The Effects of Symbolic Modelling and Coaching on Social Anxiety

Richard L. Burtt Jr.

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THE EFFECTS OF
SYMBOLIC MODELLING AND COACHING
ON SOCIAL ANXIETY

by

Richard L. Burtt, Jr.

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Degree of Master of Arts

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Richard Leigh Burtt, Jr.
PLEASE NOTE:

Some pages may have indistinct print.
Filmed as received.

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The following study has been designed to measure the effect of symbolic modelling and coaching on social anxiety. Symbolic modelling is defined as the demonstration of specific behaviors by models (on video tape) in such a way that those who observe the modeled behaviors will be able to reproduce them. Social anxiety is defined as the experience of distress, discomfort, fear, anxiety, etc. in social situations; and as a fear of receiving negative evaluation from others.

It is believed that symbolic modelling can be an effective clinical tool when used with persons who display high social anxiety. The subjects who are exposed to the modelling treatment will show a significantly greater decrease in the level of social anxiety than those subjects who are not exposed to the modelling treatment.

Empirical and theoretical interpretations of social learning processes have focused on a single method of response acquisition, which is exemplified by the operant conditioning paradigm. However, the operant conditioning paradigm does not apply in many social learning situations, since trial and error and successive approximation methods are sometimes impractical in natural settings. Informal observations suggest that vicarious learning experiences and response guidance procedures involving both symbolic and live models are
utilized extensively in social learning.

With human subjects, response patterns that differ considerably in content and complexity have been transmitted through modelling procedures under laboratory conditions. Classes of behavior that have been developed are stylistic response patterns (Bandura, Grusec & Menlove, 1966), distinctive modes of aggressive behavior (Bandura, Ross & Ross, 1963a), dramatic play patterns (Marshall & Hahn, 1967), prosocial frustration reactions (Chittenden, 1942), and teaching styles (Feshbach, 1967). As the complexity of behavior increases, studies have shown that through exposure to the behavior of models persons can acquire standards for self-reinforcement and self-evaluative responses (Bandura & Kupers, 1964; Bandura & Shalen, 1966; Bandura, Grusec & Menlove, 1967b), moral judgemental orientations (Bandura & McDonald, 1963), self imposed delay of gratification patterns (Bandura & Rischel, 1965), linguistic structures (Lovaas, 1966a), and distinctive phonetic variations in verbal behavior (Hanlon, 1964).

Most social learning is fostered through exposure to behavioral modelling cues, in actual or pictorial forms (Bandura, 1969). However, once adequate language development is achieved, people rely extensively upon verbal modelling cues for guiding their own behavior. The use of verbal forms of modelling makes it possible
to transmit an almost infinite variety of social values and response patterns that would be exceedingly difficult and time consuming to portray behaviorally. When the relevant responses are specified clearly and in sufficient detail, verbally symbolized models may have effects similar to those induced by analogous behavioral displays (Bandura & Mischel, 1965).

In many experimental investigations of modelling processes a single model exhibits a limited set of responses and observers are subsequently tested for precise response reproduction under similar stimulus conditions. These restricted experimental paradigms cannot yield outcomes that extend beyond the particular responses demonstrated. On the other hand, studies employing more complex procedures, such as those using several models who demonstrate more complex behaviors, indicate that innovative behavior and principles for generating novel combinations of responses can be transmitted to observers through exposure to modelling cues (Bandura, Ross & Ross, 1963b).

Most forms of imitation involve responses in which the subjects combine behavioral elements into new compound responses solely by observing the performance of social models, without any opportunity to perform the models' behavior at the time of exposure and without any reinforcers administered either to the models or
to the observers (Bandura, 1965a).

Under naturalistic conditions the behavior exhibited by models is typically reproduced in the absence of direct reinforcement. Therefore, theories that assume some form of reinforcement is necessary for learning tend to invoke an intrinsic source of reinforcement. It is assumed that if accurate reproduction of modelling stimuli is consistently rewarded, behavioral similarity per se acquires secondary reinforcing properties. Thereafter, a person will tend to display a high incidence of imitative actions, which because of their acquired reward value will be strengthened and sustained even though these actions may never be externally reinforced.

Important treatment implications follow from the reinforcement, non-reinforcement interpretations of generalized modelling, since in both cases the goal is to establish modelling tendencies that will generalize to more natural settings. On the basis of a secondary reinforcement hypothesis, the treatment program should include considerable imitation training under a rigid schedule of reinforcement. The more reinforcement a person experiences for behavioral matching, the more reinforcing it will become for him to imitate in any situation. On the basis of a discrimination hypothesis, the program would involve only as much
reinforcement as is necessary to establish matching behavior which would then be rewarded by different people in a variety of situations. The program used in this study is based on a discrimination hypothesis, however, the observers were not given the opportunity to overtly practice the modelled responses.

The Skinnerian analysis of modelling phenomena relies upon the $S^d-R-S^r$ paradigm (Skinner, 1953). This approach will not apply in a situation where the observer does not overtly perform the model's responses during the acquisition phase. Reinforcers are not administered either to the model or to the observer, and the first appearance of the acquired response may be delayed for days, weeks or months. $R-S^r$ are absent during the acquisition and $S^d$ is absent from the situation in which the observationally learned response is performed. The $S^d-R-S^r$ paradigm accounts for the control of previously learned matching responses, but fails to explain how a new matching response is acquired in the first place. This occurs through covert symbolic processes during the period of exposure to modelling stimuli, prior to overt responding or to the appearance of any reinforcing event (Bandura, 1969). The anticipation of positive reinforcement for matching responses by the observer may, therefore, indirectly influence the course of observational learning by enhancing and focusing observ-
ing responses.

When a person observes a model's behavior but performs no overt responses, he can acquire the modelled responses while they are occurring only at the cognitive level. Learning occurs purely on a covert basis. Bandura has labeled this phenomenon "no-trial learning". Bandura states that observational learning involves two representational systems: an imaginal and a verbal. After modelling stimuli have been coded into images or words for memory, they function as mediators for subsequent response reproduction (Bandura, 1969).

Simply exposing persons to distinctive sequences of modelled stimuli does not guarantee that they will necessarily select from the total stimulus complex the most relevant events, or that they will even perceive accurately the cues to which their attention has been directed. An observer will fail to acquire matching behavior at the sensory level if he does not attend to, recognize, or differentiate the distinctive features of the model's responses. To produce learning, stimulus contiguity must be accompanied by discriminative observation (Bandura, 1969). Thus instructions and coaching are essential if a modelling procedure is to be effective.

Instructions and coaching are most likely to result in correct performance when they both activate a person to respond, and also describe the appropriate responses.
in the order in which they should be performed. In studies comparing the relative efficacy of instructions and verbal modelling (Masters & Branch, 1969), both types of influences produce their effects through verbal modelling, and they differ only in the explicitness with which the required responses are defined. As might be expected, greater performance gains are achieved when the desired behavior is clearly specified than when it must be inferred from a few examples.

From a social learning prospective, observational learning constitutes a complex multiprocess phenomenon, in which absence of appropriate matching responses following exposure to modelling stimuli may result from failures in sensory registration, inadequate transformation of modelled events to symbolic modes of representation, retention decrements, motor deficiencies, or unfavorable conditions of reinforcement.
Subjects. Fourteen S's, ten male and four female, were selected from a group of forty students in an undergraduate psychology class, on the basis of their scores on the Social Avoidance and Distress (SAD) scale (Watson & Friend, 1969). A score of 26 was possible. Those S's chosen had scores ranging from 7 to 23, with a mean score of 13.14. The higher the score, the greater the level of social anxiety. The S's were assigned by the randomized block method to one of two experimental groups, a placebo group, or a control group.

Apparatus. An Ampex VP5100 recorder and an Ampex CC 450-01 camera were used to record S's pre and post anxiety levels. An RCA J345B monitor was used to show treatment tapes to S's. The Social Avoidance and Distress (SAD) scale was used to screen volunteers and also as a pre and post measure of social anxiety. A copy of the scale appears in Appendix A. For correlations of the SAD scale with other anxiety scales see Watson & Friend (1969).

Procedure. After the S's had been screened, those picked to take part in the study were notified by phone of the time and place. All those who volunteered and were selected to take part in the study remained S's until
the study was completed. None of the S's were informed about the nature of the study beforehand.

**Experimental Group I-Treatment & Coaching**

Group I consisted of four S's, three males and one female. Upon arrival the S's were asked to have a seat in a waiting room and told that someone would be with them shortly. Each S was then asked to accompany the E to another room and asked to have a seat. Already seated in the room was a "stooge" who had been given instructions not to talk to the S unless the S began the conversation. Male "stooges" were used with female S's and female "stooges" were used with male S's. While the S's were seated in this room they were video taped through a one-way mirror for one minute and thirty seconds each. Only one S reported being aware that he was being video taped. This tape served as a behavioral pre-test of anxiety level.

After all four S's had been taped they were asked to watch a ten minute and forty second video tape consisting of five scenes in which models demonstrated both socially anxious and unanxious behavior in five different social situations. A detailed description of the five "treatment scenes" appears in Appendix B.

During the viewing of the tape the E sat in the room with the S's and gave the following instructions:

_I WOULD LIKE YOU TO WATCH A TAPE WHICH_
Throughout the viewing of the tape the E would stop it and point out to the S's the behaviors being modeled, the changes in behavior, and the reaction of the others in the tape to the behavior changes. The E would also ask the S's to "project themselves" into the scenes. When the tape had ended the E thanked the S's and dismissed them.

One week later the S's returned and were video taped in the same room as before but with a different "stooce". After the taping the S's were asked to fill out the SAD scale for the second time. This tape and SAD scale served as the post-test of anxiety level for Group I. Group I was now completed.

**Experimental Group II-Treatment without Coaching**

Group II consisted of five S's, three males and two females. When these S's arrived they went through the same procedure as Group I. However, when they viewed the treatment tape the E was not in the room with them. The E gave Group II the following instructions before showing the tape:
I WOULD LIKE YOU TO WATCH A TAPE WHICH CONSISTS OF FIVE SCENES. EACH SCENE WILL BE A DIFFERENT SOCIAL SITUATION IN WHICH A MODEL WILL DEMONSTRATE DIFFERENT BEHAVIORS. PLEASE PAY CLOSE ATTENTION TO THE BEHAVIORS BEING DEMONSTRATED AND TO ANY CHANGES IN BEHAVIOR. I WILL NOW BEGIN THE TAPE.

The E then left the room and the S's were left alone to view the tape without any interruption from the E. After the tape ended the S's were thanked and dismissed.

One week later the S's returned and were video taped in the same room as before but with a different "stooge". After the taping the S's were asked to fill out the SAD scale for the second time. When they had completed the scale they were thanked and dismissed. This tape and the SAD scale served as the post-test of anxiety level for Group II. Group II was now completed.

Group III—Placebo Group

Group III consisted of three S's, two males and one female. When these S's arrived they went through the same procedure as Groups I and II. However, this group did not see the treatment tape. After being video taped they were asked to watch a video tape without being told the nature of its contents. The S's were also asked not to talk during the viewing of the tape. This "placebo" tape lasted ten minutes and forty seconds, the same length as the treatment tape. The S's saw a male and a female seated in a room discussing something. The tape had no sound. At the end of the
tape the S's were thanked and dismissed.

One week later the S's returned and were again video taped. The "stooge" for this taping was not the same one used during the first taping. After the taping the S's were asked to fill out the SAD scale for the second time. When they finished they were thanked and dismissed. This tape and SAD scale served as the post-test of anxiety level for Group III. Group III was now completed.

Group IV-Control Group

Group IV consisted of two S's, both male. When the S's arrived they went through the same procedure as Groups I, II, and III. However, after each S had been taped he was thanked and dismissed. Group IV saw no tape.

One week later the S's returned and were again video taped. After the taping the S's were asked to fill out the SAD scale for the second time. When they finished they were thanked and dismissed. This tape and SAD scale served as the post-test of anxiety level for Group IV. Group IV was now completed.

During the pre-test taping all S's in each group were exposed to the same male or female "stooges". This procedure was also followed during the post-test taping.

The pre-test and post-test behavioral measures of anxiety level (video tapes of S's with "stooges") were
viewed by two judges and the anxiety level of each S was rated on a scale from 1 to 28 (1-very comfortable, 28-extremely anxious). A copy of the scale and the criteria used to rate anxiety appear in Appendix C.

The judges were both male graduate students enrolled in the School Psychology and Clinical Psychology Masters programs at WMU. Neither judge had any knowledge of this study prior to his judging assignment. The two judges viewed the tapes at the same time and were given the following instructions:

I WOULD LIKE YOU TO WATCH A VIDEO TAPE ON WHICH YOU WILL SEE DIFFERENT INDIVIDUALS SEATED IN A ROOM. USING THE SCALE AND CRITERIA I HAVE GIVEN TO YOU, RATE EACH INDIVIDUAL AS TO HIS LEVEL OF ANXIETY. ON THE SHEET OF PAPER YOU HAVE THERE ARE 20 SPACES, EACH NUMBERED. EACH NUMBER REPRESENTS EACH INDIVIDUAL YOU WILL SEE ON THE TAPE. PLACE NEXT TO EACH NUMBER IN THE SPACE PROVIDED THE RATING YOU HAVE ASSIGNED THAT INDIVIDUAL. PLEASE REMEMBER TO USE ONLY THE CRITERIA GIVEN TO YOU TO RATE ANXIETY LEVEL AND BE SURE TO RATE EACH INDIVIDUAL ON THE SCALE PROVIDED. YOU MUST GIVE EACH INDIVIDUAL A RATING. DO NOT DISCUSS THE RATINGS WITH EACH OTHER. I WILL STOP THE TAPE FOR A SHORT TIME BETWEEN EACH INDIVIDUAL TO GIVE YOU TIME TO MARK YOUR PAPERS. ARE THERE ANY QUESTIONS?

After the judges had viewed the tapes the ratings were collected and they were dismissed. These ratings appear in Appendix D.
RESULTS

The results were analyzed in terms of decreased anxiety level after treatment for each group as measured by the SAD scale and the judges ratings. The mean anxiety level for each group before and after treatment is presented in Figure 1. The SAD curve shows a decrease in anxiety level for Group I from 15.0 before treatment to 9.75 after treatment. The rating curve shows a decrease in anxiety level from 12.1 before treatment to 8.5 after treatment. Group II shows a decrease from 12.5 before treatment to 11.6 after treatment (SAD curve). The rating curve shows a decrease from 12.1 before treatment to 11.4 after treatment. Group III shows a decrease from 14.0 before treatment to 13.3 after treatment (SAD curve). The rating curve shows an increase from 15.33 before treatment to 15.49 after treatment. Group IV shows no change on the SAD curve. On the rating curve Group IV shows an increase from 11.75 before treatment to 12.25 after treatment. Raw scores appear in Table 1, Appendix D.

A dependent samples t-test of significance was used to analyze the pre and post scores for each group. This was done by comparing the mean group score pre with the mean group score post for both SAD scale and judges rating scale.

Group I showed a significant decrease in anxiety
Figure 1. Mean anxiety level pre and post treatment for each group as measured by the SAD scale and judges rating scale.
level on both the SAD scale and the judges rating scale ($t=2.77, df=3, p<.05$; $t=3.53, df=3, p<.05$). Group II did not show a significant decrease on either the SAD scale or the judges rating scale ($t=.926, df=4, p<.05$; $t=1.67, df=4, p<.05$). Due to the small number of S's in Groups III and IV no statistical test was run on these groups. Only Group III SAD showed a decrease in anxiety level and this was very slight (14.0 to 13.3). Group III showed an increase in anxiety level on the judges rating scale and Group IV showed no change on the SAD scale. Group IV showed an increase on the judges rating scale. However, since the results were analyzed in terms of decreased anxiety level, these groups were considered as no change.

A one-tailed test of significance was used to analyze the results since the investigator felt any increase in anxiety level or no change in anxiety level would be psychologically meaningless to this study. A change in one direction (decreased anxiety level from pre to post) was the only concern of the investigator since the treatment was being evaluated as to its effectiveness in decreasing anxiety. Had the increase in anxiety level occurred in either one of the treatment groups, it would then be important to determine how the treatment caused increased anxiety.
DISCUSSION

The experimental results support the hypothesis that those S's exposed to symbolic modelling would show a greater decrease in anxiety level than those S's not exposed to the symbolic modelling treatment. Although both experimental groups showed a decrease in anxiety, Group I-modelling & Coaching, was the only group with a significant decrease. The symbolic modelling and coaching therapy examined in this study was far from a fully developed clinical technique. However, socially anxious S's who were exposed to only one treatment session showed significantly lower anxiety levels after treatment.

The overall pattern of results indicates that Group I-modelling & Coaching showed more behavioral change than did the just modelling, placebo, or control group. On the written measure of anxiety level (SAD scale), Group I showed decreased anxiety level after treatment. On the behavioral measure (judges ratings), Group I showed decreased anxiety level after treatment.

It is clear from these results that coaching is essential when symbolic modelling is used with socially anxious individuals. Those S's exposed to modelling and coaching showed a significant decrease in anxiety level after treatment, while those exposed to just modelling
showed no significant decrease. When the relevant responses were clearly specified at the same time the S's viewed models demonstrating the responses, the effects were greater.

Another important implication of the results is that anxiety level was decreased without the administration of any reinforcement either to the models or the S's. The S's had no opportunity to perform the model's behavior at the time of exposure on an overt level. Thus learning occurred only at the covert level. However, it could be argued that coaching or instructions given the S's by the E are reinforcing. The E did not tell the S's how to behave or how to change their behavior. He simply pointed out to the S's behaviors being modelled and changes in these behaviors. It is possible that due to the S's history of being reinforced for following instructions, they anticipated some reinforcement for matching the behavior of the models. If so, they were responding to cues from the models and not the E.

Since no positive reinforcement per se was administered during treatment, any behavioral changes as a result of treatment must be maintained by an intrinsic form of reinforcement. When the S's display this newly learned behavior in a real life situation and are positively reinforced, the behavior will be strengthened. However, if the new behavior is not positively reinforced,
the S's may abandon it and revert to the old mode of response. For this reason the S's behavioral rehearsal would be helpful in solidifying the behavior. If the S's were given the opportunity to practice the behavior in a non-threatening situation first, and return for additional treatment after practicing the behavior in everyday encounters, they might be less likely to revert to the old mode of response.

The S is aware of some deficiencies in the design and modifications in methodology that should be considered. Since the target population is rather large and well defined, the S's used should be representative of the population so that the results can be generalized to it. The S's used in this study were selected from a small volunteer group of psychology students, and they were chosen from the entire student population they would have been more representative of the target population. An even more representative sample would be taken from those people who were seeking professional help for behavioral problems stemming from high social anxiety. Also, a follow-up study would be helpful in determining how well the S's were able to maintain the behavior.

Another factor to be considered is the number of judges used to rate the S's level of anxiety. This study used only two. The S feels five judges with more experience in observing and recognizing anxious behavior.
would have strengthened the data. Also, increasing the number of S's would be advisable.

Two points for discussion arise from Figure 1. First, what score on the SAD scale could be considered normal? Of those S's tested for screening, the majority scored between 2 and 4 (20 out of 40 S's tested scored between 2 and 4). Only S's who scored 7 or above were chosen to take part in the study. Second, since Group I had a higher pre-test mean (15.0) on the SAD scale than Group IV (10), would not more change be expected? The author believes a score of 10 on the SAD scale is high enough, so that a decrease in anxiety level could be expected if S's were exposed to treatment. The higher the score, the more change you could expect. Since the treatment is designed for those who are high in social anxiety, the data reported in Figure 1 are more than statistical artifacts.

In summary, the results of this study indicate a general trend for symbolic modelling and coaching to decrease anxiety level in socially anxious individuals. With the modifications already mentioned and a general refinement of procedures, it is felt that symbolic modelling and coaching could be developed into a practical and effective clinical tool.
REFERENCES


Chittenden, G. E. An experimental study in measuring and modifying assertive behavior in young children. Monographs of the society for research in child development, 1942, 7, (1, Serial No. 31).


Please indicate whether or not the following items pertain to you by placing a T for true or an F for false in front of each item. It is important that you be totally honest with yourself when answering these items.

1. I feel relaxed even in unfamiliar social situations. (F)
2. I try to avoid situations which force me to be very sociable. (T)
3. It is easy for me to relax when I am with strangers. (F)
4. I have no particular desire to avoid people. (F)
5. I often find social occasions upsetting. (T)
6. I usually feel calm and comfortable at social occasions. (F)
7. I am usually at ease when talking to someone of the opposite sex. (F)
8. I try to avoid talking to people unless I know them well. (T)
9. If the chance comes to meet new people, I often take it. (F)
10. I often feel nervous or tense in casual get-togethers in which both sexes are present. (T)
11. I am usually nervous with people unless I know them well. (T)
12. I usually feel relaxed when I am with a group of people. (F)
13. I often want to get away from people. (T)
14. I usually feel uncomfortable when I am in a group of people I don't know. (T)
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<td>19.</td>
<td>I usually feel relaxed when I meet someone for the first time.</td>
<td>(T)</td>
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<td>20.</td>
<td>Being introduced to people makes me tense and nervous.</td>
<td>(T)</td>
<td></td>
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<tr>
<td>21.</td>
<td>Even though I find it hard to introduce myself, I do so anyway.</td>
<td>(T)</td>
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<td>22.</td>
<td>I would avoid asking up and joining a large group of people.</td>
<td>(T)</td>
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<td>23.</td>
<td>When my superiors want to talk with me, I talk unwillingly.</td>
<td>(T)</td>
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<td>24.</td>
<td>I often feel on edge when I am with a group of people.</td>
<td>(T)</td>
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<td>25.</td>
<td>I tend to withdraw from people.</td>
<td>(T)</td>
<td></td>
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<tr>
<td>26.</td>
<td>I don't mind talking to people at parties or social gatherings.</td>
<td>(T)</td>
<td></td>
<td></td>
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<tr>
<td>27.</td>
<td>I am seldom at ease in a large group of people.</td>
<td>(T)</td>
<td></td>
<td></td>
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<tr>
<td>28.</td>
<td>I often think up excuses in order to avoid social engagements.</td>
<td>(T)</td>
<td></td>
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<tr>
<td>29.</td>
<td>I sometimes take the responsibility for introducing people to each other.</td>
<td>(T)</td>
<td></td>
<td></td>
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<tr>
<td>30.</td>
<td>I try to avoid formal social occasions.</td>
<td>(T)</td>
<td></td>
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<tr>
<td>31.</td>
<td>I usually go to whatever social engagements I have.</td>
<td>(T)</td>
<td></td>
<td></td>
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<tr>
<td>32.</td>
<td>I find it easy to relax with other people.</td>
<td>(T)</td>
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TREATMENT SCENES

Scene One—female model

Scene opens with female model seated on couch studying. Male enters and sits on couch at opposite end from female. Male begins conversation with female. Female exhibits extreme anxiety over being alone with unfamiliar male. Behavioral manifestations of anxiety are: little or no eye contact with male, stiff posture, little conversation, and bowed head. As scene progresses, female relaxes and enters into conversation. More eye contact with male and easy, relaxed posture. At the conclusion of the scene female is totally relaxed and exhibits no anxiety. Time-2:10

Scene Two—male model

Scene opens with two males seated on a couch discussing an upcoming social event. Model exhibits anxiety about going to the event by offering excuses why he can't go. His speech is muffled and he looks everywhere but at the other person. His excuses are rationalizations. As scene progresses model relaxes and by the end of the scene he is talking freely and with anticipation about the social event. Time-2:00

Scene Three—male model

Scene opens with five people seated in a semi-circle in a lounge type area. All but the model are
engaged in conversation. When the conversation is directed at the model he answers with one word or by nodding his head. There is little or no eye contact between model and other members of the group. The model is seated at the far end of couch gripping the arm of the couch. He looks down and around the room. He crosses and un-crosses his legs. As the scene progresses, the model relaxes and joins into the conversation. His posture becomes more relaxed and eye contact increases. All members of the group are relaxed and comfortable throughout scene. Time-2:10

Scene Four—female model

Scene opens with four people seated in a lounge type area. Model enters and is introduced by one member of the group to the other members. The model acknowledges the introduction with a nod of the head and sits next to the person who made the introduction. The model clings to books, arm of chair, and her own hands. There is little or no eye contact between model and other members of the group. No conversation between model and other members of the group. As the scene progresses, the model becomes more relaxed and joins the conversation. By the end of the scene the model is relaxed and interacting with the group. Time-2:10

Scene Five—female model

Scene opens with two females standing and discussing
a week-end social event. Male enters and is introduced by the model to the other female. The model's behavior is very relaxed and unanxious until male enters scene. When the male enters the model becomes very stiff, clutches at her throat, and stammers the introduction. The conversation is very forced. At this point a third female enters the scene and the model's behavior becomes very relaxed and unanxious as she introduces the third female to the other members of the group. Time-2:00
Judges Rating Form

I would like you to watch a video tape on which you will see different individuals seated in a room. Using the scale and the criteria listed below, rate each individual as to his or her level of anxiety. Place your rating next to the number that corresponds with each scene. There are 28 scenes in all. Please use only the criteria listed and rate each individual on the scale provided.

Criteria

1. Lack of conversation

2. Fidgeting
   a. Playing with hair, fingers, mouth, etc.
   b. Biting finger nails
   c. Changing position in chair often
   d. Crossing and uncrossing legs
   e. Bouncing leg on other leg
   f. Rubbing hands on legs, chair, each other, etc.

3. Staring at a fixed point

4. Hands resting on face or mouth most of the time.

Rating Scale

<table>
<thead>
<tr>
<th>very comfortable</th>
<th>comfortable</th>
<th>anxious</th>
<th>very anxious</th>
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<tbody>
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TABLE I

Raw scores on SAD scale and judges rating scale pre and post for Groups I, II, III, and IV.

<table>
<thead>
<tr>
<th>GROUP</th>
<th>SAD SCALE</th>
<th>JUDGES RATING SCALE</th>
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