This research investigated the effects of sex and status of models on the acquisition of counseling behaviors by beginning students in counseling. Video tape was employed in both the presentation of models to the subjects, and in obtaining the criterion measure. The specific counseling behaviors (modeling tape) were developed during the course of the research, and the criterion measure is reflective of those behaviors. The research task was to measure the imitation by subjects of counseling behaviors which were performed by models while varying the sex and status variables of the models. Results showed that the amount of behaviors acquired by the subjects was not significantly altered from exposure to modeling with respect to the status variable of the model. Similarly, the sex model variable made no significant difference in the amount of behaviors acquired by the subjects. (Author/RK)
The effects of sex and status of models on the acquisition of counseling behaviors

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This research investigated the effects of sex and status of models on the acquisition of counseling behaviors by beginning students in counseling. Video tape was employed in both the presentation of M to the Ss, and in obtaining the criterion measure. The specific counseling behaviors (modeling tape) were developed during the course of the research, and the criterion measure is reflective of those behaviors. The research task was to measure the imitation by Ss of counseling behaviors which were performed by Ms while varying the sex and status variables of the Ms.

Numerous studies have established the efficacy of modeling as a procedure for the acquisition of new behaviors for subjects in a learning situation (Bandura, Ross & Ross, 1961; 1963; Bandura & Walters, 1963; Bandura, 1965; 1969; Hicks, 1965; Jones, 1969; Long, 1969).

Bandura and Walters (1963) and Bandura (1965; 1969) have argued that learning can be acquired through modeling procedures which exclude the reinforcement consequences to either the model or observer, or both. Important to this development is the necessity to qualify the factors which are operative during the modeling and imitative performance sequences, especially when modeling procedures are employed and when the reinforcement consequences to either the model or the model or the observer are

*This research is based in part on the author's doctoral dissertation, completed under the direction of Dr. George L. Marx at the University of Maryland. Portions of this paper were presented at the American Personnel & Guidance Association Convention in Atlantic City, 1971.
non-existent. Modeling without reinforcement includes the observer's (O) reproduction of the model's (M) behavior on the first trial without an overt response, and in the absence of reinforcement applied to O or M (Wodkte & Brown, 1967). The lack of reinforcement to either O or M becomes crucial when one attempts to assess the more important factors which are operative in the acquisition of new behaviors. While the majority of modeling research has utilized reinforcement, Phillips (1968) has been critical of such research which concludes that learning can be understood from reinforcement as the observable consequences of a performance. Phillips argues that it is impossible to specify the consequences of the learning because there is no delineation between the reinforcement and other factors which may be inherent to M or O, independent of direct reinforcement. Most studies in modeling fail to adequately analyze the learning results in view of the compounding factors such as those noted by Phillips. The advantage of studying learning through modeling without the presence of reinforcement (Bandura, 1965; Wodkte & Brown, 1967) allows for the quantification of such factors relating to M's or O's personality.

This study investigates the effect of modeling procedures without direct reinforcement upon the acquisition of counseling behaviors by beginning students in counseling. The study of modeling without the application of reinforcement is somewhat of a departure from the majority of available research, even in counseling research. Several studies in modeling relative to the counseling setting indicate the same degree of efficacy in the acquisition of new behaviors on the part of the client as do other research studies outside the area of counseling (Krumboltz & Schroeder, 1965; Thoresen & Krumboltz, 1967; Krumboltz, Varenhorst & Thoresen, 1967; Thoresen & Krumboltz, 1968; Walls & Smith, 1970; Meyer & Strowig, 1970).
Particular attention is directed toward the variables of sex and status of M.

Status of Model: Lippitt, Polansky and Rosen (1952) have suggested that group members tend to imitate the behavior of those members to whom they have attributed prestige to influence the group. Several other studies in modeling research suggest that imitation learning results from the characteristics of M which are evident to O (Mauser, 1953; Rosenbaum & Tucker, 1962; Bandura & Kupers, 1964).

Studies by Lefkowitz, Blake & Mouton (1955) and Mauser (1953; 1954) clearly indicate that status of M is a significant determinant with reference to O's imitative behavior. These findings are supported in part by the work of Hicks (1965), Patel and Gordon (1960), and Bandura and Kupers (1964), although there are qualifications to be cited with each study. If one assumes that competency is closely aligned to status, then the Rosenbaum and Tucker study lends support to the view that status of M is significant. The Hicks study found that the peer male M was most significant as a treatment in imitated behaviors, although the male M adult had the most significant lasting effect. Patel and Gordon found a significant relationship between status of M and age of O, with the younger Ss being more influenced by the status of M than the older Ss. The Bandura and Kupers study indicated a relationship between O's self-reinforcing/punishing modalities and the corresponding effect of M, even when M presented a high-criterion of self-reinforcing behaviors.

Krumboltz, Varenhorst & Thoresen (1967) studied the effects of M exposure, attentiveness and prestige of M on the frequency of information-seeking behaviors. There were no significant differences with respect to attentiveness and prestige of M. In a subsequent study, Thoresen and Krumboltz (1968) found that while Ss imitated a successful athletic M (peer),
there was no significant imitation of an adult counselor model as measured by the increased frequency of information-seeking behaviors. Walls and Smith (1970) found no significant performance differential between subjects exposed to peer status and high status counselor models in the acquisition of counseling behaviors. Further research is needed to clarify the ambiguity with regard to the effects of model status on the acquisition of behaviors by Q.

**Sex of Model:** A second important consideration is the variable of sex of model and its effects on the acquisition of behaviors of Q during modeling. The literature as it relates to sex of model is much less clear in terms of concluding how this variable shapes or alters learning through modeling. Nearly all of the studies to be reported are research attempts in which the sex variable is but one of many research considerations. For the most part, results indicate that the male model is the more effective model in the provision of controlling factors in the model-trainer-sequence (Rosenblith, 1959; Bandura, Ross & Ross, 1961; 1963; Krumboltz and Thoresen, 1964). This conclusion is tempered, however, by findings from two other sets of studies. Several of these studies indicate that there are no significant differences to Q's learning from exposure to different-sexed models (Thoresen and Krumboltz, 1968; Musselman, 1967; Rickard and Joubert, 1968; Meyer and Strowig, 1970). Some research suggests that other factors rather than sex alone may be operative. Bandura, Ross and Ross (1961; 1963) have also advanced the idea that many behaviors are "sex-linked" in that the behavior of the model may be most characteristic of behavior which is "traditionally" associated with male or female behavior. These studies research aggressive behavior in children where the model was a male peer indulging in aggressive behavior. In similar research (Hicks, 1965; Maccoby and Wilson, 1957), the explanation of "sex-linked" behaviors seem to provide the best rationale for the male model being imitated more by male sub-
jects. This suggestion is also supported by the results of another study (Musselman, 1967) in which the task behaviors were non-sex-linked, and which resulted in no significant differences between groups imitating behaviors of either sexed models. It appears that each of these general findings need to be studied systematically in order to ascertain the precise effect that the sex variable contributes to the modeling process.

In sum, this study investigated the effects of sex and status of M with reference to the amount of acquired behaviors on Q's part following the observation of M's performance when direct reinforcement was non-existent during the process.

METHOD

Subjects

Subjects for this study were beginning graduate students in an introductory counseling course during the Summer of 1970. Forty subjects were randomly selected (from a total of 71 students) and assigned to four treatment groups, with five men and five women to each group.

Construction of the Modeling Tape

This research utilized video tape equipment (SONY) in the presentation of models, and in the collection of Q's performances, based on the assumption that video taping has been demonstrated to provide an effective and credible means of studying modeling procedures.

The content of the modeling tape was drawn from several taping sessions during which more than 70 counselor/client interactions were developed. The criteria which served as a guide in selection the final interactions consisted of three factors: (a) does the counselor respond directly to the statement, comment, question, etc., of the client; (b) does the counselor
respond with a sense of concern, empathy, and "caring for;" and (c) do the interactions represent some common situations which evidence themselves in a counseling process? Four researchers involved in the development of the modeling tape agreed that nine interactions (from the 70) met the criteria. The nine interactions, representing relatively discreet counseling behaviors, reflected a brief interview between a counselor and a client.

A video, modeling tape was constructed which consisted of two sets of nine counselor/client interactions (Field, Rohen and Chasnoff, 1971). A male, confederate client role-played the part of the client for each of the model counselors (one male, one female). The first set of interactions consisted of the male counselor (and the male confederate client) who was approximately 30 years old, and a doctoral student in counseling. The second set of interactions, which consisted of the same script and behaviors (and the same male confederate client), was a female counselor who was also about 30 years old, and a doctoral student in counseling. In order to insure similarity of performances between the two sets of interactions, the researchers coached the counselors and the confederate client in their behaviors (both verbal and non-verbal). The tape was developed over a period of three video taping sessions.

There were nine counselor/client interactions for each set. A period of 30 seconds of "no material" was programmed between each interaction on the tape. The total video tape running time for each set was approximately 12 minutes.

Criterion

The research instrument, the Interaction Scale, was devised after the development of the modeling tape. The Scale consists of a listing of the identifiable and/or definable behaviors exhibited by the model counselors.
Fourteen items on the scale represent behaviors which indicate the counselor's attending behavior to the client (called client by name, using client's language) in addition to the process factors in a counseling interview, including the opening and closing of the interview, clarifying and exploring what the client says, and offering assistance to the client.

Procedures

Forty Ss were scheduled for the observation of the modeling tapes in addition to being asked to counsel with a client immediately following observation. Five high school-aged, male students were asked to role-play the part of the confederate client—"a student with a vocational concern." The five students were trained for their role by observing the modeling tape, and then practicing the client's role by imitating the same behaviors which were exhibited by the client in the modeling tape. Cue cards were given to the clients during their training phase which reflected the model client's behavior. Students in an advanced counseling practicum served as counselors during the training phase. Each confederate client practiced the client's role at least four times. In order to eliminate variability due to differences of personality and behavior of the confederate clients, the five fellows were assigned to role-play their part with one male and one female S of each treatment group during the experimental phase.

Description of Treatment Conditions

Four treatment groups (description following), to which five men and five women Ss were assigned, observed the modeling tapes and read the corresponding descriptive paragraph. The content of the modeling tape was identical for all four treatment conditions. One male counselor modeled the role of the counselor in two treatment conditions; a female counselor modeled for the other
two treatments. The status variable was altered by description. The male counselor for one treatment was described as having "high status," and in the second treatment, as having "low status." The same descriptions were in the same way to alter the status variable for the female model treatments.

Treatment I (High Status, Female Model): Ss in treatment group I were asked to read a descriptive paragraph which indicated that the counselor was trained at the doctoral level and highly successful in previous counseling experiences. Ss then observed the video taped female model counselor/client interactions, after which they were asked to read the final comment with reference to the counselor's status. Following the readings and observation, Ss immediately interviewed a male confederate client.

Treatment II (Low Status, Female Model): Ss in treatment group II were asked to read a descriptive paragraph which indicated that the counselor was a 'masters candidate' in counseling with limited experience in the field. Ss then observed the video taped female model counselor/client interactions, after which they were asked to read the final comment with reference to the counselor's status. Following the readings and observation, Ss immediately interviewed a male confederate client.

Treatment III (High Status, Male Model): Treatment group III was the same as Treatment group I, except that Ss assigned to this group viewed the video tape of the male model counselor.

Treatment IV (Low Status, Male Model): Treatment group IV was the same as Treatment group II, except that Ss assigned to this group viewed the video tape of the male model counselor.
RESULTS

Interjudge Agreement

Two judges rated all forty of the video tapes of the Ss' performances in counseling following the observational phases. A Pearson r resulted in an over-all coefficient of .81 from the scores of the raters who viewed and evaluated the tapes with the use of the Interaction Scale.

Analysis of the Data

Mean and standard deviation data were computed from the scores on the Scale on each of the main variables—sex and status of model (Tables I&II).

TABLE I

Means, Standard Deviations and Range Score Data on Rating Scale by Status of Model

<table>
<thead>
<tr>
<th>Status</th>
<th>n</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Status</td>
<td>20</td>
<td>9.0-24.0</td>
<td>18.98</td>
<td>3.956</td>
</tr>
<tr>
<td>Low Status</td>
<td>20</td>
<td>14.5-26.5</td>
<td>19.35</td>
<td>3.433</td>
</tr>
</tbody>
</table>

Differences between the means appear to be small when comparing the high status mean with the low status mean, and the female mean with

TABLE II

Means, Standard Deviations and Range Score Data on Rating Scale by Sex of Model

<table>
<thead>
<tr>
<th>Sex</th>
<th>n</th>
<th>Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>20</td>
<td>12.0-24.0</td>
<td>19.00</td>
<td>3.335</td>
</tr>
<tr>
<td>Male</td>
<td>20</td>
<td>9.0-26.5</td>
<td>19.32</td>
<td>4.025</td>
</tr>
</tbody>
</table>
the mean. The analysis of variance was the next procedure employed to test for significant differences between the means of the research variables. Analysis of variance yielded a non-significant F value of .026 (Table III) on the sex of model dimension. There is no significant difference between the means of treatment groups in the acquisition of counseling behaviors by Ss with respect to sex of model. Analysis of variance yielded a non-significant F value of .232 (Table III) on the status of model dimension. There is no significant difference between treatments groups in the acquisition of counseling behaviors by Ss with respect to status of model. The interaction effect of sex of model, and status of model in the analysis of variance (Table III) yielded a significant F value of 7.190. It can be concluded from this index that the amount of acquired counseling be-

<table>
<thead>
<tr>
<th>Factor</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Error</td>
<td>380.800</td>
<td>32</td>
<td>11.900</td>
<td></td>
</tr>
<tr>
<td>Sex of Model</td>
<td>.306</td>
<td>1</td>
<td>.306</td>
<td>.026</td>
</tr>
<tr>
<td>Status of Model</td>
<td>2.756</td>
<td>1</td>
<td>2.756</td>
<td>.232</td>
</tr>
<tr>
<td>Sex of Subject</td>
<td>15.006</td>
<td>1</td>
<td>15.006</td>
<td>1.261</td>
</tr>
<tr>
<td>Sex of Mod/Status of Mod</td>
<td>85.556</td>
<td>1</td>
<td>85.556</td>
<td>7.190*</td>
</tr>
<tr>
<td>Sex of Mod/Status of Sub</td>
<td>9.506</td>
<td>1</td>
<td>9.506</td>
<td>.799</td>
</tr>
<tr>
<td>Status of Mod/Status of Sub</td>
<td>10.506</td>
<td>1</td>
<td>10.506</td>
<td>.883</td>
</tr>
<tr>
<td>Sex of Mod/Status of Mod/Status of Sub</td>
<td>8.556</td>
<td>1</td>
<td>8.556</td>
<td>.719</td>
</tr>
</tbody>
</table>

*Significant at .05, 1,32 df.
behaviors by Ss is significantly different when sex of model, and status of model are operating simultaneously in the treatment condition. Figure I graphically illustrates this interaction effect of sex of model and status of model which present mean data taken from Table IV.

**TABLE IV**

Means and Standard Deviations on the Rating Scale by Each Treatment Group

<table>
<thead>
<tr>
<th>Treatment Condition</th>
<th>n</th>
<th>Range</th>
<th>Mean</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Female</td>
<td>10</td>
<td>18.0-24.0</td>
<td>20.35</td>
<td>3.883</td>
</tr>
<tr>
<td>Low Female</td>
<td>10</td>
<td>14.5-20.0</td>
<td>17.65</td>
<td>2.381</td>
</tr>
<tr>
<td>High Male</td>
<td>10</td>
<td>9.0-20.5</td>
<td>17.60</td>
<td>3.850</td>
</tr>
<tr>
<td>Low Male</td>
<td>10</td>
<td>15.5-26.5</td>
<td>21.05</td>
<td>3.587</td>
</tr>
</tbody>
</table>

Figure I

Interaction Effect of Sex of Model and Status of Model on the Acquired Behaviors of Ss Exposed to High Status and Low Status Models of Either Sex

The New Duncan's Multiple Range Test (Edwards, 1966) further substantiated a significant mean range between the mean score differences of
male Ss who were exposed to the High Status and Low Status Male Model treatments.

While the interaction effect is significant in the analysis of variance (Table III), Low Status treatment does not differ significantly from the High Status treatment on the Female Model dimension when analysed by the Duncan's Multiple Range test. The interaction of status of model, when varied by the Female Model treatments, does not make a significant difference in the acquisition of counseling behaviors by Ss.

DISCUSSION

The amount of acquired behaviors by the Ss was not significantly altered from exposure to modeling with respect to the status variable of M. This finding is inconsistent with the research results of several studies which found status of M to be a significant variable in imitation learning (Lefkowitz,Blake and Mouton, 1955; Mauser, 1953; 1954; Rosenbaum and Tucker, 1962). Similarly, the sex of model variable in this research made no significant difference in the amount of behaviors acquired by Ss. This finding is also inconsistent with the findings of research which has suggested that sex of model, by itself, significantly influences imitation learning (Rosenblith, 1959; Bandura, 1965a; Bandura, Ross and Ross 1961; 1963).

On the other hand, some studies do support the findings of this research with respect to status of model (Hicks, 1965; Krumboltz, Varenhorst and Thoresen, 1967; Thoresen and Krumboltz, 1968; Walls and Smith, 1970), and sex of model (Kanareff and Lanzetta, 1960) as not significantly influencing the amount of imitated behaviors by Ss.

A question remaining is the degree to which an interaction effect of
these two variables is operative with respect to imitation learning. The significant interaction effect in this research -- the amount of acquired counseling behaviors by Ss when exposure to models where sex and status of models are considered together -- is generally supported by several previous research endeavors (Patel and Gordon, 1960; Krumboltz and Thoresen, 1964; Jakubczak and Walters, 1959; Rosenblith, 1959; Bandura, 1965). More importantly, however, is the necessity to analyze the variables of status and sex of models in terms of the tasks to be performed.

Several writers in particular (Bandura, Ross and Ross, 1961; 1963; Maccoby and Wilson, 1957; Walters and Thomas, 1963) have contended that behaviors are imitated because they are sexed- or status-linked, e.g., boys may imitate aggressive behaviors from a movie because the model is a young boy exhibiting aggressive behavior (Walters and Thomas, 1963), or information-seeking behaviors will be greater with boys after observation of a high-success athletic male model. "Tentatively, it seems that imitation will be greater when the M is performing tasks with which the O can identify -- in terms of his own personality characteristics.

In reference to counseling, the interaction effect of status and sex of M in this research does not appear to contradict the conclusions regarding sex- or status-linked behaviors of M as noted above. The precise interaction effect, however, is unclear perhaps for the reason that counseling as a profession does not inherently possess the characteristics of either sex. An explanation for status of the counseling model is less clear, but it seems that the inter-relationship of status and the counselor role is unclear as well. The most that can be said is that sex and status are modeling variables which possess significant qualities.
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