point scale ranging from "Not Relevant" to "Very Highly Relevant". Those items over the mean for each category were included in the final plan. Reliabilities of the ratings were estimated using intraclass correlation coefficients based on a two-factor, mixed effects analysis of variance, which provides a composite estimate of the reliability of all raters. The intraclass correlation used is referred to by Shrout and Fleiss (1979) as "ICC(3, k)", and is mathematically equivalent to Cronbach's alpha coefficient (with raters treated as test items). The estimated intraclass correlations were .84 for Goals, .75 for Obstructions, .69 for Tests, and .71 for Insights.

The result of this process is a case-specific formulation based on Weiss's theory (Weiss &

Sampson, 1986; Weiss, 1993) that includes the patient's goals for treatment, the patient's pathogenic beliefs, the tests the patient may be likely to use to disconfirm his pathogenic beliefs, and the insights the patient may gain that will facilitate his progress toward his goals. Examples of Mr. A's goals are: to be able to refuse to let his father or other men dominate him; to be bold, spontaneous and assertive, to be able to relax. Examples of his pathogenic beliefs are: he fears that if he pursues a career without self-sabotage, he will show up his father or his friends, as well as others; he worries that if he has a good relationship with a woman, he will hurt his father, or his friends. The plan includes the hypothesis that Mr. A will test the analyst, primarily in the mode of paternal transference testing: Mr. A may act bold, challenging and provocative to see if the analyst will try to dominate him and insist on compliance, as father did; or Mr. A may test to see if the analyst can retain his authority in a flexible way or will show rigidity as did his father.

Pro-plan insight rating scale (PIRS). This scale is a case-specific insight scale, measuring insight that is consistent with the plan formulation for this case, referred to as "pro-plan insight" (Edelstein, 1992; Grebel, 1992). Pro-plan insight statements are those statements made by the patient that demonstrate self-understanding and are likely to help the patient pursue his goals and overcome his obstacles as these have been identified in Mr. A's plan formulation. The scale is a six point ordinal scale, ranging from 0 to 5. The raters' task was to make judgments regarding the planfulness of previously identified insight passages from the transcript. The scale reliabilities with three judges in a previous study ranged from .60 to .88 using intraclass correlations (O'Connor et al., 1994). In the present study, using the intraclass correlation described above, the reliability of five raters was .70.

Plan compatibility intervention scale. Planfulness of the therapist interpretations was analyzed in an effort to determine whether this variable might account for the regularity of the insight curve. Three raters worked independently in rating therapist interventions using the Plan Compatibility Intervention Scale (Fretter, 1984). This is a seven point Likert scale (+3 to -3) with steps described as strongly, moderately or mildly Pro- or Anti-plan, with a mid-point for interventions seen as unclear or containing both Pro-plan and Anti-Plan aspects. The three judges

made these ratings in accord with the patient's plan formulation. Inter-rater reliability for these judges was estimated using the intraclass correlation coefficient described above. The obtained intraclass correlation was .69. The average of the three raters was used as the primary data.

Procedure

Selecting insights. Three experienced clinicians were given the plan formulation for Mr. A and asked to read the first 97 sessions of the transcript and identify every insight compatible with the plan formulation. The definition of insight used for this purpose was as follows: "Pro-plan insight is defined as the psychological understanding of one's thoughts, feelings and/or behavior that will facilitate therapeutic progress toward case specific goals. These goals are consistent with the patient's plan as outlined in the plan formulation" (Edelstein, 1992). After the judges independently selected all identifiable insight passages, they met to discuss their differences and reach agreement, and a final list of insight passages was compiled.

Rating insights. A new group of five experienced clinicians were given the plan formulation and the pro-plan insight scale (PIRS) along with written instructions for how to use the scale. These clinicians were asked to rate the pro-plan insight statements previously identified by the first group of judges. The segments were presented to the raters in random order. The raters were asked to determine the relevance (relative to the plan formulation) of the pro-plan insight in each passage, using the six-point ordinal scale discussed above.

Rating therapist interpretations. Lists of therapist intervention segments were given in random order to three raters (all experienced clinicians) who rated them according to the Plan Compatibility Intervention Scale (Fretter, 1984). Therapist's interventions consistent with the operational definition of interpretation proposed by Luborsky and Crits-Christoph (1990) were extracted from the first 42 sessions and rated for planfulness; in an effort to maintain equal intervals the two sessions for which we had no data were estimated using the average of the planfulness of the immediately preceding and following sessions.

Results

The sum of the insight ratings for each of the first 97 sessions were plotted in sequence

(see Figure 1). No linear trend or strictly increasing pattern of insight, which might be expected based on the clinical literature, can be observed in the scatterplot. A series of polynomial curves were fit to the data and a fifth order polynomial provided the most parsimonious fit to the data (see Figure 2), with all terms in the model statistically significant at $p<.01$ (see Table 1). Durbin-Watson statistics indicated no significant autocorrelation in the residuals of the regression model. To provide a clearer picture of the pattern of insight, the sum of the insights were smoothed using a moving average of window three (see Figure 3). The graph of the smoothed data provides a more striking illustration of the pattern of insight in the first 97 hours of this analytic case. A series of polynomial models were fit to the smoothed data, and again a fifth order polynomial provided the most parsimonious fit to the data, with all terms statistically significant (see Table 2). A comparison of Table 1, representing the sums, and Table 2, representing the moving average of insight, indicates that the fifth order model provides a much better fit to the smoothed data with the multiple R increasing from .52 to .74.

The sum of the therapist planfulness ratings for the first 42 sessions, were also plotted in sequence. A series of polynomial curves were fit to the raw data, and no polynomial model produced a statistically significant fit for all terms in the model. The sum of therapist planfulness ratings were then smoothed using a moving average of window three (see Figure 4). The smoothed interpretation ratings were most parsimoniously fit by a fifth order polynomial model, with all terms in the model statistically significant at $p<.05$ (see Table 3 and Figure 4). Durbin-Watson statistics indicated no significant autocorrelation in the residuals of the regression model.

The pattern of therapist planfulness ratings paralleled that of patient insights for both the raw data and smoothed data (see Figure 5 and Figure 6). To determine whether the parallel found between the patient's insight and the planfulness of the therapist's interpretations was statistically significant, a simple linear regression predicting level of insight from planfulness of interpretation (using the raw, unsmoothed data) was calculated. Because the scatterplot of residuals revealed a marked heteroskedasticity, standard errors for the regression coefficients were estimated using Huber's jackknife procedures. The correlation between the variables was $r(41) = .27$, $p<.05$.

The correlation between the two smoothed series of planfulness of interpretation and level of insight was also calculated, and produced a stronger association between these variables, significant, $r(32) = .37$, $p<.05$ (See Figure 7). However it was found that the relationship between insight and planfulness of interpretation was best fit by a parabolic curve (see Figure 8 and Table 4).

Discussion

It is interesting to compare the curve of the first hundred sessions of Mr. A's analysis to the curve reported by O'Connor et al. (1994) in the study of five time-limited sixteen-session therapies. As noted, in O'Connor et al.'s study the patients begin with a high level of insight. They then appeared to lose it progressively until they demonstrated no insight. Toward the end of the therapy they again began to display insight. The patients' changing level of insight was best fit by a parabolic curve.

The work of O'Connor et al. supports the concept of an unconscious plan. The patient after making problems clear to the therapist, test the therapist as vigorously as possible in the time allotted them. While the patients are testing the therapist they appear to lose insight; then towards the end of therapy they appear to gain insight in preparation for leaving treatment. The fact that this sequence takes place in the 16 session case indirectly supports the idea of an unconscious plan.

The curve of Mr. A's insight, like that of the curve of the 16-session therapies, showed that Mr. A did not develop progressively more insight incrementally. Rather, he starts with insight, appears to lose it, regains it, appears to lose it and regains it. Mr. A's curve of insight corresponds to the observation that during therapy, periods of lucidity alternate with periods of obtuseness. According to our hypothesis, periods of testing during which the patient seems uninsightful occurs regularly throughout the 97 sessions.

Mr. A, in the absence of time constraints, behaves quite differently than patients with time-limited 16-session therapies. He took more time to provide the therapist with understanding of his problems before he began testing him. Then he gradually appeared to lose insight until a low point in session 19. (In a sixteen session therapy the low point had to occur much earlier).

A study of the insight level of the analyst's interpretations and Mr. A's insight level shows that the insight contained in the analyst's interpretation and the patient's insight rise and fall together. As we will illustrate below, by examples of patient - analyst interaction, Mr. A, who was burdened by the pathogenic belief that he should not be superior to others, appears to lose insight when the analyst loses it, and gains it when the analyst gains it. In addition, Mr. A's showing insight reminds the analyst of Mr. A's central issues so that the analyst is able to become more insightful. Thus, Mr. A's becoming more insightful induces the analyst to become more insightful and vice versa. The following illustrates the above by examples of patient - therapist interactions. (Our analysis of these examples did not rely on formal research methods).

Session 13. Mr. A is quite insightful. He tells the analyst that he is afraid to show off his successes with women, and he connects this with the idea that if he is strong he will hurt the analyst. The analyst does not take up this theme, and shifts to a previous topic. Mr. A experiences the analyst as not interested in helping him overcome his guilt about feeling strong and he stops producing insight. Also he shows no insight in the next session.

Session 28. Mr. A tells the analyst that he feels guilty about rising above his father. The analyst encourages Mr. A to bring out more about this theme. The analyst asks "what is so bad about rising above your father?" In this session and in the next four sessions Mr. A produces considerably more insight on this topic.

Session 86 and 87. Mr. A is silent and the analyst makes no interventions. The next hour Mr. A talks about wanting to do things his own way (he may have been reassured by the analyst not interrupting his silence, concluding that the analyst is not eager to control him). The patient then talks about wanting to be happy, and about his doubts that he has a right to be happy. The analyst encourages Mr. A to pursue this theme and the patient continues to produce insight about it. However later in the hour the analyst tells Mr. A that he is competitive with his father. According to our plan formulation, this interpretation is not accurate; Mr. A is not competitive, he is feeling guilty about feeling superior. Mr. A then stops producing insight. The next hour the analyst gets back on track. He asks the patient how would he feel if he felt superior to his father.

Mr. A responds by producing a high level of insight.

We looked ahead to two groups of hours to see if Mr. A was continuing the same theme, namely his guilt about feeling better off than his father and other people. We found that he was indeed continuing on this same theme. This finding illustrated below indicates that a patient may work to disprove one pathogenic belief or a family of closely related pathogenic beliefs for a long period of time.

Session 144. The analyst tells Mr. A who had been feeling good for the last several sessions, that he has let a problem "bug" him in order to bring down his mood. Mr. A responded by being insightful. He acknowledged that he assumed that his feeling good was hurting the analyst. He also reported that he feigns needing help from his father in order to bolster his father.

Session 616. Mr. A boldly expresses his concern about what people would think if he dated a white woman. The analyst does not understand this issue and reverts to interpreting Mr. A's competitiveness. Mr. A becomes nervous and struggles to correct the analyst " I don't feel so...uhh...much...uhh...competitive, I just would like...uhh...to feel superior...uhh...with all those I come into contact with." The analyst continues to interpret the patient's competitiveness and Mr. A appears to lose insight.

Conclusions

This study demonstrates the pattern of insight statements in the first 100 hours of an open-ended psychoanalytic treatment. The path of insight is fit best by a significant fifth order polynomial curve, demonstrating as in prior studies, that insight is not something that develops progressively in an incremental fashion in the course of therapy. This study, by contrasting the insight curve in brief therapies with the insight curve in this analysis, supports the plan concept and suggests that the patient, in working to overcome pathogenic beliefs, takes account of the time available to him so that the curve of insight is different in an analysis than in a time-limited brief therapy.

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Figure 1

Time Sequence of Insights

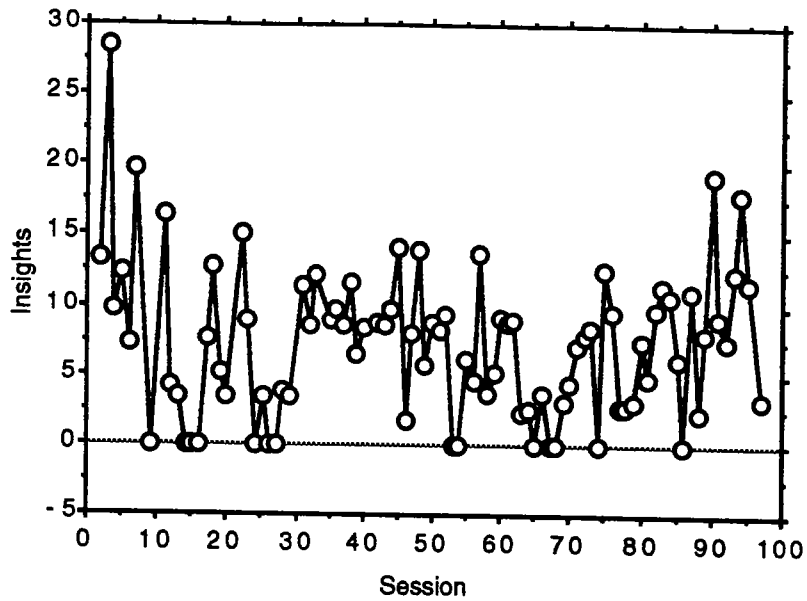

Figure 2

Scatterplot of Polynomial Regression of Insights

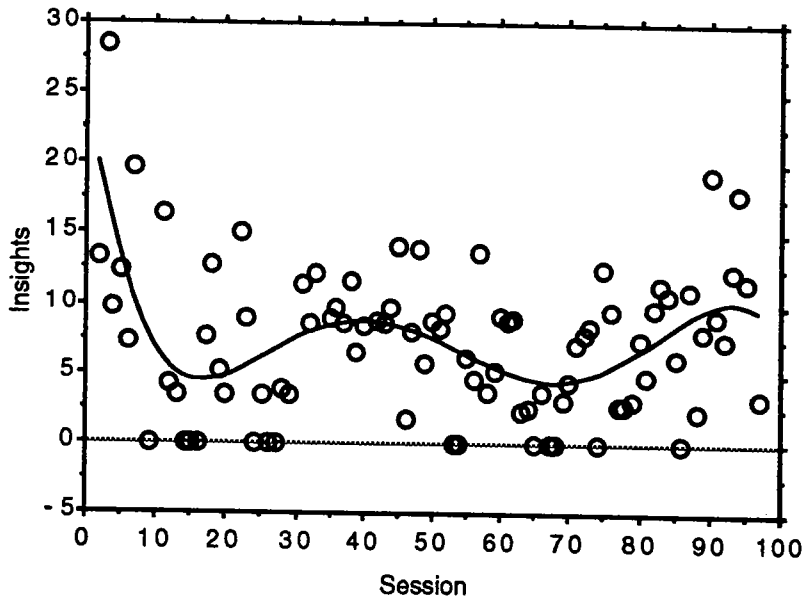

Table 1

Results of Polynomial Regression: Sum of Insights

Variable	Coefficient	t-Value	Probability
x	-16.5	4.12	.0001
x^2	92.6	3.70	.0004
x^3	-199.2	3.39	.0011
x^4	185.2	3.10	.0026
x^5	-62.3	2.83	.0058

Figure 3

Scatterplot of Polynomial Regression of Smoothed Insights

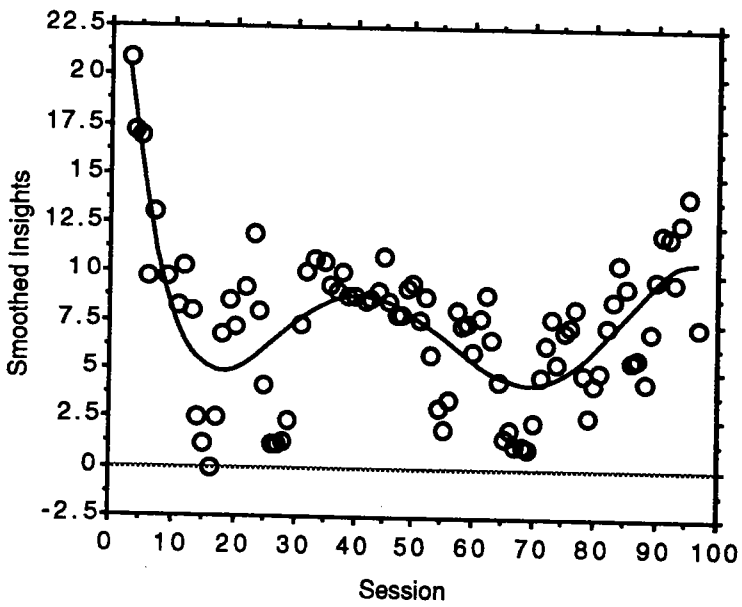

Table 2

Results of Polynomial Regression: Moving Average of Sum of Insights

Variable	Coefficient	t-Value	Probability
x	-22.8	6.39	.0001
x^2	121.7	5.59	.0001
x^3	-251.9	5.00	.0001
x^4	226.5	4.48	.0001
x^5	-73.7	3.99	.0001

Figure 4

Scatterplot of Polynomial Regression of Smoothed Interpretations, First 42 Sessions

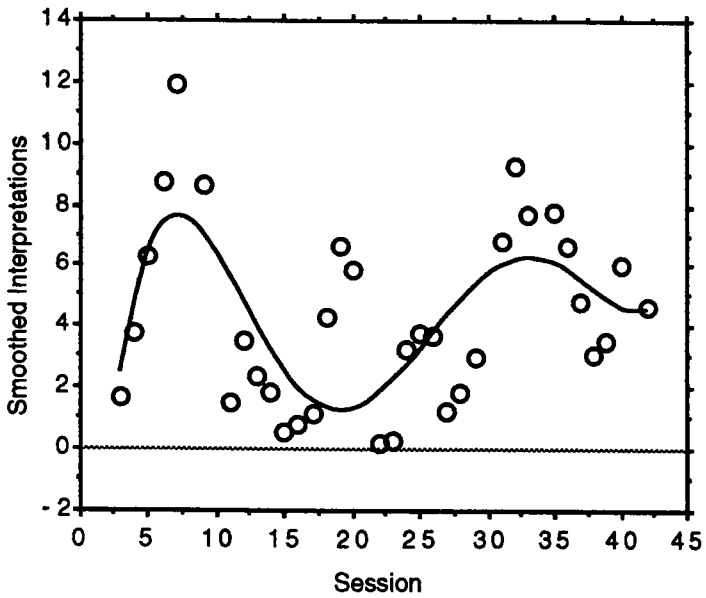

Table 3

Results of Polynomial Regression of Smoothed Interpretations, First 42 Sessions

Variable	Coefficient	t-Value	Probability
x	29.0	2.90	.0071
x^2	-164.0	2.96	.0062
x^3	335.2	2.81	.0089
x^4	-293.1	2.58	.0153
x^5	93.1	2.34	.0269

Figure 5

Time Sequence of Insights and Interpretations

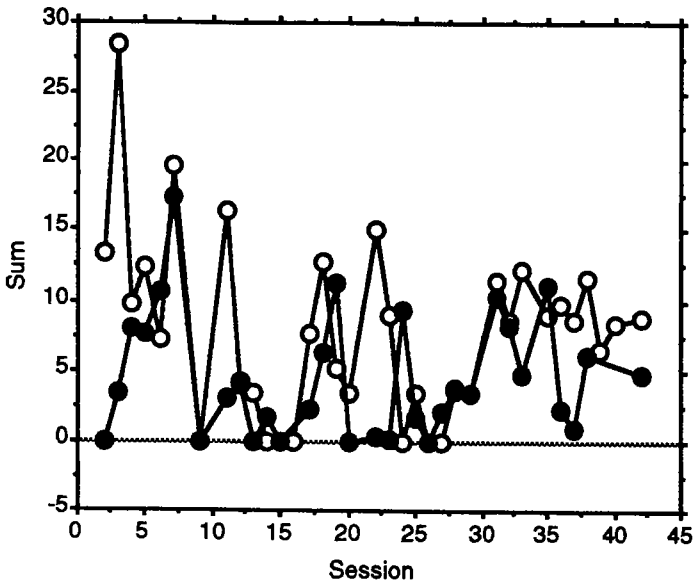

Figure 6

Time Sequence of Smoothed Insights and Smoothed Interpretations

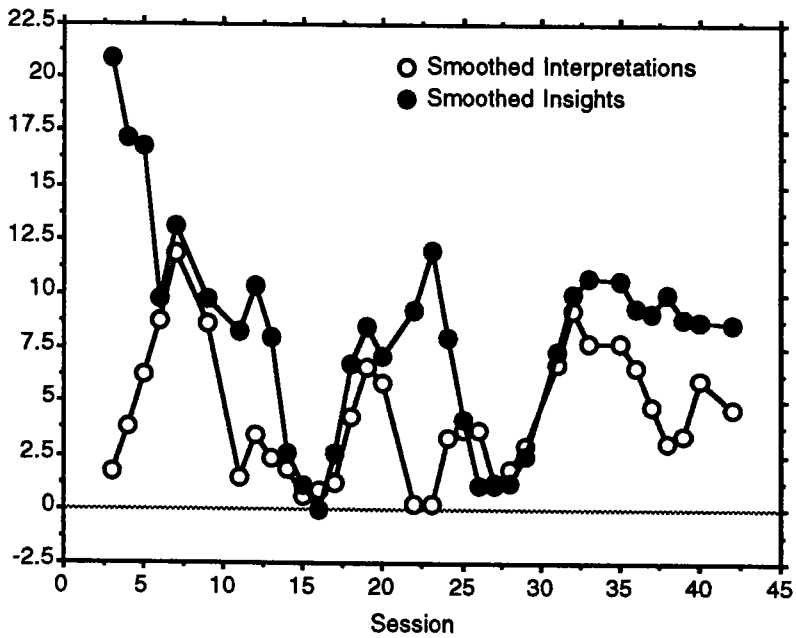

Figure 7

Scatterplot of Linear Regression of Smoothed Insights and Smoothed Interpretations

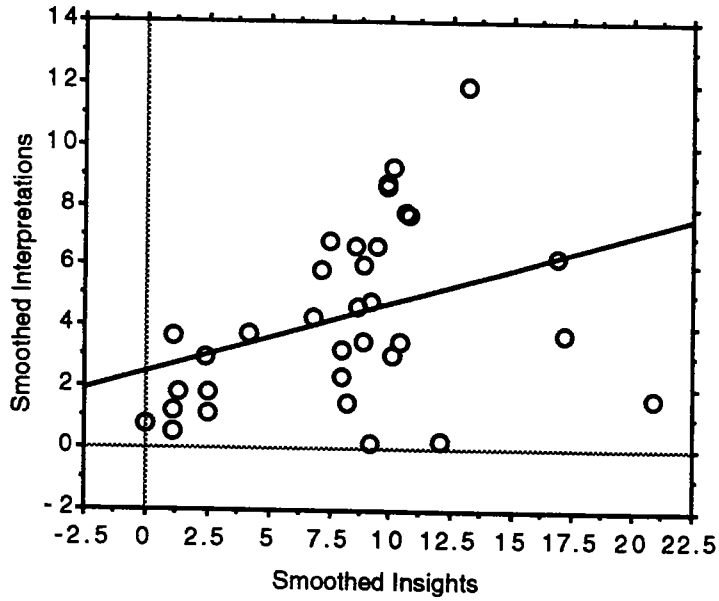

Figure 8

Scatterplot of Polynomial Regression of Smoothed Insight and Smoothed Interpretations

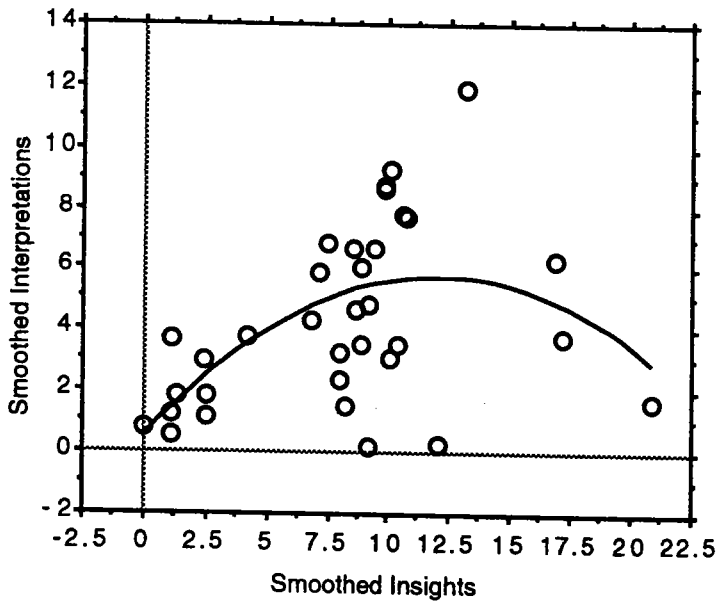

Table 4

Results of Polynomial Regression: Smoothed Insight and Smoothed Interpretations, First 42 Sessions

Variable	Coefficient	t-Value	Probability
x	1.4	3.46	.0016
x^2	-1.13	2.75	.0099