

Introductory Psychology Laboratory Problems in Research Ethics
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Abstract

Faculty at 2 universities integrated 6 case studies on research ethics into their introductory psychology curricula. Students who received the ethics modules were better able to identify ethical issues and consider moral ambiguities than students who received standard instruction. Students and faculty favorably evaluated the curriculum, and students indicated that ethics instruction increased their interest in research psychology and scientific ethics.

INTRODUCTORY PSYCHOLOGY

LABORATORY PROBLEMS

IN

RESEARCH ETHICS

Student _____

Instructor _____

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Questions about the manual may be directed to Celia B. Fisher, Marie Ward Doty University Chair, Fordham University,
fisher@fordham.edu

Ethical Issues in Field Research

Read the brief study summary below and answer the 4 questions on the following 2 pages.

You may also refer to the extended summary at the back of this booklet.

EFFECT OF BLOOD ON REACTIONS TO A VICTIM

Jane Allyn Piliavin and Irving M. Piliavin (1972)

Journal of Personality and Social Psychology, 232, 353-361

The purpose of this study was to examine some of the factors leading to "bystander apathy" (the failure of witnesses to help others in distress). Some researchers had suggested that people are less likely to help a victim if many other bystanders are present. Piliavin and Piliavin disagreed with this explanation and proposed that people are less likely to help a victim if they feel helping may place them in danger. The researchers observed the helping behaviors of subway passengers in response to a series of "staged crises" in which a "victim" with a cane feigned a collapse on a crowded train and appeared to either bleed (*indicating a potentially dangerous situation*) or not bleed from the mouth. During the experiment some of the passengers panicked when they saw the "bleeding victim" and some attempted to pull the emergency cord to stop the train. The finding that passengers were *less* likely to help the "bleeding" victim irrespective of how many other bystanders were present, supported the hypothesis that the perceived danger of the situation (rather than the number of other witnesses present) determines helping behavior.

"Effect of Blood on Reactions to a Victim"

STUDENT FOCUS QUESTIONS CONTINUED

3. Are the rights of the subway passengers protected in this study? Have the subway passengers' autonomy (the right to determine one's own fate) and/or privacy been violated? If so, are there ways to protect these rights and still test conditions which create bystander apathy?

4. How might you modify this study to make it more ethically acceptable? If you were a member of an institutional review board (a committee that evaluates whether research proposals meet ethical standards), would you approve conducting this study today in either its original form or with your modifications? Why or why not?

NOTES

Ethical Issues in Animal Research

Read the brief study summary below and answer the 4 questions on the following 2 pages.

You may also refer to the extended summary at the back of this booklet.

SHAPE AND ARRANGEMENT OF COLUMNS IN CAT'S STRIATE CORTEX

David H. Hubel and Tortsten N. Wiesel (1963)

Journal of Physiology, 165, 559-568

The purpose of this study was to map out the location of cells in the visual (striate) cortex of the brain that respond when a cat looks at vertical, horizontal, and diagonal lines. The researchers hypothesized that cells responding to similar line orientations (e.g., vertical and nearly vertical lines) were located next to one another. Cats were anesthetized and tiny microelectrodes were surgically placed into the brain areas to study the response of different cells to different line orientations. The cats were then sacrificed and their brains stained with a chemical that could be used to more exactly identify the location of the cells. The results supported the hypothesis by demonstrating that cells in the cat's visual cortex are arranged in an orderly progression with adjacent cells responding to slightly different orientations starting from vertical (0- degrees) through a full 360-degree rotation.

NOTES

Ethical Issues in Aversive Conditioning Research

Read the brief study summary below and answer the 4 questions on the following 2 pages. You may also refer to the extended summary at the back of this booklet.

CONDITIONED EMOTIONAL REACTIONS

John B. Watson and Rosalie Raynor (1920)

Journal of Experimental Psychology, 3, 1-14

In this study, John Watson, the founder of the behavioral approach to understanding psychological phenomena, tested the hypothesis that fear could be classically conditioned in young children. The subject of the experiment was an 11-month-old infant named Albert, who lived in the University-affiliated hospital with his mother, a wet nurse (a woman who nurses other women's babies). Over a period of 4 months Albert was exposed to numerous trials on which a white rat (which Albert did not initially respond to fearfully) was presented along with a loud, startling sound (which Albert did respond to fearfully). Once the loud sound was omitted, Albert not only showed a fear response to the white rat, but generalized the learning to fear other similar objects such as a white rabbit and a dog. Albert's mother took him from the hospital before Watson and Raynor had the opportunity to experimentally eliminate the fear response.

NOTES

Ethical Issues in Socially Sensitive Research with Children

Read the brief study summary below and answer the 4 questions on the following 2 pages.

You may also refer to the extended summary at the back of this booklet.

IQ TEST PERFORMANCE OF BLACK CHILDREN

ADOPTED BY WHITE FAMILIES

Sandra Scarr and Richard Weinberg (1976)

American Psychologist, 31, 726-739.

The purpose of this study was to test the hypothesis that African American children adopted by white middle-class parents would have higher IQ (intelligence test) scores than African American children reared by their biological parents. At the time the study was conducted, several researchers had suggested that racial differences in IQ and school achievement scores resulted from genetic differences in intellectual potential. IQ testing was conducted in the child's home. Information regarding the child's adoption history and school performance was obtained from State Department of Public Welfare adoption records and school records. The researchers found that the IQ scores and school achievement scores for the adopted children were above the average previously reported for both black children and the general population. The adoption records indicated that on average, the adoptive parents had 4-5 years more education than the children's biological parents. The researchers concluded that the IQ scores of African American children are influenced by their environment and that African American children's intellectual achievement can be increased by rearing in environments that are culturally similar to the traditional school environment.

"IQ Test Performance of Black Children
Adopted by White Families"

STUDENT FOCUS QUESTIONS CONTINUED

3. What ethical procedures should Scarr and Weinberg have followed to ensure that the right to autonomy (the right to determine one's own fate), privacy, and confidentiality were protected for *all* subjects of this research: the adoptive parents, the adopted children, and the biological parents?

4. What social values prevalent today might influence decisions regarding the ethical justification of this type of research? How might you modify this study to make it more ethically acceptable? If you were a member of an institutional review board (a committee that evaluates whether research proposals meet ethical standards), would you approve conducting this study today in either its original form or with your modifications? Why or why not?

NOTES

Ethical Issues in Deceptive Research

Read the brief study summary below and answer the 4 questions on the following 2 pages.

You may also refer to the extended summary at the back of this booklet.

COGNITIVE, SOCIAL, AND PHYSIOLOGICAL DETERMINANTS OF EMOTIONAL STATE

Stanley Schacter and Jerome E. Singer (1962)

Psychological Review, 69, 379-399.

The purpose of this study was to test the hypothesis that cognitive factors, when combined with physiological arousal, determine our different emotional states. Students received extra credit in their introductory psychology course for participating. The students were led to believe they were in a study on the effect of a vitamin injection on vision. Subjects were in fact injected with adrenaline (a drug which causes a state of physiological arousal similar to that experienced when we are feeling emotional). One group of subjects were then correctly informed about what their physiological reactions to the injection would be (e.g., palpitations, tremors, flushing, and accelerated breathing) while one group of subjects were misinformed (they were told they would have either an itching sensation or that the injection would have no side effects). Following the injections, subjects sat in a room with a "confederate," hired by the experimenter, who acted either very happy or very angry. The researchers found that subjects who were *misinformed* about the physiological effects of the injection experienced strong emotions similar to that acted out by the confederate. It was concluded that different emotional states are jointly determined by awareness of physiological arousal and a cognitive explanation for that arousal based on situational cues.

"Cognitive, Social, and Physiological Determinants of Emotional State"

STUDENT FOCUS QUESTIONS CONTINUED

3. Were the autonomy rights of the subjects protected in this study? Do special ethical concerns arise when subjects are introductory psychology students participating in the study for course credit? Are there ways to protect the autonomy rights of the participants and still test the experimental hypothesis? If so, how?

4. What are some *scientific* reasons for or against using deceptive procedures in psychological research? What are *ethical* reasons for or against using deceptive procedures in psychological research? How might you modify this study to make it more ethically acceptable? If you were a member of an institutional review board (a committee that evaluates whether research proposals meet ethical standards), would you approve conducting this study today in either its original form or with your modifications? Why or why not?

NOTES

Ethical Issues in Clinical Trial Research

*Read the brief study summary below and answer the 4 questions on the following 2 pages.
You may also refer to the extended summary at the back of this booklet.*

NATIONAL INSTITUTE OF MENTAL HEALTH TREATMENT OF DEPRESSION COLLABORATIVE RESEARCH PROGRAM

Irene Elkin et al (1989)

Archives of General Psychiatry, 46, 971-983

The purpose of this study was to test the hypothesis that psychotherapy was as effective as antidepressant drug therapy in treating depression. Subjects were patients diagnosed as having major depressive disorder (characterized by difficulty thinking, recurrent thoughts of death or suicide attempts, loss of interest or pleasure in activities, appetite and sleep disturbances, and feelings of worthlessness or guilt), who had come for treatment to one of several psychiatric outpatient centers participating in the research project. Patients who agreed to participate were randomly assigned by the experimenters to one of four treatment conditions: Interpersonal psychotherapy, cognitive behavioral psychotherapy, antidepressant drug treatment, and a pill placebo condition (in which the pill had no real ingredients). While the patients in the pill conditions were informed that they had a 50% chance of being in either the antidepressant or the placebo condition, they were not told until the end of the study whether they had received the antidepressant or the placebo pill. The findings demonstrated that severely depressed patients in the antidepressant group improved the most, the placebo group improved the least, and the improvement of patients in the two psychotherapies was in-between.

**"National Institute of Mental Health Treatment of Depression
Collaborative Research Program"**

STUDENT FOCUS QUESTIONS CONTINUED

3. What ethical procedures should the researchers use to protect the autonomy and confidentiality of the subjects in this study? How can the patient's autonomy (the right to determine one's own fate) be protected if, after random assignment to one of the pill conditions, they do not know whether or not they are receiving medication or a placebo? What special consideration needs to be given the fact that the subjects are depressed?

4. How might you modify this study to make it more ethically acceptable? If you were a member of an institutional review board (a committee that evaluates whether research proposals meet ethical standards), would you approve conducting this study today in either its original form or with your modifications? Why or why not?

NOTES

"EFFECT OF BLOOD ON REACTIONS TO A VICTIM"

Jane Allyn Piliavin and Irving M. Piliavin (1972)

Journal of Personality and Social Psychology, 23(3), 353-361

PURPOSE OF THE STUDY: The purpose of this study was to explore some of the reasons underlying bystander apathy to the distress of others. At the time this study was conducted, there was a great deal of media coverage of Kitty Genovese: a woman viciously murdered outside her apartment in Queens, New York City. Although the victim screamed for help, not one of the thirty-eight neighbors who watched the attack from their windows came to her assistance or even called the police. Researchers Bibb Latane and John Darley proposed that the presence of other bystanders inhibits observers from helping, because they feel a **diffusion of responsibility**.

HYPOTHESIS: Piliavin and Piliavin offered a different hypothesis. They proposed that the observation of an emergency is an emotionally aversive situation that an observer will attempt to terminate through direct help, indirect help (notifying others), or leaving the scene. Whether a bystander will offer direct help is determined by how costly (dangerous) the bystander believes the situation to be. The primary hypothesis tested in this study was: As the perceived cost for helping increases, bystanders are less likely to offer direct help and more likely to provide indirect help or leave the scene.

SUBJECTS: The subjects were all passengers riding in the end cars of express subways of the Market Street line in Philadelphia, Pennsylvania during the late afternoon. Subjects were not informed that an experiment was taking place, nor that notes were being taken on their behaviors.

PROCEDURE: To test Piliavin and Piliavin's theory of bystander intervention, the behavior of passengers was observed when an experimenter, posing as a "victim" with a cane, "collapsed" in a moving subway car. To experimentally manipulate the "cost" of helping, in half of the conditions the victim "bled" from the mouth and in half he did not bleed. The researchers assumed that the presence of blood increased the costs of helping because the sight of blood should arouse feelings of fear and revulsion in the typical bystander. The researchers staged approximately 42 of these incidents, each lasting approximately 3 minutes (the time between station stops). Problems encountered during the experiment included discovery and harassment by transit authority police; potentially dangerous actions on the part of real bystanders (e.g., attempting to pull the emergency cord to stop the train); and passenger panic during some of the blood trials.

RESULTS: As predicted, bystanders exposed to the "bloody" victim were less likely to offer direct help and more likely to offer indirect help or no help at all when compared to those exposed to the bloodless victim. The researchers also found that contrary to the *diffusion of responsibility* hypothesis, the number of bystanders present did not significantly inhibit helping behavior. Overall, males were more likely to offer direct help than females. Bloody "victims" were more likely to be helped by bystanders of their own race, while race had no effect on helping behavior for bloodless "victims."

CONCLUSIONS: The results of the Piliavin & Piliavin study support the theory that the perceived cost of helping a victim, rather than a sense of diffused responsibility with other bystanders, primarily determines whether a bystander will help a person in need.

"Shape and Arrangement of Columns in Cat's Striate Cortex"

David H. Hubel and Torsten N. Wiesel (1963)

Journal of Physiology, 165, 559-568

PURPOSE OF THE STUDY: The purpose of this study was to map out the anatomical layout of cells in the cat's **striate cortex** that respond to different visual patterns. At the time this study was conducted, scientists had determined that different **neurons** in the striate cortex are activated by different orientations of a visual form. For example, there was evidence that some striate conical cells responded best to vertical patterns, others to horizontal patterns, and others to oblique (diagonal) patterns of different degrees of slant.

HYPOTHESIS: Rubel and Wiesel had previously ascertained that the striate cortex of the cat is subdivided into columns of cells, with each column composed of cells having the same orientation preferences. They sought to further examine whether the location of each column was systematically organized about its orientation preference or whether the ordering of the columns was random. The primary hypothesis tested in this study was: *The columns of cells in the cat's striate cortex are arranged in a regular order with adjacent columns forming a progressive sequence of cells activated by slightly different pattern orientations.*

SUBJECTS: Seven cats were used.

PROCEDURE: In the first phase of the experiment, the researchers sought to determine the orientation preference of the cells in each column. To accomplish this, the cats were first **anesthetized** so that their eyes would be immobilized. Tiny **microelectrodes** were then surgically placed into the brain areas under study. Next, the experimenters presented lines of different orientations on a screen directly in front of the cat, and the microelectrode picked up the neural impulses when a particular cell responded. In the second phase of the experiment the researchers sought to get a clearer picture of the anatomical shape of the columns. To accomplish this, the cats were sacrificed and their brains were stained with a chemical that could be used to determine the shape of each column.

RESULTS: The microelectrode recordings indicated that some columns of cells in the cat's striate cortex demonstrated a systematic progression of orientation preference. For example, they found that in one cortical area a vertical (0-degree) column is next to a 10-degree oblique column, which in turn, is next to a 20-degree oblique column, with subsequent columns next to other columns progressing through one complete 360-degree rotation. The staining technique indicated that in these ordered regions the columns were especially likely to be long and narrow.

CONCLUSIONS: Rubel and Wiesel's findings indicated that cells in the striate cortex are segregated into regions according to their preferred orientation. The researchers concluded that the systematic ordering of orientation columns can aid the visual processing of shapes encountered in everyday life because it allows for interconnections among cells responding to similar orientations.

"Conditioned Emotional Reactions"

John B. Watson and Rosalie Rayner (1920)

Journal of Experimental Psychology, 3(1). 1 - 14.

PURPOSE OF THE STUDY: The purpose of this study was to demonstrate that emotional reactions to situations can be learned. At the time this study was conducted Freudian theory proposed that sex (or love) was the principal emotion around which later normal or **pathological** emotional reactions arose. Watson and Rayner believed that fear and rage was as primal as love in influencing personality and that the complexity of adult emotions could be explained by early learning experiences tied to these three emotions.

HYPOTHESIS: Watson and Rayner proposed that the range of situations eliciting emotional reactions in adulthood were learned during childhood by means of **classical conditioning**. The primary hypothesis tested in this study was: *A fear response to an originally unfeared **stimulus** can be conditioned in infancy by presenting the unfeared stimulus at the same time a feared stimulus is presented.*

SUBJECTS: The subject was an infant named Albert B. whose mother was a wet nurse in a nearby home for invalid children. Testing began when Albert was approximately 9-months of age and ended when he was approximately 13-months.

PROCEDURE: The first phase of the study was designed to demonstrate that Albert did not fear a white rat, a rabbit, a dog, and other objects, but did fear a loud sound made by striking a hammer upon a suspended steel bar in back of his head. The next phase of the experiment was designed to demonstrate that a fear response to the rat could be conditioned by striking the steel bar each time Albert reached out his hand to touch the white rat. Albert's reactions to the rat were then observed when the steel bar was and was not struck. The final phase of the experiment was designed to assess whether a conditioned fear response would **generalize** to the other objects. Over a period of weeks, Albert was presented with blocks, the rat, a rabbit, a dog, and other stimuli and his emotional reactions were observed. Motion pictures were taken of these reactions. Albert left the study before the final phase of the experiment, experimentally removing the fear response, could be implemented.

RESULTS: In the first phase of the experiment, Albert only exhibited fear to the striking of the steel bar. The fear response was defined as a violent startle, checked breathing, raised arms, lips trembling, and crying. In the second phase of the experiment, after the rat had been continuously presented with the striking of the steel bar, Albert showed the fear response when the rat was presented alone. In the third phase of the experiment, Albert showed a fear response to objects with furry characteristics similar to the rat.

CONCLUSIONS: The results of this study indicate that fear can be classically conditioned in infancy, and that learned fear can generalize to other objects. Watson and Rayner believe that the early home life of children establishes many such conditioned emotional responses. They conclude that many adult **phobias** can be explained in terms of such early conditioned responses.

"IQ Test Performance of Black Children Adopted by White Families"

Sandra Scarr and Richard A. Weinberg (1976)

American Psychologist, 31, 726-739

PURPOSE OF THE STUDY: The purpose of this study was to determine whether the **IQ score** of African American children adopted by white parents was higher than the IQ scores achieved by African American children reared by their biological parents. At the time this study was conducted there was evidence that African American children reared by their biological families achieved lower IQ scores than white children. There was also evidence that regardless of race, lower IQ scores predicted poorer school performance. Several researchers had suggested that racial differences in IQ and school achievement scores resulted from **genetic** differences in intellectual potential.

HYPOTHESIS: Scarr and Weinberg proposed that the social-environment of white economically and educationally advantaged families, when compared to the social-environment of African American families, was more conducive to bringing out a child's full intellectual potential. The primary hypothesis tested in this study was: African American children reared in economically advantaged white homes will have IQ scores higher than those reported for African American children reared in African American families.

SUBJECTS: Approximately 100 highly educated and economically advantaged white families with a African American adopted child 4 years of age or older participated in the study. Many of the adoptive families also included a white biological child. On average, the adoptive parents had 4-5 years more education than the child's biological parents. The families were informed about the study by the Minnesota State Department of Public Welfare Adoption Unit and through a Newsletter from the Open Door Society (an organization founded by adoptive parents of African American children).

PROCEDURES: Most information about the adoptive parents and their adopted and biological children was obtained through interviews and testing conducted in the home. Additional information about the child's adoption history and biological parents was gathered from State Department adoption records. School achievement scores were obtained from the children's schools.

RESULTS: The adoptive parents had IQ scores in the high average to superior range, as did their biological children. The IQ scores of adopted African American children were slightly lower than that of the adoptive parents or their biological children, but significantly above the average IQ of the general population and those reported for African American children raised by their biological parents. The school achievement and aptitude scores of the African American adopted children were also higher than the national norms.

CONCLUSIONS: Scarr and Weinberg found that African American children raised in economically advantaged white families had IQ and school achievement scores significantly higher than that usually achieved by African American children reared in their biological homes. They suggest that the IQ scores of African American children are influenced by their environment, and that children's intellectual achievement can be increased by rearing in environments that are culturally similar to the material included on IQ tests and taught in the schools. The researchers further conclude that racial discrimination suffered by African American adopted children means that the IQ differences found between African American adopted and white biological children cannot be uncritically interpreted as a result of genetic differences.

"Cognitive, Social, and Physiological Determinants of Emotional State"

Stanley Schacter and Jerome E. Singer (1962)

Psychological Review, 69(5), 379 - 399

PURPOSE OF THE STUDY. The purpose of this study was to test the hypothesis that **cognitive** factors are potent determiners of emotional states. At the time this study was conducted there was evidence that the physiological reactions associated with strong emotional states do not vary sufficiently to explain the large variety of emotions that humans experience. It was suggested that in most everyday emotional situations, cognitive factors exert a "steering function" by determining whether a state of **physiological arousal** will be labeled as "anger," "joy," "fear," or another emotion.

HYPOTHESIS. According to Schacter and Singer, if cognitive factors determine our emotional states, then the *same state of physiological arousal* could be experienced as "euphoria" or "anger" depending on the cognitive interpretation of the situation. The major hypothesis tested in this experiment was: *Given a state of physiological arousal for which an individual has no explanation, the individual will rely on cognitive/situational cues to label this arousal as a specific emotional state.*

SUBJECTS. The subjects were male, introductory psychology students who received 2 extra points on their final exams for participating in the study. Subjects were told the purpose of the study was to test how an injection of a vitamin supplement would affect their visual skills.

PROCEDURE. To experimentally manipulate physiological arousal, participants were given an injection of **epinephrine**, a drug that creates emotion-related states of physiological arousal (e.g., palpitations, tremors, flushing, and accelerated breathing). To experimentally manipulate *knowledge about the source of their physiological state*, some participants were accurately informed about the physiological reactions to the epinephrine, while other participants were misinformed about the physiological reactions (e.g., they were told they would have an itching sensation or that the injection would have no side effects). Immediately following the injection, the emotional situation was experimentally manipulated by exposing participants to a **confederate** pretending to be another research subject, who acted either euphoric or very angry about being in the experiment. Each subject was observed through a one-way mirror to determine whether he joined in or made comments in agreement with the confederate's "emotional state." Next, subjects were asked to answer written questions regarding how angry or happy they felt. The experimenter then announced the experiment was over and explained the deception.

RESULTS. According to the researcher's hypothesis, subjects who were not informed about the true physiological reactions to the epinephrine injection would be more susceptible to the emotion-inducing situations, because they would have no explanation for their own bodily states of arousal. This hypothesis was supported: (1) misinformed subjects exposed to the *euphoric* confederate gave significantly more self-report scores of euphoria than those informed about the effects of the epinephrine; and (2) misinformed subjects exposed to the *angry* confederate received observational scores of anger that were significantly higher than informed subjects.

CONCLUSIONS. The results of Schacter and Singer's experiment supports the theory that emotional states are jointly determined by awareness of nonspecific physiological arousal *and* cognitive labels for that arousal based on situational cues, with these cognitive labels serving as the major determinants of different emotional experiences.

"National Institute of Mental Health Treatment of Depression Collaborative Research Program"

Irene Elkin, M. Tracie Shea, John T. Watkins, Stanley D. Imber, Stuart Sotsky, Joseph F. Collins, David R. Glass, Paul Pilkonis, William R. Leber, John P. Docherty, Susan J. Fiester, & Morris B. Parloff (1989)
Archives of General Psychiatry, 46, 971-983

PURPOSE OF THE STUDY: The purpose of this study was to investigate the effectiveness of two forms of brief psychotherapy for patients with **major depressive disorder**: Interpersonal psychotherapy and cognitive behavior therapy. At the time this study was conducted there was scientific evidence that drug therapy with an **antidepressant drug** called **imipramine hydrochloride** was an effective treatment for this population.

HYPOTHESIS: The goal of this study was to determine whether psychotherapy treatments for depression would be as effective as the antidepressant drug therapy. A primary hypothesis tested in this study was: *Patients given imipramine treatment, interpersonal psychotherapy, or cognitive behavior therapy would demonstrate significantly higher rates of recovery from major depression than patients treated with a placebo pill (a substance with no active ingredients).*

SUBJECTS: The subjects were patients diagnosed as having major depressive disorder (characterized by loss of interest or pleasure in activities, appetite and sleep disturbances, decreased energy, feelings of worthlessness or guilt, difficulty thinking, and recurrent thoughts of death or suicide attempts) who had come for treatment to one of several psychiatric outpatient centers participating in the research project. Patients were informed that if they agreed to participate in the study they would be **randomly assigned** to one of four treatment conditions: Interpersonal therapy, cognitive behavioral therapy, antidepressant drug therapy, or a pill-placebo condition.

PROCEDURE: All treatments were planned to be 16 weeks in length. The interpersonal therapists sought to help the patients better understand their interpersonal problems and improve ways of relating to others. The cognitive behavior therapists used techniques to correct the patients' negative and distorted views about themselves and the world. In addition to the weekly administration of the medication or placebo pill, the drug therapy and pill-placebo conditions included a controlled management component involving management of medication and side effects, a review of the patient's clinical status, support and encouragement, and direct advice if necessary. Patient self-reports and clinical evaluations were used to assess patient depression before treatment began, at several points during treatment (4, 8, and 12 weeks), and at termination.

RESULTS: Of the 239 patients included in the study, 59 either dropped out or were withdrawn by the experimenters before the study was completed because of negative treatment-related reasons (e.g., dissatisfaction with the condition they had been assigned to or intolerable side effects). Treatment differences in the reduction of depressive symptoms only emerged for patients who had been originally diagnosed as most severely depressed with those in the imipramine doing best, placebo doing worst, and the two psychotherapies in between, with the interpersonal therapy generally closer to imipramine.

CONCLUSIONS: The data from the Elkin et al study suggest that for severely depressed patients imipramine treatment and, to a lesser extent, interpersonal therapy can reduce depressive symptoms. The results indicated no evidence that interpersonal therapy or cognitive behavior therapy is more effective than the placebo pill condition in treating less severely depressed patients.