Degree of choice or options in language has been posited as being relevant to the psychotherapy process. To investigate the relationship of this concept to the course of therapy and to therapy outcome, 67 15-minute segments from six cases of individual psychotherapy were transcribed and the language of the clients was coded according to variables purported to measure degree of choice or options. Therapy outcome was assessed by the Minnesota Multiphasic Personality Inventory (MMPI), Goal Attainment Scaling, client ratings, and/or therapist ratings. On the basis of these outcome measures, a global rating of degree of overall improvement was made on each client. Data analyses revealed no significant changes over time in any of the variables in any of the clients. However, ranking of clients according to overall degree of choice displayed in their language during the course of therapy revealed that significant improvement occurred only in cases where clients displayed the least degree of choice or flexibility in their language. The findings suggest further assessment of the content of instances of the variables and the context within which these instances occur. (Author/JAC)
Relationship Between Degree of Choice in Client's Language and Therapy Outcome

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Despite the general consensus about the central role of verbal communication in the therapy process, there still is not an adequate understanding of what it is about such communication that is therapeutic. As might be expected, this less than adequate understanding is reflected in the type of research done in this area which typically involves frequency counts of the occurrence of certain words, tenses, or grammatical forms, or the classification of language according to categories that appear to have relevance to the psychotherapy process. In general, neither of these approaches has really been able to capture adequately the richness of verbal behavior in psychotherapy.

One feature that is strikingly obvious in this area of study is the absence of references to theoretical or empirical work in psycholinguistics. Although it is not uncommon for different areas of psychology to be divorced from each other, it is certainly possible that, in this particular case, knowledge about the nature of language and how people use it might aid in the search for meaningful aspects to measure in the therapy process.

A first attempt at an integration of linguistic theory with a clinically meaningful conceptual scheme is the recent work of Bandler and Grinder (1975). In an effort to explicate the features of language that are important to focus on in the therapy process, Bandler and Grinder extracted certain aspects from the model of transformational grammar (Chomsky, 1965) and illustrated how the language behavior of the client may be understood and studied on the basis of these aspects. The superordinate concept in their work is that of 'choice' or 'options' and they make a case for the
significance of this concept in the model of language and in the change process. Their view of the relationship between degree of choice, language, and change can be summarized in the following way: many clients enter therapy with a delimited model of the world - one lacking in choice or options; successful therapy, whatever its form, involves a change in the client's model of the world - in some way that allows the client more choice or flexibility in his or her behavior; since language is the means by which the client's model of the world is represented, a change in this model should be evidenced by a change in the client's language, specifically a change toward increased choice or flexibility.

Bandler and Grinder (1975) focus on three linguistic processes that they maintain can be used to measure the degree of choice or options in an individual's model of the world. These processes are: (1) deletion, (2) nominalization, and (3) generalization. Deletion occurs when a portion of the original experience is removed from the individual's representation of the experience. For example, the client's original experience may be "I am scared of my father", but he or she may represent this experience by the deletion transformation "I am scared". When the mechanism of nominalization is invoked, an ongoing process is turned into an event. For example, an individual may say "I regret my decision to return home" rather than "I regret that I am deciding to return home". Through the use of generalization, certain elements of a person's model become detached from their original experience and come to represent the entire category of which the experience is an example. For instance, the
client’s original experience may be "Jack pushes me around" but he or she may generalize this experience to "People push me around", where the noun people has no referential index. In each of these three cases, the outcome is assumed to be an experience of limited choice or options.

Although Bandler and Grinder (1975) make a good case for the relatedness of these linguistic processes to the clinically meaningful experience of choice or options, they provide no empirical data regarding their usefulness. In addition, despite the central role of verbal communication in psychotherapy and the importance attached to the presence of a sense of choice in most schools of psychotherapy, the literature contains only a few studies that bear on the question of how language can be used to measure degree of choice. One variable that has shown some promise as an empirical tool is the Type/Token Ratio. This variable is a measure of the different words (types) to the total number of words (tokens) in a passage of speech. It has been used to assess the flexibility of clients’ language and has been found to increase over time only in cases that show significant improvement in therapy (Rosenthal, cited in Mowrer, 1953). In addition, there is some evidence that stereotypy of choices is present in the language of individuals under stress, as measured by a lower TTR, a greater number of allness terms, such as never, forever, and always, and a larger noun-verb/adjective-adverb ratio, which is the ratio of simple assertions to more discriminative qualification of language (Osgood, 1960).

The situation that exists, then, is that a fundamental aspect of effective psychological functioning has been isolated, that is, the
ence of a sense of choice or options in one's life and a way of measuring this aspect through language has been proposed. It was the purpose of the present study to determine how the variables derived from the model of transformational grammar and from the literature function over the course of therapy and what the relationship is between these variables and therapy outcome. Based upon the notion that positive therapeutic change is directly related to the degree of choice or options in the client's model of the world, it was predicted that positive therapy outcome would be related to a change in the client's language, such that over time there would be an increase in the number of types, a decrease in the noun-verb/adjetive-adverb ratio, and a decrease in the percentage of deletions, nominalizations, generalizations, and allness terms.

Method

Subjects

Subjects were six client-therapist dyads who engaged in approximately once a week psychotherapy for an average of 15 sessions over an average period of four months. Three dyads were from the Brigham Young University Counseling Center study (Lambert, Henrie, Mitchell, Easler, & Stein, 1977) and the other three were from private practice in the Department of Psychology at the University of Saskatchewan. All of the clients were female outpatients, were characterized as neurotics, affective disorders, or personality disorders, and ranged in age from early-twenties to early-forties. Four of them were university students, one was a professional social worker, and one was a housewife. All of the five therapists (one therapist saw two clients) had Ph.D.'s in clinical or counseling
psychology and several years of post-doctoral clinical experience. Four of them were male and one was female. Dyads were selected for the study if they engaged in psychotherapy for a minimum of 10 sessions, if a minimum of 10 audiotapes of sessions were available, if the therapist had a Ph.D., and if the mode of therapy was verbal exploration of life problems. No restriction was imposed regarding theoretical orientation of the therapist.

Measures/Assessment Procedures

Therapy outcome was assessed by several frequently used measures, including the MMPI, the Tennessee Self-Concept Scale, the Therapist Target Symptom Rating Scale, Goal Attainment Scaling, the Therapist Therapy Session Report, and/or subject evaluation by the therapist.

Procedure

A total of 67 15-minute segments were transcribed from the six cases and the language of the clients was coded by the experimenter for the six variables. A judgment of the overall improvement of each client at termination of therapy was made by the experimenter prior to any data analysis. These judgments were based on global judgments made by the researchers of the BYU project and by the U of S private practitioners and ranged from slight overall improvement to significant overall improvement.

Results and Discussion

Since the present study was based on the N-of-one-at-a-time research paradigm, the results regarding the relationship between therapy outcome and change in client language were determined separately for each client on each of the six variables. Regression
analyses on the within-subject data indicated that there were no significant changes over time in any of the variables in any of the clients. Since it was judged that two clients showed slight improvement, that one client showed slight to moderate improvement, and that three clients showed moderate to significant improvement at the termination of therapy, it is clear that no relationship between therapy outcome and change in client language was present.

In determining the relationship between degree of choice in clients' language and therapy outcome, clients were ranked according to the overall degree of choice or options that was evident in their language during the course of therapy as measured by the sum of their rank mean scores over time on each of the six variables. The results indicated that those clients who were judged as having made moderate to significant improvement evidenced relatively less choice in their language than did the clients who were judged as having made slight to moderate improvement. A point-biserial correlation revealed a significant relationship between less choice or options in clients' language and better therapy outcome ($r_{pb}(4) = +.768, p < .05$).

While these findings do not support the notion that positive therapy outcome is related to an increase over time in the degree of choice or options in clients' language, an informal examination of some of the transcripts suggested that there may have been important changes in these variables that were not apparent in the statistical analyses. First, there may have been changes that occurred at critical junctures in therapy; and second, there may have been changes in the content of instances of the variables or in the context within which a particular instance occurred. The former changes would not
have been detected because the regression analyses were performed on frequencies, and the latter would not have been detected because there was no provision in the coding system for changes in content or for the consideration of context since all of the variables are form related or content-independent.

In particular, examining the transcripts suggested that a higher number of types or greater vocabulary flexibility and a lower noun-verb/adjective-adverb ratio or greater discriminative qualification of language might be occurring when the client is relating factual details, events, or conversations than when he or she is dealing with more affect-laden material. Considering the context or the nature of the material that is presented by the client may, then, help to explain how these variables function over the course of psychotherapy. In the case of deletions and generalizations, it is likely that changes in the variables occurred at critical junctures in therapy. With deletions, it is quite possible that once the client has been able to fill in the missing piece it is not necessary to do so again. Given that the client has verbalized the previously deleted material, it is, then, no longer missing from his or her model and has been explicitly shared with the therapist. Since, as humans, we have the capacity to store dialogue, it is likely that once certain material has been made explicit it then becomes implicit. Similarly, in the case of generalizations, when the therapist has been able to get the client to supply a referent for a word or phrase that has no referential index, it may, then, be understood by both members of the dyad that when the client uses that particular word or phrase in the future it is within the context that has been previously specified.
If such changes are occurring, there would obviously be no change over time in the overall number of deletions and generalizations. In the case of allness terms, it was apparent that there were changes in the context within which instances of the variable occurred, with the contexts varying from everyday conversation to expressions of positive and negative affect. Similarly, instances of nominalizations varied in terms of positive and negative connotations. It is quite likely, then, that context and content may significantly qualify the interpretation of these variables so that changes in these aspects may need to be considered rather than changes in overall frequencies.

The significance of content and context may also be invoked as an explanation for the findings on the relationship between degree of choice in clients' language and therapy outcome. In this respect, if the client is presenting his or her impoverished model, it is not unreasonable to expect relatively less choice or options in his or her language than if more factual, "story-telling", or everyday conversational material is being presented. It could be the case, then, that better therapy outcome is related to relatively less choice or options in clients' language because clients who display less choice in their language are actually dealing more actively and directly with their impoverished models than are their counterparts who display greater choice in their language.

Although the consideration of context and content is antithetical to the content-independent models from which the present variables were derived, it is consistent with the current trends in psycholinguistics which give semantics a central role in models of language. It also supports the notion that when we are concerned with
performance (as in the measure of speech production, such as occurs in psychotherapy) we may need to adapt variables derived from models of grammar into a model of performance. In this regard, the essential next step will be to investigate the relationships between kind of material presented by the client (such as affect-laden vs. factual/conversational), changes in the content of the variables or the context in which they occur, and therapy outcome.
References


