This paper describes a therapy analogue experiment in which an interviewer's interpretation of a client's presenting problem was systematically varied along dimensions suggested by causal attribution theory. Subjects were 64 undergraduate students with the same presenting problem of unassertiveness. They were given two different interpretations of their difficulty. One group was given a behavioristic explanation asserting that their problems were caused by an unstable, externally induced conditioning process. The other group was given a "depth" explanation which suggested that their problems were caused by a subtle internal personality trait with long and complex origins. Results indicated no differences in expectancy for change and in behavior change between the two groups. Immediately following the interview, those receiving the conditioning interpretation reported more anxiety than those receiving the trait interpretation, but a week later the differences had attenuated. These results are discussed in terms of the "Rumpelstiltskin Effect" and the equipotentiality of different insights. (Author)
Insight and Attribution

Insight and Attribution in Psychotherapy
Ronald P. Matross & F. James Moynihan
University of Minnesota

Abstract

This paper describes a therapy analogue experiment in which an interviewer's interpretation of a client's presenting problem was systematically varied along dimensions suggested by causal attribution theory. Sixty-four undergraduate students with the same presenting problem of unassertiveness were given two different interpretations of their difficulty. One group was given a behavioristic explanation asserting that their problems were caused by an unstable, externally induced conditioning process. The other group was given a "depth" explanation which suggested that their problems were caused by a subtle, internal personality trait with long and complex origins. Results indicated no differences in expectancy for change and in behavior change between the two groups. Immediately following the interview, those receiving the conditioning interpretation reported more anxiousness than those receiving the trait interpretation, but a week later the differences had attenuated. These results are discussed in terms of the "Rumpelstiltskin Effect" and the equipotentiality of different insights.

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Insight and Attribution in Psychotherapy
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An enduring conceptual stance towards psychotherapy is the "essential ingredients" approach. This view holds that there are certain factors common to all types of psychotherapy which account for their effectiveness. The "essential ingredients" approach has been buttressed by an increasing number of outcome studies revealing few marked differences in the effectiveness of experienced therapists of diverse theoretical orientations (Sloane et al., 1975; Di Loreto, 1971; Luborsky et al., 1971).

One of the factors which frequently appears in lists of features common to all therapies is therapist interpretation. Although behavior therapists initially asserted that interpretation was not one of their therapeutic techniques, recent evidence suggests that this is not so. In the Temple study of therapeutic outcomes (Sloane et al., 1975) experienced behavior therapists and psychoanalytically oriented psychotherapists were compared on a number of different dimensions, including their verbal behavior in randomly selected interview segments. The behavior therapists were found to have made as many statements interpreting and clarifying the causes of clients' problems as did the psychotherapists. Surprisingly, however, when the number of therapists' interpretations were related to patient improvement on target symptoms, a negative relationship was found for the psychotherapists but not
for the behavior therapists. Psychotherapists who made more interpretations had significantly less favorable outcomes than those who made fewer interpretations. Among the behavior therapists, there were no significant differences in outcome between therapists making many and few interpretations, but there was some tendency for those who made more causal interpretations to have more effective outcomes than those who made fewer interpretations. The causal interpretations of behavior therapists were as frequent as those of the psychotherapists and may have been more effective. These findings suggest that the nature of therapeutic interpretation remains an important issue and that there is a particular need for studies of the comparative utility of the interpretations made by diverse schools of therapy.

One of the tools which has recently become available for the study of interpretation is attributional analysis (cf. Jones et al., 1971). Broadly defined, attributional analysis is the study of the determinants and consequences of individuals' attributions of the causes of their behavior. The present study applies the concept and methods of attributional analysis to interpretation in a simulated therapy setting. The study examines the effects of two different interpretations of the causes of a presenting problem on the client's emotional state, his expectancy for change, his acceptance of the interpretation, and changes in his overt behavior.

The problem interpretations were designed to encompass opposite points on two dimensions of causal attribution - internal/external and stable/unstable. The internal/external dimension refers to
whether the cause of an action is seen as residing in the person or in his environment. The stable/unstable dimension refers to whether the cause of an action is seen as something which is consistent across situations or varies from situation to situation. Social psychological studies of the effects of the attribution of emotional states by Schacter and Singer (1971) and Storms and Nisbett (1971) indicate that persons tend to feel more anxious when they attribute symptomatic behavior to internal causes than when they attribute symptoms to external causes. Similarly, studies of stable/unstable dimension indicate a relationship between causal attributions and cognitive and behavioral variables. Levy and House (1971) found that individuals had a greater expectancy for change in attitudes which they saw as having learned origins rather than unlearned origins. Meichenbaum and Smart (1971) found that students who were led to attribute their academic difficulties to an unstable cause of "late blooming" improved their grades more than individuals who were not given this causal attribution.

The present study hypothesizes that an interviewer's attribution of a client's problem to an unstable, external conditioning process will result in (1) greater acceptance of the attribution, (2) less emotional distress, (3) greater expectancy for change, and (4) greater behavior change than would an attribution of the problem to a stable, internal personality trait. Additionally, the study compared the effects of the two interpretations with
those of a no treatment control condition and a manipulation of the presence or absence of a specific action plan for behavior change. The action plan manipulation was included to deal with the possibility that the interviewer's advocating a specific behavior change plan might raise the client's morale and induce behavior change to a greater extent that either of the causal interpretations.
Method

Subjects

Subjects were 64 students enrolled in undergraduate psychology courses at the University of Minnesota. Their median age was 20.5 years, and half were males and half were females. Subjects were recruited by advertising for persons who regarded themselves as being unassertive. Students were promised that they would receive an analysis of the causes of their unassertiveness but that they would not be given specific solutions to their problems. In return for their participation, they were offered either points toward their grades in psychology or money.

Design

The study utilized a 2x2x2x2 crossed design. Subjects were assigned to one of eight experimental conditions defined by (a) a trait or a habit interpretation of the causes of their nonassertiveness, (b) the presence or absence of an action plan, (c) two interviewers, and (d) subject sex.

Interviewers

Interviewers were two male advanced graduate students in counseling psychology. Both had completed a practicum and internship in counseling and had only their theses remaining for completion of their PhD degrees. Interviewer A was 28 years old and had six years of counseling experience. Interviewer B was 26 years old and had three years of counseling experience.

Procedure

Session one. Subject's reported session consisted of pretesting. Subjects reported to a receptionist who administered a statement of informed consent outlining the possible risks of the study. The receptionist then administered a 120 item inventory titled "The Minnesota Assertiveness Inventory." This questionnaire consisted of two scales from the Guilford-Zimmerman Temperament Inventory, Ullman's Facilitator-Inhibitor Scale, and filler items chosen for face validity from the MMPI. The purpose of this instrument was simply to lend credibility to the test interpretation interview which would
occur one week later. It was presented as the test that would help
the interviewer determine the causes of the subject's nonassertiveness.
The next instrument administered was the Causal Analysis Form which
assessed students' endorsement of various causal explanations for
their nonassertive behavior. In the first part of the questionnaire,
students rated on 7-point Likert scales how well each of six possible
causes explained their nonassertiveness. Included among the six
factors were the two experimental explanations of a conditioned habit
and the trait of low risk taking. On each scale the seven possible
responses ranged from "precisely" to "not at all." Part two of the
questionnaire used a paired comparison format to assess dimensions
of the client's causal attribution. The subject chose the one state-
ment in each pair that most accurately described the nature of the
causes of his unassertiveness. The six dichotomies presented encom-
passed the six main elements and included learned vs. unlearned,
stable vs. unstable, narrow vs. wide. The third instrument adminis-
tered to subjects in session one was the Problem Attitude Questionnaire
designed to assess the subject's expectancy for change, his attitudes
toward assertiveness, and his emotional state. Expectancy for change
was measured by 5-point Likert scale items asking respondents how much
they thought they could change and control their nonassertive behavior,
how serious they thought their problem of nonassertiveness to be, to
what degree did they feel that the problem would go away by itself.
Philosophy about assertiveness was also assessed through 5-point
Likert items which asked how much he would like to change his non-
assertiveness, how useful did he feel assertion to be, and how did he
feel in asserting himself. The student's emotional state was assessed
by having him rate how descriptive each of 97 adjectives was of his
mood when he considered his problem of nonassertiveness. Adjectives
were chosen to cover a wide spectrum of positive and negative states.

After scheduling his interview for one week later, the subject
was given instructions to use the Assertive Behavior Log for the coming
week. The Assertive Behavior Log was a daily diary for students to
keep, recording the frequency of their assertive behavior and the
anxiety they felt in performing these behaviors. The items in the
structured log consisted of a comprehensive list of positive and negative assertive acts in a number of different areas. Subjects were instructed to maintain the log for the week prior to their interviews.

Session two. Subjects reported individually to the receptionist who collected their Assertive Behavior Logs from the previous week and gave them another copy to be kept during the one-week interval between session two and session three. The subject was then directed to the interviewer who was introduced as Dr. , a research psychologist. The interviewer indicated that the results of the Minnesota Assertiveness Inventory had been returned and showed the subject an elaborate computer printout, portraying a matrix of correlation coefficients which supported either a habit or a trait explanation of the individual's nonassertive behavior. The interviewer then sought to explain the nature of the attributed causal factor and sought to elicit data from the subject's personal experiences to support his conclusion. At the completion of 45 minutes, the interviewer terminated the interview except for those in the action plan conditions whom he directed to obtain a book for developing a plan to combat a particular kind of nonassertiveness evidenced by the subject. The subjects assigned to the no action plan condition received no such directive. Following the interview, the subject was asked to return to the testing room where he was administered the Problem Attitude Questionnaire and the Causal Analysis Form. Additionally, he was given a 33-item interview reaction questionnaire which asked for the subject's endorsement of true or false to items concerning the expertness, trustworthiness, and attractiveness of the interviewer. The subject was then told to report back for a third session one week later at which time he would return his second completed behavior log.

Session three. Subjects reported to the receptionist who administered a post test battery consisting of the Problem Attitude Questionnaire and the Causal Analysis Form and collected the Assertiveness Behavior Log. Finally, a two-item Awareness Form was administered, simply asking the individual whether he was aware of the purpose of
the experiment. After completion of these forms, a debrief inter-
viewer appeared and explained the nature of the experiment to the
subject and answered his questions about it. Following the debrief-
ing, subjects completed a final 7-item post-debriefing questionnaire
which elicited their feelings about the nature of the experiment
and ethics of it.

Causal Attribution Manipulation

Habit interpretation. The habit explanation was designed to
portray the student's problem of nonassertiveness as due to a cause
which is clearly variable from situation to situation and clearly
stemming from his environment. The interviewer began by referring
to the test results and explaining that there are basically two
causes of nonassertiveness. One type is due to a general personality
trait; the other is caused by "simple learned reaction to particular
external stimuli." The subject was told that his test results indi-
cated that his nonassertiveness was definitely of the conditioning
type and not the personality type. He was told that his nonassertive-
ness was simply a learned automatic reaction to certain specific
stimuli, in other words, a habit. The interviewer then took a piece
of paper and drew a diagram describing the conditioning of avoidance
reactions in assertive situations. The interviewer elaborated the
model with experiences thought to be common to college students at
large universities. Examples of conflict, e.g., open disagreement
with the course instructor, and nonconflict such as offering someone
positive feedback were given. In the next part of the influence
sequence, three personal experiences supporting the interviewer's
explanation were elicited from each subject. The interviewer asked
first whether conflict or nonconflict situations were more trouble-
some and then asked for an example of the situation in which he had
had the most difficulty in asserting himself. In analyzing the
examples, the interviewer pointed out how automatic the reactions
seemed and how they were characteristic of an avoidance learning
process. The three examples were elicited to be specific either
to conflict or nonconflict situations, but not to both. The inter-
viewer restricted the examples so that the problem would appear
variable according to the situation. The interviewer ended the explanation by summarizing the points that the person's nonassertiveness was caused by an "accidental" external conditioning process specific to certain situations and definitely not due to a pervasive aspect of his personality.

**Trait interpretation.** The purpose of the trait explanation was to present the individual's behavior as being caused by a fixed, pervasive aspect of his own person. The interviewer began the explanation by saying that for some individuals nonassertiveness is a "heterogeneous collection of inappropriate learned responses, but for others nonassertive behavior falls into a more definite pattern."

The subject was referred to the computer printout and told that his results suggest that the personality characteristic of low risk taking was definitely the cause of his nonassertive behavior. The interviewer went on to explain the nature of high risk takers and low risk takers. The high risk taker was described as typically being either a big winner or a big loser, while a low risk taker was characterized as focusing on the possibility of harm rather than on his potential for gain. The subject was asked for three examples of his inability to take risks in interpersonal situations. Each of the examples was analyzed in terms of the risk-taking alternatives actions which the person could have taken but did not in the given situation. The interviewer attempted to draw from each example the concept that the person had experienced some anxiety and thereafter consciously chose to avoid asserting. The emphasis on choice was to emphasize the internal causation of the individual's nonassertiveness. The interviewer attempted to draw examples from disparate areas of the client's life in order to establish also the concept that the person's low risk taking was a stable part of his personality affecting many areas of his life. At the end of the interview, the interviewer reiterated that the individual's nonassertiveness was due to a stable, pervasive, internal personality trait of complex origins.
**Action Plan Manipulation**

Subjects in the action plan conditions were told this by the interviewer at the end of either the trait or habit explanations that while treatment or counseling for their problem was beyond the scope of the study, there was something that the counselor might do to help. The subject was referred to a colleague of the interviewer who had in his possession a copy of a book addressing itself to the particular nonassertiveness the subject had described. The interviewer wrote the name and telephone number of a staff member with the book and gave it to the subject. For the habit condition, the book was *Your Perfect Right* and was described as being particularly suited toward the development of a plan for overcoming the conditioning of nonassertiveness. For the trait condition, the book was *Risk and Behavior* and was described as particularly suited for persons who wished to overcome their general trait of low risk taking.

**Data Analysis**

Scores were analyzed through separate analyses of variance at each administration, following procedures suggested by Cronbach and Furby (1970).
Results

Treatment Effects

The first question we asked of the data was the degree to which the two causal interpretations were accepted by the subjects who received them (see Table 1). Immediately following the interview, the conditioning interpretation had been accepted significantly ($p < .01$) more by the persons who had received it in the interview than by the persons who had received the trait interpretation. Likewise, those who received the trait explanation endorsed it as the cause of their behavior significantly ($p < .01$) more than those who had received the conditioning interpretation. That both groups understood the implications of the interpretations was indicated by the attributional dimensions score. Immediately following the interview and one week after, those receiving the trait interpretation saw the causes of their unassertive behavior as significantly more stable, complex, pervasive and uncommon than did those who received the conditioning explanation. There was a tendency for the trait explanation to be less accepted over time than the conditioning explanation. At the final testing, a week after the interview, those receiving the trait interpretation no longer endorsed it significantly more than those who received the conditioning explanation. Examination of the means indicates that this change was accounted for by a decrease in the endorsement of the trait explanation by the trait interpretation group. In contrast, the
habit explanation continued to be endorsed by the conditioning interpretation group at the final testing. However, this latter finding is somewhat ambiguous because of a tendency for the habit interpretation group to endorse the habit explanation significantly more in the pre-interview testing than did the trait explanation group. Thus, there was partial support for the hypothesis that the habit interpretation would be more accepted in testing than the trait interpretation. Further data on the acceptance of the two explanations derive from the interview reaction questionnaire administered immediately after the interview. Compared with those who had received the conditioning interpretation, persons who received the trait interpretation were significantly more likely to say that the interviewer seemed opinionated and was trying to change their minds, and less likely to say that the interviewer was someone in whom they could confide.

Descriptions of the client's mood were quite contrary to the hypothesis. We had expected that those who received the conditioning interpretation would report less anxiety and concern than those who received the trait interpretation. Instead, immediately after the interview, the conditioning interpretation subjects described themselves as significantly \( p < .01 \) less capable and significantly more anxious, embarrassed, fearful, helpless and self-conscious than did the trait interpretation subjects (see Table 2). A week following the interview, the mood differences were attenuated, with only the adjectives "rigid" and "self-conscious" differentiating the two interpretations.
Data from the subject's ratings of their expectancies for change and control were also contrary to our hypotheses. No significant differences between the interpretations were found on these variables, either immediately after or one week after the interview. The conditioning interpretation appeared not to have produced either the more positive mood or greater expectancy for change which we had hypothesized.

The behavioral effects of the treatments were inconsistent with our hypothesis. The assertive behavior logs for the week before and after the interview revealed no significant differences between the trait and conditioning interpretation groups (see Table 3). The pattern of the means was that persons receiving the trait explanation decreased the number of assertive actions from before the interview, while those receiving the conditioning explanation increased their assertions following the interview, but these differences did not reach significance. Large standard deviations in both conditions suggested that there was considerable individual variation in performance.
**Action Plan Effects**

The effects of the action plan manipulation were minimal. The only difference between the action plan conditions to reach significance at the .01 level was that the persons receiving the action plan manipulation felt less confused immediately after the interview than did the persons in the no action plan condition. No significant differences were noted on the expectancy, assertive behavior and causal explanation variables.

**Sex Effects**

No significant differences between the sexes were noted on the assertive behavior measures or the causal explanation measures. At one week before the interview and one week after, women felt that it was more important to change their nonassertiveness significantly ($p < .01$) more than did the men. At final testing, the women also endorsed the idea that assertiveness is justified to a significantly greater degree than did the men. In terms of adjectives describing their mood states, significant differences in the logical direction were found on the adjectives "masculine" and "feminine." The men were also more likely to describe themselves as unemotional at post-testing. In sum, sex differences were fairly minimal and did not appreciably affect the impact of the treatments.

**Interviewer Effects**

No significant interviewer differences were found on the assertive behavior, causal explanation, or expectancy measures.
However, the pattern of responses to the mood adjectives immediately after the interview and one week later suggests that the interviewers did have some differential effects. Immediately following the interview, students seeing interviewer B felt significantly more guilty and less reasonable than did students seeing interviewer A, and at the final testing, interviewer B's subjects felt significantly less conventional. Several mood adjectives revealed an interaction between the interviewer and the causal explanation treatment. Immediately following the interview, students receiving interviewer A's conditioning interpretation and interviewer B's trait interpretation felt significantly more honest, hopeful, mature and responsible than did students in A's trait interviews and B's conditioning interviews. In the final testing a week after the interview, a similar pattern was evident. Those receiving A's habit interpretation and B's trait interpretation felt significantly more calm, cheerful, confident, healthy, honest, relaxed and responsible than did those receiving A's trait interpretation and B's conditioning interpretation. Thus, the apparent and surprising finding of a more positive emotional feeling engendered by the trait interpretation has to be qualified by the interviewer interactions. In some unknown way, interviewer A was more reassuring with the conditioning interpretation and interviewer B was more reassuring with the risk-taking, trait interpretation of unassertiveness.
Discussion

Despite our hypotheses to the contrary, the data of this study did nothing to dispell the idea of what Nicholas Hobbs (1962) has termed the equi-potentiality of diverse interpretations. Hobbs argued that one interpretation is essentially as good as another because interpretation and insight are essentially epiphenomenal to the processes of change in psychotherapy. Our data support this position in that no differences were found between the conditioning and trait interpretations on expectancy for change and actual behavior change. However, there were differences in the relative acceptance of the two interpretations and their immediate effects on the emotions of the students. The immediate effect of attributing unassertiveness to an internal, stable personality trait was that of providing some relief when compared to the attribution to an external, unstable conditioning process. Following the interview, subjects in the trait attribution condition felt significantly less anxious, embarrassed, fearful, helpless, rigid, self-conscious and more capable than subjects receiving the conditioning explanation. However, the emotional effects of the trait explanation appeared to be short-lived. One week following the interview, few differences were found between the moods of those who had received the trait explanation and those who had received the conditioning explanation. It seems likely that the low risk-taking trait interpretation used in this experiment produced what Torrey (1972) had termed the Rumplestiltskin effect. Torrey suggests that a plausible and
convincing label attached to a phenomenon, which was previously not understood or controlled, has the effect of reducing the threat of that phenomenon, just as naming the evil dwarf in the Rumplestiltskin fable stripped him of his power. The Rumplestiltskin Effect, however, seems not to last if the interpretation which produced it does not in some manner enhance the individual's control over his problem. The behavioral data from this experiment suggest that, while the trait explanation was initially reassuring, it did not enhance the subject's mastery of his behavior and tended to be rejected over time. Moreover, the interviewers differed in their relative effectiveness with the two explanations. One interviewer was more reassuring with his trait explanation than the other interviewer, suggesting that the personality of the interviewer may be important. It is possible that the strength of the therapist's belief in his interpretations and the persuasiveness with which he portrays this belief may be more important than the specific contents of his causal interpretations. Interviewers may have produced some interactions with the treatments because of their differential convictions about the rightness of the two interpretations.

Clearly, more research is needed on both the content of therapists' interpretations and the persuasiveness of the therapist in conveying that content. The operation of causal interpretations appears to be quite complex and subtle, and we surely did not directly manipulate dimensions in this study. For
instance, attributing actions to an internal trait does not mean that one is volitionally responsible for these actions. A trait or syndrome may in turn be caused by external circumstances such as training, background and the social forces. Similarly, a conditioning explanation might be quite demoralizing if it implies that the operative environmental contingencies are invariant and out of the individual's control. In some cases, attributing an individual's actions to his volition and implying that he could choose to be different, may inspire him to turn his life around, to change his behavior in traumatic ways. In other cases, the most useful explanation might be that which implies that an individual has not been responsible for his behavior and is thus relieved of a burden of guilt. We need much further research to see whether dimensions of therapist interpretation can inhibit and enhance the clients' control over their lives. We remain encouraged that comparative studies of causal interpretations in psychotherapy, using concepts and methods of attributional analysis, have potential for expanding our knowledge of the effects of interpretations beyond what we have learned through other approaches.
Table 2
Means, Standard Deviations and Significance of Mood Adjectives Yielding Significant Explanation Effects

<table>
<thead>
<tr>
<th>Items</th>
<th>Explanation</th>
<th>Habit</th>
<th>Trait</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>$\bar{X}$</td>
<td>sd</td>
</tr>
<tr>
<td>Before Interview</td>
<td></td>
<td></td>
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<tr>
<td>fearful</td>
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<td>2.75</td>
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</tr>
<tr>
<td>feminine</td>
<td></td>
<td>2.09</td>
<td>1.28</td>
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<tr>
<td>impatient</td>
<td></td>
<td>2.81</td>
<td>1.18</td>
</tr>
<tr>
<td>Immediately after</td>
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<td></td>
</tr>
<tr>
<td>Interview</td>
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<tr>
<td>anxious</td>
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<td>3.50</td>
<td>1.14</td>
</tr>
<tr>
<td>capable</td>
<td></td>
<td>2.13</td>
<td>1.10</td>
</tr>
<tr>
<td>embarrassed</td>
<td></td>
<td>2.84</td>
<td>1.19</td>
</tr>
<tr>
<td>fearful</td>
<td></td>
<td>3.00</td>
<td>1.22</td>
</tr>
<tr>
<td>helpless</td>
<td></td>
<td>2.09</td>
<td>1.17</td>
</tr>
<tr>
<td>rigid</td>
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<td>One Week after Interview</td>
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<td>rigid</td>
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<td>2.22</td>
<td>1.07</td>
</tr>
<tr>
<td>self-conscious</td>
<td></td>
<td>3.28</td>
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<td>self-conscious</td>
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Table 4
Means, Standard Deviations and Significance of Assertive Behavior Scores by Explanation

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<tr>
<th>Explanation</th>
<th>Week before Interview</th>
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<th></th>
<th>Week after Interview</th>
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<td>sd</td>
<td>$F$</td>
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<td>$\bar{X}$</td>
<td>sd</td>
<td>$F$</td>
<td>$p$</td>
</tr>
<tr>
<td>Habit</td>
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<td>36.54</td>
<td>.12</td>
<td>.73</td>
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<td>43.16</td>
<td>.90</td>
<td>.35</td>
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<td>Trait</td>
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<td>36.06</td>
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<td></td>
<td>69.75</td>
<td>40.47</td>
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References
Cronbach, L. J., & Furby, L. How we should measure "change" or should we? Psychological Bulletin, 1970, 74, 68-80.