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# The Treatment Of Sex Guilt: A Comparative Study

Leonard Milton Stein

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THE TREATMENT OF SEX GUILT:  
A COMPARATIVE STUDY

by

Leonard Milton Stein

Department of Psychology

Submitted in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

Faculty of Graduate Studies  
The University of Western Ontario  
London, Ontario  
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## ABSTRACT

The purpose of this study was to compare the effectiveness of autogenic therapy, implosive therapy, and systematic desensitization in reducing sex guilt. Fifty-five university students were selected on the basis of high scores on the sex guilt subscale of the Mosher Forced Choice Guilt Inventory. Participants were then randomly assigned to one of five groups: (a) autogenic therapy (AT); (b) implosive therapy (IT); (c) systematic desensitization (SD); (d) attention control (AC); and (e) waiting list control (WL).

All groups but the waiting list control received four treatment sessions at one-week intervals. The autogenic therapy group received autogenic relaxation with intentional formulae related to sex guilt interspersed among the autogenic relaxation standard formulae. The intentional formulae related to sex guilt were derived from responses on the Mosher Forced Choice Guilt Inventory. The implosive therapy group were asked to imagine guilt-inducing scenes derived from responses to the Mosher Forced Choice Guilt Inventory. The systematic desensitization group were asked to imagine guilt-inducing scenes derived from responses to the Mosher Forced Choice Guilt Inventory. The scenes were not ranked in an hierarchy, but were repeatedly paired with relaxation. The attention control group received pseudodesensitization and had a similar procedure as systematic desensitization with the exception that neutral scenes were paired with relaxation. Half of each group, except WL, received positive expectancy instructions regarding their treatment, and half received non-positive expectancy



instructions. All treatments were presented individually by audio-tape.

All groups except the WL control group were tested on all treatment outcome and treatment credibility and evaluation measures at pretreatment, posttreatment, and at a four-week follow-up. In addition, two of the measures were administered at all sessions. The WL participants were tested only on the treatment outcome measures, administered pretreatment, posttreatment, and at follow-up.

Of the five hypotheses tested, all stated in the null form, none were rejected. The results indicated no clear superiority of any of the treatments in reducing sex guilt. The results also indicated no clear effects resulting from the expectancy manipulation. The conception of guilt as an emotional response to a specific stimulus, or a state, was questioned. An alternative conception of guilt, as an attitude, was presented, with suggestions for treatment outcome research based on that conception of guilt.

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TABLE OF CONTENTS

	Page
CERTIFICATE OF EXAMINATION.....	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENT.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	x
LIST OF APPENDIXES.....	xi
INTRODUCTION.....	1
The Concept of Guilt.....	2
The Treatment of Guilt.....	4
Systematic Desensitization.....	7
Implosive Therapy.....	9
Autogenic Therapy.....	11
Expectancy.....	17
The Present Study and the Hypotheses Tested.....	20
METHOD.....	23
Subjects.....	23
Apparatus.....	24
Measures.....	24
Treatments.....	35
Procedure.....	38

	Page
RESULTS.....	42
Data Analysis.....	42
Process Measures.....	43
Situational Measures.....	45
Effects over Trials.....	50
Evaluation of Treatments.....	50
DISCUSSION.....	59
Results in Terms of the Hypotheses.....	59
Limitations of the Study.....	63
The Concept of Guilt Reconsidered.....	69
Treatment of Guilt as an Attitude.....	74
Further Research.....	75
REFERENCES.....	77
APPENDIXES.....	90
VITA.....	216

LIST OF TABLES

Table	Description	Page
1	Group Means Adjusted for the Premeasure Covariate for Process Measures on the Between Groups Analyses of Covariance at Past Measure and at Follow-up.....	46
2	Estimated Adjusted Combined Group Means for Process Measures on the Groups X Expectancy Analyses of Covariance at Post Measure and at Follow-up.....	47
3	Cell Means Adjusted for the Premeasure Covariate for all Groups on the PGI for Positive and Non-positive Expectancy at Post Measure.....	49
4	Group Means Adjusted for the Premeasure Covariate for Situational Measures on the Between Groups Analyses of Covariance at Post Measure and at Follow-up.....	51
5	Estimated Adjusted Combined Group Means for Situational Measures on the Groups X Expectancy Analysis of Covariance at Post Measure and at Follow-up.....	52
6	Group Means for Two Measures of Treatment Effects over Six Trials from a Groups X Trials Analysis of Variance with Repeated Measures over Trials.....	54

Table	Description	Page
7	Estimated Adjusted Combined Group Means of Evaluations of Treatments on the Enjoyment Scale at Post Measure and at Follow-up from a Groups X Expectancy Analysis of Covariance.....	56
8	Estimated Adjusted Combined Group Means of Ratings of Credibility of Treatments on the Expectancy Rating Scale from a Groups X Expectancy Analysis of Covariance.....	57

LIST OF FIGURES

Figure	Description	Page
1	Mean Weekly Time Looking at Erotic Magazines as a Function of Treatment Sessions.....	53

LIST OF APPENDIXES

Appendix	Page
APPENDIX A	Word Association Test Stimulus Word List..... 90
APPENDIX B	Mosher Forced Choice Guilt Inventory, Male and Female (Form F) Forms..... 92
APPENDIX C	Reaction Inventory-Guilt..... 109
APPENDIX D	Perceived Guilt Index and Scoring Key..... 113
APPENDIX E	Expectancy Rating Scale..... 116
APPENDIX F	Enjoyment Scale..... 118
APPENDIX G	Transcripts of Autogenic Therapy Training and Treatment Tapes..... 120
APPENDIX H	Transcripts of Implosive Therapy Training and Treatment Tapes..... 129
APPENDIX I	Transcripts of Systematic Desensitization Training and Treatment Tapes..... 150
APPENDIX J	Transcripts of Attention Control Training and Treatment Tapes..... 157
APPENDIX K	Participant Consent Form..... 163
APPENDIX L	Participant Debriefing Form..... 165
APPENDIX M	Summaries of the Statistical Tests Performed on the Variables Under Investigation..... 173



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## INTRODUCTION

There is a paucity of research in the behavioural treatment of guilt. The concept of guilt, however, is historically important in personality theory. Freud (1951) went so far as to say that culture is impossible without it. Others, such as Schneiders (1968), have stated that if unconscious guilt is not uncovered in therapy, guilt will continue to control the patient's feelings and behaviour.

Sex guilt is of particular interest due to the increased research into the treatment of sexual dysfunctions in the past decade. However, sex guilt, unlike anxiety, has been virtually ignored in the research literature. The importance of guilt in sexuality is illustrated by White (1964), who stated that the main cause of difficulties in sexual development is the association of sex with feelings of inferiority, guilt, disgust, and fear (p. 121). In the treatment of sexual dysfunction sex guilt was identified by Masters and Johnson (1970) as a possible cause of a couple's failure to carry out therapeutic activities. Masters and Johnson did not state how such guilt is to be eliminated. Kaplan (1974) described guilt as one of a number of possible causes of anxiety, which in turn results in sexual dysfunction. She conceived of guilt as an unconscious process but, like Masters and Johnson (1970), did not describe a means of directly eliminating sex guilt. Kaplan (1974) stated that underlying sources of guilt should be explored during therapy sessions. The process of reducing or eliminating sex guilt was not further described by Kaplan. Masters and Johnson (1970) and Kaplan (1974)

discussed the problems caused by sex guilt; however, no clear method of guilt reduction was presented. The present research was carried out in an effort to fill that void in treatment methodology. Three treatment procedures, systematic desensitization (SD), implosive therapy (IT), and autogenic therapy (AT) were compared in order to determine which was most effective in reducing guilt related to sexual behaviour.

### The Concept of Guilt

According to Freud's (1927) psychoanalytic theory, guilt is experienced when the superego is impinged upon; that is, when the internal authority is challenged or violated. When this occurs, the person experiences moral anxiety, in Freud's terms. Freud saw the formation of the superego as the outcome of the resolution of the Oedipus complex through the process of identification. Through identification "oughts" and "ought nots", rules of behaviour, are internalized. The "ought nots" apply particularly to sexual wishes focused on the opposite sex parent. The end result is superego based sex guilt. According to Freud's conceptualization guilt feelings occur when one's actions or impulses violate the internalized rules. A person's behaviour is controlled by attempts to avoid the experience of guilt feelings.

Mowrer (1950) formulated a learning theory explanation of the identification process and its concomitant emotional responses, such as guilt. It is a two-stage learning process. In the first stage a model, usually a parent, reinforces or punishes the child's

behaviour. As this occurs, the behavioural qualities of the parent are repeatedly paired with reinforcement. Those behavioural qualities acquire secondary reinforcement value. In the second stage behaviours emitted by the child which are similar to those of the parent acquire reinforcing qualities through stimulus generalization. Thus, if a person engages in or thinks about engaging in sexual behaviour which has been learned as being improper, the conditioned emotional guilt response occurs. This explanation of guilt is of historical relevance to the present study, and it is of interest because it is a learning explanation of guilt.

Plutchik (1962) described guilt as a mixed emotion rather than as a primary emotion. He stated that guilt is a mixture of fear and pleasure, and that they must be present in nearly equal intensities in order for the emotion to be called guilt. Plutchik (1962) included in his definition of emotions the idea that there is a physiological reaction to a stimulus. Two conclusions may be made from Plutchik's (1962) formulation. The first conclusion is that guilt is a state of fear and pleasure in response to a stimulus. The second conclusion is that there is a physiological response associated with guilt which is different than the physiological response associated with fear alone.

There is other evidence which supports a distinction between fear and guilt. McGuire (1974) exposed subjects to stimuli inducing fear, anger, depression, joy, and guilt, and neutral stimuli, and then asked them to imagine the same emotions. GSR, heart rate, and frontalis muscle activity were monitored. During both presentation and imagination

Both overt avoidance and verbal reports were differentially affected by expectancy. In an attempt to explain the divergent outcomes of experiments using SD and/or IT, Gelder, Bancroft, Gath, Johnston, Mathews, and Shaw (1973) suggested that subjects' expectations have been an uncontrolled variable which may be at least partly responsible for the divergent outcomes. The fact that their research did not support their hypothesis was attributed to rigorous subject selection and assessment which may have had greater effect than the expectancy manipulation. Wilkins (1973), in a review article, concluded that there was insufficient evidence to attribute so much power to expectancy, and that theorists had been guilty of circular reasoning. On the other side of the argument, Davison and Wilson (1973) concluded from their review of the evidence that expectancy contributes to the effectiveness of SD and should be used in practice. They also stated that the assessment of the expectancy component of any treatment should be a standard practice in outcome research. Both Brown (1973) and Hall and Landréth (1975) provided research evidence that expectancy contributes to, but is not entirely responsible for the effects of SD in analogue fear research. Rosen (1975) presented participants with a description of SD, describing it either as a treatment or experimental procedure, with either a positive, negative, or no expectancy set. The different suggestions clearly influenced rated expectancies of the outcome by the participants who did not actually experience SD. Borkovec (1972) crossed positive and neutral expectancy with IT, SD, avoidance response, and no-treatment conditions in an analogue anxiety study. He found a significant main effect of expectancy on an approach

insight leads to new symptoms. Behavioural research has not supported that position.

Kaplan (1974) described an eclectic approach to the treatment of sexual dysfunction, yet, as mentioned above, treats guilt by exploring it in discussions with her patients in order to discover the "underlying sources". Kaplan's sex therapy utilizes the psychoanalytic concept of guilt, assuming that guilt affects sexual behaviour unconsciously. For example, unconscious guilt regarding the sex act may lead to anxiety, which in turn may lead to impotence in the male, or orgasmic dysfunction in the female. Kaplan's therapeutic procedure to alleviate guilt is first, approval of the patient's eroticism, and, if this is not sufficient, second, an effort to uncover the source of the guilt. Although the main feature of Kaplan's sex therapy is graduated practice of specific exercises, she stated that intrapsychic factors may be dealt with in order for the therapy to be successful. In spite of this, there is no well-defined means of reducing guilt which, in many cases, is a cause of sexual dysfunction.

Ellis (1966) approached the treatment of sex guilt from a rational point of view. He argued for complete freedom of sexual expression limited only by the restriction that others' rights not be affected. In the individual case the person must rid himself of self-imposed restraints on sexual behaviour. The first step is to not want to have guilt. Then one must behave in a non-guilty manner. Ellis, of course, recommends his rational-emotive therapy, which is both cognitive and behavioural, for reducing sex guilt. According to Ellis (1973) man

invariably makes himself maladjusted by self-criticism and acceptance of irrational beliefs. The therapist must refute the irrational beliefs and cause the client to change his/her thinking. In addition to the cognitive aspect, specific behavioural techniques are also used so that the client will behave rationally as well as think rationally. Unfortunately, there is no specific application to sex guilt described.

In attempting to identify an efficient treatment for guilt, there would seem to be two aspects of guilt which are salient. The first is that guilt is learned. From the psychodynamic viewpoint, guilt is acquired as an outcome of the process of identification. Mowrer (1950) and Rotter (1954), extended by Mosher (1961), developed learning theory descriptions of the acquisition of guilt. Ellis (1966) also described guilt as a learned response. If one accepts the premise that guilt is learned, it should follow that guilt can be unlearned.

The second salient aspect of guilt relevant to treatment is that it is a form of arousal. In the psychodynamic approach guilt itself is unconscious, and is experienced as anxiety. However, there is evidence that the guilt response is physiologically different from the anxiety response. McGuire (1974) found that heart rate was significantly higher during guilt inducing scenes than in scenes intended to induce other emotions, during both presentation and imagination of the scenes. Additional support for the argument that guilt is different than other emotions is provided by Evans (1975), whose examination of heart rate data in a number of aversive therapy articles revealed that successful applications of aversive therapy were characterized by conditioned increased heart rate. Evans concluded that it is possible that conditioned guilt is the outcome of successful aversion therapy, not

anxiety. The information provided by McGuire (1974) and Evans (1975) has a direct implication for treatment; namely, that an effective treatment of guilt would be one which is successful in reducing the emotional arousal associated with guilt.

In the present study three treatment methods were compared in order to determine which is most effective in reducing analogue sex guilt. The reasons for selecting these three, systematic desensitization (SD) (Wolpe, 1958), implosive therapy (IT) (Hogan, 1968, Stampfl, 1970), and autogenic therapy (AT) (Schultz & Luthe, 1969), are given below.

Systematic Desensitization

The underlying theory of systematic desensitization (Wolpe, 1958) has been extensively reported and researched (see, for example, Paul, 1969). Van Egeren (1971) reviewed the literature on physiological changes resulting from systematic desensitization. He concluded that, although inferences can rarely be made to the autonomic nervous system as a whole, desensitization seems to effect a number of autonomic responses, including heart rate. Mathews (1971) reviewed all articles to date on desensitization which utilized physiological measurement. He concluded that desensitization does significantly reduce the physiological response to stress, with the greatest effect on heart rate and GSR. He also agreed with Van Egeren that the various physiological response changes are not highly inter-correlated with respect to rate of change. Although Wolpe, Brady, Serber, Agras, and Liberman (1973) still speak of the application of SD almost exclusively to "avoidance behaviour motivated by anxiety" (p. 962), it would seem



logical to assume that a treatment effective in reducing heart rate would be appropriately applied to the reduction of the guilt response. The word "guilt" could logically be substituted for "anxiety" in the following statement of the rationale of systematic desensitization. "If a response inhibitory of anxiety (guilt) can be made to occur in the presence of anxiety (guilt) evoking stimuli it will weaken the bond between these stimuli and the anxiety (guilt)" (Wolpe, 1969, p. 15), my words in parentheses added.

Two studies have been carried out using SD to treat guilt. Allin (1973) used twelve scenes from the Reaction Inventory-Guilt (Evans, Jessup, & Hearn, 1975) which were rated "much" or "very much" guilt evoking by a large percentage of the subjects. Subjects had eight treatment sessions during which four scenes were each followed by relaxation followed by counting down from 100 by 7's, and four scenes were each followed by the counting and then relaxation. The remaining four scenes were not presented during treatment. Allin found that guilt, as measured by ratings given on the Reaction Inventory-Guilt, was reduced for the scenes presented in treatment sessions, but not for the non-treated scenes. Cahute (1974) had two treatment groups, one group with guilt-provoking stimuli and one group with fear of consequences stimuli, and a no treatment control group. She found that both treatment groups, as compared to the no treatment control group, rated treated scenes as less guilt-evoking. The two treatment groups were not significantly different from each other in outcome.

In conclusion, there is logical support for the use of SD in treating guilt. There is evidence of its effectiveness in reducing arousal associated with anxiety. There seems to be no reason to assume that it

would be less effective in reducing the arousal associated with guilt. In addition, there is some empirical evidence, cited above, that SD is in fact effective in guilt reduction. Finally, the paradigm of SD is applicable to guilt. Guilty subjects can be taught to relax and then be presented with guilt-evoking scenes to imagine while in a relaxed state.

### Implosive Therapy

This treatment method was first described in 1961 by Stampfl (cited in Hogan, 1968). The original theoretical basis included the view that a neurotic's defenses are learned avoidance responses which are maintained because they reduce anxiety. The goal of implosive therapy as originally stated by Stampfl is to unlearn the defenses by recreating "the original trauma"; or something very similar to it, in the absence of any real punishment, deprivation, or rejection (primary reinforcement)" (Hogan, 1968, p. 423). Among the neurotic conflicts listed as appropriate for implosive therapy, Hogan (1968) listed guilt, sexual problems, and, of course, anxiety. In the treatment session the patient is asked to imagine scenes related to the neurotic conflict and designed to produce high levels of anxiety (Hogan, 1969). The stimuli Hogan (1969) used to produce cues were derived from interview material, observation, dreams, and the therapist's treatment experience. Stampfl (1970) used four types of cues: external phobic stimulus cues; internal response cues; hypothesized cues related to internal cues; and hypothesized dynamic cues. He believed that if the cues presented during IT produced arousal, then they were appropriate. Behaviour therapists prefer to use only the stimulus related and anxiety-response cues (e.g., Watson, Gaid, and Marks, 1971; Mathews & Shaw, 1973). Marks' (1972)

review of the literature gave no clear answer to the question of the relative importance of hypothesized versus real cues; however, he concluded that specific extinction could be expected to occur more readily if cues directly related to the patient's anxiety were used. Ayer (1972), in his review article on IT, stated that if one uses learning theory as a justification for the use of IT, then the use of psychodynamic cues is meaningless. Experimental evidence that IT is effective without the use of psychodynamic cues is provided by Kirchner and Hogan (1966), Barrett (1969) and Prochaska (1971).

There is disagreement regarding the effectiveness of IT. The ultimate goal, as in SD, is the generalization of reduced arousal from imagined presentation to the actual stimuli. Rachman (1969) stated that there is indirect experimental support for that generalization. Marks' (1972) evaluation of the evidence lead to the conclusion that IT is effective in the treatment of phobic disorders. In the most extensive review of the literature to date on IT, Morganstern (1973) questioned the effectiveness of this treatment procedure. His doubt seems to have arisen from the absence of methodologically sophisticated research, and the inconsistent outcomes of published studies. He did concede, however, that "it seems possible to propose that prolonged exposure (if repeated long enough) may lower physiological arousal to a degree sufficient for subjects to make approach responses (covert or real)" (p. 331).

The physiological changes resulting from implosive therapy have received relatively little attention. Mathews and Shaw (1973), in comparing low arousal versus high arousal themes with spider phobic

college women, found no significant differences between groups in average heart rate but did find significant within subject effects. Analysis of skin conductance fluctuation frequency indicated a significant arousal x groups interaction. Their prediction of greater autonomic response during high arousal trials, and a decrement in physiological arousal across consecutive presentations was confirmed by the heart rate data. Borkovec (1972), using snake phobic college women, compared desensitization, implosion, avoidance, and no-treatment, with an expectancy manipulation. Both desensitization and implosion resulted in lower pulse rates. Borkovec (1974), again using snake phobic college women, compared SD, IT, and avoidance, measuring heart rate and skin conductance. Only the results for heart rate were reported. It was found that there was a significant reduction in arousal for SD and IT, but not for the avoidance condition.

In conclusion, there is some evidence that IT is effective in the treatment of phobias, and may be effective in reducing emotional arousal. It seems logical that IT would also be effective in reducing or eliminating the guilt response.

#### Autogenic Therapy

AT was first reported in North America in 1959 by Schultz and Luthe. This treatment method is being rigorously researched in Europe. Luthe (1970) listed 2,450 references, of which approximately 1% are in English. AT, according to Schultz and Luthe (1969), involves a process of self generation of physiological and psychophysiological states "considered as being diametrically opposed to changes elicited

by stress" (p. 1). The underlying assumption is that there are recuperative and self-normalizing brain mechanisms which are disinhibited by "a psychophysiologic shift from a normal state to the autogenic state..." (p. 1). The shift to the autogenic state is accomplished by the use of autogenic standard formulae and passive concentration along with a reduction of afferent stimulation. The reduction of afferent stimulation simply involves having the person assume a position similar to that used in relaxation training, either sitting or lying down in a quiet darkened room.

There are six autogenic standard formulae which, according to the rigorous method of Schultz and Luthe (1969), must be mastered in a fixed progression with each being mastered before the next is attempted. In their system, mastery requires several months to more than a year. Lindemann (1973), on the other hand, does not believe it is necessary to master each one, and completes the six exercises in a few weeks. He supports this modification by the reports of subjects who did not experience the expected results at each stage, yet were successfully treated by AT. Treatment outcome studies cited below also successfully used abbreviated procedures. The six standard formulae, or exercises, are suggestions of 1) heaviness, 2) warmth, 3) cardiac regulation, 4) respiratory regulation, 5) abdominal warmth, and 6) cooling of the forehead. Physiological changes associated with the standard formulae are discussed below. An example of autogenic therapy instructions including the six autogenic standard formulae is found in Appendix G.

Passive concentration is essential to the success of the standard formulae in bringing about the autogenic state (Luthe, 1972). It is this passive concentration, described as mental contact with the particular area of the body indicated by the formulae, that differentiates AT from hypnosis, where concentration is focused on an environmental stimulus, and relaxation, in which concentration is focused on internal cues (Luthe, 1970). When mental contact is established, "the trainee starts concentrating on the autogenic formula while maintaining a casual attitude toward the intended functional result throughout the exercise" (Schultz & Luthe, 1969, p. 16). The results of passive concentration on the autogenic formulae are physiological changes incompatible with the physiological effects of stress (Luthe, 1970).

There is experimental support for the claims that AT alters the physiological stress response. Luthe (1969) observed a significant reduction in heart rate in a group of 15 neurotics after four weeks of heaviness training. Jus and Jus (1963), using normal short-term trainees, found reduced heart rate, shallower breathing, and slower brain wave frequency. Polzien (1963), measuring EKG before, during, and after the heaviness exercise found decreases in heart rate in 46 of 55 subjects ranging from 1 to 24 beats per minute. Schultz and Luthe (1961) reported the following changes: reduction of the petallar response, increase in peripheral skin temperature with decrease in rectal temperature, E.E.G. patterns similar, but not identical to hypnosis and sleep, decrease in respiratory frequency with increase in amplitude; and decreased heart rate and blood pressure. Geissman,

Jus and Luthe (1961) compared E.E.G. patterns of subjects with 2-4 months of training to those with 6-90 months of training with the standard formulae. Differences were found between the two groups, primarily in the locus of theta activity. The different patterns were labeled "pre-sleep" and "autogenic state" for the two groups. Geissmann and Noel (1961) reported a decrease in alpha frequency associated with the autogenic state, with a shift from frontal to occipital and temporo-parietal activity. Regarding GSR, they reported no reaction during complete autogenic relaxation. Luthe (1971) reported significant decreases in muscle potential. Luthe (1972) concluded, based on both physiological and clinical data, that autogenic therapy results in a low arousal condition, the effects of which are opposite to those of stress.

Regarding the clinical application of AT, Luthe (1971) stated that "autogenic training has been applied to patients suffering from a variety of psychosomatic disturbances, a number of mental and behaviour disorders, certain organ diseases and the psychophysiological effects resulting from mental and bodily stress in general" (p. 642). Among the behaviour disorders and motor disturbances for which AT is useful, Luthe listed stuttering, writer's cramp, enuresis, blushing, anxiety states, and phobias. Luthe and Schultz (1969) claimed that AT is "helpful" in 70-95% of cases suffering from anxiety states, with relief occurring in 2-4 weeks. Among the psychoneurotic disorders, the best results are obtained with phobic reactions, anxiety reactions, and depressive reactions. Howard (cited in Luthe & Schultz, 1969), using several physiological measures, assessed the effects of

psychotherapy, desensitization, and desensitization plus AT on three matched groups of neurotic outpatients in reducing stress reactivity. He found the latter two groups significantly superior in reducing stress reactivity, with the last condition obtaining more rapid results. Genova (1973) compared the effects of passive relaxation and autogenic relaxation on athletes' recovery rate after training in track events. Autogenic relaxation five minutes after running had the same effect as passive relaxation one hour after running on a number of the dependent variables. In treating phobias, the use of intentional formulae enables the person to deal more effectively with those specific situations. Intentional formulae are repeated by the person during completion of the standard exercises. For example, a person with an insect phobia would repeat the formula, "Insects do not matter", during AT. Sellers (1974) used a long intentional formula to deal with anxiety over class room participation in a study comparing group and individual AT. That formula was, "I know that others may be afraid to speak out in class, but for me this fear does not matter. I contribute intelligently to the class" (p. 41). AT has also been studied regarding its effectiveness with migraine and tension headaches (Sargent, Green & Walters, 1972, 1973; Sargent, Walters & Green, 1973). Using a combination of autogenic relaxation and temperature differential (between forehead and right index finger) feedback, 81% of 42 subjects with migraine were rated as improved after a 150 day follow-up period. Thomas (1963) assessed the effects of AT on eight patients with brain injury and epileptic seizures. After 4-10 months of training he observed a decreased frequency of auras, decreased severity of seizures and



decreases in related disorders (sleep disorders, excitability). There were no experimental controls mentioned.

The following studies all used an abbreviated form of AT. Snider and Oetting (1966) used autogenic relaxation to treat test anxiety in college students, with training occurring over a three-week period. Participants were then instructed to use the technique whenever they felt tense. All 12 participants in this uncontrolled study had improved grade averages and reported a better ability to concentrate during examinations with appropriate levels of anxiety. Kahn, Baker, and Weiss (1968), in another uncontrolled study, gave two weeks of autogenic training to 16 chronic insomniacs (university students). There were a total of four training sessions over the two-week period, with instructions to participants to practice daily. There were follow-ups at 2 1/2 and 11 months. Eleven of 13 participants available reported improvement in sleep pattern. In a controlled experiment, Nicassio and Bootzin (1974) compared the effects of AT and progressive relaxation on insomnia. Participants were respondents to city newspaper ads. Thirty participants were randomly assigned to one of four groups after grouping by latency of sleep onset; two treatment groups, self-relaxation, or no-treatment control. There were four one-hour treatment sessions given over four weeks. The two treatment groups were significantly better than the two control groups in time to fall asleep. The effects of progressive relaxation occurred after three weeks, while AT revealed significant effects at the fourth week of training. Improvement was maintained at a six-month follow-up. Sellers (1974) compared individual to group treatment for anxiety. Six

treatment sessions were given over a three week period. There was a non-significant superiority of individual treatment in response to AT.

There is evidence supporting the use of AT in reducing emotional stress responses. AT would, therefore, seem applicable to guilt. It also seems evident that there is a need for controlled experiments to determine the usefulness of AT in the treatment of various emotional disorders. Only after the efficacy of AT has been established would it seem logical to undertake component research.

#### Expectancy

There has recently been increased attention given to the effects of expectancy resulting from therapeutic instructions on the results of outcome research. One reason for this is the difficulty encountered in interpreting the results obtained with a placebo control group. Evans (1974) discussed the problem of interpretation. He stated that if there is no significant difference between a treatment and a placebo group, a number of questions result: Was the absence of a significant difference due to a placebo effect? Was the dependent measure not sensitive enough? Was the placebo active and not inert? Evans (1974) advocated that placebo controls not be used because of the interpretation problem. Borkoyec and Nau (1972) suggested that differences in outcome between placebos and treatments can be attributed to 1) the treatment effect; 2) treatment plus expectancy; or 3) expectancy alone affecting only the treatment. Rappaport (1972) used four levels of expectancy in an analogue desensitization study and concluded that

Both overt avoidance and verbal reports were differentially affected by expectancy. In an attempt to explain the divergent outcomes of experiments using SD and/or IT, Gelder, Bancroft, Gath, Johnston, Mathews, and Shaw (1973) suggested that subjects' expectations have been an uncontrolled variable which may be at least partly responsible for the divergent outcomes. The fact that their research did not support their hypothesis was attributed to rigorous subject selection and assessment which may have had greater effect than the expectancy manipulation. Wilkins (1973), in a review article, concluded that there was insufficient evidence to attribute so much power to expectancy, and that theorists had been guilty of circular reasoning. On the other side of the argument, Davison and Wilson (1973) concluded from their review of the evidence that expectancy contributes to the effectiveness of SD and should be used in practice. They also stated that the assessment of the expectancy component of any treatment should be a standard practice in outcome research. Both Brown (1973) and Hall and Landreth (1975) provided research evidence that expectancy contributes to, but is not entirely responsible for the effects of SD in analogue fear research. Rosen (1975) presented participants with a description of SD, describing it either as a treatment or experimental procedure, with either a positive, negative, or no expectancy set. The different suggestions clearly influenced rated expectancies of the outcome by the participants who did not actually experience SD. Borkovec (1972) crossed positive and neutral expectancy with IT, SD, avoidance response, and no-treatment conditions in an analogue anxiety study. He found a significant main effect of expectancy on an approach

test, with both IT and avoidance being significantly affected. There was no significant effect of expectancy on SD. This study (Borkevec, 1972) also supports the hypothesized importance of expectancy in analogue fear research. Borkovec and Nau (1972) had participants rate the credibility and expectancy of two therapy, three placebo, and one component procedure rationale. Their results, which indicate that respondents can generally discriminate among the procedures with respect to credibility, indicate the need for at least assessing expectancy and credibility in outcome research. McGlynn and McDonell (1974) also found that respondents found SD more credible than a pseudotherapy, and recommended controlling for the resultant variable of expectancy. Borkovec (1973) defined expectancy manipulations as discriminative stimuli which influence post-test behaviour, done by the experimenter either implicitly or explicitly. He stated that placebos do not adequately control for this factor, and advocated the use of a crossed expectancy factor. In a very interesting expectancy manipulation: Steinmark and Borkovec (1974) treated sleep disturbed college students with relaxation, single item SD, placebo, or no-treatment. Participants were told that no improvement would occur until the fourth session. Relaxation and SD produced significantly greater reduction in sleep latency than the two control groups during the negative expectancy period; however, after the fourth session all the groups except no-treatment reported significant improvement. The authors pointed out the possibility that the placebo group self reports may have responded to the demands, rather than actually being real improvements in sleep. The fact that Nelson, Lipinsky, and Black (1975)

failed to obtain a significant effect of expectancy on self-recording behaviour reactivity places greater weight on the possibility that the Steinmark and Borkovec (placebo group) experienced real improvements in sleep. Borkovec (1974) added some confusion to the expectancy issue by finding that positive expectancy reduces heart rate in analogue fear subjects, thus possibly making it counterproductive in the use of IT, if maximum anxiety is required. The reduced heart rate outcome may provide an explanation for the facilitative effects of positive expectancy on SD. The latest research of Borkovec and his colleagues (Borkovec, Kaloupek, & Slama, 1975) compared progressive relaxation to three control conditions for their effectiveness on insomnia, with a positive expectancy manipulation for the fourth session. This time only progressive relaxation was significantly better than no-treatment in reducing sleep onset latency. In the case of insomnia, the active ingredient in the treatment now seems more important than expectancy.

In summarizing the information on expectancy, it seems that the data are equivocal. This would seem to make it even more important to explicitly control and assess the effects of expectancy on treatment outcomes.

#### The Present Study and the Hypotheses Tested

Evidence has been presented regarding the effectiveness of systematic desensitization, autogenic therapy, and implosive therapy in reducing anxiety. The present study examines the effectiveness of those treatment methods in a relatively untouched area, guilt. Although the treatment methods are based on different theories, this study is

in no way intended to test those theories. AT has been used in few well-controlled studies reported in the English language, and any outcome should provide useful information.

It is the main purpose of this study to provide evidence as to which of three treatment methods, AT, IT, or SD, is most effective in reducing sex guilt. A secondary purpose is to determine what effect expectancy has on outcome by assessing both direct treatment effects and participants' evaluations of the procedure to which they have been exposed.

A brief summary of the experiment follows. Participants were selected on the basis of scores on the Mosher Forced Choice Guilt Inventory sex subscale. They were given all measures at session one. They were assigned to one of three treatment groups, AT, IT, or SD, or one of two control groups, an attention control or waiting list control. Members of the last group were not seen again until session five. Half the members in each of the other groups was given either positive or non-positive expectancy instructions at session two, the first treatment session. There were four treatment sessions, the last at session five, when all participants were seen for post-measures. Participants were seen again after four weeks for follow-up measures.

It was hypothesized that:

- 1) there will be no significant differences between any of the treatment or control conditions.
- 2) there will be no significant difference between expectancy conditions with respect to outcome measures.

3) ratings of credibility after the first treatment session will not be significantly affected by expectancy manipulation.

4) ratings of credibility after the last session and at follow-up will not be significantly affected by treatment outcome differences.

5) ratings of enjoyment of treatment will not differ significantly between any of SD, IT, AT; or an attention control.

Hypotheses are stated in the null form as there are no sound bases in the research literature upon which to make specific predictions.

## METHOD

### Subjects

Selection of participants was carried out in the following manner. Mimeographed sheets concerning the study were circulated among students in introductory psychology classes and five other undergraduate psychology classes at the University of Western Ontario. The mimeographed sheets described the purpose of the study as an investigation of methods to reduce sex guilt, and stated that one need not believe they have a problem in this area in order to volunteer. Accompanying the mimeographed sheets were schedules of initial screening sessions, the sign-up forms regularly used in the Psychology Department at the University of Western Ontario. Of the approximately 3,000 students who had an opportunity to respond, 148 attended group screening sessions. During these sessions the Mosher Forced Choice Guilt Inventory (MFCGI) (Mosher, 1966, 1968) was administered. The sex guilt subscale of the MFCGI was used to select the participants in the study. After completion of the MFCGI, respondents were told that they would be contacted if they qualified for the remainder of the study. All people attending the screening sessions received a research participation credit. Of the 148 volunteers screened, 55 participants (26 males and 29 females) were selected. All respondents scoring above the 67th percentile in sex guilt were phoned and were asked to participate in the study.

The 55 participants were randomly assigned to three treatment and two control groups, with randomization restricted by age and sex. The



three treatment conditions were: Autogenic Therapy (5 males, 6 females), Implosive Therapy (5 males, 6 females), and Systematic Desensitization (6 males, 5 females). The two control groups were: Attention Control (5 males, 6 females) and Waiting-list Control (5 males, 6 females). Attrition accounted for the loss of 18 participants, four from AT, SD, and WL, and three from IT and AC. The final composition of each group was: Autogenic Therapy, 4 males, 3 females; Implosive Therapy, 4 males, 4 females; Systematic Desensitization, 4 males, 3 females; Attention Control, 4 males, 4 females; and Waiting-list Control, 4 males, 3 females.

#### Apparatus

The apparatus consisted of two cassette tape recorders, a 35 mm. Kodak Ektographic slide projector, a reaction-time clock, a push-button switch, and a control box. One cassette tape recorder was used to present treatment rationales and the treatments to each participant. The other cassette tape recorder was used to record responses in the Word Association Test (WAT) (Galbraith, Hain, & Liberman, 1968). The slide projector was used to present the slides containing the WAT stimulus words (see Appendix A). The control box, operated by the experimenter, was connected to the projector, push button, and the cassette recorder used to record responses. The operation is described in the Procedure section.

#### Measures

Mosher Forced-Choice Guilt Inventory (MFCGI). There are separate

male (Mosher, 1966) and female (Mosher, 1968) forms. Both forms appear in Appendix B. The female form is labelled "Form F". The MFCGI was developed from the Mosher Incomplete Sentences Test (MIST) (Mosher, 1961). The MIST contains 42 items relevant to guilt, such as, "When I have sexual desires...." Completions were scored at four points along a guilt continuum from (2), for very guilty, to (-2), very non-guilty. Three types of guilt are scored: sex guilt, hostility guilt, and morality-conscience guilt, with 14 stems each. The forced-choice forms of the inventory were developed by first selecting three completions for each of the four points on the guilt continuum for each stem, resulting in 168 items for each of the three subscales. These items were subjected to an item analysis and rated for social desirability. Guilty and nonguilty completions to the same stem were used which had been found to discriminate and were within 15% on the social desirability ratings. On the male form consisting of 79 items, the 28 sex guilt items have a possible range of -45 to 37, the 29 hostility guilt items from -47 to 48, and the 22 morality-conscience guilt items from -39 to 40. On the female form, consisting of 78 items, the 39 sex guilt items have a range from -61 to 64, the 22 hostility guilt items from -33 to 30, and the 17 morality-conscience guilt items from -24 to 27.

The inventory measures the personality disposition of guilt. It is, therefore, a trait measure of guilt. The split-half reliability of the male form sex guilt subscale is .97 (Mosher, 1966) and for the female form is .95 (Mosher, 1968). Multitrait-multimethod matrix analyses (Mosher, 1966, 1968) indicate acceptable convergent and

discriminant validity. Concurrent validity was demonstrated by Galbraith (1969), who found, in comparisons with scores on the Thorne Sex Inventory (Thorne, 1966), a correlation of .70 ( $p < .01$ ) with the Repression of Sexuality subscale, and correlations of  $-.75$  ( $p < .01$ ) and  $-.60$  ( $p < .01$ ) with the Sex Drive and Interest, and Promiscuity-Sociopathy subscales, respectively. The Thorne Sex Inventory was factor analytically derived. Scores on the MFCGI have been demonstrated to be related to premarital sexual experiences of college students (Mosher & Cross, 1971), sex responses to double-entendre words in a word association test (Galbraith, Hahn, & Leiberman, 1968), topography of associations to double-entendre words (Schwartz, 1975), sex experience and moral reasoning for men and couples (D'Augelli & Cross, 1975), recall of associations to double-entendre words in interaction with sexual stimulation (Galbraith & Mosher, 1970), males' preference for reading erotic magazines in a free choice situation (Schill & Chapin, 1972), associations to double-entendre words independent of an arousal manipulation (Schill, 1972), and females' guilt response (measured independently) to an erotic passage (Mosher & Greenberg, 1969). It has also been shown that scores on all three subscales of the MFCGI are reactive to instructions to fake bad or fake good when administered to adjudicated delinquents, and that those scores are not correlated to scores resulting from standard instructions (Dubek, Schuck, & Cymbalisky, 1971). Dubek et al. concluded that their results favor the use of the MFCGI as a research tool when there is nothing to be gained by faking. The studies cited above strongly suggest the usefulness of the MFCGI in assessing sex guilt.

Reaction Inventory-Guilt (RIG) (Evans, Jessup, & Hearn, 1975).

The RIG is intended to identify specific stimulus situations which result in guilt in individuals. The RIG is analogous to the Fear Survey Schedule (Wolpe & Lang, 1964). Items in the RIG were selected empirically by asking 30 undergraduates to list guilt-provoking situations, resulting in 50 items selected due to endorsement by at least two of the participants. Using the responses of 96 undergraduates; an item-test correlation was carried out, with  $r_{tt} = .94$  ( $p < .01$ ), indicating high internal consistency. A factor analysis resulted in identification of four factors accounting for 62.7% of the total variance. The four factors are: intentional behaviour disrupting interpersonal relations, self-destructive behaviour, behaviour contrary to moral or ethical principles, and unintentional behaviour disrupting interpersonal relationships. The first factor is similar to Mosher's hostility guilt, while the third factor would include Mosher's sex guilt and morality-conscience guilt (Evans et al., 1975).

The respondent to the RIG indicates on a rating form the intensity of guilt produced by each stimulus situation. The ratings are five descriptions of intensity: Not at all, A little, A fair amount, Much, Very much. The five descriptions are assigned values of 1 to 5, respectively. The sum of the 50 values gives a quantitative measure of degree of guilt. The inventory and rating sheet may be found in Appendix C. The RIG has been found to be reactive to changes in guilt in a study in which items from the inventory were used in the treatment procedure (Allin, 1973).

Perceived Guilt Index (PGI) (Otterbacher & Munz, 1973). The PGI was developed to provide a self-report measure of experiential guilt. It can be used as either a state or trait measure of guilt, ~~trait~~ guilt seen as a generalized self-concept. To develop the Index, undergraduates were asked to list adjectives and phrases they used to describe feelings of guilt, placing them along a guilty - not guilty continuum. Resulting items were then rated on an 11-point guilt continuum for intensity. Median intensity scores were computed and items selected with low interjudge variability. Items were then rated on nine semantic differential scales. The 11 items selected for the PGI were those which were spread evenly over the median intensity range, had low ambiguity of meaning, and had similar profiles on the semantic differential, based on a factor analysis. The only difference between the trait and state scales is the instructions. The former asks the respondent to check the item indicating how he/she normally feels, and the latter asks how he/she feels at a specific time. The instructions used in this experiment and the Index are in Appendix D. The stimulus paragraph used in the present study was excerpted from Deep Throat (Perkins, 1973, Pp. 48-50).

Otterbacher and Munz (1973), in a controlled study, obtained significant changes in PGI state scores for a group of Roman Catholic undergraduates attending sacramental confession. The authors concluded that if confessing is guilt-reducing then there is evidence for the validity of the PGI. In a second study, conducted over four weeks with volunteer undergraduates, the correlation between 1st and 4th week state measures was .02, and for trait measures was .30.

Otterbacher and Munz (1973) suggested that the low reliability for the trait measure was a result of unstable states, their theory being that the rated trait is a summation of preceding states. They found that participants whose state scores decreased over time had significantly lower posttest trait scores. While the same was not true of state increases, analysis revealed a significant posttest trait difference between state increases and decreases.

The PGI was selected for use in this research because it is an affective measure, as opposed to a dispositional (Mosher Forced Choice Guilt Inventory) or stimulus (Reaction Inventory - Guilt) measure of guilt. In addition, its use as a state measure makes the PGI appropriate for assessment of change in response to specific stimuli over time.

An erotic passage excerpted from Deep Throat (Perkins, 1973) was used as a stimulus to assess changes in affective guilt as measured by the PGI. The validity of this procedure is demonstrated in the research literature. Mosher and Greenberg (1969) found that high sex guilt females significantly increased their state of guilt after reading an erotic passage. Schill (1972) found an inverse relationship between guilt and arousal from reading an erotic passage, using male undergraduates. Izard and Caplan (1974), using unselected male and female participants and a different dependent measure, failed to replicate Mosher and Greenberg's (1969) results, and also found no sex differences for guilt. The difference in their results is probably a result of Izard and Caplan's (1974) use of unselected subjects, whereas, Mosher and Greenberg (1969) reported no significant changes for women with lower sex guilt.

Word Association Test (WAT) (Galbraith, Hahn, & Leiberan, 1968).<sup>o</sup>

Galbraith et al. developed the WAT in order to obtain an objectively scored projective test of sexual motivation and guilt which permits the ordering of people along a continuum. The WAT consists of 50 words, of which 20 are neutral words, with no sexual content, selected from the Kent-Rosanoff list. The remaining 30 words are double-entendre words with sexual connotations when used in their slang meaning, and clear non-sexual connotations when used literally.

Galbraith et al. (1968) presented the words orally and measured latency with a hand-held stopwatch. Participants were undergraduate males. Associative responses are scored 0, 1, or 2. A clearly asexual response is given a score of 0, as well as double-entendre responses to the same type of stimulus when the response was to the asexual meaning of the word. Scores of 1 or 2 were given to clearly sexual responses, with two reserved for "flagrant" sexual words, those dealing with the sex act, anatomy, or sex articles. The interscorer reliability as reported by Galbraith et al. (1968) was above .95. Galbraith et al. (1968) obtained a significant negative correlation between word association scores and scores on the sex subscale of the MFCGI ( $r = -.41$ ,  $p < .01$ ), and a significant positive correlation with scores on the heterosexuality scale of the Edwards Personal Preference Schedule (Edwards, 1953), a measure of sexual motive strength ( $r = .43$ ,  $p < .01$ ). The correlation with a measure of social desirability was .07. Data for response latency were not reported. Galbraith (1968b) reported inter-rater reliabilities of .99 (himself and a graduate student), .98, and .98 (himself and a male and a female undergraduate). The

reported split-half reliability was .93 and a .69 reliability for massed double-entendre word associations. Test-retest reliability was .80 for a three-week period of time. Galbraith (1968b) concluded that the scoring procedure is reliable, that response to subsets of words is reliable, and that responding is reliably stable over at least a three week period. The reactivity of the WAT was demonstrated again in a study in which the WAT was used as a dependent variable (Galbraith, 1968a). Low guilt male undergraduates had significant increases in word association scores after sexual stimulation, as opposed to high guilt subjects whose scores did not change significantly. Schill (1972) found that low sex guilt males (measured by the Mosher Forced Choice Guilt Inventory) obtained higher WAT scores than high-guilt males, regardless of sexual stimulation condition. Schill and Chapin (1972) obtained a nonsignificant negative correlation (-.29) between the MFCGI sex subscale and WAT scores. Guilt scores on the Word Association Test were inversely related to time spent reading erotic magazines in a waiting room setting (Schill & Chapin, 1972).

Jung is given credit for placing interpretive importance on the reaction time for word associations (Goodstein & Lanyon, 1971). Jung (1910) viewed the stimulus words as linguistic substitutes for the real things, and the verbal associations as products of the respondent's psychological past. A relatively long latency of response was evidence of "imperfect adaptation" to that situation represented by the stimulus word. Long latencies were in response only to "critical" words, those with special meaning to the respondent. He used critical words, associated with a specific crime, interspersed among neutral words, to test



suspects of a crime. Crosland (1929) applied Jung's method, with greater statistical and experimental sophistication, in seven criminal situations, with most testing done blind regarding suspects and controls. One hundred percent accuracy is reported in identifying the suspected criminals! More relevantly, Galbraith and Leiberman (1973) measured sexual associations and associative latencies in the Word Association Test under sexual arousal or sexual nonarousal, comparing the responses of suppressors (cope with anxiety by avoidance) and sensitizers (cope by approach and mastery). Sensitizers had significantly higher word association scores after sexual stimulation than did control sensitizers; the difference for repressors was not significant. The difference between sensitizers and repressors was significant for the arousal condition only. This difference was interpreted as indicating less inhibition of sexual responding by the sensitizers. To analyze latencies, reaction times to 10 sexual words and 10 asexual words, rated in an earlier study (Galbraith & Mosher, 1968), were compared and it was observed that sexual stimulation increased latencies by sensitizers in response to asexual words. The implications for the use of the latency measure in the present study are that latencies for both neutral and sexual words should be analyzed, and that the associative response latency measure is reactive to experimental manipulations.

The use of the WAT as one of the dependent measures provides an objectively scored projective measure of sex guilt; indirectly, as a result of the respondent's inhibition or disinhibition of sexual responses. The inhibition explanation is supported by Schwartz (1975),

who had high and low sex guilt (MFCGI) people take the WAT a number of times with instructions to give "new" associations each time. High guilt respondents gave significantly fewer sexual responses on the first trial, but the groups were equal across repetitions of the WAT, indicating disinhibition over trials. Alternately, asexual responses to sexual (double-entendre) words may be interpreted as perceptual defense. The latency measure is possibly an indirect measure of emotionality associated with the stimulus.

Waiting Room Test (WRT). This is the name given by this author to a procedure described by Schill and Chapin (1972). In their experiment, male undergraduates reporting for an experiment were told that the experimenter was not ready and were asked to sit and wait in a room and read some magazines if they wished. Two neutral and two popular "erotic" magazines were available. An experimenter observed through a one-way mirror for five minutes. Schill and Chapin (1972) found that high erotic readers ( $\bar{x} = 4.64$  minutes,  $N = 15$ ) had significantly lower guilt scores than low erotic readers ( $\bar{x} = .84$  minutes,  $N = 12$ ). Questioning indicated that participants were naive regarding the purpose of the experiment. The WRT was used to provide a behavioural measure of sex guilt in the present study.

Expectancy Rating Scale (ERS). Called the "credibility/expectancy-for-improvement scales" by Borkovec and Nau (1972), this assessment device was developed in order to measure both the credibility of treatment rationales, and the expectancy for improvement produced in participants by the rationales. The ERS consists of five questions regarding the treatment. Each question was answered

on a 10-point scale in the original version with scores summed over the five questions. A mean score was then calculated for each treatment rationale. Borkovec and Nau (1972) found that treatment and control group rationales were not of equal credibility, using the ERS. In their experiment the participants simply read the treatment rationales. McGlynn and McDonell (1974) had raters listen to excerpts of systematic desensitization and pseudotherapy. Systematic desensitization was rated as more credible. Nau, Caputo, and Borkovec (1974) had participants listen to descriptions and rationales for therapy and control conditions. Participants were then asked to assume they had experienced five weeks of treatment, respond accordingly on a post-test, and rate the credibility. In one of three experiments, simulated treatment outcome was greater under therapy rationale conditions, but in all three experiments simulated treatment outcome and credibility ratings were significantly correlated. Steinmark and Borkovec (1974) had ratings done after the last treatment session, so ratings in that study were possibly contaminated by treatment outcome. In another study (Borkovec, Koloupek, & Slama, 1975), a shortened version of the scale was administered after session one of four weekly sessions. The ERS as modified for use in this research is in Appendix E.

The results of the ERS are used in the interpretation of treatment group comparison results, and to assess the effects of the expectancy manipulation. Also, since the ERS was administered at each session, changes in credibility over time could be assessed.

Enjoyment Scale (ES). The ES is in Appendix F. This semantic differential measure assesses participants' perceptions of the treatments for three factors: evaluative, activity, and potency (Osgood, Suci, & Tannenbaum, 1957). Thirteen pairs of adjectives were used, five evaluative pairs, four potency pairs, and four activity pairs, randomized for order and polarity. The three factors were factor-analytically derived by Osgood et al. (1957). A fourth factor, accounting for less than 2% of the total variance, was considered a residual because the scales loading on it made no sense semantically. The ES also provides information regarding the effectiveness of the expectancy manipulation on participants' perceptions of the various treatment conditions.

#### Treatments

Autogenic Therapy (AT). During the first treatment session participants assigned to this group listened to the autogenic therapy training tape. This tape contained a description and rationale of the procedure, followed by autogenic relaxation instructions on the same tape. The description and rationale presented on the tape are a condensed, simplified version of those presented in the introductory section of this dissertation. A transcript of the autogenic therapy training tape is provided in Appendix G.

In treatment sessions 2, 3 and 4, participants in the AT group listened to a twenty-five minute treatment tape of autogenic relaxation instructions including intentional formulae dealing with sex. The rationale and description of AT were not repeated in these three treatment sessions.

Implosive Therapy (IT). The sequence of events for IT was the same as that for AT. During the first treatment session participants assigned to the IT group listened to the IT training tape. The IT training tape began with a description and rationale of the procedure for IT, followed by twenty minutes of IT. The rationale presented was that of extinction.

In treatment sessions 2, 3 and 4, participants in the IT group listened to a twenty-five minute treatment tape of implosive imagery. The implosive method was similar to that described by Prochaska (1971). The six items selected to be paired with aversive imagery were those scored in the guilt direction on the sex subscale of the Mosher Forced Choice Guilt Inventory by most respondents. Due to differences in males' and females' responses on the MFCGI, separate treatment tapes for men and women were used. Transcripts of IT training and treatment tapes are provided in Appendix H.

Systematic Desensitization (SD). The sequence of events for SD was the same as for AT and IT. During the first treatment session, participants assigned to the SD group listened to the SD training tape. The SD training tape gave a counterconditioning explanation of SD followed by relaxation training on the same tape. The relaxation instructions used were those in Lazarus (1971). These relaxation instructions were selected because of their apparent higher face validity than strictly muscle relaxation instructions.

In treatment sessions 2, 3 and 4, a twenty-five minute treatment tape was played. This tape began with the same relaxation instructions followed by instructions to imagine the guilt scenes while

relaxing. The sex guilt scenes selected were those items in the sex subscale of the MFCGI answered in the guilt direction by most respondents. There were separate tapes for males and females due to differences in responses. It was not possible to rank order the hierarchy items with respect to intensity of guilt response. Each item was presented three times with visualization for 30 seconds, followed by 30 seconds of relaxation for each item. This taped method of SD is similar to that used by Nawas, Mealiea, and Fishman (1971), with the exception that items were not in a graded hierarchy and later items were not presented more frequently. Donner and Guerney (1969), in comparing therapist to taped administered SD with groups, employed a hierarchy using most frequently listed items related to test anxiety. They found no difference between the two treatment groups, which were both significantly better than a waiting list control group. Krapfl and Nawas (1970) compared three types of standard hierarchies and two control groups in the desensitization of snake phobias. The hierarchy items were ordered by increasing aversiveness, decreasing aversiveness, or were randomized. All three types resulted in significant improvement compared to the control groups. Nawas, Fishman, and Pucel (1970), using taped presentation, compared individual hierarchies, standardized hierarchies, pseudodesensitization, and a no treatment control group. The first two groups improved significantly compared to the control groups, and did not differ significantly from each other. The use of taped standardized hierarchies seems defensible based on previous research. Yates (1975), in his text on the application of theory to practice, stated that there seems to be no special way

of constructing the hierarchies which is necessary for desensitization to be effective. Transcripts of training and treatment tapes are provided in Appendix I.

Pseudodesensitization (AC). This procedure was included as an attention control condition. It was selected due to its frequent use as a control condition (see, for example Nawas, Mealiea, & Fishman, 1971; Trexler & Karst, 1972).

The procedure for AC is the same as that for SD with the exception that neutral scenes were presented in place of sex guilt items. In the training tape presented during the first treatment session, the procedure was called "covert control". The rationale given for the procedure was that of a coping skill. The AC procedure is similar to the pseudodesensitization procedure used by Nawas et al. (1971). Transcripts of the pseudodesensitization procedure are provided in Appendix J.

Waiting List (WL). This was a no-treatment control group. Those people assigned to this group were told that it was necessary to obtain measurements of guilt over time, independent of treatment effects. Each participant in this group was assessed at pretesting, posttesting, and follow-up sessions, with no other contact except to arrange appointments.

#### Procedure

All participants were seen individually except for the initial selection in which the MFCGI was administered to groups of volunteers. Signed consent forms for participation were also obtained at that

time. A consent form is provided in Appendix K. In order to obtain a large enough N to make statistical analyses meaningful, the study had to be run three times. The three samples were derived independently. A female experimenter, a paid undergraduate, ran the first group of participants (N = 12). A male experimenter, also a paid undergraduate, ran the second (N = 9). The author ran the third (N = 16).

Session One - Pretesting Session. Appointment times for this session were arranged by telephone. When the participant arrived at the experimental room, the experimenter explained that he/she was not yet ready and asked the person to have a seat at a table on which were four magazines - Playboy, Penthouse, Sport, and Newsweek for males, or Viva, Playgirl, Chatelaine, and Newsweek for females. The person was told that he/she could look at the magazines if they desired, and that the experimenter would return shortly. The experimenter then went to an adjoining room and observed the person through the one-way window for five minutes, recording the amount of time during which erotic magazines were read (defined as magazine open with eyes on magazine). This was the Waiting Room Test. The experimenter then returned, gave out the Reaction Inventory-Guilt and Perceived Guilt Index, and left the room. After approximately ten minutes the two tests were collected and instructions for the Word Association Test were given. The participant was placed facing the wall opposite the projector, handed the response button, and told,

Words will be projected onto the wall there one at a time. When you see the word, you are to say the very first word that enters your mind. But before you say



your word, you are to press this button. The button starts a tape recorder in the other room which will record your responses through this microphone. Each time the slide changes the recorder stops, so remember to press the button before you say your word. Do you have any questions?

The experimenter then turned off the room lights, shut the door, and went to the adjoining room. The experimenter pressed the "cycle" button on the control box, opening a shutter in front of the projector exposing the first word and starting the timer. When the respondent pressed the response button, the timer stopped and the recorder started. The experimenter then recorded response latency on the WAT scoring sheet, reset the timer, pressed the "stop recorder" button and then advanced the next slide in the projector, and pressed the "cycle" button. This process was repeated for all 50 stimulus words. The experimenter returned to the experimental room and arranged times for future appointments. All sessions were at one-week intervals. Those in the Waiting List control group were told of the need to obtain baseline data over intervals of time without treatment and that they would be contacted in four weeks' time for their next appointment.

Session Two - Treatment Session One. Upon arrival for the session, the participant first had the Waiting Room Test. Next, he/she was asked to sit in the recliner and told that the procedure they would undergo would be presented on tape, and to do whatever the tape instructed, and that the experimenter would return when the tape was over. The experimenter then started the tape (training tapes for this session), turned the lights off, and left the room. The experimenter returned to the room when the tape ended, gave out the Perceived

Guilt Index, Enjoyment Scale, and Expectancy Rating Scale and left the room. After approximately ten minutes, the tests were collected and a time arranged for the next session one week later.

Sessions Three and Four - Treatment Sessions Two and Three.

Exactly the same procedure was followed as described in Session Two, except that treatment tapes were used in place of training tapes.

Session Five - Treatment Session Four and Posttest Session. The Waiting Room Test and treatment were administered as in Session Two. Following the tape, all other dependent measures were administered, namely the Mosher Forced Choice Guilt Inventory, Reaction Inventory-Guilt, Perceived Guilt Index, Word Association Test, Enjoyment Scale (ES), and Expectancy Rating Scale (ERS).

Those in the Waiting List control group underwent the same procedure with the exception that they did not listen to a treatment tape and did not receive the ES and ERS.

All participants were then asked to return again in four weeks' time for a follow-up session at which all tests would again be completed. Appointment times were arranged.

Session Six - Follow-up Session. Four weeks after Session Five, all dependent measures were administered to all participants, with the exception of the waiting list control group who did not receive the ES and ERS. Participants were told they would receive a written description of the experiment and feedback regarding their individual results at a later date. Mailing addresses were obtained so that the feedback could be mailed to the participants. The form used for feedback is provided in Appendix L.

## RESULTS

### Data Analysis

Inspection of the pretest data indicated differences among the groups with respect to several measures. Hence, an analysis of covariance was employed for all measures. Separate between groups analyses of covariance, with pretest measures as covariates, were carried out on each of the dependent variables at posttest and at follow-up. Separate two-way analyses of covariance with pretest measures as covariates, were employed for all measures to assess groups (4) x expectancy (2) differences at posttest and follow-up. The Newman-Keuls method of multiple comparisons was used when significant  $F$  values were obtained. The Newman-Keuls method was selected because its critical values are a compromise between Type I and Type II errors (Ferguson, 1971). In order to assess change over time, a groups (4) x trials (6) analysis of variance with repeated measures over trials was employed for the Waiting Room Test (WRT) and the Perceived Guilt Index (PGI). These two measures were administered at each session. Summary tables for the analyses are provided in Appendix M.

Three analyses were employed to investigate the effects of having used three separate samples. A chi square test was applied to the number of participants assigned to each of the five treatment groups for each of the three samples. Chi square was not significant ( $\chi^2$  (8df) = 2.86), indicating that no one sample contributed disproportionately to the size of any one group. In order to investigate the

contribution of sampling to pretest differences an analysis of variance was employed using participants' scores from the Mosher Forced Choice Guilt Inventory Sex Subscale (used to select participants) from the three samples. The results of the analysis were not significant ( $F = 1.31$ ,  $df = 2/34$ ). The results of the two analyses would seem to indicate that the use of three samples did not introduce a significant sampling effect. An analysis of variance applied independently to all treatment outcome measures at post-measure and at follow-up for the three samples revealed only one significant effect (Word Association Test Word Score,  $F = 3.26$ ,  $df = 2/34$ ,  $p = .05$ ) at post-measure, and none at follow-up. In summary, it appears that the use of three samples did not have a significant effect on the outcome of the present study.

The results will be considered under the following headings: Process Measures, Situational Measures, Effects Over Trials, and Evaluations of Treatments. Under each of these headings, with the exception of Effects Over Trials, results at post- and follow-up measures for between groups and for groups x expectancy analyses will be described.

#### Process Measures

Mosher Forced Choice Guilt Inventory. The following scores on the MFCGI were obtained for each subject at pre-, and posttreatment, and at follow-up: sex guilt, hostility guilt, morality guilt, and total guilt. Total guilt is the sum of the three subscale scores. The between groups analysis of covariance with premeasures as the

covariates revealed no significant treatment effect at either post- or follow-up measure for sex guilt, for morality guilt, or for total guilt. For hostility guilt, the analysis of covariance with premeasures as the covariate revealed a significant treatment effect at post-measure ( $F = 3.13, df = 4/31, p < .05$ ) and at follow-up ( $F = 3.03, df = 4/31, p < .05$ ). The Newman-Keuls test indicated that hostility guilt was significantly lower for implosive therapy than for systematic desensitization at post-measure ( $p < .05$ ) and at follow-up ( $p < .05$ ). No other differences between groups were significant for hostility guilt.

The groups x expectancy analysis of covariance with premeasures as the covariate revealed no significant effects at either post- or follow-up measure for sex guilt, for morality guilt, or for total guilt. For hostility guilt there was a significant main effect for treatments at post-measure ( $F = 3.07, df = 3/21, p = .05$ ) and at follow-up ( $F = 3.20, df = 3/21, p < .05$ ), with no significant main effect for expectancy and no significant interaction at post-measure or at follow-up. The Newman-Keuls test, applied to estimated combined group means with covariate adjustment, indicated that hostility guilt was significantly lower for implosive therapy than for autogenic therapy ( $p < .01$ ) and systematic desensitization ( $p < .05$ ) at post-measure. At follow-up, implosive therapy was again significantly lower than systematic desensitization ( $p < .05$ ) and autogenic therapy ( $p < .05$ ).

Word Association Test. The following scores on the WAT were obtained for each subject at pre-, and posttreatment, and at follow-up: response latency for double entendre words (DE), response latency for neutral words (N), and word association scores. The between groups

analysis of covariance with premeasures as the covariate revealed no significant treatment effect at either post- or follow-up measure for DE, N, or word association scores. The groups x expectancy analysis of covariance with premeasures as the covariate revealed no significant effects at either post- or follow-up measure for DE, N, or word association scores. Group means for the process measures are provided in Table 1 for the between groups analyses of covariance, and in Table 2 for the groups x expectancy analysis of covariance.

#### Situational Measures

Perceived Guilt Index. Scores on the PGI were obtained for each subject at each session. The between groups analysis of covariance with premeasures as the covariate was applied to post-measure and follow-up, revealing no significant treatment effect. The groups x expectancy analysis of covariance with premeasures as the covariate revealed a significant main effect for treatments ( $F = 3.09$ ,  $df = 3/21$ ,  $p < .05$ ), a significant main effect for expectancy ( $F = 5.62$ ,  $df = 1/21$ ,  $p < .05$ ), and a significant interaction ( $F = 3.20$ ,  $df = 3/21$ ,  $p < .05$ ) at post-measure. Inspection of the means for expectancy reveals that positive expectancy resulted in lower guilt scores on the PGI than non-positive expectancy. Regarding the significant main effect for treatments, the Newman-Keuls test, applied to estimated combined group means with covariate adjustment, indicated that both the implosive therapy and attention control groups had significantly lower guilt scores than the systematic desensitization group ( $p < .05$ ). Regarding the significant interaction, the Newman-Keuls test revealed

TABLE 1

Group Means Adjusted for the Premeasure Covariate  
for Process Measures on the Between Groups Analyses  
of Covariance at Post Measure and at Follow-up

Variable	Treatment					
	AT	IT	SD	AC	WL	F
MFCGI - SEX						
Post	-32.12	-33.13	-19.01	-20.41	-22.49	1.77
Follow-up	-22.72	-31.88	-20.31	-19.07	-24.71	.82
MFCGI - HOSTILITY						
Post	9.80	- 2.71	11.50	1.73	8.47	3.13*
Follow-up	9.06	- 6.07	16.57	2.48	11.42	3.03*
MFCGI - MORALITY						
Post	1.79	- 4.31	4.37	- 3.43	- 1.26	.43
Follow-up	- 2.84	- 5.39	4.00	.43	- 1.85	.64
MFCGI - TOTAL						
Post	-23.49	-38.16	- 2.85	-22.16	-14.55	1.53
Follow-up	-19.25	-42.27	1.31	-16.17	-14.50	1.92
WAT - DE						
Post	3.19	3.48	3.03	3.25	2.56	.49
Follow-up	2.48	2.29	2.24	2.37	2.42	.13
WAT - N						
Post	2.43	2.61	2.22	3.03	2.59	.70
Follow-up	1.92	1.79	1.87	2.12	2.16	.99
WAT - WORD						
Post	13.03	15.19	14.22	16.21	12.99	.21
Follow-up	- 14.45	13.73	13.55	12.40	13.22	.05

\*  $p < .05$

TABLE 2

Estimated Adjusted Combined Group Means for Process Measures on the Groups x Expectancy Analyses of Covariance at Post Measure and at Follow-up

Variable	Treatment				
	AT	IT	SD	AC	F
MFCGI - SEX					
Post	-32.02	-40.48	-13.07	-19.86	2.38
Follow-up	-23.48	-40.06	-13.39	-18.44	1.03
MFCGI - HOSTILITY					
Post	14.82	- 6.09	8.95	1.66	3.07*
Follow-up	14.12	- 9.59	14.55	2.41	3.20**
MFCGI - MORALITY					
Post	8.79	- 8.87	6.50	- 3.00	.33
Follow-up	4.29	-10.13	5.83	.87	.63
MFCGI - TOTAL					
Post	- 8.37	-55.42	2.29	-21.17	1.50
Follow-up	- 5.07	-59.77	6.97	-15.15	1.94
WAT - DE					
Post	2.66	2.99	3.48	3.60	.20
Follow-up	2.12	1.96	2.54	2.60	.13
WAT - N					
Post	2.17	2.41	2.77	3.27	.80
Follow-up	1.73	1.65	2.21	2.29	.79
WAT - Word					
Post	16.33	19.00	9.53	10.38	.36
Follow-up	17.51	17.26	9.17	7.01	.04

\* p = .05

\*\* p &lt; .05



no significant differences. In order to explore possible effects contributing to the significant interaction, a less conservative test was then employed. The Duncan new multiple range test, applied to cell means with covariate adjustment, indicated significant differences between positive and non-positive expectancy for systematic desensitization ( $p < .05$ ) and for the attention control group ( $p < .05$ ). Within the positive expectancy condition, the attention control group had significantly lower guilt scores than systematic desensitization ( $p < .05$ ). Within the non-positive expectancy condition, implosive therapy had significantly lower guilt scores than systematic desensitization ( $p < .01$ ) and autogenic therapy ( $p < .05$ ). The attention control group also had lower guilt scores than systematic desensitization ( $p < .05$ ) within the non-positive expectancy condition. Group means for both expectancy conditions are presented in Table 3. The two-way analysis of covariance with premeasures as the covariate revealed no significant main effects and no significant interaction at follow-up.

Waiting Room Test. Scores on the WRT were obtained for each subject at each session. The between groups analysis of covariance with premeasures as the covariate was applied to post-measure and follow-up, revealing no significant treatment effect. The groups x expectancy analysis of covariance with premeasures as the covariate revealed no significant main effects and no significant interaction at post-measure or at follow-up.

Reaction Inventory-Guilt. Scores on the RIG were obtained for each subject at pre-, and posttreatment, and at follow-up. The between groups analysis of covariance with premeasures as the covariate

TABLE 3

Cell Means Adjusted for the Premeasure Covariate  
for all Groups on the PGI for Positive and  
Non-positive Expectancy at Post Measure

Expectancy	Treatment			
	AT	IT	SD	AC
Positive	2.25	1.96	3.03	1.26
Non-positive	3.54	1.71	4.83	3.06

revealed no significant treatment effect at post-measure or at follow-up. The groups x expectancy analysis of covariance with pre-measures as the covariate revealed no significant main effects and no significant interaction at post-measure or at follow-up. Group means for the situational measures are provided in Table 4 for the between groups analyses of covariance, and in Table 5 for the groups x expectancy analyses of covariance.

#### Effects Over Trials

Perceived Guilt Index. Scores on the PGI were obtained for each subject at each session. A groups (4) x trials (6) analysis of variance with repeated measures over trials revealed no significant main effect for treatments or for trials, and no significant interaction.

Waiting Room Test. Scores on the WRT were obtained for each subject at each session. A groups (4) x trials (6) analysis of variance with repeated measures over trials revealed no significant main effect for treatments, a significant main effect for trials ( $F = 3.21$ ,  $df = 5/22$ ,  $p < .05$ ), and no significant interaction. A trend analysis was performed, revealing a cubic trend ( $F = 6.84$ ,  $df = 5/22$ ,  $p < .05$ ). A graphical representation of the WRT group means over trials is presented in Figure 1. The group means for the PGI and the WRT over trials are provided in Table 6.

#### Evaluations of Treatments

Enjoyment Scale. The following scores on the ES were obtained for each subject, except those in the Waiting List group, at pre-, and

TABLE 4

Group Means Adjusted for the Premeasure Covariate for  
Situational Measures on the Between Groups Analyses  
of Covariance at Post Measure and at Follow-up

Variables	Treatments					
	AT	IT	SD	AC	WL	F
PGI						
Post	2.80	1.84	3.79	2.17	2.50	1.79
Follow-up	2.93	2.37	3.31	2.18	3.91	1.28
WRT						
Post	1.59	1.46	1.85	1.30	1.73	.07
Follow-up	1.36	1.52	.69	.97	.74	1.01
RIG						
Post	148.95	156.99	163.57	178.48	174.74	2.48
Follow-up	150.65	151.26	168.99	177.39	174.45	2.08

TABLE 5

Estimated Adjusted Combined Group Means for Situational  
Measures on the Groups x Expectancy Analyses of Covariance  
at Post Measure and at Follow-up

Variables	Treatments				
	AT	IT	SD	AC	F
PGI					
Post	2.94	1.77	4.11	2.00	3.09*
Follow-up	3.05	2.30	3.54	2.00	.79
WRT					
Post	1.43	1.55	1.87	1.16	.34
Follow-up	1.22	1.67	.76	.74	.40
RIG					
Post	161.6	146.3	164.5	170.9	2.09
Follow-up	159.5	142.7	170.0	171.4	2.08

\*  $p < .05$

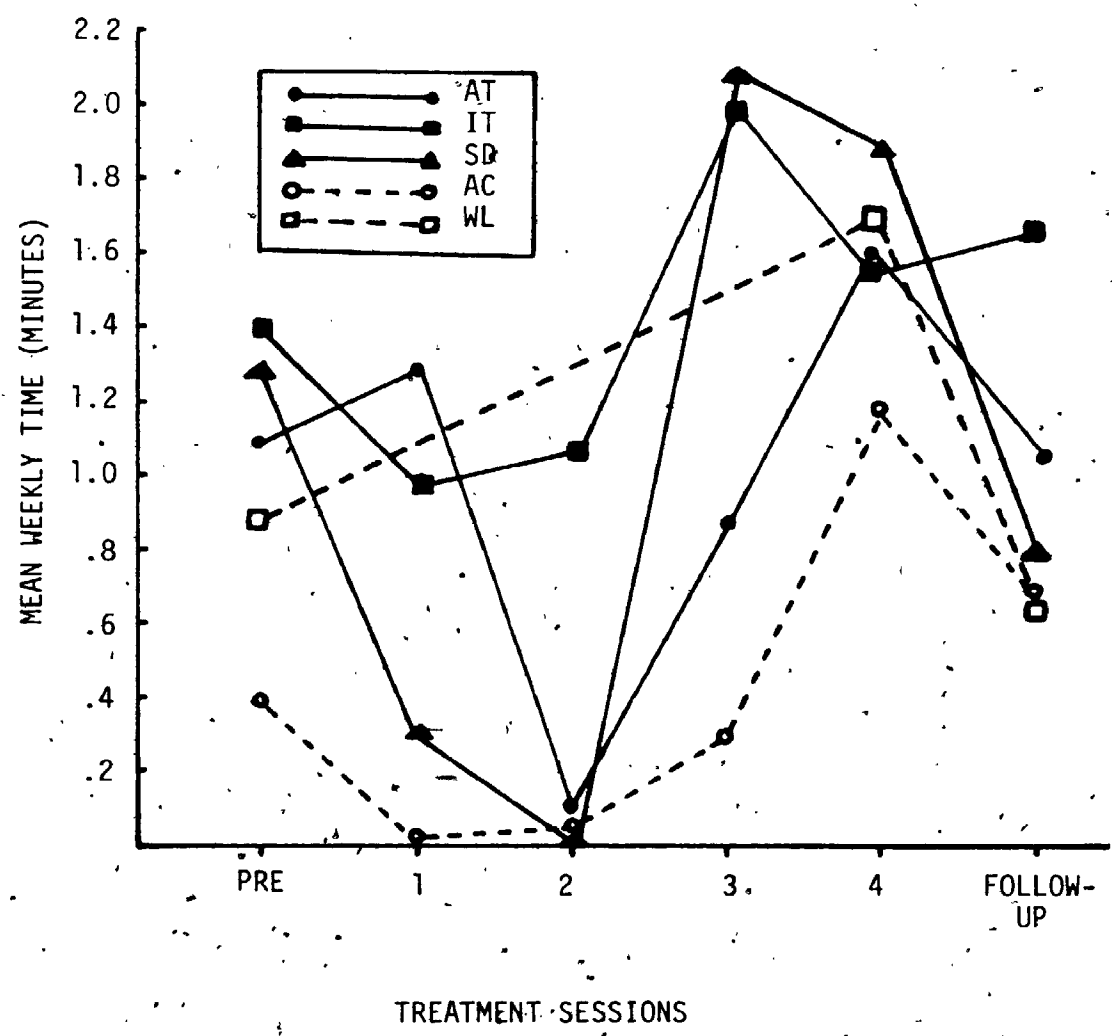


Figure 1. MEAN WEEKLY TIME LOOKING AT EROTIC MAGAZINES AS A FUNCTION OF TREATMENT SESSIONS.

TABLE 6

Group Means for Two Measures of Treatment Effects  
Over Six Trials from a Groups x Trials Analysis of Variance  
with Repeated Measures over Trials

Variable	Group	Trials					
		PRE	1	2	3	4	FOLLOW
WRT	AT	-.4286	-.0357	-1.1786	.1786	1.3571	.1071
	IT	-.4063	-.6688	-.2938	1.3000	.1125	-.0438
	SD	.4857	-.8714	-1.0857	.9143	.6286	-.3571
	AC	.5188	-.8688	-.8688	.3500	.4438	.4250
PGI	AT	3.7857	3.7857	2.8000	3.1286	2.8286	2.9571
	IT	3.2875	3.2750	3.2125	1.7750	1.7750	2.3000
	SD	4.6143	2.2000	3.2571	3.3143	3.9714	3.5000
	AC	2.7250	1.8875	2.0000	2.9250	2.0000	2.0000

posttreatment, and at follow-up: evaluative, potency, and activity, each scored separately. A groups x expectancy analysis of covariance with premeasures as the covariate revealed no significant main effects for groups or for expectancy, and no significant interaction for the evaluative, potency, or activity scores at either post-measure or follow-up. Group means for the four groups for the three ES scores are provided in Table 7.

Expectancy Rating Scale. Scores on each of the five questions separately, and the total score of the five questions comprising the ES were obtained for each subject, except those in the Waiting List group, at pre-, and post-treatment, and at follow-up. A groups x expectancy analysis of covariance with premeasures as the covariate revealed no significant main effects for groups or for expectancy, and no significant interaction for any of the five questions or the total score at either post-measure or at follow-up. Group means for the ERS for the five questions and total score are provided in Table 8.

A summary of the significant results follows. The between groups analysis of covariance for hostility guilt on the Mosher Forced Choice Guilt Inventory was significant at post-measure ( $p < .05$ ) and at follow-up ( $p < .05$ ), with implosive therapy significantly lower in hostility guilt than systematic desensitization at post-measure ( $p < .05$ ) and at follow-up ( $p < .05$ ). There was a significant main effect for treatments for hostility guilt on the groups x expectancy analysis of covariance at post-measure ( $p = .05$ ) and at follow-up ( $p < .05$ ), with implosive therapy significantly lower in hostility



TABLE 7

Estimated Adjusted Combined Group Means of Evaluations of Treatments  
on the Enjoyment Scale at Post Measure and at Follow-up from a  
Groups x Expectancy Analysis of Covariance

Subscale	Treatment					
	Occasion	AT	IT	SD	AC	F
Evaluative						
Post		5.412	3.651	4.671	5.426	.9588
Follow		5.135	4.301	4.523	5.201	.4458
Potency						
Post		2.836	3.659	3.188	2.721	1.6110
Follow		2.783	3.127	3.167	2.690	.9981
Activity						
Post		2.671	3.276	2.435	2.807	.6937
Follow		2.465	2.934	3.046	2.840	2.4344

TABLE 8

Estimated Adjusted Combined Group Means of Ratings of Credibility  
of Treatments on the Expectancy Rating Scale from a  
Groups x Expectancy Analysis of Covariance.

Question	Treatment				
	AT	IT	SD	AC	F
Question 1					
Post	3.62	2.87	2.98	3.37	.6672
Follow-up	3.21	2.62	3.40	3.37	.8079
Question 2					
Post	2.59	2.63	3.00	3.00	1.5244
Follow-up	3.04	2.75	3.14	2.88	.9249
Question 3					
Post	3.79	2.88	2.68	3.25	1.4724
Follow-up	3.54	3.00	3.29	2.88	.6232
Question 4					
Post	4.21	4.00	3.71	2.87	.2902
Follow-up	3.96	3.50	3.69	2.87	.3087
Question 5					
Post	3.79	3.50	3.29	3.75	.5152
Follow-up	3.46	3.00	2.99	3.63	.5474
Total Score					
Post	18.00	15.88	16.65	16.25	.6494
Follow-up	17.21	14.88	16.51	15.63	.6389

guilt than autogenic therapy ( $p < .01$ ) and systematic desensitization ( $p < .05$ ) at post-measure, and implosive therapy had lower hostility guilt than autogenic therapy ( $p < .05$ ) and systematic desensitization ( $p < .05$ ) at follow-up. The groups  $\times$  expectancy analysis of covariance on the Perceived Guilt Index revealed a significant main effect for treatments ( $p < .05$ ), a significant main effect for expectancy ( $p < .05$ ), and a significant interaction ( $p < .05$ ) at post-measure. Systematic desensitization had higher guilt scores than implosive therapy ( $p < .05$ ) and attention control ( $p < .05$ ). Positive expectancy was associated with less guilt than non-positive expectancy on the Perceived Guilt Index. Systematic desensitization ( $p < .05$ ) and attention control ( $p < .05$ ) accounted for the significant interaction, with attention control significantly lower than systematic desensitization ( $p < .05$ ) within the positive expectancy condition. Within the non-positive expectancy condition, implosive therapy was significantly lower than systematic desensitization ( $p < .01$ ) and autogenic therapy ( $p < .05$ ), and attention control was also lower than systematic desensitization ( $p < .05$ ). The groups  $\times$  trials analysis of variance with repeated measures over trials applied to the Waiting Room Test revealed a significant main effect for trials ( $p < .05$ ), with a trend analysis revealing a cubic trend ( $p < .05$ ).

## DISCUSSION

In the discussion there will first be a review of the results in terms of the hypotheses tested. Limitations of the study will then be examined. Next, the concept of guilt will be discussed, followed by suggestions for further research based on implications of the present study.

### Results in Terms of the Hypotheses

The hypotheses tested in the present study were stated in the null form due to the exploratory nature of the experiment. There was no previous sound research literature on the behavioural treatment of guilt on which to base predictions of outcome. The first hypothesis was that there would be no significant differences between any of the treatment or control conditions. The outcome that there were few significant treatment effects in the between groups analyses of covariance suggests that this hypothesis cannot be rejected. The only significant effects were for hostility guilt as measured by the Mosher Forced Choice Guilt Inventory (MFCGI), at both post and follow-up occasions. In the treatment x expectancy analysis of covariance applied to AT, IT, SD, and AC, only the main effect for treatments at posttest and follow-up was significant. In both analyses, implosive therapy (IT) was superior to systematic desensitization (SD), with no other significant differences among groups. This outcome for hostility guilt is interesting since hostility guilt was not a target of the treatments. It cannot be argued that the effect for hostility guilt is a generalization of changes accruing to sex guilt since there is no

evidence for significant changes in sex guilt. Measurement error related to the hostility guilt subscale of the MFCGI is unlikely since that subscale was developed with and similarly to the other two subscales of the MFCGI (Mosher, 1966, 1968). A speculative explanation is that hostility guilt is qualitatively different from sex guilt and that the effects of IT are such that there was an accidental direct effect on some central aspect of hostility guilt. This speculative explanation would have to be tested directly.

The second hypothesis tested in the present study was concerned with the interaction of treatments and expectancy, stating that there will be no significant differences between expectancy conditions with respect to outcome measures. With the exception of one outcome measure, the Perceived Guilt Index (PGI), this hypothesis was not rejected. There were significant main effects for treatments and for expectancy, and a significant interaction, all at post measure, but not at follow-up. The positive expectancy manipulation was significantly superior to no expectancy in reducing guilt. The data reveal that for the most powerful treatment, IT, there is no interaction with expectancy, while measured guilt is lower under the positive expectancy condition for the other three conditions. These results tentatively indicate that in the present study expectancy does not seem to be a powerful manipulation and may only be of value with weaker treatments. It is interesting that, where significant effects were found, IT was reliably superior to SD. Morganstern (1973), in his very critical review of IT and flooding, attributed reported instances of effective use of IT to "demand characteristics of the situation, expectancy of the subjects, or other extra-therapy variables" (p. 332); and the absence of meaningful control

groups. In the present study those arguments should not apply. While all possible extra-therapy variables and demand characteristics cannot be controlled, the procedures were administered by tape, two of the three experimenters were relatively naive regarding the treatments used, and expectancy was manipulated. The absence of an expectancy effect with IT is in contradiction with the results reported by Borkovec (1972). Dee (1970) found a weak effect of expectancy on IT using taped instructions, while Layné (1970) found no significant expectancy effect. Borkovec (1972) did not use taped presentations, while Dee (1970) and the present study did. The question is raised as to whether an expectancy manipulation is more effective when delivered in vivo or when delivered via tape recordings. This question would seem to be important only after expectancy is proven to be an important variable, as it seems to be with less powerful treatments.

The third and fourth hypotheses were concerned with the participants' ratings of the credibility of the treatments as measured by the Expectancy Rating Scale (ERS). The third hypothesis was that ratings of credibility after the first treatment session would not be significantly affected by expectancy. There were no significant results on tests of this hypothesis so it seems that, in contradiction to Borkovec (1972), expectancy manipulations did not influence credibility in the present study. The absence of an affect of expectancy on credibility ratings might be attributed to the fact that previous research in this area has been concerned with anxiety, and those findings do not hold with respect to guilt. Also, the absence of an effect may simply be due to the weakness of the expectancy

manipulation in comparison to other variables, such as the treatments. The fourth hypothesis was that ratings of credibility after the last treatment session and at follow-up would not be significantly affected by treatment outcome differences. The groups x expectancy analysis of covariance results do not contradict this. Since there are no significant group differences on the ERS, and there is no clearly superior treatment for sex guilt, this hypothesis could not be adequately tested.

The fifth hypothesis was that ratings of enjoyment, as measured by the Enjoyment Scale (ES), would not differ significantly between any of systematic desensitization, implosive therapy, and autogenic therapy. The data, including those for attention control indicate similar assessments of all four treatment conditions for evaluation, potency, and activity. The absence of significant differences between groups on the scales of the ES and the absence of treatment outcome differences leaves the hypothesis essentially untested.

Change in sex guilt over time was assessed using the Waiting Room Test (WRT) and the Perceived Guilt Index (PGI), with measures at all six test and treatment sessions. The significant cubic trend for the WRT indicates that, for this behavioural measure of guilt, there was an initial increase in guilt, followed by a decrease at post measure, with guilt increasing again at follow-up. A number of participants asked about the large one-way window, so it is difficult to know what effect the expectation of being observed might have had. The decrease in time spent looking at erotic magazines in sessions after the pretest may be a result of sensitization to the situation,

followed by desensitization over time as a result of either habituation or a treatment effect. The decrease in time spent looking at the magazines at follow-up could be attributed to sensitization or a weakening of the treatment effect over the four-week interval between post measure and follow-up measure.

Overall, the few significant effects lead to the tentative conclusion that the three experimental treatments are no better than pseudodesensitization and a waiting-list control in reducing sex guilt. The pseudodesensitization group was not rated as significantly different from the real treatments either for credibility or for enjoyment. Thus it functioned as a placebo treatment, having the "appearance" of a real treatment.

#### Limitations of the Study

Sample size. The sample size in the present study may be considered small, having seven or eight subjects in each of the five groups. A larger sample size would increase the power of the tests used in data analysis. If sample size were at an optimum level in the present study, the interpretation of the results would be less speculative since the power of the tests would be greater.

Subject selection. In the initial stage of subject selection, potential volunteers were told that they need not believe that they have a problem with sex guilt in order to participate. The effect of selecting participants in this manner, even though only those scoring in the highest third within the group of volunteers were selected, would be to have a restricted range of possible change in guilt scores. Also, there was a failure to control for depression, which may have interacted with treatment in a significant manner.



\* The mean and standard deviation on the sex subscale of the MFCGI for male participants in the present study are -5.05 and 15.18. Means for males cited in the literature (D'Augelli & Cross, 1975; Galbraith, 1969; Galbraith et al., 1968; Mosher & Cross, 1971; Schill & Chapin, 1972) range from -28 to 15, with standard deviations from 6.91 to 18.07. The lower limit of the male form of the sex subscale of the MFCGI is -45. The mean and standard deviation for female participants in the present study are -19.24 and 17.21. Means for females cited in the literature (D'Augelli & Cross, 1975; Mosher & Cross, 1971) range from -49.3 to 3.50 with standard deviations from 6.7 to 24.34. The lower limit of the female form of the sex subscale of the MFCGI is -61. These data would seem to indicate that scores obtained in the present study are comparable to previously reported scores and, more importantly, that there was room statistically for significant decreases in sex guilt scores. Restricted range would not seem to have contributed to the outcome of the present study. No scores for males and females combined were found in the research literature; therefore, a comparison with the combined scores from the present study is not possible.

It is possible that the potential problem of low functional guilt might have been avoided if a different method of subject selection had been used. Rosen (1975), in his discussion of the use of mildly anxious subjects in phobia analogue studies, argued that subjects with a true problem or concern in the relevant area may be more easily recruited than analogue subjects. Bernstein and Paul (1971) questioned the use of subjects whose primary motivation is participation credit, curiosity, or

a desire to aid science. Recruitment of people with a real concern about sex guilt as participants in the present study might have resulted in a greater possible range of change in scores, and the participants would probably have had a greater motivation for change.

Analogue research. The problem of subject selection is related to the broader topic of analogue research. Rosen (1975) stated that analogue treatment methods are used so that specific methodological factors may be controlled in order to identify cause-effect relationships. He argued that analogue subjects should be used only when "true" subjects are too limited in number. The value of analogue research lies in the control and identification of variables. The weakness of analogue research, according to Bernstein and Paul (1971), is the extent to which they generalize to the clinical setting. Generalization of results to the clinical setting is a function of the number of shared essential characteristics. Bernstein and Paul (1971) list four areas of concern: subjects and selection, target behaviors and assessment, treatment techniques, and therapist characteristics and environments. They argue that the payoff to people for participation should be relief of distress, with volunteers recruited for a treatment service, not for an experiment. In terms of the present study, the target problem may have been no problem at all for many of the participants, with the result being little change. Regarding target behavior assessment, degree of distress should be assessed using direct measures of arousal, cognition, and behavior, according to Bernstein and Paul (1971). Treatment techniques will be discussed in a later section. The training and expertise of therapists should be sufficient and equivalent. This

last area is of less relevance to the present study since all treatments were automated and were recorded according to published procedures. The use of analogue research in the present study is justified by the scarcity of research dealing with the topic of sex guilt treatment and by the small number of controlled studies of autogenic therapy. In his discussion of tactics for future behavior modification research, Paul (1969a) listed the development of treatment techniques in the laboratory as the first step. The present study was intended to be such an initial step in the investigation of treatment for sex guilt.

Measures. The measures of guilt employed in the present study can be examined on the basis of their possibly being nonreactive, and on the basis of appropriateness of measures selected. Nonreactivity is not likely because for most of the measures a variety of other studies have demonstrated the reactivity of the measures. The sex subscale scores of the Mosher Forced Choice Guilt Inventory (MFCGI) have been found to reflect sexual experience and moral reasoning for men and couples (D'Augelli & Cross, 1975), and scores on all three subscales of the MFCGI were demonstrated to be reactive to instructions to fake good or fake bad (Dubek et al., 1971). The Reaction Inventory-Guilt reflected changes in response on items used in treatment as opposed to untreated items (Allin, 1973). The Perceived Guilt Index scores changed as a result of respondents attending sacramental confession (Otterbacher & Munz, 1973). The Word Association Test scores were shown to change when word association scores increased following sexual stimulation of male undergraduates (Galbraith, 1968a). Behaviour in the Waiting Room Test was shown to be related to scores on the sex subscale of the MFCGI (Schill & Chapin, 1972). The usefulness of the Expectancy Rating Scale was demonstrated by Borkovec and Nau (1972) and by McGlynn and McDonell

(1974) in rating the credibility of treatment rationales. The Enjoyment Scale (Osgood et al., 1957) has been used extensively. Thus, based on previous research, it seems that the dependent measures used in the present study could be expected to be reactive to changes in guilt.

If participants had been selected on the basis of having a distressing level of sex guilt, an appropriate measure would be an evaluation of reported level of distress by self report. A list of behaviors affected by sex guilt could be constructed based on participants' reports, resulting in a behavioral measure of generalization outside the laboratory. In addition, the possibility exists that many participants experienced new or more extensive sexual behavior as first year students, with positive reinforcement from peers: It is possible that such experience would affect guilt scores. Sexual experience during the course of the experiment was not assessed. A knowledge of such experience might contribute to the interpretation of results. A measure of sexual behavior, such as the Heterosexual Experience Scale (Zuckerman, 1973) would serve that function.

Treatment procedures. Another possible explanation for the absence of significant differences among the groups is that the treatments employed are inert with respect to sex guilt. There is a large body of research providing evidence for the effectiveness of these three procedures in reducing anxiety, especially so for SD. The possibility exists, however, that although AT, IT, and SD are active with respect to reducing anxiety, they may be inactive with respect to sex guilt. Although the evidence regarding anxiety reduction is not as strong for IT and AT, the present study produced few significant differences among the three, and when differences were found they favoured IT. Thus if

one accepts the idea that SD is not inert with respect to guilt (Allin, 1973; Cahute, 1974), then IT and AT could logically be assumed to be as effective as SD. The fact that the Expectancy Rating Scale data suggest that the AC condition was as credible as the others, and the Enjoyment Scale data suggest that it is as potent and active as the others, as rated by the participants, together suggest that pseudodesensitization is a placebo treatment by one criterion: it is convincing. The results for pseudodesensitization cannot be attributed to participants not accepting it as a real treatment, as compared to the three treatment conditions. Evans (1974) stated that a placebo treatment must, by definition, be believable and inert. Evidence has been provided above for the former. Evans also stated that where there is no significant difference between a treatment and a placebo treatment, this may be due to placebo effects for either condition, insensitive measures, or a placebo that is actually active. The first two possibilities have been discussed. The question to be answered is, what evidence is there that pseudodesensitization is not inert? The training instructions to the participants gave the AC procedure the name "covert control", a method of learning to control stress associated with guilt (relaxation was paired with neutral scenes). This could be construed as a self-control explanation. Goldfried and Trier (1974) carried out an experiment to investigate the effectiveness of relaxation training with the aim of resolving confusion from conflicting evidence. They had two treatment conditions: relaxation training with an explanation that it would automatically reduce anxiety, and relaxation training with a self-control explanation given in terms of learning a coping skill applicable in many anxiety-provoking situations, including public speaking. Public

speaking anxiety was the target behaviour. There was a group discussion group functioning as an attention-placebo group. There were five "live" group treatment sessions with two tape sessions between each weekly live session. Change score results consistently indicated improvement for the self-control group, especially at follow-up. Expectancy, assessed after the first session, was equal for the relaxation groups. Ratings of satisfaction at follow-up also showed the self-control group to be significantly better. The conclusion, based on public speaking and generalization results, was that participants had learned an active coping skill which was used in a variety of situations. In reference to the present study, it is argued that the AC condition actually functioned as a relaxation-coping skill condition. Since AC was significantly superior to SD in the PGI positive expectancy condition, there is some support for that argument.

A possible explanation for the absence of significant differences between the WL control group and the other groups is spontaneous improvement. Bakeland and Lundwall (1975) described improvement in untreated clinical populations assessed after periods as short as six weeks (Gottschalk, Fox, & Bates, 1973) with those patients more likely to improve having better pretreatment morbidity scores. Their waiting list and immediate treatment patients were found to improve to the same extent. It is, perhaps, possible to generalize the above information to the present study, explaining the absence of significant differences in sex guilt among treatment and control groups.

#### The Concept of Guilt Reconsidered

A conclusion which may be drawn from the discussion thus far is

that guilt is not a stimulus-bound emotional response analogous to anxiety. If guilt were such a state, the treatments would be expected to have had a measurable effect relative to the control conditions. Although the treatments employed in the present study may be appropriate for emotions, they appear not to be appropriate for guilt. Guilt would seem to be a more complex response, with emotion being one of a number of components included in the guilt response. Such an interpretation would explain the resistance of sex guilt to short-term behavioral treatment effects.

Guilt as an Attitude. It is proposed that sex guilt might be construed as a trait, rather than a state, comprised of sexual attitudes learned at an early age and reinforced during a person's development by parents and society.

Hoffman (1970) described three types of internalization in his discussion of moral development: conditioned fear or anxiety, orientation towards the standards of a reference group or person, and an experience of standards as an obligation to the self. The third most approaches definitions of guilt presented in the introduction. That type of internalization, an experience of standards as an obligation to the self, motivates the individual to avoid guilt by appropriate behaviour, and "involves an inner process of thought and judgement concerning right and wrong in which the actor thinks through the standards and accepts them as his own" (p. 264). In terms of behaviour, a guilt-provoking stimulus situation leads to cognitions and an emotional response, which in turn lead to avoidance or escape behaviour. Hoffman (1970) concluded from his review of the literature that social learning theory best accounts for the early stages of moral development,

with cognitive mediation allowing for conceptual generalizations, in addition to the conditioned physical generalizations. He further stated that continued cognitive development is a function of interaction with rational authority figures who utilize induction (explanations for the use of power), and experience in authority roles, thus evaluating and legitimizing internalized standards. A third process described by Hoffman involves conditioned anxiety or guilt associated with the impulse to perform a prohibited act, insuring conformity in the absence of authority figures. The fourth process described by Hoffman is based on induction and the child's empathy for the harmful effects on others of deviant behaviour. The four processes, according to Hoffman, are not stages, but independently operating modes of development. The outcome is the third type of internalization, which is an experience of standards as an obligation to the self. This type of internalization applies directly to guilt.

It can be concluded that a conceptualization of guilt as a state is an oversimplification. Treatment methods whose function is the modification of states, as in the present study, are not likely to be effective. The results of the present study support that conclusion; therefore, a new conceptualization of guilt is required.

Hoffman's (1970) description of the acquisition of moral standards included a type of internalization involving an experience of standards as an obligation to the self. This was expanded to a chain of responses to a guilt-provoking stimulus situation, the responses being cognitions and an emotional response, followed by avoidance or escape behaviour. The theory of attitudes presented by Zimbardo and Ebbeson (1959) is directly related to Hoffman's (1970) explanations of the acquisition of moral standards, and provides the basis for the conceptualization



of sex guilt as an attitude. Zimbardo and Ebbesen (1969) defined attitudes "as either mental readiness or implicit predispositions which exert some general and consistent influence on a fairly large class of evaluative responses" (p. 6). Attitudes are reflected in behaviour, and are enduring predispositions which are learned (Zimbardo and Ebbesen, 1969). Techniques which affect learning should be effective in changing attitudes. However, Zimbardo and Ebbesen also stated that there are three components into which attitudes have been divided: affect, cognition, and behaviour. The first is an emotional response, the second is evaluation and factual knowledge, and the third is overt behaviour towards the object of the attitude. The contention that there is a cognitive component in guilt is supported by Mosher, (1961, 1965), who developed a conceptualization of guilt based on Rotter's (1954) social learning theory of personality. Rotter used three personality constructs, behavior potential, expectancy, and reinforcement value, in a formula to predict human behavior in a specific situation. The formula states that "the potentiality of the functionally related behaviours  $x$  to  $n$  to occur in the specified situations  $1$  to  $n$  in relation to potential reinforcements  $1$  to  $n$  is a function of the expectancies of these behaviours leading to these reinforcements in these situations and the values of these reinforcements" (P. 110). According to Mosher (1961, 1965), the expectancy variable includes both fear, an expectancy for external punishment, and guilt, an expectancy for internal punishment. Mosher (1961) defined guilt as "a generalized expectancy for self-mediated punishment (i.e. negative reinforcement) for violating, anticipating the violation of, or failure to attain

internalized standards of proper behaviour" (p. 23). Guilt is acquired in childhood by immediate concrete punishment for certain behaviours, and loss of love. The latter, according to Mosher (1961) tends to be more delayed and vague with respect to consequences, and becomes independent of concrete reinforcement, and thus, internal. This is the origin of an expectancy for guilt based on the history of reinforcement. Mosher (1961, 1965) used the term "generalized expectancy for guilt" to represent an anticipation of an internal response, such as self-criticism or self-punishment. This is an implicit indication that a cognitive evaluation of behaviour occurs within the guilt process. The description of attitudes presented here can be related directly to Hoffman's (1970) third type of internalization of moral standards, and the resulting three-component process of behavior motivated by emotion mediated by cognitions. In terms of guilt, there is a predisposition to behave in a manner which avoids an unpleasant emotion (guilt), with the mediation of a cognitive evaluation of the situation. Because there are three components to attitudes, namely, emotions, cognitions, and behaviour, techniques changing the emotional component alone would not necessarily affect the other two, as indicated by the results of the present study. Attitude change methods based on cognitive dissonance theory are effective after behaviour change, but the behaviour changes are not enduring, and attitude change has not produced enduring changes in behaviour (Zimbardo & Ebbesen, 1969). What seems to be required is a method which will efficiently result in enduring changes in cognition as a means of attitude change. If the evaluation of a situation is modified, or the rules governing a class of behaviours are changed, then the

emotional responses following new behaviours should also be changed accordingly.

#### Treatment of Guilt as an Attitude

The cognitive modification technique to be suggested is based on the idea that the way in which a person perceives, anticipates, and evaluates events influences the effects of the external environment on the person's emotions and behaviour. Specifically, the goal is to have the person change what is said to him/herself. A modification of stress inoculation (Meichenbaum & Cameron, 1974), to be called guilt inoculation, would be utilized. The format of the treatment would include 1) didactic education about the guilt response including the emotional arousal and the guilt emotion-producing self-statements; 2) treatment of the emotional response by relaxation, and modifying self-statements by overt and covert modeling, and rehearsal of coping self-statements; 3) graduated performance assignments, perhaps facilitated by covert rehearsal; and 4) rewarding self-statements. Treatment could be focused on specific guilt-producing situations derived from the Mosher Forced Choice Guilt Inventory sex subscale, the Reaction Inventory-Guilt, and any additional situations reported by the participant in the study. Guilt inoculation deals with all three components of an attitude: the emotional response, by relaxation and self-statements; cognitions, by instruction and self-statements; and behaviour, by graded assignments. The application of stress inoculation to guilt would be exploratory, as were the treatments employed in the present study, but the method seems to better fit the target response as here conceptualized.

In summary, the theory of guilt as an emotion can be questioned. The treatments employed in the present study seem to be ineffective in reducing guilt, although evidence has been provided for their effectiveness with anxiety. It seems erroneous, then, to conceive of guilt as an emotional state. An alternative theory of guilt has been presented. This alternative is that guilt is an attitude. A treatment method was then suggested as worthy of future research into the problem of guilt reduction. The treatment, a cognitive-behavioural procedure, utilizes three change components which fit the three components of an attitude: the emotional response component of the attitude is reduced by relaxation training and appropriate self-statements; the cognitions are modified by instruction and appropriate self-statements; and, the behavioural component is modified by graded assignments.

#### Further Research

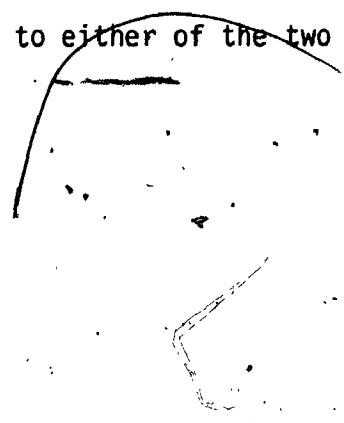
The present study has raised a number of questions which indicate possible future approaches to the investigation of the treatment of sex guilt.

An initial follow-up study might be a treatment analogue experiment employing the same treatments as those in the present study. The participants, however, would be selected on the basis of their assertion that sex guilt is a real problem for them. In addition to the measures used in the present study, it would be useful to assess sexual behaviour and relevant cognitions. Sexual behaviour is of interest since it is an uncontrolled variable which may interact with outcome, and it may itself be a useful outcome measure. Information regarding cognitive

changes might aid in interpreting treatment outcomes, and provide cues for the direction of later research.

Another follow-up study might be a non-analogue treatment outcome experiment employing trained clinicians administering treatments as they would in a clinic. Participants would be people experiencing distressing levels of sex guilt. Appropriate control groups and the suggested assessment methods would be employed.

It would be appropriate, given the conclusions from the present study, that future research investigate the effectiveness of a cognitive modification procedure. A "guilt inoculation" group could be added to either of the two studies described above.



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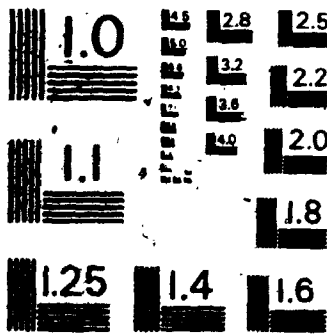
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APPENDIX A

Word Association Test Stimulus Word List

## Stimulus Words for the Word-Association Test

- |             |               |
|-------------|---------------|
| 1. LIGHT    | *26. QUEER    |
| 2. CHAIR    | 27. SPIDER    |
| * 3. SNATCH | *28. WIENER   |
| 4. TOBACCO  | *29. TAIL     |
| * 5. RUBBER | 30. BUTTERFLY |
| 6. TABLE    | 31. SOLDIER   |
| * 7. BROAD  | *32. PIECE    |
| 8. HEALTH   | *33. PET      |
| * 9. BUST   | *34. HUMP     |
| 10. OCEAN   | *35. TOOL     |
| *11. NUTS   | *36. SUCK     |
| *12. PARK   | *37. BANG     |
| *13. PRICK  | *38. PERIOD   |
| 14. SALT    | 39. STOVE     |
| *15. MAKE   | *40. ASS      |
| 16. STREET  | 41. CITY      |
| *17. CRACK  | *42. BALLS    |
| *18. SCREW  | *43. CHERRY   |
| 19. BITTER  | 44. RIVER     |
| 20. CABBAGE | *45. JUGS     |
| *21. BLOW   | 46. EAGLE     |
| 22. CARPET  | *47. PUSSY    |
| *23. COCK   | *48. BOX      |
| *24. MOUNT  | 49. SOUR      |
| 25. LAMP    | *50. LAY      |

\*Indicates double-entendre words.

APPENDIX B.

Mosher Forced Choice Guilt Inventory,  
Male and Female (Form F) Forms

## Mosher F-C Inventory

This questionnaire consists of a number of pairs of statements or opinions which have been given by college men in response to the "Mosher Incomplete Sentences Test". These men were asked to complete phrases such as "When I tell a lie..." and "To kill in war..." to make a sentence which expressed their real feelings about the stem. This questionnaire consists of the stems to which they responded and a pair of their responses which are lettered A and B.

You are to read the stem and the pair of completions and decide which you most agree with or which is most characteristic of you. Your choice, in each instance, should be in terms of what you believe, how you feel, or how you would react, and not in terms of how you think you should believe, feel, or respond. This is not a test. There are no right or wrong answers. Your choices should be a description of your own personal beliefs, feelings, or reactions.

In some instances you may discover that you believe both completions or neither completion to be characteristic of you. In such cases select the one you more strongly believe to be the case as far as you are concerned. Be sure to find an answer for every choice. Do not omit an item even though it is very difficult for you to decide; just select the more characteristic member of the pair.

Your answers are to be recorded on a separate answer sheet. If alternative A is more characteristic of you for a particular item place an X in column A for that item. If alternative B is more characteristic of you for a particular item place an X in column B for that item.

1. When I tell a lie...
  - A. it hurts.
  - B. I make it a good one.
2. To kill in war...
  - A. is a job to be done.
  - B. is a shame but sometimes a necessity.
3. Women who curse...
  - A. are normal.
  - B. make me sick.
4. When anger builds inside me...
  - A. I usually explode.
  - B. I keep my mouth shut.
5. If I killed someone in self-defense...
  - A. would feel no anguish.
  - B. think it would trouble me the rest of my life.
6. I punish myself...
  - A. for the evil I do.
  - B. very seldom for other people do it for me.
7. If in the future I committed adultery...
  - A. I won't feel bad about it.
  - B. it would be sinful.
8. Obscene literature...
  - A. is a sinful and corrupt business.
  - B. is fascinating reading.
9. "Dirty" jokes in mixed company...
  - A. are common in our town.
  - B. should be avoided.
10. As a child, sex play...
  - A. never entered my mind.
  - B. is quite wide spread.
11. I detest myself for...
  - A. my sins and failures.
  - B. for not having more exciting sexual experiences.
12. Sex relations before marriage...
  - A. ruin many a happy couple.
  - B. are good in my opinion.
13. If in the future I committed adultery...
  - A. I wouldn't tell anyone.
  - B. I would probably feel bad about it.



14. When I have sexual desires...
  - A. I usually try to curb them.
  - B. I generally satisfy them.
15. If I killed someone in self-defence, I...
  - A. wouldn't enjoy it.
  - B. I'd be glad to be alive.
16. Unusual sex practices...
  - A. might be interesting.
  - B. don't interest me.
17. If I felt like murdering someone...
  - A. I would be ashamed of myself.
  - B. I would try to commit the perfect crime.
18. If I hated my parents...
  - A. I would hate myself.
  - B. I would rebel at their every wish.
19. After an outburst of anger...
  - A. I usually feel quite a bit better.
  - B. I am sorry and say so.
20. I punish myself...
  - A. never.
  - B. by feeling nervous and depressed.
21. Prostitution...
  - A. is a must.
  - B. breeds only evil.
22. If I killed someone in self-defense, I...
  - A. would still be troubled by my conscience.
  - B. would consider myself lucky.
23. When I tell a lie...
  - A. I'm angry with myself.
  - B. I mix it with truth and serve it like a Martini.
24. As a child, sex play...
  - A. is not good for mental and emotional well being.
  - B. is natural and innocent.
25. When someone swears at me...
  - A. I swear back.
  - B. it usually bothers me even if I don't show it.
26. When I was younger, fighting...
  - A. was always a thrill.
  - B. disgusted me.

27. As a child, sex play...  
A. was a big taboo and I was deathly afraid of it.  
B. was common without guilt feelings.
28. After an argument...  
A. I feel mean.  
B. I am sorry for my actions.
29. "Dirty" jokes in mixed company...  
A. are not proper.  
B. are exciting and amusing.
30. Unusual sex practices...  
A. are awful and unthinkable.  
B. are not so unusual to me.
31. When I have sex dreams...  
A. I cannot remember them in the morning.  
B. I wake up happy.
32. When I was younger, fighting...  
A. never appealed to me.  
B. was fun and frequent.
33. One should not...  
A. knowingly sin.  
B. try to follow absolutes.
34. To kill in war...  
A. is good and meritable.  
B. would be sickening to me.
35. I detest myself for...  
A. nothing, I love life.  
B. not being more nearly perfect.
36. "Dirty" jokes in mixed company...  
A. are lots of fun.  
B. are coarse to say the least.
37. Petting...  
A. is something that should be controlled.  
B. is a form of education.
38. After an argument...  
A. I usually feel better.  
B. I am disgusted that I allowed myself to become involved.
39. Obscene literature...  
A. should be freely published.  
B. helps people become sexual perverts.

40. I regret...  
A. my sexual experiences.  
B. nothing I've ever done.
41. A guilty conscience...  
A. does not bother me too much.  
B. is worse than a sickness to me.
42. If I felt like murdering someone...  
A. it would be for good reason.  
B. I'd think I was crazy.
43. Arguments leave me feeling...  
A. that it was a waste of time.  
B. smarter.
44. After a childhood fight, I felt...  
A. miserable and made up afterwards.  
B. like a hero.
45. When anger builds inside me...  
A. I do my best to suppress it.  
B. I have to blow off some steam.
46. Unusual sex practices...  
A. are O.K. as long as they're heterosexual.  
B. usually aren't pleasurable because you have preconceived feelings about their being wrong.
47. I regret...  
A. getting caught, but nothing else.  
B. all of my sins.
48. When I tell a lie...  
A. my conscience bothers me.  
B. I wonder whether I'll get away with it.
49. Sex relations before marriage...  
A. are practiced too much to be wrong.  
B. in my opinion, should not be practiced.
50. As a child, sex play...  
A. is dangerous.  
B. is not harmful but does create sexual pleasure.
51. When caught in the act...  
A. I try to bluff my way out.  
B. truth is the best policy.
52. As a child, sex play...  
A. was indulged in.  
B. is immature and ridiculous.

53. When I tell a lie...  
A. it is an exception or rather an odd occurrence.  
B. I tell a lie.
54. If I hated my parents...  
A. I would be wrong, foolish, and feel guilty.  
B. they would know it that's for sure!
55. If I robbed a bank...  
A. I would give up I suppose.  
B. I probably would get away with it.
56. Arguments leave me feeling...  
A. proud, they certainly are worthwhile.  
B. depressed and disgusted.
57. When I have sexual desires...  
A. they are quite strong.  
B. I attempt to repress them.
58. Sin and failure...  
A. are two situations we try to avoid.  
B. do not depress me for long.
59. Sex relations before marriage...  
A. help people to adjust.  
B. should not be recommended.
60. When anger builds inside me...  
A. I feel like killing somebody.  
B. I get sick.
61. If I robbed a bank...  
A. I would live like a king.  
B. I should get caught.
62. Masturbation...  
A. is a habit that should be controlled  
B. is very common.
63. After an argument...  
A. I feel proud in victory and understanding in defeat.  
B. I am sorry and see no reason to stay mad.
64. Sin and failure...  
A. are the works of the Devil.  
B. have not bothered me yet.
65. If I committed a homosexual act...  
A. it would be my business.  
B. it would show weakness in me.

66. When anger builds inside me...  
A. I always express it.  
B. I usually take it out on myself.
67. Prostitution...  
A. is a sign of moral decay in society.  
B. is acceptable and needed by some people.
68. Capital punishment...  
A. should be abolished.  
B. is a necessity.
69. Sex relations before marriage...  
A. are O.K. if both partners are in agreement.  
B. are dangerous.
70. I tried to make amends...  
A. for all my misdeeds, but I can't forget them.  
B. but not if I could help it.
71. After a childhood fight, I felt...  
A. sorry.  
B. mad and irritable.
72. I detest myself for...  
A. nothing, and only rarely dislike myself.  
B. thoughts I sometimes have.
73. Arguments leave me feeling...  
A. satisfied usually.  
B. exhausted.
74. Masturbation...  
A. is all-right.  
B. should not be practiced.
75. After an argument...  
A. I usually feel good if I won.  
B. it is best to apologize to clear the air.
76. I hate...  
A. sin.  
B. moralists and "do gooders".
77. Sex...  
A. is a beautiful gift of God not to be cheapened.  
B. is good and enjoyable.
78. Capital punishment...  
A. is not used often enough.  
B. is legal murder, it is inhuman.
79. Prostitution...  
A. should be legalized.  
B. cannot really afford enjoyment.

ANSWER SHEET  
MOSHER F-C INVENTORY

NAME:

STUDENT NO:

SEX:

Pr Po F

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## MOSHER F-C INVENTORY

## Form F

This questionnaire consists of a number of pairs of statements or opinions which have been given by college women in response to the "Mosher Incomplete Sentences Test". These women were asked to complete phrases such as "When I tell a lie..." and "To kill in war..." to make a sentence which expressed their real feelings about the stem. This questionnaire consists of the stems to which they responded and a pair of their responses which are lettered A and B.

You are to read the stem and the pair of completions and decide which you most agree with or which is most characteristic of you. Your choice, in each instance, should be in terms of what you believe, how you feel, or how you would react, and not in terms of how you think you should believe, feel, or respond. This is not a test. There are no right or wrong answers. Your choices should be a description of your own personal beliefs, feelings, or reactions.

In some instances you may discover that you believe both completions or neither completion to be characteristic of you. In such cases select the one you more strongly believe to be the case as far as you are concerned. Be sure to find an answer for every choice. Do not omit an item even though it is very difficult for you to decide; just select the more characteristic member of the pair.

Your answers are to be recorded on a separate answer sheet. If alternative A is more characteristic of you for a particular item place an X in column A for that item. If alternative B is more characteristic of you for a particular item place an X in column B for that item.

1. I punish myself...
  - A. very infrequently.
  - B. when I do wrong and don't get caught.
2. If I killed someone in self-defence...
  - A. I would be glad to be alive.
  - B. I would be a murderer.
3. Women who curse...
  - A. usually want to bring attention to themselves.
  - B. in private are still ladies.
4. When anger builds inside me...
  - A. I let people know how I feel.
  - B. I'm angry at myself.
5. If in the future I committed adultery...
  - A. I hope I would be punished very deeply.
  - B. I hope I enjoy it.
6. Obscene literature...
  - A. is all right if you like it.
  - B. ought to be completely abolished.
7. "Dirty" jokes in mixed company...
  - A. do not bother me.
  - B. are something that make me very uncomfortable.
8. Masturbation...
  - A. helps one feel eased and relaxed.
  - B. is wrong and will ruin you.
9. I detest myself for...
  - A. nothing, I love life.
  - B. for my sins and failures.
10. Sex relations before marriage...
  - A. should be permitted.
  - B. are wrong and immoral.
11. If in the future I committed adultery...
  - A. I would be unworthy of my husband.
  - B. I would have a good reason.
12. I should have been punished for...
  - A. many things I kept secret.
  - B. very few things.
13. Capital punishment...
  - A. is totally acceptable for capital crimes.
  - B. is wrong and should be stopped.



14. If I committed a homosexual act...
  - A. it would be my business.
  - B. it would show weakness in me.
15. When caught in the act...
  - A. I make a fool of myself.
  - B. I try to get out of it the best I can.
16. After a childhood fight, I felt...
  - A. guilty and ashamed.
  - B. that I had triumphed.
17. When I was a child, sex...
  - A. was not talked about and was a feared word.
  - B. was fun to think about.
18. When I have sexual dreams...
  - A. I sometimes wake up feeling excited.
  - B. I try to forget them.
19. When I was younger, fighting...
  - A. didn't bother me.
  - B. never appealed to me.
20. Arguments leave me feeling...
  - A. elated at winning.
  - B. depressed and disgusted.
21. "Dirty" jokes in mixed company...
  - A. can be funny depending on the company.
  - B. are in bad taste.
22. Capital punishment...
  - A. is a good deterrent to crime.
  - B. does not deter crime, so why keep it.
23. Obscene literature...
  - A. makes interesting reading.
  - B. is for people with sick minds.
24. I detest myself for...
  - A. nothing at present.
  - B. being so self-centered.
25. Petting...
  - A. is an expression of affection which is satisfying.
  - B. I am sorry to say is becoming an accepted practice.
26. Unusual sex practices...
  - A. are not so unusual.
  - B. don't interest me.

27. After a childhood fight, I felt...  
A. good if I won, bad otherwise.  
B. hurt and alarmed.
28. If I hated my parents...  
A. I would need psychiatric help.  
B. I would rebel at their every wish.
29. "Dirty" jokes in mixed company...  
A. disgust me.  
B. do not bother me as long as they are just in fun.
30. If I had sex relations, I would feel...  
A. very dirty.  
B. happy and satisfied.
31. Sex...  
A. is good and enjoyable.  
B. should be saved for wedlock and childbearing.
32. After an outburst of anger...  
A. I usually feel quite a bit better.  
B. I feel ridiculous and sorry that I showed my emotions.
33. I punish myself...  
A. when I make mistakes.  
B. rarely.
34. After an argument...  
A. I feel proud in victory, understanding in defeat.  
B. I wish that I hadn't argued.
35. A guilty conscience...  
A. does not bother me too much.  
B. is worse than a sickness to me.
36. When I have sexual desires...  
A. I enjoy it like all healthy human beings.  
B. I fight them for I must have complete control of my body.
37. Prostitution...  
A. makes me sick when I think about it.  
B. needs to be understood.
38. After a childhood fight, I felt...  
A. that it was partly my fault.  
B. much better, but made friends afterward.
39. Unusual sex practices...  
A. might be interesting.  
B. are disgusting and revolting.

40. The idea of murder...
  - A. is inconceivable to me.
  - B. understandable at times.
41. Sex relations before marriage...
  - A. are disgusting and unnecessary.
  - B. are o.k. if both partners are in agreement.
42. Masturbation...
  - A. is sickening.
  - B. is understandable in many cases.
43. One should not...
  - A. say "one should not."
  - B. lose his temper.
44. If in the future I committed adultery...
  - A. I would resolve not to commit the mistake again.
  - B. I would hope there would be no consequences.
45. Unusual sex practices...
  - A. are all in how you look at it.
  - B. are unwise and lead only to trouble.
46. Obscene literature...
  - A. helps people become sex perverts.
  - B. is fun to read once in a while.
47. Capital punishment...
  - A. is the only thing some criminals can understand.
  - B. is legal murder; it is inhuman.
48. Petting...
  - A. is just asking for trouble.
  - B. can lead to bigger and better things.
49. After an outburst of anger...
  - A. my tensions are relieved.
  - B. I am jittery and all keyed up.
50. When I have sexual desires...
  - A. I know it's only human, but I feel terrible.
  - B. I usually express them.
51. If I had sex relations, I would feel...
  - A. guilty, sinful and bad.
  - B. happy if I loved the boy and he loved me.
52. I punish myself...
  - A. for very few things.
  - B. by denying myself a privilege.

53. Masturbation...  
A. is stupid.  
B. is a common thing in childhood.
54. Sin and failure...  
A. are the works of the devil.  
B. do not depress me for long.
55. Unusual sex practices...  
A. are the business of those who carry them out and no one else's.  
B. are dangerous to one's health and mental condition.
56. After an argument...  
A. I feel happy if I won or still stick to my own views if I lose.  
B. I am disgusted that I let myself become involved.
57. Petting...  
A. is justified with love.  
B. is not a good practice until after marriage.
58. After a childhood fight, I felt...  
A. like I was a hero.  
B. as if I had done wrong.
59. When I have sexual desires...  
A. I try to go to sleep and forget them.  
B. I become easily aroused.
60. I detest myself for...  
A. not always listening to those who know better.  
B. very little.
61. If I had sex relations, I would feel...  
A. cheap and unfit for marriage.  
B. warm and very good.
62. Sex relations before marriage...  
A. ruin many a happy couple.  
B. might help the couple to understand each other and themselves.
63. I regret...  
A. the way I have behaved.  
B. few things in my life.
64. Masturbation...  
A. is a normal outlet for sexual desires.  
B. is wrong and a sin.
65. After an argument...  
A. if I have won, I feel great  
B. I am sorry for my actions.
- 7

66. Petting...
  - A. depends on whom I'm with.
  - B. is against my better judgment but hard to resist for some.
67. After a fight, I felt...
  - A. relieved.
  - B. it should have been avoided for nothing was accomplished.
68. Masturbation...
  - A. is all right.
  - B. is a form of self destruction.
69. Unusual sex practices...
  - A. are all right if both partners agree.
  - B. are awful and unthinkable.
70. If I committed a homosexual act...
  - A. I would want to be punished.
  - B. I would be discreet.
71. When I have sexual desires...
  - A. I attempt to repress them.
  - B. I sometimes think of past experiences.
72. If I had sex relations, I would feel...
  - A. all right, I think.
  - B. I was being used, not loved.
73. Arguments leave me feeling...
  - A. that it was a waste of time.
  - B. as if I might have accomplished something.
74. Sin and failure...
  - A. depress me more than any other acts.
  - B. are not necessarily related.
75. If I felt like murdering someone...
  - A. I would be ashamed of myself.
  - B. it would be for a good reason.
76. Sex relations before marriage...
  - A. are not good for anyone.
  - B. with the person I hope to marry is o.k.
77. After an outburst of anger...
  - A. I feel much better.
  - B. I usually hate myself for being so silly.
78. "Dirty" jokes in mixed company...
  - A. should be avoided.
  - B. are acceptable up to a point.

ANSWER SHEET  
MOSHER F-C INVENTORY  
Form F

NAME:

STUDENT NO:

SEX:

Pr Po F

	A	B
1.		
2.		
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24.		

	A	B
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37.		
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	A	B
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72.		

	A	B
73.		
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77.		
78.		

APPENDIX C

Reaction Inventory-Guilt



## THE REACTION INVENTORY-GUILT.

## DIRECTIONS

The items in this questionnaire refer to things and experiences that may cause guilt or other unpleasant feelings. On the separate answer sheet write the number of each item in the column that describes how much you feel guilty in response to it.

## ITEMS

1. Promising to do something for someone and not doing it.
2. Doing something which you know you should not have done.
3. Not helping someone who needs your help.
4. Speaking angrily to someone in authority.
5. Going to a meeting, when you have not prepared for it.
6. Realizing you have just gone through a red light.
7. Drinking too much.
8. Buying something which you cannot afford.
9. Denting a car as you leave a parking lot and not doing anything about it.
10. Being financially dependent on someone close to you.
11. Losing something valuable which someone close has given to you.
12. Having sex with someone without being emotionally involved.
13. Forgetting to buy a birthday present for someone close to you.
14. Lying to someone to get out of a commitment you have made to them.
15. Cheating.
16. Breaking up with someone who has been close to you.
17. Spreading a nasty rumour about someone.
18. Losing something valuable which you have borrowed.
19. Not going to church when you know you should.
20. Hitting a child.
21. Changing plans at the last minute which involves someone else.
22. Finding out you have hurt someone's feelings.
23. Wishing someone would die.
24. Borrowing money from someone and suddenly realizing you forgot to pay them back.



25. Someone else paying for your dinner, even though they cannot afford it.
26. Hitting someone who cannot hit you back.
27. Hurting someones feelings intentionally.
28. Not doing as well as expected on a project.
29. Stealing money from someone.
30. Wasting time which you cannot afford.
31. Eating too much.
32. Lying to someone close to you.
33. Taking too many drugs.
34. Mistreating an animal.
35. Masturbating.
36. Finding you have walked out of a store with something and forgotten to pay for it.
37. Repeating something that has been told to you in secret.
38. Failing to reply to a letter from a close friend.
39. Failing to return a telephone call when you said you would.
40. Putting on a front to impress someone.
41. Being stopped by the police for speeding.
42. Going to bed late when you know you have to get up early.
43. Saying things you don't mean when you're in an argument.
44. Criticizing someone behind their back.
45. Doing something of which your parents do not approve.
46. Not contributing to charities when asked.
47. Having sex with someone just for physical satisfaction.
48. Breaking something which you have borrowed.
49. Not being sincere with someone.
50. Being mean to someone for no reason at all.

## ANSWER SHEET

	Not at all	A little	A fair amount	Much	Very Much		Not at all	A little	A fair amount	Much	Very Much
1.						26.					
2.						27.					
3.						28.					
4.						29.					
5.						30.					
6.						31.					
7.						32.					
8.						33.					
9.						34.					
10.						35.					
11.						36.					
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15.						40.					
16.						41.					
17.						42.					
18.						43.					
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23.						48.					
24.						49.					
25.						50.					

APPENDIX D

Perceived Guilt Index  
and Scoring Key

## FGI

INSTRUCTIONS: Below is a list of words and phrases people use to describe how they feel at different times. Please check the one word or phrase which best describes the way you felt when reading the passage a moment ago. So that you will become familiar with the general range of feeling that they cover or represent, carefully read the entire list before making your selection. Again, check only one word or phrase, that which best describes the way you felt while reading that passage.

REPROACHABLE

INNOCENT

PENT UP

DISCRACEFUL

UNDISTURBED

MARRED

CHAGRINED

RESTRAINED

DEGRADED

FRETFUL

UNFORGIVABLE

PGI SCORING KEY  
EMPIRICALLY DETERMINED WEIGHTS

6.8 REPROACHABLE

1.1 INNOCENT

4.3 PENT UP

9.4 DISGRACEFUL

2.0 UNDISTURBED

7.8 MARRED

5.9 CHAGRINED

3.4 RESTRAINED

8.6 DEGRADED

5.3 FRETFUL

10.4 UNFORGIVABLE

APPENDIX E

Expectancy Rating Scale

ERS

INSTRUCTIONS: Below are five questions pertaining to the procedure you have undergone. Following each question is a five point rating scale. Indicate your response to each question on the five point scale by placing an X at the point on the scale which best indicates your response. Do not put the X over a blank space.

1. How logical does this procedure seem to you?

Not at all \_\_\_\_\_ X \_\_\_\_\_ Absolutely

2. How confident are you that this procedure will be successful in eliminating sex guilt?

Not at all \_\_\_\_\_ \_\_\_\_\_ Absolutely

3. How confident would you be in recommending this procedure to a friend who experienced sex guilt?

Not at all \_\_\_\_\_ \_\_\_\_\_ Absolutely

4. If you were experiencing extremely great sex guilt, would you be willing to undergo this procedure?

Not at all \_\_\_\_\_ \_\_\_\_\_ Absolutely

5. How successful do you feel this procedure would be in decreasing a different guilt; for example, guilt about aggression or hostility?

Not at all \_\_\_\_\_ \_\_\_\_\_ Absolutely

APPENDIX F

Enjoyment Scale





APPENDIX G

Transcripts of Autogenic Therapy  
Training and Treatment Tapes

## Autogenic Therapy

### Training Tape - Positive Expectancy

The procedure which you will undergo is a treatment called Autogenic Therapy. There have been thousands of experiments carried out in Europe to examine its effectiveness in the treatment of a variety of disorders. The European researchers provide many single case examples of the success of autogenic therapy in treating psychosomatic disorders and anxiety, including the treatment of phobias or irrational fears. Research on autogenic therapy is just beginning to be carried out in North America, and there are no published reports of its use in treating guilt. However, since the physiological state resulting from autogenic therapy is antagonistic to stress responses, there is every reason to expect it to be effective in reducing sex guilt.

Autogenic therapy involves a process of self-generation of physiological and psychophysiological states considered to be diametrically opposed to changes brought about by stress. The assumption is that there are recuperative and self-normalizing brain mechanisms which are disinhibited by shifting into an autogenic state. The shift is accomplished by passive concentration and the use of autogenic relaxation in the absence of external stimulation. Passive concentration is essential to autogenic therapy. During autogenic relaxation, you are to form mental contact with the area of the body indicated by the autogenic relaxation instructions while maintaining a casual or passive attitude toward the intended result of the exercise. For example, if the relaxation instructions say, "My arms are heavy," you would concentrate on the feelings present in your arms; but, you would not concentrate on trying to make them feel heavy. That is why it is called passive concentration.

Autogenic relaxation brings about physiological changes through suggestion of heaviness, warmth, cardiac regulation, respiratory regulation, abdominal warmth, and cooling of the forehead. This is what you will be doing today. In the following sessions, neutralizing formula will be added. These will directly neutralize the feelings of sex guilt. Positive statements about sex being pleasant are interspersed among the relaxation instructions. You can expect to experience changes no later than after the second session. You will now receive instructions in autogenic relaxation.

Make yourself as comfortable as you possibly can be. The following is a series of phrases designed to help you relax. After you hear each one, please continue to repeat it to yourself mentally. Don't worry about getting results. A casual, passive attitude is best. While you are mentally repeating each phrase, put your attention on the part of your body involved.

Allow me to repeat the instructions. You will hear a series of phrases designed to help you relax. After you hear each one, please

continue to repeat it to yourself mentally. A casual, passive attitude is best. While you are mentally repeating each phrase, put your attention on the part of your body involved.

To begin with, please direct your attention to your right arm.  
 "My right arm is heavy." Please continue to repeat that mentally.  
 "My right arm is heavy."

And next, "My right leg is heavy." "My right leg is heavy."

And next, "My left arm is heavy." "My left arm is heavy."

"My left leg is heavy." "My left leg is heavy."

"Both arms are heavy." "Both arms are heavy."

"Both legs are heavy." "Both legs are heavy."

"My right arm is warm." "My right arm is warm."

"My right leg is warm." "My right leg is warm."

"My left arm is warm." "My left arm is warm."

"My left leg is warm." "My left leg is warm."

"Both arms are warm." "Both arms are warm."

"Both legs are warm." "Both legs are warm."

"My arms and legs are warm." "My arms and legs are warm."

"My heartbeat is calm and regular." "My heartbeat is calm and regular."

"It breathes me, it breathes me." "It breathes me, it breathes me."

"My solar plexus is warm."

"The upper part of my stomach is warm."

"My forehead is cool." "My forehead is cool."

Now, let's review your relaxed sensations. Please continue to repeat each phrase mentally.

"My whole body is heavy." "My whole body is heavy."

"My arms and legs are warm." "My arms and legs are warm."

"My heartbeat is calm and regular." "My heartbeat is calm and regular."

"It breathes me, it breathes me."

"The upper part of my stomach, the solar plexus, is warm."

"My solar plexus is warm."

"My forehead is cool." "My forehead is cool."

Now, to end the relaxation period, take in a deep breath, exhale, open your eyes, and stretch vigorously and then, sit up.

## Autogenic Therapy

### Training Tape - Nonpositive Expectancy

The procedure you will undergo is an experimental procedure called Autogenic Training. The purpose of the present research is intended to determine whether guilt feelings can be effectively reduced using this procedure. Although there have been single case studies done primarily in Europe, reporting to show effectiveness in dealing with psychosomatic, anxiety and phobic disorders, there is no evidence that autogenic training is effective in reducing sex guilt. The purpose here is to see in a controlled study if there is any effect. The rationale is that since the state resulting from autogenic training is thought to be diametrically opposed to stress responses, it could be effective in reducing sex guilt.

Autogenic training theoretically involves a process of physiological and psychophysiological states considered to be antagonistic to changes brought about by stress. It is hypothesized that there are recuperative and self-normalizing brain mechanisms which are disinhibited by shifting into an autogenic state. That shift is accomplished by passive concentration and autogenic relaxation in the absence of external stimulation. During autogenic relaxation, you are to try to form mental contact with the area of the body indicated by the autogenic relaxation instructions, while maintaining a casual or passive attitude toward the intended result of the exercise. For example, if the relaxation instructions say, "My arms are heavy," you would then concentrate on the feelings present in your arms, but would not concentrate on trying to make them feel heavy. That is why, it is called passive concentration.

It is thought that autogenic relaxation brings about physiological changes through suggestions of heaviness, warmth, cardiac regulation, respiratory regulation, abdominal warmth, and cooling of the forehead. This is what you will be doing today. In the following sessions, neutralizing formula will be added. Hopefully, these will neutralize the feelings of sex guilt. Positive statements about sex being pleasant are interspersed among the relaxation instructions. Unfortunately, we are not sure if autogenic training will have any effect at all on sex guilt. This is what we are trying to find out. You will now receive instructions in autogenic relaxation.

Make yourself as comfortable as you possibly can be. The following is a series of phrases designed to help you relax. After you hear each one, please continue to repeat it mentally to yourself. Don't worry about getting results. A casual passive attitude is best. While you are mentally repeating each phrase, put your attention on the part of the body involved.

Allow me to repeat the instructions. You will hear a series of phrases designed to help you relax. After you hear each one, please continue to repeat it mentally to yourself. A casual, passive attitude is best. While you are mentally repeating each phrase, put your attention to the part of your body involved.

To begin with, please direct your attention to your right arm.  
 "My right arm is heavy." Please continue to repeat that phrase mentally to yourself. "My right arm is heavy." "My right leg is heavy."  
 "My right leg is heavy."

And next, "My left arm is heavy." "My left arm is heavy."

"My left leg is heavy." "My left leg is heavy."

"Both arms are heavy." "Both arms are heavy."

"Both legs are heavy." "Both legs are heavy."

"My right arm is warm." "My right arm is warm."

"My right leg is warm." "My right leg is warm."

"My left arm is warm." "My left arm is warm."

"My left leg is warm." "My left leg is warm."

"Both arms are warm." "Both arms are warm."

"Both legs are warm." "Both legs are warm."

"My arms and legs are warm." "My arms and legs are warm."

"My heartbeat is calm and regular." "My heartbeat is calm and regular."

"It breathes me, it breathes me." "It breathes me, it breathes me."

"The upper part of my stomach, my solar plexus, is warm."

"My solar plexus is warm."

"My forehead is cool." "My forehead is cool."

Now, let us review your relaxed sensations. Please continue to repeat each phrase mentally to yourself.

"My whole body is heavy." "My whole body is heavy."

"My arms and legs are warm." "My arms and legs are warm."

"My heartbeat is calm and regular." "My heartbeat is calm and regular."

"It breathes me, it breathes me."

"My solar plexus is warm." "My solar plexus is warm."

"My forehead is cool." "My forehead is cool."

Now, to end the relaxation period, take in a deep breath, exhale, open your eyes, and stretch vigorously and then, sit up.

## Autogenic Therapy

## Treatment Tape - Male

Make yourself as comfortable as you possibly can be. After you hear each of the following phrases, continue to repeat it mentally. Don't worry about getting results. A casual, passive attitude should be maintained. While you are mentally repeating each phrase, put your attention to the part of the body involved. Allow me to repeat the instructions. You will hear a series of phrases designed to help you relax. After you hear each one continue to repeat it mentally. A casual, passive attitude is best. While you are mentally repeating each phrase put your attention to the part of the body involved.

To begin with, direct your attention to your right arm. "My right arm is heavy". Please continue to repeat that phrase mentally to yourself. "My right arm is heavy."

"My right leg is heavy." "My right leg is heavy."

"My left arm is heavy." "My left arm is heavy."

"My left leg is heavy." "My left leg is heavy."

"Both arms are heavy." "Both arms are heavy."

"Both legs are heavy." "Both legs are heavy."

"My right arm is warm." "My right arm is warm."

"My right leg is warm." "My right leg is warm."

"My left arm is warm." "My left arm is warm."

"My left leg is warm." "My left leg is warm."

"Both arms are warm." "Both arms are warm."

"Both legs are warm." "Both legs are warm."

"My arms and legs are warm." "My arms and legs are warm."

"As a child sex play was wide-spread and fun."

"My heartbeat is calm and regular."

"As a child sex play was wide-spread and fun."

"My heartbeat is calm and regular."

"Sex play among children is wide-spread and fun."

"It breathes me."

"I satisfy my sexual desires and it is pleasant."

"It breathes me."

"I satisfy my sexual desires and it is pleasant."

"My solar plexus is warm."

"I satisfy my sexual desires and it is pleasant."

"My solar plexus is warm."

"If I were to commit adultery I would not tell anyone."

"My forehead is cool."

"If I were to commit adultery I would not tell anyone."

"My forehead is cool."

"If I were to commit adultery I would not tell anyone."

"My whole body is heavy." "My whole body is heavy."

"Dirty jokes in mixed company are fun."

"My arms and legs are warm."

"Dirty jokes in mixed company are fun."

"My arms and legs are warm."

"Dirty jokes in mixed company are fun."

"My heartbeat is calm and regular."

"Extramarital sex is pleasant."

"My heartbeat is calm and regular."

"Extramarital sex is pleasant."

"It breathes me."

"Extramarital sex is pleasant."

"It breathes me."

"My solar plexus is warm."

"Child sex play creates pleasure."

"My solar plexus is warm."

"Child sex play creates pleasure."

"My forehead is cool." "My forehead is cool."

"Child sex play creates pleasure."

Now, to end the relaxation period, take a deep breath, exhale, stretch your arms, and open your eyes.



## Autogenic Therapy

## Treatment Tape - Female

Make yourself as comfortable as you possibly can be. After you hear each of the following phrases, continue to repeat it mentally. Don't worry about getting results. A casual, passive attitude should be maintained. While you are mentally repeating each phrase, put your attention to the part of the body involved. Allow me to repeat the instructions. You will hear a series of phrases designed to help you relax. After you hear each one continue to repeat it mentally. A casual, passive attitude is best. While you are mentally repeating each phrase put your attention to the part of the body involved.

To begin with, direct your attention to your right arm. "My right arm is heavy". Please continue to repeat that phrase mentally to yourself. "My right arm is heavy."

"My right leg is heavy." "My right leg is heavy."

"My left arm is heavy." "My left arm is heavy."

"My left leg is heavy." "My left leg is heavy."

"Both arms are heavy." "Both arms are heavy."

"Both legs are heavy." "Both legs are heavy."

"My right arm is warm." "My right arm is warm."

"My right leg is warm." "My right leg is warm."

"My left arm is warm." "My left arm is warm."

"My left leg is warm." "My left leg is warm."

"Both arms are warm." "Both arms are warm."

"Both legs are warm." "Both legs are warm."

"My arms and legs are warm." "My arms and legs are warm."

"If I committed adultery my reason would be good."

"My heartbeat is calm and regular."

"If I committed adultery my reason would be good."

"My heartbeat is calm and regular."

"If I committed adultery my reason would be good."

"It breathes me."

"Dirty jokes in mixed company do not bother me."

"It breathes me."

"Dirty jokes in mixed company do not bother me."

"My solar plexus is warm."

"Dirty jokes in mixed company do not bother me."

"My solar plexus is warm."

"Dirty jokes in mixed company are funny."

"My forehead is cool."

"Dirty jokes in mixed company are funny."

"My forehead is cool."

"Dirty jokes in mixed company are funny."

"My whole body is heavy." "My whole body is heavy."

"Sexual relations are happy and satisfying."

"My arms and legs are warm."

"Sexual relations are happy and satisfying."

"My arms and legs are warm."

"Sexual relations are happy and satisfying."

"My heartbeat is calm and regular."

"In sexual relations I feel warm and good."

"My heartbeat is calm and regular."

"In sexual relations I feel warm and good."

"My heartbeat is calm and regular."

"In sexual relations I feel warm and good."

"It breathes me."

"In sexual relations I feel warm and good."

"It breathes me."

"My solar plexus is warm."

"If I committed adultery there would hopefully be no consequences."

"My solar plexus is warm."

"If I committed adultery there would hopefully be no consequences."

"My forehead is cool." "My forehead is cool."

"If I committed adultery there would hopefully be no consequences."

Now to end the relaxation period take in a deep breath, exhale, stretch your arms, and open your eyes.

APPENDIX H

Transcripts of Implosive Therapy  
Training and Treatment Tapes

## Implosive Therapy

## Training Tape - Positive Expectancy

Male

The procedure which you will undergo is a treatment called Implosive Therapy. Past research indicates that guilt feelings can be effectively reduced using this therapy procedure. As you may have already learned, this treatment procedure has also been found to be effective in reducing other types of unpleasant emotional responses, such as anxiety, and is widely used in the treatment of phobias or irrational fears.

Implosive therapy is based on the principle of extinction. It has been demonstrated that the frequency of occurrence of a behavior is a function of the consequences of the behavior. A behavior followed by a positive reinforcer maintains or increases its frequency of occurrence. If, however, behavior occurs in the absence of reinforcing consequences, the frequency of the behavior will decrease, perhaps to zero frequency. This is extinction.

Implosive therapy is used in the extinction of emotional responses. These emotional responses usually occur as a result of anticipated punishment, either external as in the case of anxiety, or internal as with guilt. In implosion, then, the person imagines the behavior which leads to an emotional response but the anticipated feared consequences do not occur. Thus the emotional response is extinguished. It is, of course, very convenient that you need only imagine the guilt or anxiety producing scene in the treatment room, and then have the effects of extinction generalized to real-life situations.

What you will be doing today and in the following sessions, then, is imagining as clearly as possible some guilt-producing scenes taken from the Mosher Forced Choice Inventory, and, while you imagine those scenes in your mind, you are to try to experience the guilt feelings associated with them, as strongly and intensely as possible. The result after a period of time will be the extinction of those guilt feelings. You should experience changes no later than after the second session.\*

Sit in the chair with it in the upright position, close your eyes, and we'll begin. Remember, try to experience everything that follows as intensely as possible while listening to the tape.

Now, just try to imagine and to feel guilt feelings that can be associated with sex. Imagine the guilt you would feel if you were married, and then you had extramarital sex. Try to put yourself in that position, and feel the guilt. Your heart would beat faster, you

\* The training segment ends at this point. The treatment tape used in treatment sessions 2 through 4 starts with the following paragraph.

would have a feeling in your stomach, a feeling almost like a constant tension as if something were going to happen. You would be afraid to tell anyone because you would feel guilty, you would have this feeling, you would feel bad, and you would feel sinful. Just try to feel that. Put everything else out of your mind except how you would feel if you had committed adultery and you were afraid to tell anyone because of this feeling inside you, a feeling in the pit of your stomach, the rapid heartbeat, all these feelings inside because of this guilt.

This guilt of having done something sexual that is wrong. Feel the guilt. You can feel it in your face, you can feel it in your heartbeat, you can feel it in the pit of your stomach, you get the funny feeling in your legs. All from guilt because you've done something sexual that's wrong. Just feel it and make it grow, feel the guilt, experience it, feel it in your stomach, feel it throbbing in your heartbeat, feel that queasiness, feel that weak feeling in your legs, feel the tension, all from guilt.

Feel the guilt you experience when you have a sexual urge and you're afraid to express it. You're afraid because you feel guilty, feel the guilt, feel that tension, feel it in your stomach, feel it in the pit of your stomach, it's almost like nausea. Just feel the guilt, feel it building and building inside, experience it. Don't push it away, experience it, feel it even stronger, more intensely. Draw up all those feelings you would have that you call guilt. Just feel them and experience them, don't push them away.

Experience the guilt you would feel if you were a child and were engaged in sex play, and all of a sudden, your parents came into the room. Imagine the guilt you would feel. Just think about that feeling, experience it, feel the tension in your body, that feeling in the pit of your stomach, your heartbeating faster, feel those things, experience them, don't push them away. Just concentrate on that feeling of guilt, and try to make it grow stronger and stronger.

Imagine how you would feel standing with a group of people, and you think of a really dirty joke but you can't say it because of the guilt you have. Just feel that guilt, imagine exactly how you would feel. Experience it, make it grow, don't let it slip away. Just think about guilt, think about guilt you would feel if you committed adultery. You would feel sinful, you would feel bad. Feel those things, feel the tension grip your stomach, feel your heartbeat speed up, that strange feeling in your legs, feel all those things. Feel the guilt and make it grow, don't let it slip away. Just let the guilt grow and grow in you. Feel those things in your body when you feel guilty. Think of the things that make you feel guilty. Think of those things that have to do with sex that make you feel guilty and experience the guilt feelings.

Imagine that you are married to a woman that you love and don't want to hurt. Then think about committing adultery, how bad it would be and how bad you would feel. Just feel that guilt. Think of the

sexual desires you have and the guilt you feel that makes you try to curb them. Just feel the guilt. Make it grow, don't let it fade away, experience it. Make yourself feel guilty, make yourself amplify those feelings, just feel the guilt, and make it grow, make it strong, and experience it in your body. Just think about that and feel it. Feel the guilt, don't let it fade, keep that feeling in the pit of your stomach, feel your heart pound, feel that strange in your legs, feel that tension that comes with feeling guilty, feel it all.

Think about the guilt people feel when the children engage in sex play, and they think they've been discovered, think of the guilt, feel it, think of the guilt that goes along with committing adultery, and how bad people feel, how sinful it is, feel the guilt, experience it. Experience it intensely, experience all that guilt. Experience the heartbeat that goes along with feeling guilty, the speeded up heartbeat, that tightness in the pit of the stomach, almost like nausea. It feels almost like a frightened knot in the pit of your stomach, almost as if you're going to throw up, and feel the tension, feel the tension all over your body, the speeded up heartbeat, the tightness in your stomach. Just feel the guilt, make it grow, and grow, and feel it intensely. Don't let it slip away, don't let your mind wander, concentrate on one thing, the guilt that has to do with something wrong sexually.

Think about the sexual desires you try to curb because you feel guilty, think about the feeling of guilt that goes along with those sexual desires, think of the feeling of guilt that goes along with committing adultery, how bad it feels to commit adultery, just experience it completely, concentrate on it, go to it in your mind, to that sick feeling in your stomach, and feel it, and feel it grow. Your whole being experiences those feelings in your body.

Think of the guilt you experience when you tell a dirty joke in a mixed crowd and people just look at you, like how could he say that, think of the guilt you feel later on, think of the feelings in your body when you think of that situation, you told that joke and they just looked at you, then later on you think about and how did you feel, you felt guilty, and what did those feelings feel like, how did your stomach feel, how did your pulse feel, how did your head feel, feel those things now, feel them intensely, make them grow, feel them intensely and strongly, and don't let them slip away. Experience that sick feeling in your stomach that's almost like nausea, as if you can almost feel your stomach tightening, as if the food's about to come up your throat, that's all coming from sex guilt. Just feel it and experience it and don't let it go away. Feel your heart pound, feel the sickness in your stomach, feel the tension all over your body, feel it in your face, feel it all over. Just feel those feelings that are associated with guilt, all those sensations, in your stomach, that sickness, that nausea, that tightness, and your rapid heartbeat, the feeling of tension, growing and growing, just feel them, feel those sensations, and make them stronger, don't let them get away, make them stronger and stronger, and feel them. Experience those sensations of guilt.

Think about the guilt you would feel if you committed adultery, and how bad it would be, you'd feel terrible, you'd feel guilty, you'd feel worthless, you'd feel horrible, all those things from guilt.

Think of the guilt from your strong sexual desires, experience that guilt, experience how bad it feels, feel those powerful sensations, the sickness in your stomach, the racing heartbeat, the tension all over. Experience that guilt, don't let it fade. In your mind, go down to your stomach and feel the nausea there, just experience it.

Experience the guilt you could have over childhood sex play, thinking back over it, someone had walked in, think of the guilt. Think of the guilt you would feel if you told a dirty joke in a crowd and they just looked at you, and then later you were thinking about it, think of how guilty you would feel. Think about the sickness in your stomach, and the tension all over your body, just feel that tension, in the back of your neck, in your stomach, that nausea in your stomach, it's growing and growing, it's a tight knot in the pit of your stomach, just experience that, experience that guilt, experience the sensations associated with it. Concentrate on it, make it grow, make that tense feeling grow, that nauseous feeling grow. Feel your heartbeat, feel it race, all those things are from sex guilt, and feel them, feel them intensely, don't let them fade, concentrate on them, concentrate on those feelings from sex guilt. Think of that loving wife that you cheated on and how guilty you would feel, just picture that clearly in your mind, how you would feel knowing that you hurt such a wonderful woman. Experience those feelings, the sickness in your stomach, the tension, the heartbeat, feel them all, feel that nausea grow in your stomach, taste it, taste that nausea, feel the tension, feel it in your legs, feel it in your arms. Feel all those sensations of guilt and don't let them fade, concentrate on them. Make them grow, make them stronger, make them more intense, and feel them, feel those sensations, make them grow and grow. Feel that nausea, taste it, taste it in your mouth, feel it burning in your throat, get the taste of it in your nostrils, on your tongue, feel it burning your throat, that nausea in the pit of your stomach, and the tension, you can feel it in the back of your neck, you can feel it in the back of your legs, and you can feel the tension in your arms, tension from sex guilt. Make it strong, make it intense, feel it, and don't let it fade. Concentrate on all those sensations.

Feel the guilt associated with sexual desire, that you have to control. Just feel those sensations from guilt. Think of the guilt you would feel, that strong and sickening guilt, if you were caught in the act during childhood sex play. Just think of those feelings you would have, let it happen. Think of the guilt you would feel if you had told a really dirty joke in a crowd and no one had laughed, they just looked at you, then later you are thinking about it, feel the sensations of guilt that would cause. Feel your heart race, you can feel it pounding in your chest, you feel the pulse in your neck. Feel it, concentrate on it and feel it. You feel the nausea in the pit

of your stomach, feel your stomach tightening into a knot, you can almost feel the nausea rising up your stomach, into your throat, you can almost taste it. The sensations from sex guilt, and the tension; the tension you would feel knowing you had committed adultery, you had done something that bad, just feel that tension, feel it all over your body, it makes that feeling in your stomach even worse. Concentrate on it, and feel it, make it grow, feel the tension and feel your heartbeat, and feel the sickness in the pit of your stomach. Feel all those things, and make them grow, make them stronger and stronger. Feel them intensely, concentrate on those sensations. You have strong sexual desires and you're afraid to express them because of these feelings of guilt. Think about expressing those desires and the guilt that would go along with it, and experience it, experience it intensely, and make it grow, the feeling in your stomach. Feel it, feel that sensation, feel that knot in the pit of your stomach, and experience it, concentrate on it, don't let it slip away, try to experience it as fully as you can, stronger and stronger you can feel the tension, you can feel the sex guilt.

Think about something in sex that would make you feel guilty, think about it and feel the guilt. Just feel it grow, make it grow, feel it intensely, that feeling in your stomach, and the tension all over your body, and how it makes your legs feel. Concentrate on that feeling in your legs, that feeling of tension, and feel it, feel the tension in your arms, feel that tension all over your body, and experience it, that feeling in the pit of your stomach, experience that sensation, make it stronger, feel the nausea, feel that knot in the pit of your stomach, as if someone had walked in on you when you were engaged in childhood sex play, and you're thinking about it afterwards, imagine the feelings you would have. Think of those feelings and experience them. Picture the scene to yourself where you might feel sex guilt, and feel the guilt that goes along with it, feel it strongly and intensely. Make those sensations grow stronger and more intense and experience them, don't let them fade away, feel them strongly and intensely, and make them grow. Experience those feelings of sex guilt and make them strong, you feel it in your stomach, you feel that knot in the pit of your stomach, you feel that tension all over your body, just feel that tension, experience it, feel it intensely, it's all from sex guilt, feel those things. Experience those sensations, feel your heart pounding, you can feel the pulse in your neck. Just experience it, concentrate on it, make those sensations strong, experience them as intensely as you can.

Now, put those things out of your mind, and just relax. What we've tried to do is have you experience the sensations associated with sex guilt, intensely, and for a long period of time without any negative consequences.

So, now, just relax, and we'll continue again next session.



## Implosive Therapy

## Training Tape - Positive Expectancy

Female

The procedure which you will undergo is a treatment called Implosive Therapy. Past research indicates that guilt feelings can be effectively reduced using this therapy procedure. As you may have already learned, this treatment procedure has also been found to be effective in reducing other types of unpleasant emotional responses such as anxiety, and is widely used in the treatment for irrational fears.

Implosive therapy is based on the principle of extinction. It has been demonstrated that the frequency of occurrence of a behavior is a function of the consequences of the behavior. A behavior followed by a positive reinforcer maintains or increases its frequency of occurrence. If, however, the behavior occurs in the absence of reinforcing consequences, the frequency of the behavior will decrease, perhaps to zero frequency. This is extinction.

Implosive therapy is used in the extinction of emotional responses. These emotional responses usually occur as a result of anticipated punishment, either external as in the case of anxiety, or internal as with guilt. In implosion, then, the person imagines the behavior which leads to an emotional response but the anticipated feared consequence does not occur. Thus the emotional response is extinguished. It is, of course, very convenient that you need only imagine the guilt or anxiety producing scene in the treatment room, and then have the effects of extinction generalized to real-life situations.

What you will be doing today and in the following sessions, then, is imagining as clearly as possible some guilt-producing scenes taken from the Moshier Forced Choice Inventory, and, while you imagine those scenes in your mind, you are to try to experience the guilt feelings associated with them, as strongly and intensely as possible. The result after a period of time will be the extinction of those guilt feelings. You should experience changes no later than after the second session.\*

Sit in the chair with it in the upright position, close your eyes, and we'll begin. Remember, try to experience everything that follows as intensely as possible while listening to the tape.

Now, I would like you to feel as strongly as you can, and as intensely as you can, those sensations you have when you feel guilty. Imagine, for example, how you would feel if you committed adultery. Imagine the consequences of committing adultery. Imagine what a mistake that would be.

\* The training segment ends at this point. The treatment tape used in treatment sessions 2 through 4 starts with the following paragraph.

Imagine the guilt that would go along with it. Feel the sensations you would experience, feel them strongly and intensely. Feel how cheap you would feel, feel those sensations, perhaps a tension, the tightness in the pit of your stomach, a knot right there in your stomach, and your heart might be pounding, pounding so hard you can feel the pulse in your neck or in your head. Feel those sensations, feel the tension you would feel all over your body, feel the guilt you would experience if you committed adultery and how unworthy you would feel, how cheap, experience those sensations, experience them strongly and intensely. Feel that knot in the pit of your stomach, the nausea you would feel in your stomach.

Feel those things, feel the guilt associated with having sexual relations outside of marriage, how cheap you would feel, and experience it, how totally unfit you would be to be married, what a mistake it would be, imagine the consequences of committing adultery and the guilt you would feel. Feel the sensations you would be experiencing, feel them strongly, concentrate on them. Don't let your mind wander, feel the guilt, feel how uncomfortable you would feel. Experience the tension, the tension all over your body, you can feel it in your back, in your legs, feel the tension in your legs, that strange weak feeling, shaky feeling you get in your legs, you feel guilty.

Imagine you were a little high and told some really dirty jokes in mixed crowds, then afterwards you're thinking about it. Experience those sensations, your heart pounding, that nausea in the pit of your stomach, experience those things and feel them. Feel the tension all over your body and make it grow, concentrate on that feeling of tension, how it feels in your legs, and how it feels in your arms, just feel that tension, and concentrate on it, don't let it slip away, make it grow. Just feel that tension, feel it grow and grow, that tension associated with guilt. Just think how you would feel if you committed adultery, if you had sex outside of marriage, and you didn't push it out of your mind but wanted to experience it. You felt so unworthy of your husband, you felt cheap and unfit for marriage. Feel the guilt and experience it, experience all those sensations in your body that go along with sex guilt. Think about it and experience it, experience it fully and intensely. Make it stronger, don't make it go away. Make it grow and grow in intensity, and feel those sensations in your body. Concentrate on them, feel them. Feel that knot in your stomach as you think to yourself, "I committed adultery, I'm cheap and unfit." Feel the guilt, feel the tension, feel your heartbeat, feel the knot in the pit of your stomach, feel that nausea and make it grow, feel it and experience it, make it grow stronger and stronger. Concentrate on those feelings. Don't let them go away, concentrate on them, and feel them, just make them grow stronger and stronger. Feel those sensations. Feel the tightness in your stomach and in your mind go to that tightness and experience it in all its intensity. Feel that guilt, feel those guilt feelings, don't fight them, experience them, live with them, breathe with them. Feel your heart pounding, and feel the tension, feel the tightness in your stomach, feel the tension in your legs, concentrate on that feeling, make it grow stronger.

Imagine the feeling you would have afterwards, thinking back over telling those really dirty jokes in mixed company. Think of the feelings, the sensations you would have in your body. Think of the sensations you would experience, thinking about having had sexual relations outside of your marriage. Feel it, experience it intensely, feel the guilt, feel the guilt associated with those sexual relations, feel how cheap you would feel, experience it, feel those sensations. You committed adultery, how unworthy you would be of your husband. Imagine exactly how you would feel if that happened and you were thinking about it, and experience it intensely. Make the feelings grow stronger and stronger. Feel that tightness in the pit of your stomach turn into nausea, you can almost feel it rising and burning in your throat, all from guilt; you can almost taste it in your mouth, from guilt. Feel the tension, feel it in the back of your neck, feel the tension in your stomach and in your legs, feel it grow stronger and stronger, and make it grow. Experience it, don't fight it off, feel those sensations intensely.

Imagine your thinking back over an incident where you told some really dirty jokes in mixed company and no one laughed, they just looked at you, and afterwards you are thinking about it. Think about how guilty you would feel, experience those sensations, experience the rapid heartbeat, you feel it pounding, you feel it in your neck and in your head, feel the pounding, that tightness in your stomach, feel it and experience it, and make it grow. Don't fight it off, don't let it slip away, keep feeling those sensations strongly. Try to make them become more and more real. Experience those feelings you have if you had sexual relations outside your marriage, that feeling of cheapness, how you are completely unfit for your husband. Think about it and feel it. Concentrate on those sensations you would have, concentrate on those awful sensations, that feeling in your stomach that you can't get rid of. It keeps growing stronger and stronger and turns into nausea, that feeling of tension all over your body because of that sexual thing that you did that made you feel guilty. Feel it, feel it intensely, concentrate on those sensations. Make them stronger, make them more intense, feel them and make them grow, don't let them slip away. Make them grow stronger and stronger. Feel them more and more intense. Concentrate on them. Make them grow stronger and stronger, more and more real.

Imagine feeling cheap and unfit for your marriage because of having sexual relations. Imagine how you would feel. Feel those sensations, don't just think about them, feel them, make them grow stronger, feel them intensely. Feel the guilt because of those sexual relations you had. Think about it and experience it. Experience it as intensely as you can. Don't let it slip away, don't fight it, experience it. Just feel the guilt, and wallow in it. Think about telling those dirty jokes and everyone just stood and looked at you. Afterwards, when you thought about it, how guilty you felt. Think to yourself, how could you have done anything in such bad taste, and you can feel those sensations in your body that go along with those thoughts. How could you do it, and you feel so guilty, feel those sensations of guilt, go along with them and feel them, don't fight them off, experience that guilt.

Think of that terrible guilt you would have if you committed adultery, think of how you would hurt the man you love, and the feelings you would have. You would feel so unworthy and so cheap. Think of those feelings. What would they be? And experience them. Think of them and experience them. Experience them intensely. Feel that sensation, it's like tension, and the feeling in your stomach, and the feeling in your legs, all those sensations.

Think of something you would do that would cause you to feel sex guilt. Picture it clearly in your mind, what that thing is. Picture it as clearly as you can, then feel the sensations that go along with that guilt. Feel them, feel them strongly, don't let them slip away. Experience them intensely and more intensely, and concentrate on them. Concentrate on the feeling you'd get in your stomach and feel it strongly. The feeling is almost like nausea and it's growing and growing. It's going up your throat, you can taste it in your mouth, and it's burning. You can feel those sensations and concentrate on them. And your heart is beating faster, you can feel it pounding, you can feel it pounding in your head, you can feel your heart pounding, all from those guilt feelings. And the feeling of tension is growing and growing, it's all over your body, you can feel that tension, you can feel it in your legs, the weakness in your legs, it's all from guilt because you did that sex act that made you feel guilty. You can experience it all over your body. Don't just think about it, feel it. Feel it intensely, concentrate on those sensations, and feel them.

Just think of how you would feel if you had sexual relations outside your marriage and the guilt you would experience, and concentrate on that. Concentrate on those sensations and feel them. Make yourself experience them even more and more intensely. Concentrate on all those feelings, and experience them. Experience that tension completely, that tension that you feel from guilt. Experience it strongly and intensely, all the sensations that go with it. The feelings you get in your legs, from tension. The feelings in your arms, in the back of your neck, and feel the tension. Feel it all over your body. Feel that tension from sex guilt, feel it intensely and strongly and even more strongly.

Concentrate on those feelings and experience them, how you would feel if you told some dirty jokes in a mixed crowd and no one laughed, and then afterwards you are thinking about it, reliving that, and the people just looked at you, and how guilty you felt, if you had sexual relations outside of marriage, how cheap and unfit you would feel and the guilt, feel the guilt, if you committed adultery, how you would feel, the consequences, you would just be waiting for them to happen. Feeling guilty, feel that tightness in your stomach, it grows and grows. You can't get away from that sensation, that nausea in the pit of your stomach. It's there and you feel it strongly and intensely. Then it gets stronger and stronger. You just can't get away from it. You can just feel it spreading, that knot in the pit of your stomach is growing, and you can feel it more and more intensely, and at the same time, you feel your heart pounding, pounding, you can feel it in your neck and in your head.

At the same time you can feel the tension, and you can feel that tightness in your stomach as you think about the guilt you would feel if you had sexual relations outside of marriage. Think of that situation, where you had done something sexual that would make you feel guilty, think of it very clearly, think of how guilty you would feel. Place yourself in that situation, experience the guilt, experience it intensely and strongly, experience those sensations, don't let your mind wander. Experience them and feel them. Experience that guilt. Experience exactly how it would feel if you were feeling that guilt right now. Make it more intense and stronger. Feel that tightness in your stomach, feel it grow as it gets tighter, you feel nauseous, your heart's pounding, there's a tension all over your body. Experience those things, experience those sensations even more strongly. Concentrate on them, don't let them go away, make them stronger, feel that tightening growing knot in your stomach, feel your heart pounding, feel the tension, feel all those things, from guilt for that scene you're imagining where you've done something sexual that makes you feel guilty. Feel that guilt and concentrate on it. Feel it strongly, don't let it slip away, feel it intensely, make it grow and grow, and feel those sensations. Go to them with your mind, go to that feeling in your legs and the tension, go to that feeling in your stomach that knot in the pit of your stomach and experience it. Feel your heart pounding, feel the guilt, imagine that scene where you would feel so guilty, and experience that guilt. Experience it strongly and intensely.

OK, now, just relax. Put those things out of your mind, and relax. Just think for a few seconds about relaxing.

OK, what we've done today is to experience sensations associated with guilt without any consequences. And we will continue with this next time.

## Implosive Therapy

### Training Tape--Nonpositive Expectancy

Male

The procedure which you will undergo is an experimental procedure called Implosion. This research is intended to determine whether guilt feelings can be effectively reduced using this procedure. This procedure has been shown to have some effect in reducing other types of unpleasant emotional responses such as anxiety and has been tried in dealing with phobias or irrational fears.

In theory, Implosion is based on the principles of extinction. It has been demonstrated that the frequency of occurrence of behavior is a function of the consequences of the behavior. A behavior followed by a positive reinforcer maintains or increases its frequency of occurrence. If, however, the behavior occurs in the absence of reinforcing consequences, the frequency of the behavior will decrease perhaps to zero frequency. This is extinction.

Implosion is thought to be useful in the extinction of emotional responses. These emotional responses usually occur as a result of the anticipated punishment either external as in the case of anxiety, or internal as with guilt. In implosion then the person imagines the behavior which leads to an emotional response, but the anticipated feared consequence does not occur. Thus, the emotional response is thought to extinguish. It is, of course, very convenient that you need only imagine the guilt or anxiety producing scene in the experiment room, and then, hopefully, have the effects of extinction generalized to real-life situations.

What you will be doing today and in the following sessions, then, is imagining as clearly as possible some guilt-producing scenes taken from the Mosher Forced Choice Inventory, and, while you imagine those scenes in your mind, you are to try to experience the guilt feelings associated with them, as strongly and intensely as possible. The result after a period of time could be the extinction of those guilt feelings. We are trying to determine whether or not this experimental procedure will reduce guilt feelings, and, we're just not sure if it will have any effect at all on sex guilt.\*

Now, sit in the chair with it in the upright position, close your eyes, and we will begin. Remember, try to experience everything that follows as intensely as possible while listening to the tape.

\* The training segment ends at this point. The treatment tape used in treatment sessions 2 through 4 starts with the following paragraph.

Now, just try to imagine and to feel the guilt feelings that can be associated with sex. Imagine the guilt you would feel if you were married and you had extra-marital sex. Try to put yourself in that position and feel the guilt. Your heart would beat faster, you would have a feeling in your stomach, feeling almost like a constant tension as if something were going to happen. You would be afraid to tell anyone because you would feel guilty. You would have this feeling. You would feel bad, you would feel sinful. Just try to feel that. Put everything else out of your mind except how you would feel if you had committed adultery and you were afraid to tell anyone because of this feeling inside you, the feeling in the pit of your stomach, the rapid heartbeat, all these feelings inside because of this guilt. This guilt of having done something sexual that is wrong. Just feel the guilt. You can feel it in your face, you can feel it in your heartbeat, you can feel it in the pit of your stomach. You get a funny feeling in your legs, all from guilt, because you had done something sexual that's wrong. Just feel it and make it grow. Feel the guilt, experience it. Feel it in your stomach, feel it throbbing in your heartbeat, feel that queasiness, feel that weak feeling in your legs, feel the tension, all from guilt.

Feel the guilt you experience when you have a sexual urge and you are afraid to express it. You're afraid because you feel guilty. Feel the guilt, feel that tension, feel it in your stomach, feel it in the pit of your stomach, it's almost like nausea. Just feel the guilt, feel it building and building inside and experience it. Don't push it away, experience it. Feel it even stronger, more intensely. Draw all those feelings you would have that you call guilt. Feel them and experience them, don't push them away. Experience the guilt you would feel if you were a child and you were engaged in sex play and all of a sudden your parents came into the room. Imagine the guilt you would feel. Just think about that feeling, experience it, feel the tension in your body, that feeling in the pit of your stomach, your heart beating faster, feel those things, experience them, don't push them away. Just concentrate on that feeling of guilt and try to make it grow stronger and stronger.

Imagine how you would feel standing with a group of people and you think of a really dirty joke but you can't say it because of the guilt you have. Just feel that guilt, imagine exactly how you would feel. Experience it, make it grow, don't let it slip away. Just think about guilt, think about the guilt you would feel if you committed adultery. You would feel sinful, you would feel bad. Feel those things. Feel the tension grip your stomach. Feel your heartbeat speed up, that strange feeling in your legs, feel all those things. Just feel the guilt and make it grow. Don't let it slip away. Just let the guilt grow and grow in you. Feel those things in your body when you feel guilty. Think of the things that make you feel guilty. Think of those things that have to do with sex that make you feel guilty and experience the guilt feelings. Imagine that you're married to a woman that you love and you don't want to hurt. Then, think about committing adultery and how bad it would be and how bad you would feel.

Just feel that guilt. Think of the sexual desires you have and the guilt you feel that makes you try to curb them. Just feel the guilt. Make it grow, don't let it fade away, experience it. Make yourself feel guilty, make yourself amplify those feelings, just feel the guilt. Make it grow, make it strong, and experience it in your body. Just think about that and feel it. Feel the guilt, don't let it fade, keep that feeling in the pit of your stomach. Feel your heart pound, feel that strange feeling in your legs, feel that tension that comes with feeling guilty, feel it all.

Think about the guilt people feel when they were children engaging in sex play and they've been discovered. Think of the guilt and feel it. Think of the guilt that goes along with committing adultery and how bad people feel, how sinful it is, just feel the guilt. Experience it, experience it intensely, experience all that guilt. Experience the heartbeat that goes along with feeling guilty, the speeded up heartbeat, the tightness in the pit of the stomach, almost like nausea, it feels almost like a frightened knot in the pit of your stomach!!! Almost as if you're going to throw up!!! And feel the tension, feel the tension all over your body, the speeded up heartbeat and the tightness in your stomach. Just feel the guilt, make it grow and grow, feel it intensely, don't let it slip away, don't let your mind wander, concentrate on one thing, the guilt that has to do with something wrong sexually. Think about those sexual desires that you try to curb because you feel guilty. Think of the feeling of guilt that goes along with those sexual desires. Think of the feeling of guilt that goes along with committing adultery and how bad it feels to commit adultery. Just experience it completely. Concentrate on it, go to it in your mind, go to that sick feeling in your stomach and feel it, and feel it grow. Your whole being experiences those feelings in your body.

Think of the guilt you experience when you tell a dirty joke in a mixed crowd and people just look at you, like how could he say that. Think of the guilt you feel later on. Think of the feelings in your body when you think of that situation. You told that joke and they just looked at you, then, later on, you think about it, and how did you feel. You felt guilty and what did those feelings feel like. How did your stomach feel, how did your pulse feel, how did your head feel? Feel those things now, feel them intensely, and make them grow. Feel them intensely and strongly and don't let them slip away. Experience that sick feeling in your stomach that's almost like nausea, as if you can almost feel your stomach tightening as if the food's about to come up your throat!!! It's all coming from sex guilt. Just feel it and experience it and don't let it go away. Feel your heart pound. Feel the sickness in your stomach. Feel the tension all over your body. Feel it in your face, feel it all over, just feel those feelings that are associated with guilt, all those sensations in your stomach, that sickness, that nausea, that tightness, and your rapid heartbeat, the feeling of tension, growing and growing. Just feel them, feel those sensations, and make them strong, don't let them get away, make them stronger and stronger, and feel them, experience those sensations of guilt.



Think about the guilt you would feel if you committed adultery and how bad it would be. You'd feel terrible, you'd feel guilty, you'd feel worthless, and you'd feel horrible. All those things from guilt. Think of the guilt from your strong sexual desires. Experience that guilt, experience how bad it feels. Feel those powerful sensations, the sickness in your stomach, your racing heartbeat, the tension all over. Experience that guilt, don't let it fade. In your mind, go down to your stomach and feel the nausea there. Experience it. Experience the guilt you could have over childhood sex play, thinking back over it, someone had walked in. Think of the guilt. Think of the guilt you would feel if you told a dirty joke in a crowd and they just looked at you, then later, you were thinking about. Think how guilty you would feel. Think about the sickness in your stomach and the tension all over your body. Just feel that tension in the back of your neck, in your stomach, that nausea in your stomach, it's growing and growing, it's in a tight knot in the pit of your stomach. Just experience that. Experience that guilt. Experience the sensations associated with it, concentrate on it, make it grow, make that tense feeling grow, make that nauseous feeling grow. Feel your heartbeat, feel it race, all those things are from sex guilt. Feel them. Feel them intensely, don't let them fade, concentrate on them, concentrate on those feelings from sex guilt. Think of that loving wife you cheated on and how guilty you would feel. Picture that clearly in your mind, how you would feel knowing that you could such a wonderful woman. Experience those feelings, the sickness in your stomach, the tension, the heartbeat, feel them all. Feel that nausea grow in your stomach and come up your throat, taste it, taste that nausea. Feel the tension, feel it in your legs, feel it in your arms. Feel all those sensations of guilt and don't let them fade. Concentrate on them, make them grow, make them stronger, make them more intense and feel them. Feel those sensations. Make them grow and grow. Feel that nausea, taste it, taste it in your mouth, feel it burning in your throat. Get the taste of it in your nostrils, on your tongue, feel it burning your throat, that nausea in the pit of your stomach. And the tension, you can feel it in the back of your neck, you can feel it in your legs. You can feel the tension in your arms, tension from sex guilt. Make it strong, make it intense. Feel it, don't let it fade. Concentrate on all those sensations.

Feel the guilt associated with sexual desire that you have to control. Feel those sensations from guilt. Think of the guilt you would feel, that strong sickening guilt. If you were caught in the act during childhood sex play. Just think of those feelings you would have if that had happened. Think of the guilt you would feel if you had told a really dirty joke in a crowd and no one had laughed, they just looked at you. Later, you're thinking about it, feel the sensations of guilt that would cause. Feel your heart, you can feel it pounding in your chest. Feel the pulse in your neck. Feel it. Concentrate on it and feel it. You can feel the nausea in the pit of your stomach. Feel your stomach tightening into a knot, you can almost feel the nausea rising up from your stomach, into your throat. You can almost taste it. The sensations from sex guilt. And the tension, the tension you would feel knowing you'd committed adultery, you had done something that bad.

Just feel that tension, feel it all over your body. It makes that feeling in your stomach even worse. Concentrate on it, and feel it, make it grow, feel the tension and feel your heartbeat. Feel the sickness in the pit of your stomach. Feel all those things and make them grow. Make them stronger and stronger. Feel them intensely, concentrate on those sensations. You have strong sexual desires and you are afraid to express them because of these feelings of guilt. Think about expressing those desires and the guilt that would go along with it and experience it. Experience it intensely and make it grow, the feeling in your stomach. Feel it, feel that sensation, feel that knot in the pit of your stomach and experience it. Concentrate on it, don't let it slip away, try to experience it as fully as you can, stronger and stronger, you can feel the tension, you can feel the sex guilt. Think about something in sex that would make you feel guilty. Think about it and feel the guilt. Just feel it grow, make it grow, feel it intensely, that feeling in your stomach, and the tension all over your body, and how it makes your legs feel. Concentrate on that feeling in your legs, that feeling of tension, and feel it, feel the tension in your arms, feel that tension all over your body, and experience it. That feeling in the pit of your stomach, experience that sensation, make it stronger, feel the nausea. Feel that knot in the pit of your stomach, as if someone had walked in on you when you were engaged in childhood sex play and you're thinking about it afterwards, imagine the feelings you would have. Just think of those feelings and experience them.

Picture the scene to yourself where you might feel sex guilt and feel the guilt that goes along with it, and feel it strongly and intensely. Make those sensations grow stronger and more intense and experience them, and don't let them fade away, feel them strongly and intensely and make them grow. Experience those feelings of sex guilt and make them strong. You feel it in your stomach, you feel that knot in the pit of your stomach, you feel that tension all over your body, just feel that tension, experience it, feel it intensely. It's all from sex guilt. Feel those things, experience those sensations, feel your heart pounding, you can feel the pulse in your neck, just experience it, concentrate on it, make those sensations strong, and experience them as intensely as you can.

Now, put those things out of your mind, and just relax. What we've tried to do is have you experience the sensations associated with sex guilt, intensely and for a long period of time without any negative consequences. So now, just relax. And, we will continue again next session.

## Implosive Therapy

## Training Tape--Nonpositive Expectancy

## Female

The procedure which you will undergo is an experimental procedure called Implosion. This research is intended to determine whether guilt feelings can be effectively reduced using this procedure. This procedure has been shown to have some effect in reducing other types of unpleasant emotional responses such as anxiety and has been tried in dealing with phobias or irrational fears.

In theory, Implosion is based on the principles of extinction. It has been demonstrated that the frequency of occurrence of behavior is a function of the consequences of the behavior. A behavior followed by a positive reinforcer maintains or increases its frequency of occurrence. If, however, the behavior occurs in the absence of reinforcing consequences, the frequency of the behavior will decrease perhaps to zero frequency. This is extinction.

Implosion is thought to be useful in the extinction of emotional responses. These emotional responses usually occur as a result of the anticipated punishment either external as in the case of anxiety, or internal as with guilt. In implosion, then, the person imagines the behavior which leads to an emotional response, but the anticipated feared consequence does not occur. Thus, the emotional response is thought to extinguish. It is, of course, very convenient that you need only imagine the guilt or anxiety producing scene in the experiment room, and then, hopefully, have the effects of extinction generalized to real-life situations.

What you will be doing today and in the following sessions, then, is imagining as clearly as possible some guilt-producing scenes taken from the Mosher Forced Choice Inventory, and, while you imagine those scenes in your mind, you are to try to experience the guilt feelings associated with them, as strongly and intensely as possible. The result after a period of time could be the extinction of those guilt feelings. We are trying to determine whether or not this experimental procedure will reduce guilt feelings, and, we're just not sure if it will have any effect at all on sex guilt.\*

Sit in the chair with it in the upright position, close your eyes, and we'll begin. Remember, try to experience everything that follows as intensely as possible while listening to the tape.

\* The training segment ends at this point. The treatment tape used in treatment sessions 2 through 4 starts with the following paragraph.

Now, I would like you to feel as strongly as you can, and as intensely as you can, those sensations you have when you feel guilty. Imagine, for example, how you would feel if you committed adultery. Imagine the consequences of committing adultery. Imagine what a mistake that would be. Imagine the guilt that would go along with it. Feel the sensations you would experience, feel them strongly and intensely. Feel how cheap you would feel, feel those sensations, perhaps a tension, the tightness in the pit of your stomach, a knot right there in your stomach, and your heart might be pounding, so hard you can feel the pulse in your neck or in your head. Feel those sensations, feel the tension you would feel all over your body, feel the guilt you would experience if you committed adultery and how unworthy you would feel, how cheap, experience those sensations experience them strongly and intensely. Feel that knot in the pit of your stomach, the nausea you would feel in your stomach. Feel those things, feel the guilt associated with having sexual relations outside of marriage, how cheap you would feel, and experience it, how totally unfit you would be to be married, what a mistake it would be, imagine the consequences of committing adultery and the guilt you would feel. Just feel the sensations you would be experiencing, feel them strongly, concentrate on them. Don't let your mind wander, feel the guilt, feel how uncomfortable you would feel. Experience the tension, the tension in your legs, that strange weak feeling, shaky feeling you get in your legs, you feel guilty. Imagine you were a little high and told some really dirty jokes in mixed crowd, then, afterwards you're thinking about it. Experience the guilt you would feel thinking back over that incident, experience those sensations, your heart pounding, that nausea in the pit of your stomach, experience those things and feel them. Feel the tension all over your body and make it grow, concentrate on that feeling of tension, how it feels in your legs, and how it feels in your arms, just feel that tension, and concentrate on it, don't let it slip away, make it grow. Just feel that tension, feel it grow and grow, that tension associated with guilt. Just think how you would feel if you committed adultery, if you had sex outside of marriage, and you didn't push it out of your mind but wanted to experience it. You felt so unworthy of your husband, you felt cheap and unfit for marriage. Feel the guilt and experience it, experience all those sensations in your body that go along with sex guilt. Think about it and experience it, experience it fully and intensely. Make it stronger, don't make it go away. Make it grow and grow in intensity and feel those sensations in your body. Concentrate on them, feel them.

Feel that knot in your stomach as you think to yourself, "I committed adultery, I'm cheap and unfit." Feel the guilt, feel the tension, feel your heartbeat, feel the knot in the pit of your stomach, feel that nausea and make it grow, feel it and experience it, make it grow stronger and stronger. Concentrate on those feelings. Don't let them go away, concentrate on them, and feel them, just make them grow stronger and stronger. Feel those sensations. Feel the tightness in your stomach and in your mind go to that tightness and experience it in all its intensity. Feel that guilt, feel those guilt feelings, don't fight them, experience them, live with them, breathe with them.

Feel your heart pounding, and feel the tension, feel the tightness in your stomach, feel the tension in your legs, concentrate on that feeling, make it grow stronger.

Imagine the feeling you would have afterwards, thinking back over telling those really dirty jokes in mixed company. Think of the feelings, the sensations you would have in your body. Think of the sensations you would experience, thinking about having had sexual relations outside of your marriage. Feel it, experience it intensely, feel the guilt, feel the guilt associated with those sexual relations, feel how cheap you would feel, experience it, feel those sensations. You committed adultery, how unworthy you would be of your husband. Imagine exactly how you would feel if that happened and you were thinking about it, and experience it intensely. Make the feelings grow stronger and stronger. Feel that tightness in the pit of your stomach turn into nausea, you can almost feel it rising and burning in your throat, all from guilt; you can almost taste it in your mouth, from guilt. Feel the tension, feel it in the back of your neck, feel the tension in your stomach and in your legs, feel it grow stronger and stronger, and make it grow. Experience it, don't fight it off, feel those sensations intensely.

Imagine your thinking back over an incident where you told some really dirty jokes in mixed company and no one laughed, they just looked at you, and afterwards you are thinking about it. Think about how guilty you would feel, experience those sensations, experience the rapid heartbeat, you feel it pounding, you feel it in your neck and in your head, feel the pounding, that tightness in your stomach, feel it and experience it, and make it grow. Don't fight it off, don't let it slip away, keep feeling those sensations strongly. Try to make them become more and more real. Experience those feelings you have if you had sexual relations outside your marriage, that feeling of cheapness, how you are completely unfit for your husband. Think about it and feel it. Concentrate on those sensations you would have, concentrate on those awful sensations, that feeling in your stomach that you can't get rid of. It keeps growing stronger and stronger and turns into nausea, that feeling of tension all over your body because of that sexual thing that you did that made you feel guilty. Feel it, feel it intensely, concentrate on those sensations. Make them stronger, make them more intense, feel them and make them grow, don't let them slip away. Make them grow stronger and stronger. Feel them more and more intense. Concentrate on them. Make them grow stronger and stronger, more and more real.

Imagine feeling cheap and unfit for your marriage because of having sexual relations. Imagine how you would feel. Feel those sensations, don't just think about them, feel them, make them grow stronger, feel them intensely. Feel the guilt because of those sexual relations you had. Think about it and experience it. Experience it as intensely as you can. Don't let it slip away, don't fight it, experience it. Just feel the guilt, and wallow in it. Think about telling those dirty jokes and everyone just stood and looked at you. Afterwards, when you

thought about it, how guilty you felt. Think to yourself, how could you have done anything in such bad taste, and you can feel those sensations in your body that go along with those thoughts. How could you do it, you feel so guilty, feel those sensations of guilt, go along with them and feel them, don't fight them off, experience that guilt.

Think of that terrible guilt you would have if you committed adultery, think of how you would hurt the man you love, and the feelings you would have. You would feel so unworthy and so cheap. Think of them and experience them. Experience them intensely. Feel that sensation, it's like tension, and the feeling in your stomach, and the feeling in your legs, all those sensations.

Think of something you would do that would cause you to feel sex guilt. Picture it clearly in your mind, what that thing is. Picture it as clearly as you can, then feel the sensations that go along with that guilt. Feel them, feel them strongly, don't let them slip away. Experience them intensely and more intensely, and concentrate on them. Concentrate on the feeling you'd get in your stomach and feel it strongly. The feeling is almost like nausea and it's growing and growing. It's going up your throat, you can taste it in your mouth, and it's burning. You can feel those sensations and concentrate on them. And your heart is beating faster, you can feel it pounding, you can feel it pounding in your head, you can feel your heart pounding, all from those guilt feelings. And the feeling of tension is growing and growing, it's all over your body, you can feel that tension, you can feel it in your legs, the weakness in your legs, it's all from guilt because you did that sex act that made you feel guilty. You can experience it all over your body. Don't just think about it, feel it, feel it intensely, concentrate on those sensations, and feel them.

Just think of how you would feel if you had sexual relations outside your marriage and the guilt you would experience, and concentrate on that. Concentrate on those sensations and feel them. Make yourself experience them even more and more intensely. Concentrate on all those feelings, and experience them. Experience that tension completely, that tension that you feel from guilt. Experience it strongly and intensely, all the sensations that go with it. The feelings you get in your legs from tension. The feelings in your arms, in the back of your neck, and feel the tension. Feel it all over your body. Feel that tension from sex guilt, feel it intensely and strongly and even more strongly.

Concentrate on those feelings and experience them, how you would feel if you told some dirty jokes in a mixed crowd and no one laughed, and then afterward you are thinking about it, reliving that, and the people just looked at you, and how guilty you felt, if you had sexual relations outside of marriage, how cheap and unfit you would feel and the guilt, feel the guilt, if you committed adultery, how you would feel, the consequences, you would just be waiting for them to happen.

Feeling guilty, feel that tightness in your stomach, it grows and grows. You can't get away from that sensation, that nausea in the pit of your stomach. It's there and you feel it strongly and intensely. Then it gets stronger and stronger. You just can't get away from it. You can just feel it spreading, that knot in the pit of your stomach is growing, and you can feel it more and more intensely, and at the same time, you feel your heart pounding, pounding, you can feel it in your neck and in your head.

At the same time you can feel the tension, and you can feel that tightness in your stomach as you think about the guilt you would feel if you had sexual relations outside of marriage. Think of that situation, where you had done something sexual that would make you feel guilty, think of it very clearly, think of how guilty you would feel. Place yourself in that situation, experience the guilt, experience it intensely and strongly, experience those sensations, don't let your mind wander. Experience them and feel them. Experience that guilt. Experience exactly how it would feel if you were feeling that guilt right now. Make it more intense and stronger. Feel that tightness in your stomach, feel it grow as it gets tighter, you feel nauseous, your heart's pounding, there's a tension all over your body. Experience those things, experience those sensations even more strongly. Concentrate on them, don't let them go away, make them stronger, feel that tightening growing knot in your stomach, feel your heart pounding, feel the tension, feel all those things, from guilt for that scene you're imagining where you've done something sexual that makes you feel guilty. Feel that guilt and concentrate on it. Feel it strongly, don't let it slip away, feel it intensely, make it grow and grow, and feel those sensations. Go to them with your mind, go to that feeling in your legs and the tension, go to that feeling in your stomach, that knot in the pit of your stomach and experience it. Feel your heart pounding, feel the guilt, imagine that scene where you would feel so guilty, and experience that guilt. Experience it strongly and intensely.

OK, now, just relax. Put those things out of your mind, and relax. Just think for a few seconds about relaxing.

OK, what we've done today is to experience sensations associated with guilt without any consequences. And we will continue with this next time.

APPENDIX I

Transcripts of Systematic Desensitization  
Training and Treatment Tapes



## Systematic Desensitization

### Training Tape - Positive Expectancy

The procedure which you will undergo is a treatment called Systematic Desensitization. Past research indicates that guilt feelings can be effectively reduced using this therapy procedure. As you may have already learned, this treatment procedure has also been found to be effective in reducing other types of unpleasant emotional responses such as anxiety and is widely used in the treatment of phobias or irrational fears.

Systematic desensitization involves three stages. The first is deep muscle relaxation. This deep muscle relaxation is brought about by systematically tensing, then relaxing, all of the major muscles of the body. You will learn this procedure later in this session. The second stage in systematic desensitization is the construction of a list of guilt producing stimuli. This has been done for you using your responses to the Mosher Forced Choice Inventory. The last stage of systematic desensitization involves imagining guilt-producing stimuli while you're in a state of deep muscle relaxation. For example, if you indicated on the Mosher Forced Choice Inventory that telling dirty jokes in mixed company caused you to feel guilty, you would be asked to visualize in your mind as clearly as possible that you are with a group of men and women telling a dirty joke. You would be asked to do this while in a state of deep muscle relaxation. This pairing of relaxation and visualizing in your mind of the guilt-producing stimuli is the actual treatment process in systematic desensitization. This part will commence next week.

What occurs in this treatment, then, is that after a number of repetitions of pairing relaxing with the guilt-producing scenes, counter-conditioning occurs, and the scene no longer produces guilt. This reduction or elimination of guilt in the treatment room then generalizes to real life situations. You can expect to experience changes to start no later than after the next session.

Next, the relaxation exercises from Lazarus (1971) were presented.

## Systematic Desensitization

### Training Tape - Nonpositive Expectancy

The procedure which you will undergo is an experimental procedure called Systematic Desensitization. This research is intended to determine whether guilt feelings can be effectively reduced using this procedure.

Systematic desensitization has been shown to have some effect in reducing other types of unpleasant emotional responses, such as anxiety, and has been tried in dealing with phobias or irrational fears.

Systematic desensitization, as used in this experiment, involves three stages. The first is deep muscle relaxation. Deep muscle relaxation is brought about by systematically tensing and relaxing all of the major muscles of the body. You will learn this procedure later in this session. The second stage in systematic desensitization is the construction of a list of guilt-producing stimuli. This has been done for you using your responses to the Mosher Forced Choice Inventory. The last stage of systematic desensitization involves imagining the guilt-producing stimuli while you are in a state of deep muscle relaxation. For example, if you indicated on the Mosher Forced Choice Inventory that telling dirty jokes in mixed company caused you to feel guilty, you would be asked to visualize in your mind, as clearly as possible, that you are with a group of men and women telling a dirty joke. You would be asked to do this while in a state of deep muscle relaxation. This pairing of relaxation and of visualizing in your mind the guilt-producing stimuli is the main procedure in systematic desensitization. This will commence next week.

What is hoped will occur using this procedure is that after a number of repetitions of pairing relaxation with the guilt-producing scenes, counterconditioning is thought to occur, and the scenes theoretically will no longer produce guilt. This reduction or elimination of guilt in the experimental room then generalizes in theory to real-life situations. We are trying to determine whether or not this experimental procedure will reduce guilt feelings, and we are not sure if it will have any effect at all on sex guilt.

Next, the relaxation exercises from Lazarus (1971) were presented.

## Systematic Desensitization

## Treatment Tape - Male

Note: The same relaxation instructions were used here as were used in the training tapes. The treatment tape continues as follows:

Now, imagine as clearly as you can committing adultery and not feeling bad.

Stop imagining that now, and relax.

Now, imagine again, while you continue relaxing, committing adultery and not feeling bad.

Stop imagining that and continue relaxing. Be sure there's no tension anywhere in your body.

Once again, imagine committing adultery and not feeling bad.

Stop imagining that now, and relax. Think only about relaxing.

Now imagine committing adultery and not telling anyone about it.

Stop imagining that now, and just relax. Just let yourself become more and more relaxed.

Imagine again committing adultery and not telling anyone about it.

Stop imagining that, and relax.

Imagine again committing adultery and not telling anyone about it.

Stop imagining that now, and think only about relaxing.

Now as you relax, imagine satisfying your sexual desires.

Stop imagining that now, and relax. Be sure there's no tension anywhere in your body.

Imagine again satisfying your sexual desires.

Now stop imagining that, and continue relaxing.

Imagine once again satisfying your sexual desires.

Stop imagining that, and relax. Just enjoy the feeling of being of being completely calm and relaxed.

While relaxing, imagine the sex play you engaged in as a child.

Stop imagining that, and go on relaxing, trying to become more and more relaxed.

Imagine again the sex play you engaged in as a child.

Stop imagining that, and relax.

Imagine once more the sex play you engaged in as a child.

Stop imagining that now, and just relax. Enjoy the feeling of relaxation.

Now imagine your childhood sex play and not worrying about it being wrong.

Stop imagining that and go on relaxing.

Again imagine your childhood sex play and not worrying about it being wrong.

Now stop imagining that, and relax.

Once again imagine your childhood sex play and not worrying about it being wrong.

Stop imagining that, and just relax.

Now imagine as clearly as you can telling dirty jokes in mixed company.

Stop imagining that now, and go on relaxing.

Imagine again telling dirty jokes in mixed company.

Stop imagining that now, and relax. Think only about relaxing and be sure there's no tension anywhere in your body.

Imagine again telling dirty jokes in mixed company.

Stop imagining that now, and just relax.

Now I'm going to count backwards from ten to one. At the count of five open your eyes, and then by the time I reach one just have a stretch, and yawn, and then sit up. Now, counting backward... ten, nine, eight, seven, six, five, open your eyes, four, three, two, and one. Now just stretch, and yawn, and slowly sit up.

## Systematic Desensitization

## Treatment Tape - Female

Note: The same relaxation instructions were used here as were used in the training tapes. The treatment tape continues as follows:

Now, while you stay completely relaxed, imagine as clearly as you can some scenes. Imagine that if you were to commit adultery there would hopefully be no consequences.

Stop imagining that now, and relax. Just think about relaxing.

Imagine again that if you committed adultery there would hopefully be no consequences.

Stop imagining that now, and relax. Think only about relaxing.

Imagine again as clearly as you can that if you committed adultery there would be no consequences.

Stop imagining that and relax. Let yourself become more and more relaxed.

Now imagine that if you committed adultery that your reason would be good.

Stop imagining that now, and go back to relaxing.

Imagine again that if you committed adultery that your reason would be good.

Now stop imagining that and relax. Think only about letting yourself relax more and more.

Imagine again that if you committed adultery that your reason would be good.

Stop imagining that, and relax. Enjoy the feeling of relaxation.

Now imagine as clearly as you can telling dirty jokes in mixed company, and it doesn't bother you.

Stop imagining that and continue relaxing.

Imagine again telling dirty jokes in mixed company, and it doesn't bother you.

Stop imagining that now, and think only about relaxing.

Imagine again telling dirty jokes in mixed company, and it doesn't bother you.

Stop imagining that now, and relax.

Now imagine that you're telling dirty jokes in mixed company, and they're funny.

Stop imagining that now, and think only about relaxing.

Imagine again that you're telling dirty jokes in mixed company, and they're funny.

Stop imagining that, and relax.

Again, imagine telling dirty jokes in mixed company, and they're funny.

Now stop imagining that and go back to just thinking about relaxing. Be sure there's no tension anywhere in your body.

Now think about having sexual relations, and feeling happy and satisfied.

Stop imagining that now, and just think about relaxing.

Again, picture in your mind as clearly as possible, having sexual relations and feeling happy and satisfied.

Stop imagining that now, and continue relaxing.

Again imagine having sexual relations and feeling happy and satisfied.

Stop imagining that now, and relax. Let yourself become more and more relaxed.

Now imagine that you've had sexual relations and you feel warm and good.

Now stop imagining that, and relax.

Imagine again that you've had sexual relations and you feel warm and good.

Stop imagining that now, and relax.

Imagine again, as clearly as you can, that you've had sexual relations and you feel warm and good.

Stop imagining that now, and continue relaxing.

Now, I'm going to count backward from ten to one. At the count of five open your eyes, and then, by the time I reach one just have a stretch, and yawn, and then sit up. Now, counting backward...ten, nine, eight, seven, six, five, open your eyes, four, three, two, and one. Now just stretch, and yawn, and slowly sit up.

APPENDIX J

Transcripts of Attention Control  
Training and Treatment Tapes

## Attention Control

### Training Tape - Non-positive Expectancy

The procedure which you will undergo is an experimental procedure I am calling Covert Control. The present research is intended to determine whether guilt feelings can be effectively reduced using this procedure. The procedure has been shown to have some effect in reducing other types of unpleasant emotional responses such as anxiety, and has been tried in dealing with phobias or irrational fears.

Covert control as used in this experiment involves three stages. The first is deep muscle relaxation. This deep muscle relaxation is brought about by systematically tensing, and then relaxing all of the major muscles of the body. You will learn this process later in the session. The relaxation is hypothesized to be essential to gaining covert control over maladaptive responses. The second stage in covert control is the construction of a list of calm, pleasant scenes, either ones you have experienced or fictional. This list has been made up for you to facilitate production of this experimental program. The last stage of covert control involves learning to produce feelings of relaxation and pleasant imagery as needed. The rationale is that you have learned to react with guilt in certain situations. Likewise, sex guilt is a learned, maladaptive response. Covert control teaches you a new type of response, it is hoped. What will occur then is that during the experiment sessions, you will first carry out deep muscle relaxation, and then, while trying to maintain the relaxation, you will visualize pleasant, relaxing scenes which will be described to you. The theory is that when you have practiced this several times during the sessions that follow you will gain greater covert control. I should mention at this point that it is called covert control because the experimental procedure uses internal means in dealing with maladaptive responses. We are trying to determine whether or not this experimental procedure will reduce guilt feelings and we're not sure if it will have any effect at all on sex guilt. Now, you will be given instruction in deep muscle relaxation.

Next, the relaxation exercises from Lazarus (1971) were presented.



## Attention Control

## Training Tape - Positive Expectancy

The procedure which you will undergo is a treatment called Covert Control. Past research indicates that guilt feelings can be effectively reduced using this therapy procedure. As you may have already learned, this treatment procedure has also been found to be effective in reducing other types of unpleasant emotional responses such as anxiety and is widely used in the treatment of phobias or irrational fears.

Covert control involves three stages. The first is deep muscle relaxation. This deep muscle relaxation is brought about by systematically tensing, then relaxing all of the major muscles of the body. You will learn this process later in the session. It is essential to gaining covert control over maladaptive responses. The second stage in covert control is the construction of a list of calm, pleasant scenes, either ones you have experienced or fictional. This list has been made up for you to facilitate production of the treatment program. The last stage of covert control involves learning to produce feelings of relaxation and pleasant imagery as needed. The rationale is that your guilt responses are the result of learning. Sex guilt may be considered to be a maladaptive learned response. Using covert control you learn to control how you respond to formerly unpleasant situations. What will occur, then, is that during therapy you will first carry out deep muscle relaxation and then while maintaining the resulting state of deep relaxation, you will visualize pleasant relaxing scenes which will be described to you. When you have practiced this several times during the sessions that follow, you will gain greater covert control. I should note for you at this point that it is called covert control because the therapeutic procedure uses internal means of dealing with maladaptive responses. You can expect to experience results no later than after the second session. In today's session, you will receive instruction in deep muscle relaxation. Listen carefully, and follow the instructions closely.

Next, the relaxation exercises from Lazarus (1971) were presented.

## Attention Control

## Treatment Tape - Male and Female

Note: The same relaxation instructions were used here as were used in the training tapes. The treatment tape continues as follows:

Now, I want you to imagine, while you continue relaxing, the following scene. I want you to picture it in your mind and feel it as clearly as possible. Now, while you relax, imagine that you're lying in the sun on a warm spring day, listening to the sound of the breeze in the trees feeling warm and lazy. Imagine and feel this scene as clearly as you can.

Stop imagining that scene now, and just think about relaxing. Try to become more and more relaxed as you lie there.

Now, while you continue relaxing, imagine as clearly as you can that you're lying in the sun on a warm spring day listening to the sound of the breeze in the trees, and feeling warm and lazy.

Stop imagining that now, and just relax.

Imagine again that you're lying in the sun on a warm spring day listening to the sound of the breeze in the trees, feeling warm and lazy.

Stop imagining that now, and continue relaxing. Be sure there's no tension anywhere in your body.

Now imagine that you're sitting in the cool shade of a tree on a hot summer day enjoying the feeling of a light breeze blowing on your face.

Stop imagining that now, and relax.

Imagine again that you're sitting in the cool shade of a tree on a hot summer day enjoying the feeling of a light breeze blowing on your face.

Stop imagining that now, and go on relaxing. Try to be as completely relaxed as you can.

Again imagine that you're sitting in the cool shade of a tree on a hot summer day enjoying the feeling of a light breeze blowing on your face.

Stop imagining that now, and relax.

Imagine now that you've just awakened after a good night's sleep, and you stretch lazily, and lie there contently, knowing you can be there as long as you like.

Stop imagining that now, and relax.

Imagine again that you've just awakened after a good night's sleep, and you stretch lazily, and lie there contently, knowing you can lie there as long as you like.

Stop imagining that now, and relax.

Again imagine that you've just awakened after a good night's sleep, and you stretch lazily, and lie there contently, knowing you can lie there as long as you like.

Stop imagining that now, and continue relaxing.

Imagine, as clearly as you can, that you've just reached the end of a long hard hike up the side of a hill, and standing at the top, you stare at the breath-taking view of the valley below.

Stop imagining that now, and relax.

Imagine again that you've just reached the end of a long hard hike up the side of a hill, and standing at the top, you stare at the breath-taking view of the valley below.

Stop imagining that, and relax.

Now imagine, that after exercising hard, you're standing under a hot shower enjoying the soothing effect its having on your muscles.

Stop imagining that now, and just relax.

Now imagine that after hard exercise, you're standing under a hot shower enjoying the soothing effect its having on your muscles.

Now stop imagining that, and relax.

Imagine again as clearly as you can that after hard exercise, you're standing under a hot shower enjoying the soothing effect its having on your muscles.

Now put that out of your mind, and just relax.

Now imagine that you've just come inside from a long walk on a freezing snowy day, and you're sitting in front of a crackling fire, feeling the warmth flood into your body.

Stop imagining that now, and relax.

Imagine again you've just come inside from a long walk on a freezing snowy day, and you're sitting in front of a crackling fire, feeling the warmth flood into your body.

Stop imagining that now, and relax.

Imagine again that you've just come inside from a long walk on a freezing snowy day; and you're sitting in front of a crackling fire, feeling the warmth flood into your body.

Stop imagining that now, and continue relaxing.

Now I'm going to count backward from ten to one. At the count of five I want you to open your eyes, and then by the time I reach one kind of stretch, and yawn, and sit up. Now, counting backward... ten, nine, eight, seven, six, five, open your eyes, four, three, two, one. Now just stretch, kind of yawn, and then sit up.

APPENDIX K

Participant Consent Form

## Sex Guilt Study

This study is concerned with identifying procedures which might be effective in the reduction of guilt feelings associated with sexual material, thoughts, and/or behaviour. If you are selected (selection is based on scores on the Moshier F-C Inventory), and agree to participate, you will be expected to attend:

- (a) one thirty-minute assessment session one week prior to the start of the experiment proper;
- (b) four thirty-minute experimental sessions at one week intervals, each followed by a five-minute assessment session;
- (c) one thirty-minute assessment session one month following the fourth experimental session.

All information gathered about individuals will be strictly confidential. You will receive written feedback about the results of the study and your own data one month following completion of the study.

Persons who have received, are receiving, or intend to seek psychiatric treatment are not acceptable.

Following the initial selection assessment you will be phoned to inform you of whether you qualify for inclusion in the study.

I, \_\_\_\_\_, hereby consent to participate in the study on sex guilt described above. I have read and understand the above material. I also understand that I am free to withdraw from the study at any time.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Phone No: \_\_\_\_\_

APPENDIX L

Participant Debriefing Form

### Sex Guilt Experiment

Thank you for serving as a subject in my experiment. As it turned out, I had just enough subjects to meet my criteria, so your participation is really appreciated.

The purpose of the experiment was to compare the effectiveness of three treatment methods in reducing sex guilt. These will be described below. The rationale was that if guilt is defined as a specific type of emotional response (there is some physiological evidence) (McGuire, 1974), then treatment procedures effective in reducing other types of emotions, such as anxiety, should be effective in reducing guilt.

#### Treatment groups

1. Systematic desensitization (Wolpe, 1958). This procedure has been proven to be effective in reducing anxiety associated with phobias. It involves teaching the subject to relax, and then having the subject imagine the undesirable emotion-producing stimulus while in a relaxed state. Eventually, imagining the stimulus no longer produces arousal, and this generalizes to the real situation. In my experiment, stimuli to be imagined were from the Mosher F-C Guilt Inventory.
2. Implosive therapy (Hogan, 1968). There is also evidence that this procedure is effective in reducing anxiety, but the evidence is less conclusive. Implosive therapy requires that the subject imagine the anxiety, or guilt in this case, producing stimulus so that maximum arousal occurs and is maintained until it gradually diminishes. There is evidence that the effects generalize to the real situation, as with anxiety.



3. Autogenic therapy (Schultz and Luthe, 1959). This procedure has received much research attention in Europe, but is relatively new to North America. Its proponents offer evidence of its effectiveness in reducing physiological arousal associated with stress. It is based on the theory that the human brain possesses self-normalizing processes which are inhibited by stress. To allow those processes to occur, one must undergo autogenic ("self-generated") relaxation. Rather than just skeletal muscle relaxation as in systematic desensitization, the subject repeats phrases to him/herself dealing with suggestions of warmth, heaviness, regular breathing, regular heartbeat, warmth of the solar plexus, and coolness of the forehead. The result is the "autogenic state", and the self-normalizing processes are free to occur. Statements related to specific problems are added, such as, "Sex is fun". Good research on the effectiveness of autogenic therapy is lacking, and I was especially interested in this procedure.

If you were in none of the three treatment groups, you were in one of the two control groups.

#### Control groups

1. Pseudodesensitization. On the tape, this was called "covert control". It involved relaxation training, as in systematic desensitization, but the imagining of neutral scenes, rather than guilt-producing scenes. Its purpose is to be non-therapeutic, and to control for the attention given to subjects in the treatment groups. Theoretically, it should have no effect on guilt.

2. Waiting List. This group took the same tests as all other groups, but underwent no procedure. The purpose was to assess the effect of the passage of time, and control for the effects of taking the tests.

Within each of the first four groups, half of the subjects were given positive expectancy of results, and half, no expectancy. Positive expectancy instructions described a treatment, shown to be effective in reducing anxiety. No expectancy instructions described an experimental procedure, the effectiveness of which was questionable. The purpose of this experimental manipulation was to determine what effect a subject's expectations have on the outcome of treatment.

There were several dependent measures.

1. Mosher Forced Choice Guilt Inventory (Mosher, 1966). This is a trait measure of guilt. You indicated whether each statement was true or false for you. It measures sex, morality, and hostility guilt. I scored it for all three types.
2. Reaction Inventory-Guilt (Evans, Jessup & Hearn, 1975). This is a stimulus measure of guilt. You indicated whether each situation caused you to feel guilt, "not at all", "a little", etc.
3. Perceived Guilt Index (Otterbacher & Munz, 1973). This is a state measure of guilt. Here you indicated on a checklist the effect of reading the typed paragraph.
4. Waiting room test. A behavioral measure of guilt, derived by measuring the amount of time spent looking at erotic or nonerotic magazines while sitting at the table waiting.

5. Word Association Test.
  - a. Word associations were scored for sexual meanings.  
High guilt should result in primarily neutral responses.
  - b. Reaction time was measured. A new slide started a timer and pressing the button stopped it, and started a tape recorder.  
High guilt is associated with longer response latencies.
6. Expectancy Rating Scale (Borkovec and Nau, 1972) (Does not apply to Waiting List Group). Your response to five questions indicated how effective you thought your procedure to be.
7. Enjoyment Scale. This is a semantic differential Scale. I obtained measures of your views of the treatment's activity, potency, and value. (Waiting List subjects did not do this.)

### Results

The overall results indicate that no group improved significantly more than the control group. All five groups improved (less guilt), but this includes the two control groups as well.

Most of the measures used have been shown to be valid and reactive to true differences in guilt. Therefore, the absence of significant differences cannot be "blamed" on insensitive instruments. On the other hand, none of the groups had high guilt to begin with, so only limited changes were possible. Possibly there was no room for a treatment effect. The most likely explanation seems to be that guilt is learned in childhood and is not simply an emotion, but a set of attitudes. Therefore, brief behavioral treatment is ineffective, and either a cognitive or attitude change procedure is required.

There were no significant differences among the Enjoyment Scale or Expectancy Rating Scale scores. Trends indicated that Autogenic Therapy and pseudodesensitization were liked the most; that systematic desensitization was most potent; and that systematic desensitization was most active, all at follow-up.

Your results appear on the following page.

Leonard M. Stein

Your Results

Perceived Guilt Index:

Waiting Room Test:

Mosher Forced Choice Guilt Inventory

Sex:

Hostility:

Morality:

Reaction Inventory-Guilt:

Word Association Test:

Sex-related words - reaction time:

Neutral words - reaction time:

Word Score:

References

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APPENDIX M

Summaries of the Statistical Tests  
Performed on the Variables Under Investigation

Number of Participants in each Treatment Group,  
After Attrition, for each of Three Samples;  
and Chi-Square Comparison

Sample	AT	IT <sub>1</sub>	Group SD	AC	WL
1	4	2	2	2	3
2	1	2	2	2	1
3	2	4	3	4	3

$\chi^2$  (8 df) = 2.86 n.s.



Analysis of Variance Summary Table for Pretest  
Differences among Participants from Three  
Samples on the MFCGI Sex Subscale

Source	df	MS	F
Samples	2	409.86	1.3056
Error	34	313.92	

Analysis of Variance Summary Table for all Treatment Outcome  
Measures for Three Samples at Post Measure

Source	df	MS	F
Perceived Guilt Index			
Groups	2	.8470	.3071
Error	34	2.7583	
Waiting Room Test			
Groups	2	5.3357	1.1410
Error	34	4.6764	
MFCGI Sex Subscale			
Groups	2	21.5427	.0330
Error	34	653.4307	
MFCGI Hostility Subscale			
Groups	2	1.2800	.0037
Error	34	341.8691	
MFCGI Morality Subscale			
Groups	2	259.3881	.8363
Error	34	810.1632	
MFCGI Total Score			
Groups	2	353.5833	.1309
Error	34	2700.8719	

---

Reaction Inventory-Guilt			
Groups	2	595.7048	.4716
Error	34	1263.1430	

---

Word Association Test-Double Entendre Reaction Time			
Groups	2	.5914	.1673
Error	34	3.5347	

---

Word Association Test-Neutral Word Reaction-Time			
Groups	2	.3279	.1643
Error	34	1.9962	

---

Word Association Test-Word Score			
Groups	2	476.5936	3.2557*
Error	34	146.3896	

---

\* p = .05

Analysis of Variance Summary Table for all Treatment Outcome  
Measures for Three Samples at Follow-up Measure

Source	df	MS	F
Perceived Guilt Index			
Groups	2	2.1070	.6563
Error	34	3.2105	
Waiting Room Test			
Groups	2	2.4619	.8151
Error	34	3.0205	
MFCGI Sex Subscale			
Groups	2	520.7873	.6933
Error	34	751.1858	
MFCGI Hostility Subscale			
Groups	2	41.0973	.0836
Error	34	491.3568	
MFCGI Morality Subscale			
Groups	2	256.1550	1.0324
Error	34	248.1117	
MFCGI Total Score			
Groups	2	1556.1482	.5237
Error	34	2950.9563	

---

 Reaction Inventory-Guilt
 

---

Groups	2	951.6862	.8386
Error	34	1.134.9104	

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 Word Association Test-Double Entendre Reaction Time
 

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Groups	2	.4741	.3538
Error	34	1.3400	

---



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 Word Association Test-Neutral Word Reaction Time
 

---

Groups	2	1.1399	1.7612
Error	34	.6472	

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 Word Association Test Word Score
 

---

Groups	2	339.3008	2.1782
Error	34	155.7740	

---

Summary of the One-Way Analysis of Covariance  
for All Groups on the MFCGI Sex Subscale Post Measures

Source	df	MS	F
Groups	4	322.71	n.s.
Error	31	182.37	
Total	35		

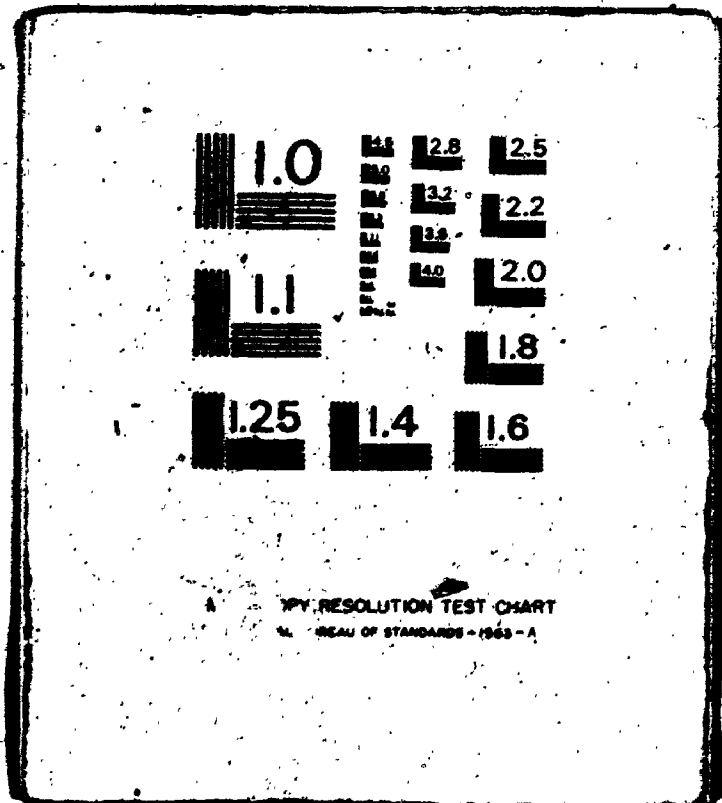
Summary of the One-Way Analysis of Covariance for All  
Groups on the MFCGI Sex Subscale Follow-up Measures

Source	df	MS	F
Groups	4	191.36	n.s.
Error	31	234.19	
Total	35		

3

3

OF/DE



10X RESOLUTION TEST CHART  
NBS - BUREAU OF STANDARDS - 1963-A

**Summary of the One-Way Analysis of Covariance  
for All Groups on MFCGI-Hostility Subscale Post Measures**

Source	df	MS	F
Groups	4	271.08	3.13*
Error	31	86.59	
Total	35		

\*  $p < .05$

**Q Values of Newman-Keuls Test on Post Measures of  
MFCGI-Hostility Subscale for All Groups**

Treatment	IT	AP	WL	AT	SD
IT		1.31	1.64	3.68	4.48*
AC			1.98	2.37	2.87
WL				0.39	0.89
AT					0.50
SD					

\*  $p < .05$



Summary of the One-Way Analysis of Covariance for All  
Groups on the MFCGI-Hostility Subscale Follow-up Measures

Source	df	MS	F
Groups	4	574.89	3.03*
Error	31	189.84	
Total	35		

\*  $p < .05$

Q Values of Newman-Keuls Test on Follow-up Measures  
of MFCGI-Hostility Subscale for All Groups

Treatment	IT	AC	AT	WL	SD
IT		1.78	3.08	3.43	4.56*
AC			1.30	1.76	2.78
AT				0.46	1.48
WL					1.02
SD					

\*  $p < .05$

Summary of the One-Way Analysis of Covariance for All  
Groups on the MFCGI Morality Subscale Post Measures

Source	df	MS	F
Groups	4	89.90	n.s.
Error	31	209.34	
Total	35		

Summary of the One-Way Analysis of Covariance for All  
Groups on the Morality Subscale Follow-Up Measures

Source	df	MS	F
Groups	4	90.48	n.s.
Error	31	141.05	
Total	35		

Summary of the One-Way Analysis of Covariance  
for All Groups on the MFCGI Total Score Post Measures

Source	df	MS	F
Groups	4	1210.34	n.s.
Error	31	791.73	
Total	35		

Summary of the One-Way Analysis of Covariance for All  
Groups on the MFCGI Total Score Follow-up Measures

Source	df	MS	F
Groups	4	1774.47	n.s.
Error	31	924.30	
Total	35		

Summary of the One-Way Analysis of Covariance for All Groups  
on the WAT Double Entendre Word Reaction Time Post Measures

Source	df	MS	F
Groups	4	.84	n.s.
Error	31	1.71	
Total	35		

Summary of the One-Way Analysis of Covariance for All Groups on  
the WAT Double Entendre Word Reaction Time Follow-up Measures

Source	df	MS	F
Groups	4	.06	n.s.
Error	31	.48	
Total	35		

Summary of the One-Way Analysis of Covariance for All Groups on  
the WAT Neutral Word Reaction Time Post Measures

Source	df	MS	F
Groups	4	.67	n.s.
Error	31	.96	
Total	35		

Summary of the One-Way Analysis of Covariance for All Groups on  
the WAT Neutral Word Reaction Time Follow-up Measures

Source	df	MS	F
Groups	4	.20	n.s.
Error	31	.20	
Total	35		

Summary of the One-Way Analysis of Covariance for All  
Groups on the WAT Word Score Post Measures

Source	df	MS	F
Groups	4	13.77	n.s.
Error	31	66.57	
Total	35		

Summary of the One-Way Analysis of Covariance for All  
Groups on the WAT Word Score Follow-up Measures

Source	df	MS	F
Groups	4	3.85	n.s.
Error	31	76.15	
Total	35		

Summary of the One-Way Analysis of Covariance  
for All Groups on the PGI Post Measures

Source	df	MS	F
Groups	4	3.86	n.s.
Error	31	2.16	
Total	35		

Summary of the One-Way Analysis of Covariance  
for All Groups on the PGI Follow-up Measures

Source	df	MS	F
Groups	4	3.57	n.s.
Error	31	2.79	
Total	35		

Summary of the One-Way Analysis of Covariance  
for All Groups on the WRT Post Measures

Source	df	MS	F
Groups	4	0.35	n.s.
Error	31	5.26	
Total	35		

Summary of the One-Way Analysis of  
Covariance for All Groups on the WRT Follow-up Measures

Source	df	MS	F
Groups	4	1.01	n.s.
Error	31	2.86	
Total	35		



Summary of the One-Way Analysis of Covariance  
for All Groups on the RIG Post Measures

Source	df	MS	F
Groups	4	1101.53	n.s.
Error	31	444.02	
Total	35		

Summary of the One-Way Analysis of Covariance  
for All Groups on the RIG Follow-up Measures

Source	df	MS	F
Groups	4	1226.93	n.s.
Error	31	590.91	
Total	35		

Adjusted Estimated Combined Means of Positive and  
 Non-positive Expectancy for Variables from the  
 Groups x Expectancy Analysis of Covariance

Variable	Positive Expectancy Post	Expectancy Follow	Non-pos. Expectancy Post	Expectancy Follow
MFCGI-Sex	-23.79	-20.94	-28.92	-26.75
MFCGI-Hostility	6.03	3.60	3.64	7.15
MFCGI-Morality	-2.37	-1.69	4.08	2.12
MFCGI-Total	-20.11	-19.02	-21.23	-17.49
WAT-DE	2.72	2.11	3.65	2.50
WAT-N	2.18	1.88	3.12	2.06
WAT-WORD	12.69	12.95	14.93	12.53
PGI	2.06	2.38	3.35	3.07
WRT	1.79	1.56	1.22	.63
RIG	159.8	160.4	161.9	161.4
ERS-Question 1	3.19	3.12	3.24	3.18
ERS-Question 2	2.81	2.81	2.79	3.09
ERS-Question 3	3.07	2.94	3.24	3.42
ERS-Question 4	3.69	3.31	3.71	3.70
ERS-Question 5	3.44	3.19	3.73	3.35
ERS Total	16.19	15.38	16.70	16.73
ES-Evaluative	4.69	4.61	4.89	5.00
ES-Potency	3.07	2.88	3.14	3.01
ES-Activity	2.67	2.79	2.93	2.85

Summary of the Two-Way Analysis of Covariance for  
Four Groups x Expectancy on the MFCGI Sex Subscale Post Measures

Source	df	MS	F
Treatments (A)	3	362.19	n.s.
Expectancy (B)	1	341.61	n.s.
A X B	3	143.11	n.s.
Error	21	152.22	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Sex Subscale Follow-up Measures

Source	df	MS	F
Treatments (A)	3	200.13	n.s.
Expectancy (B)	1	498.03	n.s.
A X B	3	361.80	n.s.
Error	21	193.52	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Hostility Subscale Post Measures

Source	df	MS	F
Treatments (A)	3	322.77	3.0655*
Expectancy (B)	1	3.93	n.s.
A X B	3	47.55	n.s.
Error	21	105.29	
Total	28		

\* p = .05

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Hostility Subscale Follow-up Measures

Source	df	MS	F
Treatments (A)	3	656.25	3.1996*
Expectancy (B)	1	403.94	n.s.
A X B	3	226.49	n.s.
Error	21	205.11	
Total	28		

\* p < .05

Q Values of Newman-Keuls Test on Post Measures of the MFCGI-  
Hostility Subscale Data for Groups from the Groups x  
Expectancy Analysis of Covariance

Treatment	IT	AC	SD	AT
IT		2.09	4.06*	5.65**
AC			1.97	3.56
SD				1.59
AT				

\*  $p < .05$

\*\*  $p < .01$

Q Values of Newman-Keuls Test on Follow-up Measures  
of the MFCGI Hostility Subscale Data from the  
Groups x Expectancy Analysis of Covariance

Treatment	IT	AC	AT	SD
IT		2.31	4.56**	4.64*
AC			3.18	3.26
AT				0.08°
SD				

\*  $p < .05$

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Morality Subscale Post Measures

Source	df	MS	F
Treatments (A)	3	106.06	n.s.
Expectancy (B)	1	247.46	n.s.
A X B	3	80.05	n.s.
Error	21	270.51	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Morality Subscale Follow-up Measures

Source	df	MS	F
Treatments (A)	3	120.11	n.s.
Expectancy (B)	1	75.82	n.s.
A X B	3	22.48	n.s.
Error	21	189.54	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the MFCGI Total Score Post Measures

Source	df	MS	F
Treatments (A)	3	1343.56	n.s.
Expectancy (B)	1	1332.36	n.s.
A X B	3	747.02	n.s.
Error	21	896.00	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the MFCGI Total Score Follow-up Measures

Source	df	MS	F
Treatments (A)	3	2019.79	n.s.
Expectancy (B)	1	2186.37	n.s.
A X B	3	1238.56	n.s.
Error	21	1039.82	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the WAT Double Entendre Word Reaction Time Post Measures

Source	df	MS	F
Treatments (A)	3	.3381	n.s.
Expectancy (B)	1	3.4764	n.s.
A X B	3	.7091	n.s.
Error	21	1.6674	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the WAT Double Entendre Word Reaction Time Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.0551	n.s.
Expectancy (B)	1	.4071	n.s.
A X B	3	.0775	n.s.
Error	21	.4376	
Total	28		



Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the WAT Neutral Word Reaction Time Post Measures

Source	df	MS	F
Treatments (A)	3	.8972	n.s.
Expectancy (B)	1	1.8572	n.s.
A X B	3	.4281	n.s.
Error	21	1.1211	
Total	28		

Summary of the Two-Way Analysis of Covariance  
for Four Groups x Expectancy on the WAT Neutral Word  
Reaction Time Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.1641	n.s.
Expectancy (B)	1	.1359	n.s.
A X B	3	.0950	n.s.
Error	21	.2085	
Total	28		

Summary of the Two-Way Analysis of Covariance for  
Four Groups x Expectancy on the WAT Word Score Post Measure

Source	df	MS	F
Treatments (A)	3	27.6719	n.s.
Expectancy (B)	1	5.2623	n.s.
A X B	3	76.1009	n.s.
Error	21	76.3080	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the WAT Word Score Follow-up Measures

Source	df	MS	F
Treatments (A)	3	3.4185	n.s.
Expectancy (B)	1	88.6578	n.s.
A X B	3	77.7595	n.s.
Error	21	89.5407	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the PGI Post Measures

Source	df	MS	F
Treatments (A)	3	5.13	3.09*
Expectancy (B)	1	9.31	5.62*
A X B	3	5.30	3.20*
Error	21	1.66	
Total	28		

\*  $p < .05$

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the PGI Follow-up Measures

Source	df	MS	F
Treatments (A)	3	1.78	n.s.
Expectancy (B)	1	2.01	n.s.
A X B	3	.19	n.s.
Error	21	2.27	
Total	28		

Q Values of Newman-Keuls Test on Post Measures of  
the PGI Data for Treatments from the Groups x Expectancy  
Analysis of Covariance

Treatment	IT	AC	AT	SD
IT		.48	2.49	4.97*
AC			2.01	4.49*
AT				2.48
SD				

\* p < .05

Summary of the Results of Duncan's Multiple range Test on Guilt  
Scores from the PGI Post Measures for Interaction from the  
Groups x Expectancy Analysis of Covariance

Means	1.26	1.71	1.96	2.25	3.03	3.06	3.54	4.83
Groups	(AC(P)	IT(NP)	IT(P)	AT(P)	SD(P)	AC(NP)	AT(NP)	SD(NP)

AC(P)					*	*		
IT(NP)							*	**
IT(P)								
AT(P)								
SD(P)								*
AC(NP)								*
AT(NP)								
SD(NP)								

(P) Positive expectancy  
(NP) Non-positive expectancy

\* p < .05

\*\* p < .01

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the WRT Post Measures

Source	df	MS	F
Treatments (A)	3	.34	n.s.
Expectancy (B)	1	1.71	n.s.
A X B	3	8.99	n.s.
Error	21	4.72	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the WRT Follow-up Measures

Source	df	MS	F
Treatments (A)	3	1.23	n.s.
Expectancy (B)	1	5.80	n.s.
A X B	3	2.09	n.s.
Error	21	3.09	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the RIG Post Measures

Source	df	MS	F
Treatments (A)	3	1159.78	n.s.
Expectancy (B)	1	154.56	n.s.
A X B	3	251.63	n.s.
Error	21	555.73	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four  
Groups x Expectancy on the RIG Follow-up Measures

Source	df	MS	F
Treatments (A)	3	1349.94	n.s.
Expectancy (B)	1	90.93	n.s.
A X B	3	957.66	n.s.
Error	21	648.28	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 1 Post Measures

Source	df	MS	F
Treatments (A)	3	.8262	n.s.
Expectancy (B)	1	.0547	n.s.
A X B	3	.2761	n.s.
Error	21	1.2383	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 1 Follow-up Measures

Source	df	MS	F
Treatments (A)	3	1.0171	n.s.
Expectancy (B)	1	.0347	n.s.
A X B	3	1.0672	n.s.
Error	21	1.2589	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 2 Post Measures

Source	df	MS	F
Treatments (A)	3	1.2580	n.s.
Expectancy (B)	1	.3801	n.s.
A X B	3	.5639	n.s.
Error	21	.8252	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 2 Follow-up Measures

Source	df	MS	F
Treatments (A)	3	1.0055	n.s.
Expectancy (B)	1	2.0520	n.s.
A X B	3	.2553	n.s.
Error	21	1.0871	
Total	28		




Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 3 Post Measures

Source	df	MS	F
Treatments (A)	3	1.7574	n.s.
Expectancy (B)	1	.0169	n.s.
A X B	3	.4607	n.s.
Error	21	1.1936	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 3 Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.9736	n.s.
Expectancy (B)	1	1.0103	n.s.
A X B	3	.7600	n.s.
Error	21	1.5624	
Total	28		

  
 Summary of the Two-Way Analysis of Covariance for Four Groups x  
 Expectancy on the ERS Question 4 Post Measures

Source	df	MS	F
Treatments (A)	3	.3409	n.s.
Expectancy (B)	1	.0414	n.s.
A X B	3	.8988	n.s.
Error	21	1.1747	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
 Expectancy on the ERS Question 4 Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.6218	n.s.
Expectancy (B)	1	1.3970	n.s.
A X B	3	1.0922	n.s.
Error	21	2.0146	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 5 Post Measures

Source	df	MS	F
Treatments (A)	3	.3718	n.s.
Expectancy (B)	1	.5945	n.s.
A X B	3	.6477	n.s.
Error	21	.7217	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Question 5 Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.7935	n.s.
Expectancy (B)	1	.2308	n.s.
A X B	21	.2752	n.s.
Error	21	1.4498	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Total Post Measures

Source	df	MS	F
Treatments (A)	3	12.4132	n.s.
Expectancy (B)	1	5.1844	n.s.
A X B	3	3.0685	n.s.
Error	21	19.1154	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ERS Total Follow-up Measures

Source	df	MS	F
Treatments (A)	3	17.8987	n.s.
Expectancy (B)	1	21.6878	n.s.
A X B	3	4.8593	n.s.
Error	21	28.0153	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ES-Evaluative Post Measures

Source	df	MS	F
Treatments (A)	3	1.1534	n.s.
Expectancy (B)	1	.1138	n.s.
A X B	3	.2071	n.s.
Error	21	1.2029	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ES-Evaluative Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.7441	n.s.
Expectancy (B)	1	.4970	n.s.
A X B	3	.4541	n.s.
Error	21	1.6693	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ES-Potency Post Measures

Source	df	MS	F
Treatments (A)	3	.6630	n.s.
Expectancy (B)	1	.0221	n.s.
A X B	3	.7276	n.s.
Error	21	.4115	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ES-Potency Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.4015	n.s.
Expectancy (B)	1	.1073	n.s.
A X B	3	.5990	n.s.
Error	21	.4023	
Total	28		

Summary of the Two-Way Analysis of Covariance for Four Groups x  
Expectancy on the ES-Activity Post Measures

Source	df	MS	F
Treatments (A)	3	.3065	n.s.
Expectancy (B)	1	.1974	n.s.
A X B	3	.0813	n.s.
Error	21	.4419	
Total	28		

Summary of the Two-Way Analysis of Covariance  
for Four Groups x Expectancy on the ES-Activity Follow-up Measures

Source	df	MS	F
Treatments (A)	3	.7161	n.s.
Expectancy (B)	1	.0001	n.s.
A X B	3	.2107	n.s.
Error	21	.2942	
Total	28		

Summary of the Groups x Trials Analysis of Variance with  
Repeated Measures over Trials for the WRT

Source	df	MS	F
Treatments (A)	3	.0243	n.s.
Trials (B)	5	.0702	3.2056*
A X B	15	.0205	n.s.
Error	26	.0219	
Total	49		

\*  $p < .05$

Summary of the Groups x Trials Analysis of Variance with  
Repeated Measures over Trials for the PGI

Source	df	MS	F
Treatments (A)	3	13.9519	n.s.
Trials (B)	5	11.0771	n.s.
A X B	15	10.1878	n.s.
Error	26	11.4665	
Total	49		



Summary of the Regression Coefficients for Each Variable  
 Resulting from a Between Groups Analysis of  
 Covariance in which the Pretest Scores  
 were Used as Covariates

Variable	Regression Coefficient	
	Post	Follow-up
Mosher Forced Choice Guilt Inventory-Sex	.83***	.83***
Mosher Forced Choice Guilt Inventory-Hostility	.85***	.75***
Mosher Forced Choice Guilt Inventory-Morality	.57**	.65***
Mosher Forced Choice Guilt Inventory-Total	.83***	.81***
Word Association Test - DE Response latency	.74***	.82***
Word Association Test - N Response latency	.72***	.84***
Word Association Test - Word Score	.79***	.73***
Perceived Guilt Index	.30	.27
Waiting Room Test	.16	.35*
Reaction Inventory-Guilt	.81***	.68***

\*  $p < .05$

\*\*  $p < .001$

\*\*\*  $p < .0001$

Summary of the Regression Coefficients for Each Variable  
 Resulting from a Groups x Expectancy Analysis of Covariance  
 in which the Pretest Scores were Used as Covariates

Variable	Regression Coefficient Post	Regression Coefficient Follow-up
Mosher Forced Choice Guilt Inventory-Sex	.86****	.87****
Mosher Forced Choice Guilt Inventory-Hostility	.84****	.79****
Mosher Forced Choice Guilt Inventory-Morality	.56**	.61**
Mosher Forced Choice Guilt Inventory-Total	.83****	.83****
Word Association Test - DE Response latency	.78****	.81****
Word Association Test - N Response latency	.72***	.86****
Word Association Test - Word Score	.77****	.72***
Perceived Guilt Index	.33	.33
Waiting Room Test	.23	.22
Reaction Inventory-Guilt	.78****	.67***
Expectancy Rating Scale - Question 1	.28	.18
Expectancy Rating Scale - Question 2	.58**	.53**
Expectancy Rating Scale - Question 3	.59**	.41*
Expectancy Rating Scale - Question 4	.52*	.31
Expectancy Rating Scale - Question 5	.13	.09
Expectancy Rating Scale - Total	.51*	.44*
Enjoyment Scale - Evaluative	.29	.21
Enjoyment Scale - Potency	.48*	.44*
Enjoyment Scale - Activity	.82****	.73****

\* p < .05

\*\* p < .01

\*\*\* p < .001

\*\*\*\* p < .0001