Heterosocial skill training for institutionalized rapists and child molesters

WILLIAM P. WHITMAN AND VERNON L. QUINSEY
Mental Health Centre, Penetanguishene

ABSTRACT

Eleven child molesters and six rapists were given heterosocial skill training and sex education. The sex education course was included as a comparison condition to control for therapist attention, discussion of sexual and social problems, and interaction with female staff. Assessments of social skill were made before and after training and in between the two types of training. Social skill ratings of the assessment data were made by raters blind as to when the assessments were made and inter-rater reliabilities were very high. Social skill ratings showed no improvement as a result of sex education but did show improvement as a result of social skill training. On ratings of the videotaped role plays, the effects of social skill training were statistically significant when it was administered before sex education but not after. Social skill ratings made of subject responses to interrupted audiotaped interactions showed larger effects of social skill training than ratings of videotaped role plays and were significant for both orders of treatment. Subjects' ratings of their own social skillfulness showed significant improvement during the course of the study but this improvement was unrelated to the type of training they had received.

Although there has been a plethora of recent articles describing social skill interventions for heterosocially deficient male college students (e.g., Bander, Steinke, Allen, & Mosher, 1975; Twentyman & McFall, 1975) and hospitalized psychiatric patients (reviewed by Hersen & Bellack, 1976), there have been primarily only case studies of attempts to alleviate heterosocial skill problems of sex offenders (Edwards, 1972; Laws & Serber, 1975; Serber & Keith, 1974; Stevenson & Wolpe, Note 1; Turner & Van Hasselt, 1979). In a recent pilot study, Crawford & Allen (1979) reported increasing the social skill of six sex offenders with a behavioural intervention but did not analyze their data statistically.

The dearth of controlled social skill treatment studies for sex offenders is unfortunate because heterosocial deficits are commonly observed among them and are often reported by them to be significant problems (Becker, Abel, Blanchard, Murphy, & Coleman, 1978; Quinsey, 1977). In addition, from a behavioural perspective, it would be expected that a man would be more likely to resort to rape or child molestation if he did not possess the heterosocial skill to obtain consenting sex with an adult female. At present, however, it is not known whether sex

Thanks are due to the female staff who served as confederates, the volunteers who served as raters, and Mrs. K. Finney who helped teach the sex education course. Dr. M. Rice provided valuable comments on an earlier draft of this paper. The research was supported by grant 754-78/80 from the Ontario Mental Health Foundation. Reprint requests should be sent to V.L. Quinsey, Research Department, Mental Health Centre, Penetanguishene, Ontario L0K 1P0.

offenders are more heterosocially inept than other men; Barlow, Abel, Blanchard, Bristow, and Young (1977) have found sex offenders to be less socially skilled than non-sex offenders but, unfortunately, neither group was randomly selected from the relevant populations. Although the etiological role of heterosocial skill deficits in sexual deviance remains to be shown, it is nevertheless clear that poor social skill constitutes an important clinical problem for many sex offenders (e.g. Marshall, Christie, & Lanther, Note 2) which they will need to overcome if they are to be successful in adopting acceptable heterosexual behaviour patterns.

The purpose of the present investigation was to compare a social skill intervention with a control condition in modifying the heterosocial skill of institutionalized child molesters and rapists and to examine several methods of measuring heterosocial skill acquisition. The control condition was designed to provide for the effects of experience in the videotape and audietape assessment situations, interactions with a female therapist, expectancy of change, time, and attention.

METHOD

Subjects

Seventeen male inpatients of the Penetanguishene Mental Health Centre participated in a program involving sex education and heterosocial skill training. Of these, fifteen were housed in the maximum security Oak Ridge Division and two in the minimum security Regional Division. Their average age at the start of treatment was 23.24 years (SD = 10.29) and they had been at the Centre for an average of 15.75 months (SD = 21.69). Eleven subjects had received primary diagnoses of personality disorder, four of retardation, and two of schizophrenia. Seven of the subjects were considered to be “intellectually dull” on the basis of IQ scores.

Ten subjects were classified as child molesters on the basis of their offence history (physical sexual contact with a child 13 years of age or younger when the offender was 16 years of age or older and at least 5 years older than the child). One subject, whose victim was a 16-year-old boy, was classified as a child molester based on his verbal report and a corroborating psychophysiological examination of his sexual age preferences previously shown to be a valid indicator (Quinsey, Steinman, Berghersen, & Holmes, 1975). Five child molesters chose only child and pubescent males as victims and six chose child and pubescent females. The remaining six subjects were charged with rape or attempted rape of a female aged 14 or older.

All subjects volunteered for treatment; it was made clear to each that such participation would have no necessary effect on their possible time of release and that they could withdraw from treatment at any time. The course was not offered to subjects who wished to become exclusively homosexual, but subjects who were unsure of their orientation and who wished to learn heterosocial skills were accepted in the course. No attempt was made to shift subjects from a homosexual or bisexual orientation to a heterosexual one.

Criteria for inclusion in the social skill training program were: (a) a referral from the subject’s treatment team indicating that he had a social skill deficit; (b) a pre-hospital history of heterosocial difficulties as reported by the subject or as recorded on his file; (c) an adequate attention span and an ability, as demonstrated in the subject’s ward and during an assessment interview, to comprehend simple instructions; and (d) the subject’s discharge date anticipated by the hospital as being no longer than two years from the beginning of treatment.
Procedure
Subjects were given a social skill assessment (see below) and then were assigned to either a dull or bright social skill training group or a dull or bright sex education group according to their intellectual level. After completing the training with their initial group, subjects were given a second assessment and assigned to their second group. Subjects were given a third and final assessment after completing the training with their second group. For some subjects their initial group was the social skill training group, while for other subjects the sex education group was their initial group; this assignment was arbitrary.

Assessments
All structured assessments and group meetings were conducted in a group room at the end of a ward in the maximum security hospital. The group room was carpeted and curtained and contained comfortable chairs and cushions. A television monitor, used for videotape feedback in the groups, was situated in one corner of the room. Suspended from the ceiling in another corner of the room was a wide angle camera. The camera was operated from a control room which was adjacent to the group room. The control room contained a videotape recorder, a television monitor, and another camera which was used to videotape the subjects through the one-way mirror which linked the two rooms.

(a) Audiotape assessments. Each subject was seated in the group room, in front of a small table on which there were two audiotape recorders. The recorder on the subject's left contained a pre-recorded audiotape on which there was one of three sets of 12 simulated heterosocial interactions. Each interaction consisted of a male and a female talking to each other in a commonly encountered type of social situation (for example, meeting a female co-worker in a cafeteria and initiating a conversation with her).

The female in the social interactions reacted to her partner's advances in a positive (warm and accepting), negative (cold and rejecting), or neutral (noncommittal) manner. Each taped social interaction was interrupted by a high-pitched tone. The subject was instructed to imagine that he was the male in each audiotaped interaction and to make a comment at the sound of the tone which he felt would be an appropriate response to make at the point in the social interaction at which the interaction was terminated. The pre-recorded social interactions and the subject's responses to them were recorded on the second audiotape recorder located on the subject's right. The male experimenter sat on the subject's left and operated both recorders.

The first three social interactions on each set of pre-recorded situations were identical, and served as warmups. The remaining nine interactions in each pre-recorded set were the assessment interactions. Each set contained similar, though different, social interactions. The female was positive in three interactions, negative in three, and neutral in three, (although the "emotional tone" of the female was actually sometimes ambiguous in the actual recording). The interactions were presented in a pre-determined fixed random sequence. The subject was required to respond to a different set of interactions (with the exception of the three warm-up interactions) during each of his three assessments. The order of presentation of the sets of interactions was randomly determined.

(b) Sex education questionnaire. When the subject had completed the audiotape assessment he was given the sex education quiz, a 25-item multiple choice questionnaire concerning facts about human sexuality. If the subject was incapable of reading the questionnaire, the questions were read to him by the experimenter.

(c) Videotape assessments. The subject entered the group room with the experimenter and a trained female confederate who was unknown to him. The subject and the confederate were introduced to each other and were given small booklets containing descriptions of ten common social situations. The experimenter then read the instructions to the subject and the confederate. The subject was asked to act out the situation as if it were really happening. The subject was told that if it appeared to be an appropriate situation in which to try to get to know the female better, he could attempt to do so.
The experimenter then read the description of the first social situation to the subject and the confederate. When the subject said he was ready to begin, the experimenter told the subject and the confederate where to position themselves in the room and signalled verbally to the camera-person in the control room to begin recording. When the videotape had run for five seconds, the subject was told to begin the simulated social interaction. The same procedure was used for the remaining nine interactions.

During each of the subject's three assessments he was presented with one of three sets of ten social interactions. The first two interactions in each set were identical, and served as warmups. The remaining eight assessment interactions in each set were similar, but not identical to the situations in the other sets.

The booklets of interactions which the confederate received were identical to those of the subject, with the exception that, in the confederate's booklet there was a symbol beside each interaction description, indicating to her how she should respond to the subject. In each interaction, the confederate was to respond to the subject in one of four ways: positively (warm and accepting), negatively (cold and rejecting), neutrally (noncommittal), or asocially (to give the subject only information and facts). To control for the effects of familiarization, a different confederate was employed for each of the subject's three assessments. Different orders of confederates were used with different subjects.

(d) Self-Rating Scale. When the ten interactions were completed, the confederate left the group room. The subject was then asked to complete a Self-Rating Scale which was designed to evaluate the subject's perception of his performance in the interactions with the confederate as well as his anticipation of success in heterosocial situations outside of the hospital. If the subject was incapable of reading the Self-Rating Scale questions, they were read to him by the experimenter. The scale contained ten 5-point rating scales. The first five concerned the subject's perception of how he did in the role plays (for example, how nervous or relaxed he felt) and the remaining five dealt with how he thought he would do in a "real life" situation (for example, if he thought the female would think he was an awkward or skilful talker). One score was obtained by summing the ratings.

Treatment
(a) Sex education groups. Each of these groups consisted of three or four subjects, a female nurse, and the experimenter. The groups met twice weekly for seven or eight weeks in the group room, each meeting lasting approximately one hour. The group leaders lectured on male and female anatomy and physiology, male and female sexual responses, parameters of male and female sexual behaviour, masturbation, sexual intercourse, conception, birth control methods, sex-related diseases, sexual variations and deviations, and moral and legal implications of sexual behaviour. The lectures were interspersed with pertinent questions and discussion of relevant material. Whenever feasible, pictorial aids were used in teaching the course material. The subjects were also free to borrow course-related literature from the group leaders.

(b) Social skill group. These groups met three times per week for seven or eight weeks. Each group session of approximately 90 minutes was attended by three or four subjects, the experimenter, and one or two female therapists. Because of commitments in other parts of the hospital, the female therapists could not attend every session. Thus, for each group, the female therapist pool was comprised of four to six persons. The female therapists had little, and in many cases, no experience with social skill training techniques prior to starting in the social skill groups.

The subjects were initially taught how to request information from females in relatively social situations (e.g., asking for directions to the post office). In these situations, the subjects learned to improve their vocal clarity, voice volume, posture, eye contact, etc. The subjects were then taught techniques which they could use to initiate and maintain conversations with females and later how to ask women for a variety of dates. Finally, the subjects were taught how to perceive and handle rejection from females. The group leaders relied heavily on McGovern's heterosexual skill training manual (McGovern, Note 3) when designing this heterosexual social skill program.
HETERO SOCIAL SKILL TRAINING

When a particular social behaviour was introduced to the group, the subjects would receive instructions about when and how to implement the behaviour. Group discussion was also used at this time to facilitate subjects talking about their personal experiences with the social behaviour in question. The experimenter then modelled the behaviour in a simulated "real life" interaction with one of the female therapists. This interaction was videotaped and played back to the group, who then discussed the model's performance. Each subject was then given the opportunity to role play the same behavioural sequence with one of the female therapists. If a subject was having extreme difficulty with a particular role play, the experimenter or the female therapists would interrupt the role play and coach the subject as to how he could make his behaviour more appropriate. Each subject's role play was videotaped and played back to him and the group. In addition to videotaped feedback, each subject also received verbal feedback about his role play behaviour from the other subjects and from the therapists. Successful role plays were rewarded with verbal reinforcement from the therapists and from the other subjects. Homework assignments were sometimes used to encourage subjects to practise their heterosocial skills outside of the group setting. For example, some subjects were encouraged to initiate conversations with females or to ask females to dance with them at the volunteer dances which occurred at the hospital.

Rating Scales and Treatment of the Data
The videotaped assessments were independently rated by two female raters. The role play interactions were presented in random order with respect to session and subject and the raters were blind with respect to the actual assessment order. Each interaction was rated on seven variables and the pairs of ratings were averaged for each session. These variables were chosen before the study on the basis of a literature search and our previous experience with this treatment technique. Inter-rater product moment correlations were calculated for each variable using the average of the assessments. One variable, "apparent physical anxiety," did not reach the criterion of agreement that was set in advance (r = .75) and was deleted. The remaining variables were then averaged over raters and the inter-correlations among them examined. There were very high positive correlations (r's between .64 and .94) among five of the six variables: number of questions, tonal-vocal expressiveness, facial expressiveness, apparent social skill, and assertiveness. The sixth variable, "clarity of audible speech," did not correlate very highly with the others. Because of these inter-correlations, only apparent social skill and clarity of audible speech were selected for further analysis, following the strategy suggested by Koretz (1979). The latter revealed no significant changes as a result of treatment and will not be discussed further. "Apparent social skill" was rated on a 9-point scale ranging from "no social skill at all" (1), through "some social skill" (5) and "adequate social skill" (7), to "excellent social skill" (9). The correlation between raters was .87 on this variable.

The ratings were treated similarly for the audiotape data with the exceptions that the raters were male, and that both raters did not rate all the data (the raters overlapped on a randomly selected 57% of the sessions). The average of the two raters was used in subsequent analyses whenever possible. Four variables were rated: content relevancy, feeling relevancy, tonal-vocal expressiveness, and apparent social skill. All achieved inter-rater correlations of .78 or higher and all were positively correlated among themselves (r's between .56 and .86). "Apparent social skill" was the only variable chosen for further analysis because it had the highest inter-rater reliability (.91) and was the same dimension used with the videotapes. One subject was deleted from the audiotape analyses because of a recording equipment error on one of the assessments.

The original plan for the analyses of the ratings included using the confederates' behaviours (positive, neutral, or negative) and order of treatment as variables in a single analysis of variance for the video and audio data separately. Ambiguities in the confederates' responses, however, rendered this impossible. A further difficulty was that patient characteristics and order of treatment were partially confounded because bright and dull patients could not be treated together in a single group, so that patient availability and scheduling difficulties led to unequal N's and imperfect counterbalancing. As
a result of these problems, a more conservative procedure was adopted in which three analyses for each variable were calculated. In the first, all subjects were included and the independent variable was time of assessment (first or last). In the second analysis, only subjects who had social skill training first were included and all three assessment times were used in the analysis. The third analysis was identical to the second but contained only subjects who received sex education first. For the second and third analyses of the social skill rating and self rating data, it was predicted that social skill would improve from the pre- to the post-social skill training assessments but not from the pre- to the post-sex education assessments. The predictions for the sex education quiz were reversed and these analyses were conducted separately.

RESULTS

Social Skill Ratings
Average ratings of apparent social skill are depicted in Figure 1. There was a significant increase in social skill from the first to last assessment for both the videotape \(F(1,16) = 15.58, p < .005\) and the audiotape data \(F(1,15) = 43.00, p < .001\). When all three assessments were included in the analyses, and the effect of social skill training and sex education were examined using planned contrasts, there was no significant improvement found as a result of sex education for either the videotape or audiotape social skill ratings. When the social skill training was given first, it resulted in significant improvement on the videotape \(F(1,18) = 11.49, p < .005\) and the audiotape data \(F(1,16) = 20.70, p < .001\). When the social skill training was given last, there was significant improvement for the audiotape \(F(1,12) = 5.86, p < .05\) but not for the videotape ratings \(F(1,12) = 2.64, p < .20\).

In summary, social skill training appeared to effect modest but significant improvements in rated social skill. These improvements appeared greatest for subjects who received social skill training before rather than after sex education, partly because there were more subjects in the former condition \(N = 10\) for the videotape data and \(9\) for the audiotape data) than in the latter \(N = 7\). The audiotaped ratings showed larger differences than the videotape ratings even though the two measures were correlated (.72) when averaged over assessment times.

Self Rating Scale
There was a significant improvement in the subjects’ ratings of how well they performed or anticipated performing between the first and last assessment \(F(1,16) = 9.34, p < .025\). Visual inspection of these data indicated that improvement was essentially linear over the three assessments for both orders of treatment, although none of the planned comparisons were significant.

Sex Education Quiz
Subjects improved their number of correct responses on the sex education quiz
FIGURE 1
The effect of social skill and sex education training on mean ratings of social skill obtained from audiotapes and videotapes.
from their first to their third test \(F(1,13) = 136.51, p < .001\). Some subjects’
data were not included because they did not attend properly to the instructions.
Planned comparisons indicated that the improvement was due to sex education
\(F(1,6) = 48.99, p < .001\), for subjects who had sex education first, and \(F(1,18)
= 29.33, p < .001\), for subjects who had it second). The comparisons for the
social skill training were nonsignificant for both orders of treatment.

**Discussion**

Social skill training improved the heterosocial performance of the sex offenders
when the effects of repeated testing and experience talking with female staff were
controlled. These acquisition effects were found with raters who were blind with
respect to when in the course of the treatment program the assessments were made.
Because of the trends toward linear increases in the self report data, it appeared as
if the effects of the demand characteristics were approximately similar in the sex
education and social skill conditions. The videotape assessment data were all
obtained using female confederates who were unknown to the offenders and
situations which were similar to, but not identical with, the situations used in
training. The audiotape assessments were obtained under conditions even more
dissimilar to the training conditions, providing evidence for at least a limited
amount of generalization from the treatment conditions.

It was of interest that the audiotaped assessments showed larger treatment
effects than the videotaped assessments although the overall social skill ratings for
each subject were substantially correlated between the two assessment methods.
The discrepancy between assessment methods is more surprising because the
audiotape assessment method was less similar to the training conditions than the
videotape method. This result is of some importance because the audiotaped
assessments are much easier to run and rate than the videotape assessments. The
fact that the stimuli for the audiotape assessments were also taperecorded removes
confederate variables, such as expectancies or style of the interaction, as a source
of variance. The reasons for the superiority of the audiotape procedure,
particularly with regard to sensitivity to poor performance, is at present a matter
for conjecture. Although it is tempting to conclude that the difference in sensitivity
results from the shorter responses that were rated and the less complex nature of
the confederate’s behaviour in the audio assessments, this explanation is
weakened by the high inter-rater reliabilities obtained with the videotape
procedure.

The major question which this research leaves unanswered is the extent to which
these newly acquired skills generalize to real life situations. Research is required
both to enhance the magnitude of the acquisition effects demonstrated in the
present study and to examine the generality of social skill acquisition. Such a study
might profitably employ more extended training and greater individualization of
treatment and assessment methods. Individualization could be better accomplished if normative data were available so that a particular sex offender's social skill pattern could be compared with the skill pattern of heterosocially adequate men. The problem of generalization might be best approached through the use of graded homework assignments in which the sex offender practised the appropriate skills in a real life context during treatment, although the artificiality of the maximum security environment makes this approach problematic.

RÉSUMÉ

Onze sujets coupables de molestations d’enfants et six sujets coupables de viols subissent un entraînement hétérosocial et suivent un cours d’éducation sexuelle. Le cours d’éducation sexuelle constitue une condition de comparaison servant à contrôler l’attention du thérapeute, la discussion de problèmes sexuels et sociaux, et l’interaction avec le personnel féminin. L’habileté sociale est évaluée avant comme après l’entraînement et entre les deux sortes d’entraînement. Cette évaluation est faite par des juges non informés du moment de l’expérience où leur évaluation est faite, et la corrélation entre juges est très élevée. Les résultats indiquent que l’entraînement hétérosocial, mais non le cours d’éducation sexuelle, améliore l’habileté sociale. L’évaluation des jeux de rôle (enregistrés sur vidéo) montre que les effets de l’entraînement hétérosocial sont statistiquement significa""


*First received 22 February 1980*