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UNDISCOVERED AND DISCOVERED TRANSGRESSIONS.

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**HELPING BEHAVIOR AS A CONSEQUENCE OF
UNDISCOVERED AND DISCOVERED TRANSGRESSIONS**

by

Ronald C. Kahwaty

**A dissertation submitted to the Graduate Faculty
in Psychology in partial fulfillment of the
requirements for the degree of Doctor of
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1978

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Abstract

HELPING BEHAVIOR AS A CONSEQUENCE OF
UNDISCOVERED AND DISCOVERED TRANSGRESSIONS

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The two experiments reported here were designed to investigate the effect of transgression which occurred under varying conditions of discovery upon subsequent helping behavior, and thus to provide an empirical basis for inferred mediating process. In both experiments the transgression manipulation employed consisted in an operation by which the subject was induced to engage in an undertaking devised to lower the felt self-esteem of another individual through implementation of a bogus creativity test procedure. In this manner, the subject was led to believe that he had committed behavior which had resulted in psychological harm to another. The dependent variable consisted in helping behavior as measured by the number of telephone calls the subject subsequently volunteered to make in response to a request by the victim.

In Experiment 1 twenty-nine subjects were randomly assigned to one of three treatment conditions. These were: No-Transgression (Control); Undiscovered Transgression; and Discovered Transgression. The results obtained suggested an increase in helping behavior following commission of a transgression which remains undiscovered. However, the effect upon helping of a socially recognized transgression re-

mained unclear due to the fact that the procedure employed for the Discovered Transgression condition involved the manipulation of three situational factors--discovery of the transgression by the victim, implication of the subject in the recognized transgression, and the resulting disapproval received by the subject from the victim.

Accordingly, a second experiment was conducted in order to permit an assessment of each of the above factors which concern discovery upon post-transgressional helping behavior. In Experiment 2 one-hundred and twelve subjects were randomly assigned to one of five treatment conditions. These were: No-Transgression (Control); Undiscovered Transgression; Discovered Transgression - No Implication; Discovered Transgression - Implication; and Discovered Transgression - Implication with Disapproval.

Such sequential ordering of the levels of the independent variable in Experiment 2 can thus be viewed as the construction of an entire transgression operation programmed to unfold in a series of stages in terms of external events which proceed along an undiscovered-discovered dimension. In turn, this design allowed a test of the postulation that guilt as process which results from commission of a transgression that remains undiscovered mediates an increase in subsequent helping behavior; and that shame as process which results from the receipt of explicit disapproval by another following commission of a socially recognized transgression also mediates an increase in post-transgressional helping. Furthermore, it was maintained that within the present transgressional context helping behavior is greater in the case where shame operates than in that where guilt operates.

The results obtained provided empirical support for the above explanation of the transgression—helping relationship in terms of intervening psychological process. As hypothesized, it was found that help volunteered was greater following an undiscovered transgression than following no transgression. Discovery of the transgression by the victim which occurred in the absence of implication of the harm-doer attenuated help volunteered to the level obtained following no-transgression. Helping behavior remained at this baseline level following implication of the harm-doer in the discovered transgression. However, when the implicated transgressor also received explicit disapproval from his victim, subsequent help volunteered was greater than that which followed an undiscovered transgression.

Post-transgressional helping behavior was discussed as one mechanism of balance utilized by an individual following the arousal of each of guilt and shame. It was suggested that when guilt is experienced, the individual attempts to alleviate his distress through employment of pro-social behavior as a means of appeasing the corresponding agent of censure, violated conscience. In parallel fashion, the individual seeks to diminish the distress of shame, when this is experienced, through employment of pro-social behavior as a means of appeasing that corresponding agent of censure, the disapproving witness.

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Altruism can be viewed as behavior whose intended purpose is to help or benefit another individual without direct recompense to the agent of the benevolent act. Macauley and Berkowitz (1970) have thus defined the concept of altruism "as behavior carried out to benefit another without anticipation of rewards from external sources" (p. 3). The present research will attempt to investigate the relationship between harm-doing and such altruistic behavior.

Numerous studies have shown that transgressors, subsequent to some act of harm they have committed, are more willing to engage in altruistic behavior than are non-transgressors. This effect has been reliably demonstrated by independent investigators across a variety of harm-doing manipulations, such as administering shocks to another individual, knocking over carefully arranged index cards, breaking an experimenter's apparatus, lying about having previously obtained information relevant to a test, etc. In addition, this transgression-altruism relationship has been found to occur with the employment of many different measures of willingness to help (e.g., volunteering for an additional experiment without pay, offering to donate blood, agreeing to make phone calls, etc.). However, a basic paradigm is common to these situations. Thus Brock (1969) maintains:

The individual is induced to commit behavior which ostensibly results in some kind of damage to another's property or to another person (the victim); then the individual, the transgressor, is requested to comply in carrying out an additional task that will benefit the victim or someone associated with him or recommended by him (p. 138).

Carlsmith and Gross (1969) had subjects deliver painful electric shocks to a victim in a Milgram teacher-learner situation. The dependent

variable was the subject's subsequent willingness to make telephone calls as part of a campaign to save the "redwood trees in Northern California." Regan (1971) led subjects to believe that due to their negligence while performing an assigned task, the experiment had, resultingly, been "ruined;" afterwards, subjects were requested to donate money in support of a special university summer project. Freedman, Wallington, and Bless (1967) induced subjects to lie about having received prior information relevant to an upcoming test which they subsequently completed, and then measured their willingness to volunteer for a future experiment without pay. McMillen (1971), employing a similar lie manipulation, provided subjects with a request to aid the experimenter in scoring test forms. In a study by Brock and Becker (1966), subjects "broke" the experimenter's apparatus while engaged in an experimental task, and following, were asked to sign a petition in support of increased university tuition. In a related damage procedure (Wallace and Sadalla, 1966), subjects were prompted by a confederate to depress a switch on the experimenter's apparatus, thus rendering it inoperable. The subjects' subsequent willingness to participate in a future experiment which would involve painful electric shock was then measured. Freedman, Wallington, and Bless (1967) induced subjects to knock over a stack of carefully arranged index cards which had apparently been compiled for a graduate student's thesis, and then measured their willingness to volunteer to participate in an additional experiment without pay. In separate field experiments, subjects were led to believe that they had harmed a passer-by by causing a collection of computer-punch cards to spill onto

the street (Konečni, 1972), and by causing a camera to malfunction while attempting to take a photograph (Regan, 1972). In the former study, the subjects' tendency to gather-up the fallen cards was taken as the measure of helping; in the latter, the subjects' tendency to aid another passer-by provided the measure of helping. Darlington and Macker (1966) induced the subject to believe that as a result of her ostensibly poor performance on a series of paper-and-pencil tasks, she had failed to co-operate with an assigned partner, thus denying the latter badly needed points in an undergraduate course. The subsequent measure of helping consisted in the subject's willingness to donate blood to the university blood bank. Berscheid and Walster (1967), Rawlings (1968), and Berscheid, Walster, and Barclay (1969) employed similar failure in performance techniques, and then presented the harm-doer with an opportunity to compensate the victim. In each of the above-described investigations, transgression was demonstrated to increase helping directed toward either the immediate victim or another third party. Due to the varied nature of both the operational manipulations of harm-doing and the measures of helping employed in these previous studies, empirical support for the transgression-altruism relationship is thus strong and highly consistent.

At this point, it becomes necessary to attempt an explanation of this empirical transgression-altruism relationship in terms of mediating process. Most researchers have offered an interpretation in terms of guilt-mediated altruism (Darlington and Macker, 1966; Freedman, Wallington, and Bless 1967; Carlsmith, Ellsworth, and Whiteside, 1968; Carlsmith and Gross, 1969; Walster, Berscheid, and Walster, 1970; Regan, 1971;

Walster, Berscheid, and Walster, 1973). Essentially, such an explanation postulates that transgression arouses guilt and that subsequent "good" behavior can serve as a means of expiating the experienced guilt. Accordingly, the individual, following his transgression, will seize an available opportunity to engage in behavior which helps another as a means of reducing the distress of guilt. Hence, the guilt-hypothesis assigns a balance function to altruistic behavior which follows an act of harm to another. Thus, Freedman, Wallington, and Bless (1967) state:

If he is asked to do someone a favor, pleasant or otherwise, the guilty person should be more likely to agree than the non-guilty because the former can view it as his good deed for the day which will make up for the bad deed about which he feels guilty (p. 327).

However, an alternative explanation to the guilt hypothesis can be offered which is based on the failure of the previous transgression-altruism literature adequately to consider the situational context in which transgression occurs. In each of the studies by Carlsmith and Gross, 1969; Regan, 1971; Brock and Becker, 1966; Berscheid and Walster, 1967; Berscheid, Walster, and Barclay, 1969; and Rawlings, 1968, the subject's performance occurred, in fact, within a public context. Thus, his transgressive act was initially witnessed by either the immediate victim or another third-party. Subsequently, this observer of the prior harm-doing act either directly provided the subject with an opportunity to engage in altruistic behavior, or was present when such an opportunity was provided. Accordingly, in such a visible context, the socially recognized transgressor might have volunteered pro-social behavior to placate his witness, rather

than to relieve experienced guilt feelings resulting from his misdeed. Hence, by performing an observable "good" deed following commission of an observable "bad" one, the transgressor can be viewed as motivated by essentially a socially expedient consideration. In effect, the transgressor might have employed socially approved behavior as a device with which to demonstrate to his witness that he is really a benevolent person capable of altruism. Wallace and Sadalla (1966) present findings which can be viewed as somewhat supportive of this expediency interpretation of the transgression-altruism effect. It was found that caught transgressors exhibited a significantly greater tendency than non-transgressors to volunteer for a subsequent experiment involving painful electric shocks. However, uncaught transgressors did not significantly differ from non-transgressors. Unfortunately, such support is qualified since thirty percent of the subjects assigned to the experimental conditions could not be induced to transgress, and thus the results are confounded by the factor of self-selection.

A similar explanation in terms of expediency can be applied to studies by Freedman, Wallington, and Bless (1967) and McMillen (1971), in which the subject's transgression was not directly observed by another. The situational context prevalent in both these studies was such that the subject could easily have inferred that his misdeed might, in fact, become discovered by another present participant prior to the completion of the experimental session. Consequently, the subject might have employed the available opportunity to publically exhibit pro-social behavior as a device of social defensiveness. Thus,

the subject can be viewed as displaying prior socially approved behavior — that is, helping — in an attempt to fortify his appearance as a benevolent person in anticipation of possible social disapproval should his transgression subsequently actually become discovered.

In summary to this point, although the robust nature of the transgression-altruism effect has been demonstrated, the public nature of the various transgression manipulations employed in previous studies precludes an adequate interpretation of their findings in terms of mediating process. Prior to further consideration of such intervening process, it is necessary to provide appropriate conceptualizations of each of two relevant terms, guilt and shame.

Psychoanalytic theory has provided the essential notion of guilt as an important component in the socialization process (A. Freud, 1942; S. Freud, 1955; 1957; 1961; 1962). According to this formulation, conscience can be viewed as an internal mechanism of social control which results from experiences in incorporation and identification in the early life history of the individual. Once established as the internalized representation of parental prohibition and injunction, conscience functions as a self-critical agency with regard to behaviors which have moral implication. When an individual performs an action for which he had previously been punished — either by parents or other legitimate authority — there subsequently occurs internally generated self-judgment and resulting criticism for the disapproved behavior. Thus, conscience replaces external authority as the punitive agent consequent to transgression. This process of self-castigation is experienced by the individual as guilt, an uncomfortable

state of internalized anxiety. Hence, the phenomenal experience of guilt is viewed as the result of internal sanction in the form of inner-directed reproach or censorship, and as not dependent upon external sanction. Thus, Freud (1961) states:

A great change takes place only when the authority is internalized through the establishment of a superego. The phenomena of conscience then reach a higher state. Actually, it is not until now that we should speak of conscience or a sense of guilt. At this point, too, the fear of being found out comes to an end....nothing can be hidden from the superego (p. 72).

For the purpose of the present investigation, guilt will be defined as an aversive state experienced by an individual as a result of commission of a transgressive act. This negative state is not contingent upon social recognition of the disapproved behavior.

Various social anthropologists (Mead, 1950; 1953; Benedict, 1972; Leighton and Kluckhohn, 1947), however, have postulated that guilt as internal sanction is not universally present as a device of social control. Consistent with its psychoanalytic conceptualization, guilt has been considered by these investigators as:

a unique property of the characterology of individuals who as children experience the kinds of relationships with parents allowing for 'superego' formation, that is, typically of persons growing up in cultures adhering to the Judaic-Christian tradition (Ausubel, 1972, p. 185).

Thus, within Western societies, the capacity for guilt feelings is viewed as based upon the development of an internalized conviction of sin which results from the inculcation within the individual of absolute standards of morality. Accordingly, Mead (1950; 1953) maintains that, among such societies as the Samoan, American Indian, and Balinese where the individual is reared within the context of the extended

family, normative standards of behavior are maintained primarily through the employment of external sanction. With regard to these cultures, she asserts that parents do not assume the role of interpreters and reinforcers of societal standards. Instead, the parents "...continually refer the child to what people will say, in which fear of social disapproval becomes a principal mechanism" (1953, p. 658). Shame thus functions as the essential mechanism of social control. Similarly with regard to the Navaho, Leighton and Kluckhohn (1947) maintain that shame "...largely takes the place that remorse and self-punishment have in preventing anti-social conduct in white society" (p. 106). And, Benedict (1972), while minimizing the role of guilt, emphasizes the primacy of shame as a mechanism of self-regulation among the Japanese.

In effect, these authors have provided a distinction between Western societies which have been identified as possessing both a guilt and shame orientation and those others which have been identified as possessing an exclusive shame orientation.

As indicated above, shame, in contrast to guilt, has been viewed as a universally employed method of social control which consists in external sanction (Mead, 1950; 1953; Benedict, 1972; Ausubel, 1972; Leighton and Kluckhohn, 1947; Gilligan, 1976). Thus, socially undesirable behaviors which involve violation of societal norms and standards, if publicly visible, result in the negative evaluation of the transgressor by others in the form of criticism, ridicule, or censure. Essentially, then, shame involves negative judgment of the transgressor by societal peers who render disapproval of his behavior.

Accordingly, the necessary conditions for the occurrence of shame include social recognition of both the transgressor and his impropriety as well as disapproval by another who either witnesses or acquires knowledge of his behavior. Within such a public context, the disapproval by the other may either be actually expressed or inferred by the recognized transgressor to exist. Phenomenally, shame is experienced by the individual as a state of discomfort which results from external censure directed by another.

Thus, at least among Western societies, guilt and shame can be conceptualized as distinct processes, each of which functions as a method of socialized control of behavior. Guilt is viewed as a reaction to internally motivated censure for transgression, and thus, does not require social recognition of the disapproved behavior. Shame is viewed as a reaction to public censure for socially disapproved behavior and thus requires an audience. Hence, Mead (1953) contrasts shame, "the agony of being found wanting and exposed to the disapproval of others," with guilt, "the fear of not measuring up to the high standards which are represented by the parents" (p. 660). Shame will be defined in the present investigation as a negative state experienced by the individual as a result of actual, or inferred, disapproval by another for a socially recognized transgression.

Based upon the above described conceptual distinctions, both guilt and shame can be viewed as processes capable of leading to an increase in altruistic behavior subsequent to transgression. The possible function of each in mediating such an effect is discussed below.

Guilt-Mediated Altruism

The notion of guilt-mediated altruism proceeds as follows: following the commission of a transgression against accepted moral standards, the individual experiences guilt as a result of internally generated self-censure. Guilt, felt as an aversive internal state, thus motivates the individual to attempt behavior which will reduce his discomfort. Accordingly, the individual will engage in "good" behavior in the form of altruism which is directly available following his transgression, in this manner attempting to expiate guilt by assuaging violated conscience. Thus, in fact, Freud maintains that guilt generates "the best behavior of which we are capable" (Rieff, 1959, p. 276). Hence, altruistic behavior is employed as a means of reducing the tension of guilt.

Regan (1971) and Carlsmith, Ellsworth, and Whiteside (1968) provide support for the notion of guilt as intervening process in the transgression-altruism effect. In each of these investigations, it was found that transgressors who were not provided with a following opportunity to confess their misdeed, subsequently demonstrated significantly greater altruistic behavior than did non-transgressors. However, transgressors who were, in fact, allowed to confess their misdeed were subsequently not more altruistic than were non-transgressors. Therefore, it was argued that transgression is shown to increase subsequent altruistic behavior. If such altruistic behavior occurs as a method of reducing post-transgressional guilt, then some prior mechanism of guilt reduction should also subsequently reduce altruism. Thus, since confession introduced prior to a request for

help has, in fact, been demonstrated to reduce subsequent altruistic behavior, support is available for the notion of guilt as causal agent in the transgression-altruism effect.

Shame-Mediated Altruism

Freedman, Wallington, and Bless (1967) report findings which, however, also suggest shame as a separate process subsequent to transgression. Subjects were led to believe that they had harmed another individual due to ostensibly careless behavior — e.g., by upsetting carefully arranged index cards supposedly belonging to a non-present graduate student. Subsequently, a third-party who apparently had no knowledge of the prior harm-doing provided the subject with an opportunity to aid the victimized person by volunteering to distribute research questionnaires in a shopping center at some later date. Results indicated that such transgression significantly increased altruistic behavior only for those subjects who were led to believe that the subsequent helping task would not involve personal contact with the victim. Transgressing subjects who were induced to believe that volunteering would actually necessitate personal contact with this harmed other did not significantly differ from non-transgressors in help offered.

The obtained data from the above investigation are both intriguing and highly relevant to the present inquiry. That transgressors attempt to "repair" a prior misdeed is indicated by the finding that individuals demonstrate increased altruistic behavior following transgression. However, this effect is limited to the condition in which helping does not involve the transgressor meeting his victim. Some

process must be accounted for which functions to preclude the occurrence of an increase in post-transgressional altruism when such behavior entails face-to-face contact with the harmed other. It appears that the prospect of later confronting the person who has been victimized is aversive, and thus, he is avoided. This may be because the transgressor infers that the former might actually discover her misdeed prior to their subsequent meeting, and thus she would be susceptible to direct disapproval by the victim upon such future personal contact. Such a situation involving a lowering of public image in the presence of the harmed individual would be highly uncomfortable. The transgressor, then, can be viewed as motivated to avoid the unpleasant experience of shame through avoidance of her victim. Anticipation of shame then functions to preclude the transgression-altruism effect. Thus, although the data reported by Freedman, Wallington, and Bless (1967) do not directly indicate the effect of actually experienced shame on post-transgressional altruistic behavior, they do suggest shame as process which affects such behavior. Shame which is, in fact, actually experienced as a result of a visible transgression can be hypothesized to increase subsequent altruistic behavior.

The notion of shame-mediated altruism proceeds as follows: following commission of a socially recognized transgression which violates accepted societal standards, the individual experiences shame due to his resulting negative evaluation by another. Caught in such a publicly discovered context, the transgressor endures a loss in felt public image. Thus found wanting in the presence of his witness, he can be said to suffer the discomfort of a "loss of face." Accordingly,

the transgressor will then be motivated to demonstrate some socially approved behavior in order to appease his disapproving witness, the agent of his shame. Hence, by employing the opportunity to exhibit "good" behavior in the form of altruism following his transgression, the individual can be viewed as attempting to provide his witness with compensatory positive information about himself. In this manner, he is seeking to reduce the discomfort of shame by attempting to raise his lowered public image by means of elevating the latter's evaluation or appraisal of him. Hence, altruism is employed as an expedient method of social reparation.

Although the conceptualized processes of guilt and shame may thus independently facilitate post-transgressional altruism, they are not necessarily mutually exclusive and thus are capable of functioning in conjunction. Therefore, the following possible outcomes are also presented:

Guilt and Shame as Combined Mediators of Altruism

Following transgression against accepted moral standard, the individual initially experiences guilt. In addition, if his impropriety then becomes socially recognized, he will subsequently also experience shame. As a result, the transgressor will be motivated both to expiate guilt feeling and reduce the discomfort of shame through social appeasement. Consequently, the transgressor's tendency to perform pro-social behavior will be resultingly increased, thus maximizing demonstrated post-transgressional altruistic behavior.

Guilt as Mediator of Altruism — Shame as Expiative

Guilt has been conceptualized as a reaction to internally gen-

erated censure, and subsequent altruistic behavior as a means of reducing this aversive internal state. However, punishment has also been viewed as expiative of guilt (Freud, 1961; Fenichel, 1945; Menninger, 1938). Thus, if an individual endures some form of punishment following commission of a transgression, he may resultingly experience a reduction in the tension of guilt through such atonement for his disapproved act. Fenichel (1945) indicates this expiative function of punishment:

The need for punishment is a special form of the need for absolution: the pain of punishment is accepted or even provoked in the hope that after the punishment the greater pain of guilt feelings will cease (p. 105).

Now, it is possible that shame, resulting from disapproval by another for a socially recognized transgression, may actually assume such a punitive function. Accordingly, this negative state induced in the individual as a result of verbal chastisement directed at him by his witness may be experienced by the transgressor as punishment for his prior misdeed. Such punishment may, in effect, assume atonement value for the transgressor and thus function to reduce existing guilt feeling initially aroused following his transgression. Such an expiative function of shame has implication for post-transgressional altruism.

The notion of guilt-mediated, but shame-diminished altruism proceeds as follows: following an undiscovered transgression against accepted moral standard, individuals demonstrate an increase in guilt-mediated altruistic behavior. However, if the impropriety is followed by discovery, the individual also experiences shame as a result of his negative evaluation by another in the form of disapproval. Such

shame is experienced by the individual as punishment for his prior misdeed, and hence, functioning as a mechanism of atonement, the shame reduces existing guilt feeling. Shame, as thus expiatory of guilt, consequently obviates or reduces the need for subsequent pro-social behavior. In effect, then, the unpleasant experience of shame which occurs prior to an available opportunity for altruistic behavior acts to attenuate an increase in guilt-mediated helping. The transgressor has previously "made-up" for his misdeed through the punishment received and thus feels less need to subsequently "right" the "wrong" by means of "good" behavior.

In summary, a number of possible ways in which the conceptualized processes of guilt and shame may affect helping behavior subsequent to transgression have been presented: guilt as process may mediate an increase in helping; shame as process may mediate an increase in helping; guilt and shame, each as process, may combine in effect to maximize an increase in helping; shame as process may attenuate a prior increase in guilt-mediated helping.

In order adequately to assess the relative effects of guilt and shame on post-transgressional helping behavior, it is necessary that the undiscovered-discovered dimension of transgression be systematically varied. Guilt has been viewed as a reaction to transgression which is not dependent upon external disapproval by another. Viewed thus as the result of internally generated censure, guilt is experienced by the individual even when his transgression is not socially recognized. He cannot avoid the criticism of violated conscience (Freud, 1955; 1957; 1961; 1962). Thus an increase in helping behavior

which is found to follow an undiscovered transgression would provide empirical support for the functioning of guilt. Shame, however, is considered a reaction to external sanction. As such, the experience of shame requires disapproval by another for a socially recognized transgression. Therefore, an obtained difference in helping behavior that follows a transgression which remains undiscovered and one which subsequently does become discovered and thus results in disapproval by another would provide support for the functioning of shame.

Accordingly, the first experiment in the present investigation was conducted in order to test the effectiveness of guilt and shame as intervening processes in post-transgressional helping behavior. In addition, the transgression manipulation employed involved psychological harm inflicted on another. Previous studies have used various types of physical harm (e.g., administering electric shock to a victim) or material harm (e.g., breaking the experimenter's apparatus). Thus, the independent variable consisted in transgression which was operationalized by inducing subjects to engage in behavior whose intended outcome was to lower the felt self-esteem of another individual. Consistent with the purpose of the study, manipulation of the independent variable yielded a three-condition experiment:

1. No-Transgression (Control) Condition

— in which the subject was not induced to transgress against another individual.

2. Undiscovered Transgression Condition

— in which the subject was induced to transgress against another individual and such transgression remained undiscovered.

3. Discovered Transgression Condition

— in which the subject was induced to transgress against another individual and such transgression subsequently became discovered and disapproved of by his victim.

The dependent variable consisted in helping behavior as measured by the number of phone calls the subject subsequently volunteered to make in response to a request by the victim.

It was hypothesized that helping behavior would be significantly greater following an undiscovered transgression than following no transgression; also, that helping behavior would be significantly greater following a discovered transgression resulting in disapproval by the victim than following a transgression undiscovered by the victim. Such a predicted outcome would provide data which is consistent with the notion that guilt and shame combine to maximize an increase in post-transgressional helping.

Alternative Outcomes

1. There would be no significant difference in helping behavior between the No-Transgression and Undiscovered Transgression conditions. However, helping under the Discovered Transgression condition would be significantly greater than that under each of the No-Transgression and Undiscovered Transgression conditions.

Such an obtained outcome would suggest the notion that shame mediates an increase in post-transgressional helping and that guilt has no effect on such behavior.

2. There would be no significant difference in helping behavior between the Undiscovered and Discovered Transgression conditions. However, helping behavior under each of these conditions would be significantly greater than that under the No-Transgression condition.

Such an obtained outcome would suggest the notion that guilt mediates an increase in post-transgressional helping but would not indicate that shame has an effect upon such behavior.

3. Helping behavior under the No-Transgression condition would be significantly greater than that under the Undiscovered Transgression condition. However, helping behavior under the Discovered Transgression condition would not significantly differ from that under the No-Transgression condition, but would be significantly greater than that under the Undiscovered Transgression condition.

Such an obtained outcome would suggest the notion that guilt mediates an increase in post-transgressional helping, and that subsequent shame functions to eliminate such an increase in guilt-mediated helping.

4. Helping behavior under the Undiscovered Transgression condition would be significantly greater than that under the No-Transgression condition. However, helping behavior under the Discovered Transgression condition would be significantly greater than that under the No-Transgression condition, but would be significantly less than that under the Undiscovered Transgression

condition.

Such an obtained outcome would suggest the notion that guilt mediates an increase in post-transgressional helping, and that subsequent shame functions to reduce, but not eliminate, such an increase in guilt-mediated helping.

EXPERIMENT 1

METHOD

Subjects. The subjects were fifteen male and fourteen female undergraduate students at Brooklyn College who participated in partial fulfillment of an introductory psychology course requirement. They were randomly assigned to each of the three treatment conditions. The data from five subjects were eliminated from the final analysis because they expressed suspicion concerning the intent of the study.¹ The remaining twenty-four subjects, comprising thirteen males and eleven females, were equally divided among the three conditions. All subjects were run individually by a male experimenter.

Materials. A bogus test, entitled the Creative Association Test, was constructed specifically for the independent variable manipulation in the present study. The ostensible purpose of this test was to provide a measure of an individual's degree of creativity based on his ability to associate words. The test consisted of two forms, labelled Form A and Form B, respectively, each containing a sheet for administration of the test and an answer sheet.

The administration sheet for each test form contained a series of twelve consecutively numbered word-items. For each item, there appeared on the left side of the sheet under the heading, Stimulus Words, a sequence of three, related words spaced one-half inch apart. Also, for each item there appeared a word on the right side of the sheet under the heading, Answer. The format of the administration sheet for both Form A and Form B was identical for all conditions, with the particular word items included differing for the control

(see Appendices A and B) and experimental (see Appendices C and D) conditions.

The answer sheet for each test form also contained a series of twelve consecutively numbered word-items. With the exception of the Form A answer sheet employed in the control condition (See Appendix E), which contained a series of three-word items spaced three-quarters of an inch apart, all other answer sheets contained a series of one-word items (See Appendices F, G, and H).

Experimental Area. The experimental area consisted of two inter-connecting rooms, with the larger first room separated by a door from the second room located to its rear. The former will henceforth be called the experimental room. Two desks, spaced six and one-half feet apart and with a chair positioned directly behind each, faced each other across opposite corners of the experimental room. These desks were of the study-type variety commonly found in a university library, and the surface of each contained a border four and one-half inches in height which extended around its front and sides. This arrangement ensured that an individual seated at either of the desks could not see the surface of the other, oppositely positioned desk, but would have face-to-face contact with another individual seated there. Another desk, of the office-type variety with a chair positioned alongside, and also a table were located in the remaining opposite corner of the room. On this desk was placed a five inch square cardboard box with an open slot on top. The table contained an array of various electrical equipment, such as timers and motors. In addition, a second door was located on one side of the room next to one

of the study-type desks which opened onto a long corridor at the end of which was a small waiting area.

In the second room, a table which contained a large dummy apparatus was located along one wall. This device consisted of a square wooden box whose front panel contained an impressive array of colored lights, wires, and toggle switches. A second table located in a corner of the room contained an array of electrical equipment similar to that located in the first room as described above. The sole purpose of the arrangement of these latter devices throughout the experimental area was to give the appearance of a formal laboratory setting. Also, two chairs, positioned side by side in the middle of the room, faced the dummy apparatus across a distance of six feet.

Procedure. Upon arrival, the subject was ushered into the experimental area by the experimenter who asked what class he was from. After the subject had invariably replied that he was enrolled in one of the introductory psychology classes, the experimenter stated that the present experiment involved two individuals and that the "other subject," a volunteer from a non-psychology class, had not yet arrived. He continued, further, that he had recruited for his research students from introductory psychology classes as well as those from non-psychology classes, such as English, history, and biology, who had never taken a formal psychology course and thus were interested in participating in a psychological experiment. Following this introduction, the experimenter pointed to an empty chair and told the subject to wait for the arrival of the other participant before the experiment could begin. The experimenter then departed into the second room,

closing behind him the door which separated it from the experimental room where the subject was now seated. Previously, this door had been open to allow a view of the various electrical equipment displayed on the table in the second room.

Five minutes after the arrival of the subject, a college age male confederate knocked on the door separating the experimental room from the main outside corridor. The experimenter re-entered, again closing behind him the door which led into the second room, and asked if he were a subject for the experiment. When the confederate had replied, "yes," and that he had been recruited from a history class, he was instructed to be seated at the study-type desk adjacent to the closed door which opened onto the long hallway. The subject was instructed to be seated at the other, oppositely positioned, study-type desk. The experimenter, now seated alongside the office-type desk, provided a detailed briefing concerning the supposed nature and intent of the experiment:

I'm interested in studying the relationship between personality and sensitivity to physical stimulation. Physical stimulation refers to the stimuli from the external world which affect our senses in some way. Thus, we have different sensory experiences in terms of taste, sound, smell, etc. Now, people are individually different in terms of how sensitive they are to these stimuli, at least with regard to some of them. Let me give you a few examples to make the point. Take pain, for instance. Some people are very sensitive to

any type of physical pain, and therefore, they can tolerate very little. Other people are much less sensitive to physical pain, and therefore, they can tolerate more. So, there are these differences.

Another area where there are differences in sensitivity is in the area of hearing, or what we call audition. Some people are very sensitive to tones of different pitch or quality, and therefore, they can discriminate among them very well or tell them apart. Other people are much less sensitive to these auditory stimuli, and therefore, they discriminate among tones less well. In fact, at one end of things, there are people who are tone deaf and thus cannot discriminate among tones of different pitch at all. And, there are other examples I could give you from other areas regarding how people differ in sensitivity to physical stimuli but I think that makes the point.

In addition, however, people also differ in terms of personality. Personality refers to those traits or characteristics which describe the individual as a person. Now, what I'm looking at again is the relationship between personality and sensitivity to physical stimulation. To what extent are differences in sensitivity to physical stimuli related to these differences in personality? Maybe one way to make this point clearer is to say this: If I know something about an individual's personality,

as measured by tests that I give, to what extent will I then be able to predict how sensitive he is to physical stimulation?

At this point, the experimenter paused and asked whether there were any questions concerning the general nature of his research. The confederate had previously been instructed not to ask any questions; if the subject did, in fact, pose any questions, the experimenter provided answers consistent with the details of the previous briefing. The experimenter then continued, explaining that during the present experimental session he was interested in investigating the relationship between the specific personality characteristic of creativity and sensitivity to two types of physical stimulation, light and sound:

What I'm specifically interested in studying today is the relationship between the personality characteristic of creativity and sensitivity to physical stimulation. If you look at the work of people such as artists, you might think there is some relationship between how creative a person is and how sensitive he is to the external or physical world around him.

Therefore, the experiment in which you will participate today has two parts. First, there will be a test of creativity which you each will take, followed by a measure of sensitivity to two types of physical stimuli. The first will be in the area of hearing or audition. I will give you a series of tones of different pitch or frequency and ask you to discriminate these

or tell them apart. Following this, I will give you a series of lights of different color or hue and again ask you to discriminate these or tell them apart.

Following this initial orientation, it was requested that, prior to proceeding with the actual experimental tasks, both participants complete a brief questionnaire (See Appendix N) "designed to provide additional information about subjects important to the evaluation of the results of the study." No names were to be placed on these forms, and to emphasize the fact that the information would be completely anonymous, the experimenter stated that both "subjects" would be placed in separate rooms to complete them. Upon completion, these questionnaires were to be folded and placed through the slot of the cardboard box visible on the office-type desk to which the experimenter pointed. In actual fact, the only two purposes for the use of the questionnaire forms were to provide additional rationale for the subsequent interval of separation of the subject and confederate during the procedure, and to heighten the feeling of the former that all information obtained during the session would be completely anonymous. When the above instructions had been given, the experimenter redirected attention to the upcoming experimental tasks:

The first test is a measure of creativity based on how well an individual can associate words. The test is completely oral and each of you will take turns giving the test and taking the test. That is, the first time one of you will administer the test to the other. Following this, we will reverse it, and the person who

administered the test the first time will then take it. When the first part of the experiment is finished, we'll go to the next part which involves the measure of your sensitivity to the two types of physical stimulation, light and sound. And then, the experiment will be over.

After a brief pause, the experimenter, in an apparently random manner, selected the confederate to first take the test of "creativity" and the subject to first administer it:

When we begin,....let's see....we'll have you (pointing at the confederate) start off by taking the test, and you (pointing at the subject) by administering the test to him. The second time, you will take the second form of the test (pointing at subject), and you will administer it (pointing at confederate).

The experimenter next distributed the questionnaire forms to both the subject and confederate, again emphasizing the anonymous nature of the information requested, and stated that he would now place the participants in separate rooms. In addition, he maintained that, since the confederate had been selected to first take the test of "creativity," it was necessary that, after completing the questionnaire, he remain in the room assigned while the experimenter explained the details for administering the test to the subject. This was so because the test would involve the reading aloud of words which could not be heard until the test procedure had actually begun.

After requesting the subject to remain seated at his desk in the

experimental room, the experimenter then opened the door adjacent to the desk where the confederate was seated and escorted the latter down the long corridor into the small waiting area which was not visible to the subject seated in the experimental room. In a voice audible to the subject, the experimenter instructed the confederate to complete the questionnaire and then to remain seated in this other "room" until called to begin the test of "creativity." In actual fact, the confederate merely folded the questionnaire form and waited in this area until later in the procedure when told to re-enter the experimental room. Returning to the latter room, the experimenter told the subject to complete the questionnaire which would take "only a few minutes" after which he would explain the necessary details for administering the test of "creativity." He then departed into the second room, leaving ajar the door which separated it from the room where the subject was seated, and began shuffling forms in apparent preparation for the upcoming task. When the subject had completed the questionnaire, he was told to fold the form, deposit it in the cardboard box, and occupy a chair alongside the office-type desk. Assuming a seat at an adjacent side of this desk in order to ensure close face-to-face contact, the experimenter began to instruct the subject regarding the procedures for the upcoming task. Such close contact between experimenter and subject was designed to heighten the feeling of personal involvement of the latter in the details of the experiment. At this point, the experimental manipulations were introduced; prior, the procedure had been identical for subjects in all conditions.

TRANSGRESSION CONDITIONS

If assigned to either the Undiscovered Transgression or the Discovered Transgression condition, the subject was provided with a cover story designed to induce him to engage in an undertaking intended to lower the felt self-esteem of another individual, namely, the confederate.

Accordingly, the subject was told that the actual purpose of the present experimental session was to investigate the relationship between the personality characteristic of self-esteem and sensitivity to physical stimulation. Thus, the subject was instructed that the upcoming first task would involve a bogus, rather than real as previously described, test of creativity; and that this test would consist of sham items, each with no actually correct or incorrect answers possible. The subject himself would be instrumental in implementing a procedure designed to control the apparent performance on these sham items of each participant when taking the test. The test situation would be structured in such a way that with the subject's participation, the "other subject," thinking the test a true measure of creativity, would be manipulated into believing that he had performed poorly, particularly with regard to the subject's apparently acceptable performance. As a result of this manipulation, the "other subject" would thus experience a feeling of lowered self esteem.

Hence the subject was given the following cover story:

Let me start off by saying that when you first came here, I asked what class you were from and you said "the psychology class." Well, there was a reason why

I asked you this. You see, I'm not really interested in studying the relationship between the personality characteristic of creativity and sensitivity to physical stimulation as I said when the other subject was here. What I'm really interested in is the relationship between the personality characteristic of self-esteem, particularly low self-esteem, and sensitivity to physical stimulation. Self-esteem refers to an individual's feeling of self-worth, self-confidence, self-evaluation. Now, it can happen to anyone at times that his self-esteem is lowered by some real world event which gives him some negative feedback or unflattering information about himself. For example, a student may do poorly on a test, and, as a result, feel badly about himself.

After it had been indicated to the subject that following an actual loss of self-esteem, it was possible that an individual's level of sensitivity to the physical world might subsequently be either increased or decreased, the experimenter continued:

Which one of these relationships will occur is what I'm actually interested in studying today. In order to do this, the self-esteem of the other subject is first going to be lowered. The reason that you've been selected for your part in the procedure to lower his self-esteem is that you're taking the introductory psychology course, and therefore, have some knowledge

of psychology procedures. The other subject, because he has never taken a psychology course, is basically naive concerning these procedures, and so he is the one whose self-esteem will be lowered. We're going to do this by setting up a false test disguised as a test of creativity. And it will be set up so that it will appear that you will do fairly well and he will do poorly. After you've helped in lowering his self-esteem in this way, his sensitivity to the physical stimuli will be measured so that the relationship between these two factors can be determined.

The subject was then provided with the specific details of the procedure designed "to lower the other subject's self-esteem." He was told that a bogus test would be employed which would consist of sham rather than real word association items, each, therefore, with no actually correct or incorrect solutions possible. When the test situation began, both he and the "naive other subject" would be repositioned at the same study-type desks where previously seated; and due to the high border surrounding each, neither participant would be able to view the surface of the oppositely-located desk. Then, directing attention to a form he held which was labelled Creative Association Test, Form B (see Appendix D), the experimenter told the subject to observe that each of the twelve, consecutively numbered items included consisted of a different series of three related words which appeared under the heading, Stimulus Words, followed by either the word, "Correct" or "Incorrect," to the right under the heading, Answer. "Incorrect" thus

appeared on the form for each of ten of the twelve word items, and "Correct" appeared for each of the remaining two word items. This form was to be employed by the subject in first administering the test to the "other subject." In addition, the latter would have placed in front of him an answer sheet which would also contain twelve numbered items, with each item consisting of three words and corresponding to the same numbered item on the administration sheet. The subject was instructed that, for each item which appeared on the administration sheet, beginning with item #1, he was to "read out loud the three stimulus words, pronouncing them loudly, clearly, pausing between each, and then repeat the sequence." The "other subject" would be instructed to, in turn, select from the corresponding item which appeared on his answer sheet, "the one word from the three possible word answers which he thinks is correctly associated with each of the three stimulus words he has just heard, circle this word on his answer sheet, and then say the word out loud." Following the latter's response, the subject's task would be to provide the "other subject" with false feedback about the correctness of his choice by saying out loud "either 'Correct' or 'Incorrect,' depending upon which of these two words appears under the heading, Answer, on your administration sheet for that item." Since the subject would thus provide negative feedback following ten of the "other subject's" verbalized word choices and positive feedback following only two such choices, "he (the confederate) will, as a result, feel that he has performed poorly on a test of creativity."

Following the above explanation of the subject's part in inducing the other participant to believe that he had performed poorly, the

experimenter detailed the procedure to be followed when the roles of the participants in the test procedure were subsequently reversed. He stated that the "other subject," in administering an alternate form of the test to the subject, would employ a sheet of the same format as the one previously used by the latter. However, for each of the twelve three-word items included on this sheet, neither "Correct" nor "Incorrect" would appear under the heading, Answer, but instead, a different word such as "Dream" or "Music" which "he (the confederate) will think is the correct word answer for that item." The subject was then presented with a second sheet, labelled Creative Association Test, Form A, Answer Sheet (see Appendix G). He was told that this answer sheet, which he would employ in taking the alternate form of the test, would provide him with each particular word answer he was to give in response to each of the twelve three-word stimulus items presented by the "other subject." Accordingly, the subject was then told to observe that his answer sheet consisted of twelve one-word, rather than three-word, items (as supposedly appeared on the confederate's answer sheet), and next instructed, "when the other subject reads out loud to you the three stimulus words for each item, make believe you are thinking for a few seconds, then say out loud whatever word appears on this answer sheet for that item number and circle it." When the subject had understood the exact procedure involved in taking the test, the experimenter related that for each of ten of the twelve sham word-association items, his verbalized "choice" would match the apparent correct word answer on the "other subject's" administration sheet. The remaining two "choices" would not thus match, and hence,

be apparently incorrect. Since the "other subject" would accordingly provide him with "Correct" feedback ten times and "Incorrect" feedback only twice, the subject would apparently have performed fairly well on a "test of creativity."

In addition, the subject was told that when the bogus test had been completed by both participants, the experimenter would take a few minutes to score their answer sheets, and then, publically provide each with a brief evaluation of his overall performance. He, the subject, would be told that he had performed fairly well on the "test of creativity," answering ten of the twelve word association items correctly, while the "other subject" would, however, be told that he had performed poorly, answering only two of the twelve items correctly. Following the negative feedback given the latter, he would also be told by the experimenter that the present research was extremely important; therefore, it was necessary for him to concentrate harder on the upcoming second task. In effect, then, the discrepancy perceived by this other participant between his own poor performance on a creativity task and the acceptable performance of the subject would result in the "lowering of the other subject's feeling of self-esteem."

When explanation of the above described harm-doing manipulation had been completed, the experimenter indicated that the second task would simply consist in an actual measure of sensitivity to the two types of physical stimulation, light and sound. The subject was told that in order to equate the time which elapsed for each participant between the prior experimental task and this following sensitivity one, the "other subject" would first engage in this second task of ten

minutes duration while the subject waited in the experimental room. When finished, the former would be immediately dismissed from the entire experimental area without having been told the "true nature" of the experimental session, and therefore, would not know that he had been deceived into believing that he had performed poorly on an actual test of creativity. Subsequently, the subject would complete the same sensitivity task, and then, also be dismissed. Finally, the subject was instructed to neither talk nor otherwise communicate with the "other subject" other than when required during the specific experimental procedures. Thus, the subject had been induced to engage in behavior which would result in psychological harm to another, and to believe that such transgression would remain unknown to this victimized other with whom he would have no further contact following dismissal from the experimental area.

The actual test situation proceeded according to the expectation of the subject. The confederate, initially administered one form of the "test of creativity," appeared to have performed poorly since the later had been previously instructed to provide him with verbalized "Incorrect" feedback following ten of his twelve responses regardless of the particular word choice given. In actual fact, the confederate merely offered a series of programmed responses (see Appendix H). Conversely, the subject, subsequently administered an alternate form of the test, appeared to have performed acceptably since he had been provided with the apparent correct word answer for each of ten of the twelve items. Accordingly, the confederate provided the subject with "Correct" feedback following ten of the latter's verbalized word

"choices" (see Appendix C). Following completion of this bogus test of creativity, the experimenter provided each participant with a public evaluation of his performance. After the subject had been told that he had performed fairly well, the experimenter indicated to the confederate that he had, in fact, performed poorly and urged him to concentrate harder on the subsequent task since the present research was important. The confederate responded by indicating that he felt badly as a result of his poor performance.

The experimenter next provided a short description of the supposed second part of the experiment in which, he related, each participant would partake separately. He continued that prior to the actual start of this next part, however, a brief delay would follow while he prepared the necessary equipment in the second room. After shuffling a number of forms lying on the desk at which he was seated, the experimenter proceeded toward the second room. Before exiting the experimental room, he was interrupted by the confederate. In the Undiscovered Transgression condition, the confederate indicated no suspicion regarding the true nature of the experiment. He merely identified himself as a writer for the Brooklyn College student newspaper and requested if he could discuss with the subject a project in which the newspaper staff was then involved. After cautioning the participants not to discuss any previous part of the experiment, the experimenter assented and exited into the adjoining room where he began to manipulate the large dummy apparatus. The confederate, now alone with the subject in the experimental room, provided the former with a request for help. He stated that student volunteers were needed to telephone

various business establishments regarding their possible interest in placing ads in the college newspaper:

As I said, I write for the Kingsman, and the staff's been making up lists of stores and other businesses in the city who we'd like to get to advertise in our paper. The problem is our staff just isn't large enough to call all these places.

So, we're trying to get people here on the campus to help us with these calls. The calls only take a minute or two to make and there's no armtwisting or anything and you don't have to give your name. All you have to do is find out if they're interested in advertising in our paper. If they are, tell them the prices of the ads and tell them that someone from the business office will call them back to make arrangements. If not, just say, "thanks."

The calls would be made from our office here on campus; it's in LaGuardia Hall. There's no problem about time because the office is open all day and night and on weekends. Actually, though, you wouldn't have any more contact with me on this because I'm from the downtown campus, you know, on Schemmerhorn Street. And, I'm only here a couple of days a week to take a journalism course that's not given downtown. I don't even stop at the office here. I just write my articles downtown and send them up here.

But, if you're interested, you can put your name and phone number on an index card I have here and then I'll just stick it in the pile of other cards I have here to send to the Kingsman. Someone from the business office will call you in about a week or so about making the calls. But they don't have to be made right away. There's no time limit or anything. So, if you think you can help us, we're asking people to make up to 50 phone calls from the lists which have already been made. But you wouldn't have to make all 50 if you didn't have the time. Would you like to help us?

If the subject refused to help, the confederate simply said, "OK." If the subject did agree to help, he was asked the number he was willing to make. The number of phone calls volunteered by the subject was employed as the dependent variable measure of helping. At this point, the experimenter re-entered the experimental room, dismissed the confederate, and administered the subject a number of post-experimental questions designed to assess the effectiveness of the experimental manipulations.

In the Discovered Transgression condition, the confederate, after similarly interrupting the experimenter as he was leaving the experimental room, questioned the validity of the previously completed "test of creativity." When the experimenter subsequently asked the reason for such doubt, the confederate replied that it did not seem "right" that he had done as poorly as he had and continued that he believed he had been "set-up" for something. Finally, the confederate expressed

disbelief concerning the actual intent of the experiment. At this point, the experimenter, after a pause, revealed the "true nature" of the experiment to the confederate, indicating that with the active involvement of the subject the former had been led to believe that he had performed poorly on an apparent, but not real, test of creativity. The previous test procedure had been employed so that "you would feel badly about yourself and so feel a loss in self-esteem." The actual purpose of the experiment was to investigate the relationship between lowered self-esteem and sensitivity to physical stimulation.

Following the discovery of the transgression by the confederate, the experimenter stated that the following second part of the experiment would continue as scheduled. The confederate replied, "OK," but then continued by expressing disapproval of what had previously been done to him, and in so doing, also directly cited the subject for his involvement in the transgression committed against him. Following this reaction by the confederate, the experimenter again proceeded toward the second room, and before entering, was asked by the former who identified himself as a writer for the Brooklyn College student newspaper if he could discuss with the subject a project in which the newspaper was then involved. The remainder of the procedure was identical to that for the Undiscovered Transgression condition.

NO-TRANSGRESSION CONDITION

If assigned to the No-Transgression condition, the subject was not induced to engage in behavior which would lower the felt self-esteem of another individual. Therefore, the upcoming first task was not described to the subject as one in which his participation would

result in the other participant's belief that he had performed poorly on a creativity task. Accordingly, the subject was provided with details which, consistent with his expectation, indicated that the first task would involve both participants in a test of creativity consisting of solvable word-association items. Thus, the experimenter initially repeated the essential details of the prior briefing concerning the supposed intent of the present experiment. He concluded by restating that during the present session he was concerned with investigating the relationship between the personality characteristic of creativity and sensitivity to physical stimulation, and that therefore, there would be two tasks, each designed to assess one of these factors. Subsequently, the experimenter stated:

As I said before, the first part of the experiment involves a measure of creativity based on a person's ability to associate words. The test that will be used is called the Creative Association Test and each of you (both participants) will administer a different form of this test to the other. Although the particular items included on each of these two forms are not identical, they are similar and equated for difficulty. You'll be first administering this test to the other subject before taking it yourself. Let me explain the procedure you are to follow.

The essential format of the test situation described to the subject was equivalent with that described in the transgression conditions. However, appropriate modifications were made in both the test admin-

istration and answer sheets to be employed by the subject assigned to the No-Transgression condition, and hence also, in corresponding procedures regarding their use.

Thus, the test sheet first shown the subject was labelled Creative Association Test, Form B (see Appendix B) and was similar in design to the administration sheet presented to subjects in the transgression conditions. It contained twelve numbered items, each consisting of a different series of three, related words which appeared under the heading, Stimulus Words. However, for each of these word association items, there appeared on the sheet under the heading, Answer, neither "Correct" nor "Incorrect" which appeared in the transgression conditions, but a different word, such as "Monument" or "Smoke" which the subject was told was the correct word answer for that item. He was to employ this sheet in initially administering "one form of the test of creativity to the other subject," who, in turn, he was told, would be provided with an answer sheet also containing twelve items, each consisting of three words and corresponding to the same numbered item on the subject's administration sheet. The procedure to be followed by the subject differed from that specified in the transgression conditions only in that he was instructed to note whether the "other subject's" verbalized word choice for each item selected from the latter's answer sheet matched the "correct word answer for that item which appears on your answer sheet under the heading, Answer. If it does, provide him with positive feedback by saying, 'Correct'; if it does not, provide him with negative feedback by saying, 'Incorrect'." Thus, the subject would not engage in pro-

viding false negative feedback to the other participant regarding the latter's test performance. The second test sheet presented to the subject was labelled Creative Association Test, Form A Answer Sheet (see Appendix E) and corresponded in design to the previous description of the other participant's supposed alternate form answer sheet. After he had observed each of the twelve three-word items appearing on this answer sheet which he would employ when the roles of the participants were subsequently reversed and he was administered "this second form of the test" by the "other subject," the subject was instructed that the same procedure as that used previously would be followed. Finally, the subject was told that when the entire test procedure had been completed, the experimenter would take a few minutes to score both answer sheets, and then, publicly provide each participant with an evaluation of his overall performance.

Following explanation of the details regarding the procedure to be employed for the ostensible test of creativity, the experimenter indicated that the second task would simply consist in a measure of sensitivity to the two types of physical stimulation, light and sound. The subject was told that in order to equate for each participant the length of time which occurred between the completion of the first creativity measure and this second sensitivity one, the "other subject" would first complete the latter task of ten minutes duration while he (the subject) waited in the experimental room. Subsequently, the "other subject" would be immediately dismissed from the entire experimental area, and following, the subject would complete the same task, and then, also be dismissed. And, finally, the subject was instructed

to neither talk nor otherwise communicate with the "other subject" other than when required during the specific experimental procedures. Thus, the subject had not been induced to engage in behavior which would result in psychological harm to another. The actual test procedure advanced in accordance with the expectation of the subject. The confederate was initially administered one form of the "test of creativity" by the subject, and subsequently administered an alternate form of this test to the latter. As in the transgression conditions, the confederate merely offered a series of programmed word responses when administered his assigned form of this test (see Appendix F), and in turn, provided the subject with a predetermined number of "Correct" and "Incorrect" responses (see Appendix A). In the No-Transgression condition, the ostensible performances of both the subject and confederate were thus controlled so that it appeared that each had performed adequately. Hence, following the completion of the test procedure, the experimenter indicated that each participant had performed acceptably, answering one-half of the test items correctly.

The experimenter next provided a brief description of the supposed second part of the experiment, and then, also indicated a brief delay while he prepared the necessary equipment in the second room. Before exiting, he was interrupted by the confederate who requested to talk to the subject about the Kingsman related activity. The remainder of the procedure was identical to that for the previously described transgression conditions.

RESULTS

The mean number of telephone calls volunteered in each of the treatment conditions was as follows: Undiscovered Transgression condition, $\bar{X} = 32.125$; Discovered Transgression condition, $\bar{X} = 16.875$; No-Transgression condition, $\bar{X} = 11.875$. However, due to difficulty in recruiting students in the introductory psychology course, a total of only twenty-nine subjects participated in Experiment 1. Since five subjects were eliminated due to suspicion concerning the actual intent of the study, data was obtained for only twenty-four subjects, with eight subjects assigned to each of the treatment conditions. Therefore, because of the unknown nature of the distribution of the dependent variable measure, the high variability obtained, and the small number of subjects employed, a non-parametric test of significance was used, the median test.

Table 1 presents the number of individuals in each condition who volunteered a number of telephone calls above and below the overall median which was 17.50 phone calls. It was found that transgression was related to helping behavior (with Yates correction for continuity, $\chi^2 = 6.24$, $df = 2$, $p < .05$). As opposed to only one of eight non-transgressing subjects, eleven of sixteen transgressing subjects volunteered a number of phone calls above the overall median. From inspection of Table 1, it seems that there is an increase in helping behavior following a transgression which remains undiscovered since seven of eight subjects assigned to the Undiscovered Transgression condition volunteered a number of telephone calls above the median as opposed to only one of eight subjects assigned to the No-Transgression

TABLE 1

Number of Subjects in Each Treatment Condition Who
Volunteered a Number of Telephone Calls Above and Below the Median

	Undiscovered Transgression	Discovered Transgression	No Transgression	TOTAL
Above Median	7	4	1	12
Below Median	1	4	7	12
TOTAL	8	8	8	24

condition who did so. The level of helping behavior which occurred following a transgression which subsequently became discovered was between that which occurred following no transgression and that following an undiscovered transgression. Four subjects assigned to the Discovered Transgression condition volunteered a number of telephone calls above the median and four subjects volunteered a number of telephone calls below the median. Thus, due to the small number of subjects employed, the effect upon helping behavior of a discovered transgression remains unclear.

The results of Experiment 1 suggest an increase in helping behavior following an undiscovered transgression and thus are consistent with the hypothesized notion of guilt as mediator of an increase in post-transgressional helping behavior. The obtained data also indicate the possibility that a transgression which subsequently becomes discovered may actually result in a reduction in the level of helping which occurs following a transgression which remains undiscovered.

However, further analysis of the procedure employed for the Discovered Transgression condition in Experiment 1 reveals that three situational factors were actually manipulated when the transgression became socially recognized. These consisted in: the discovery of the transgression by the victim, the implication of the subject in the revealed transgression, and the resulting disapproval which the latter received from this victimized other. The possible effect of each of these factors upon subsequent helping behavior is discussed below.

Consideration of the nature of the transgression operation employed in this investigation leads to the notion that actual discovery of a transgression by the victimized individual is capable of producing a decrease in post-transgressional helping behavior. More specifically, it is suggested that within the present transgressional context such discovery which occurs in the absence of public recognition of the harm-doer has the effect of attenuating an increase in helping behavior which follows an undiscovered transgression. Thus, in the Discovered Transgression condition in Experiment 1, the victim discovers that he had previously been "set-up" to perform poorly on a

bogus, not actual, test of creativity in order that his self-esteem would be lowered. Hence, following such discovery, the subject might easily infer that the transgression has become undone at that point since the other participant now knows that his prior test performance was not an indication of actual poor creative ability. Resultingly, the subject might subsequently experience a reduction in the level of guilt which existed prior to the actual discovery of the transgression, and hence, be less motivated to engage in following helping behavior. In this manner, such discovery would assume an expiative function prior to the victim's actual request for help.

However, actual implication of the subject in the socially recognized transgression may also affect subsequent helping behavior. Within the context of face-to-face contact with the person whom he has harmed, the subject is revealed to the latter as engaged in the transgression. Caught in such a compromising situation, the subject might infer that the victimized other is negatively evaluating him even in the absence of explicit verbalized disapproval received from the latter. Thus, such implicit negative evaluation, involving a loss of face vis-a-vis the harmed other, might actually result in the transgressor experiencing the uncomfortable state of shame. Such experienced shame may then function to subsequently increase helping behavior which is employed as a method of social appeasement, or, in turn, assuming an expiative function, to decrease such helping.

Finally, mere implication of the subject in the socially recognized transgression, although occurring within a context of face-to-face contact with the person whom he has harmed, may not be sufficient

to affect subsequent helping behavior. Possibly, explicit verbalized disapproval which the subject receives from this victimized other following such implication is the necessary situational factor for arousal of the latter's experience of shame, and thus, accordingly, for affecting subsequent helping. Or possibly, implication of the subject is sufficient to arouse shame and thus to affect helping, but explicit disapproval received arouses a greater degree of shame experienced, and thus also, has a greater effect upon helping.

In order adequately to test the role of shame as intervening process in post-transgressional helping behavior, it is necessary that each of the situational factors considered above — discovery of the transgression by the victim, implication of the subject in the transgression, and disapproval which the subject receives from the victim following such implication — be operationally separated when the transgression becomes socially recognized. Thus, a second study was conducted in order to assess the effect of transgression upon subsequent helping behavior in which manipulation of the independent variable, transgression, yielded a five-condition experiment. These were:

1. No-Transgression (Control) Condition

— in which the subject was not induced to transgress against another individual.

2. Undiscovered Transgression Condition

— in which the subject was induced to transgress against another individual and such transgression remained undiscovered by the victim.

3. Discovered Transgression - No Implication Condition
— in which the subject was induced to transgress against another individual and such transgression subsequently became discovered by his victim. The subject was not implicated in the discovered transgression.
4. Discovered Transgression - Implication Condition
— in which the subject was induced to transgress against another individual and such transgression subsequently became discovered by his victim. The subject was implicated in the discovered transgression.
5. Discovered Transgression - Implication with Disapproval Condition
— in which the subject was induced to transgress against another individual and such transgression subsequently became discovered by his victim. The subject received disapproval from the victim following implication in the discovered transgression.

It was hypothesized that there would be no significant difference in helping behavior among the No-Transgression, Discovered Transgression - No Implication, and Discovered Transgression - Implication conditions. However, helping behavior in the Undiscovered Transgression condition as well as in the Discovered Transgression - Implication with Disapproval condition would be significantly greater than that in each of these conditions. Also, helping behavior in the Discovered

Transgression - Implication with Disapproval condition would be significantly greater than that in the Undiscovered Transgression condition. Such a predicted outcome would provide empirical evidence which is supportive of the postulated notion that guilt mediates an increase in post-transgressional helping; and further, that shame (aroused by explicit disapproval) also mediates an increase in such helping, since discovery of the transgression itself functions to expiate post-transgressional guilt and thus to reduce subsequent helping. In addition, this outcome would be supportive of the notion that within the present transgressional context shame mediates an even greater increase in post-transgressional helping than does guilt.

Alternative Outcomes

1. There would be no significant difference in helping behavior among the Undiscovered Transgression, Discovered Transgression - No Implication, Discovered Transgression - Implication, and Discovered Transgression - Implication with Disapproval conditions. And, helping behavior in each of these conditions would be significantly greater than that in the No-Transgression condition. Such an obtained outcome would suggest that guilt mediates an increase in post-transgressional helping.
2. There would be no significant difference in helping behavior between the Undiscovered Transgression and Discovered Transgression - No Implication conditions. However, helping behavior in each of these two condi-

tions would be significantly greater than that in the No-Transgression condition. Also, helping behavior would not significantly differ in each of the Discovered Transgression - Implication and Discovered Transgression - Implication with Disapproval conditions; however, helping in each of these latter two conditions would be significantly greater than that in each of the Undiscovered Transgression and Discovered Transgression - No Implication conditions. Such an obtained outcome would suggest that guilt and shame (aroused by face-to-face implication without necessity of explicit disapproval) combine to maximize an increase in post-transgressional helping.

3. Same as above with the following exception: helping behavior in the Discovered Transgression - Implication condition would not significantly differ from that in each of the Undiscovered Transgression and Discovered Transgression - No Implication conditions, but would be significantly less than that in the Discovered Transgression - Implication with Disapproval condition. However, helping behavior in each of these transgression conditions would be significantly greater than that in the No-Transgression condition. Such an obtained outcome would suggest that guilt and shame (aroused by explicit disapproval) combine to maximize an increase in post-transgressional

helping.

4. There would be no significant difference in helping behavior among the No-Transgression, Discovered Transgression - No Implication, Discovered Transgression - Implication and Discovered Transgression - Implication with Disapproval conditions. However, helping behavior in the Undiscovered Transgression condition would be significantly greater than that in each of these conditions. Such an obtained outcome would suggest that guilt mediates an increase in post-transgressional helping and that discovery of the transgression itself functions to expiate post-transgressional guilt and thus to reduce subsequent helping.
5. Same as hypothesized outcome except that shame (aroused by face-to-face implication without necessity of explicit disapproval) mediates an increase in post-transgressional helping.
6. There would be no significant difference in helping behavior among the No-Transgression, Discovered Transgression - Implication, and Discovered Transgression - Implication with Disapproval conditions. Also, there would be no significant difference in helping behavior between the Undiscovered Transgression and Discovered Transgression - No Implication conditions; however, helping in each of these latter two conditions would be significantly greater than that in each of

the other three conditions. Such an obtained outcome would suggest that guilt mediates an increase in post-transgressional helping, and that shame (aroused by face-to-face implication without necessity of explicit disapproval) functions to expiate post-transgressional guilt and thus to reduce subsequent helping.

7. Same as above except that shame (aroused by explicit disapproval) functions to expiate post-transgressional guilt and thus to reduce subsequent helping.

EXPERIMENT 2

METHOD

Subjects. The subjects were eighty-three female and twenty-nine male undergraduate students at Brooklyn College who participated in partial fulfillment of the introductory psychology course requirement. They were randomly assigned to each of the five treatment conditions. The data from twelve subjects were eliminated from the final analysis because they expressed suspicion concerning the intent of the study.² The remaining one-hundred subjects, comprising seventy-three females and twenty-seven males, were equally divided among the five conditions. All subjects were run individually by a male experimenter.

Materials. The bogus Creative Association Test constructed for use in Experiment 1 was also employed in Experiment 2 with appropriate modifications made (see Appendices I, J, K, L, and M).

Procedure. For all transgression conditions, the procedure was essentially the same as that employed for the transgression conditions in Experiment 1 up to and including the point at which, the bogus test of creativity having been completed by both participants, the experimenter provided a brief description of the supposed second part of the experiment. Minor changes were made in the procedure in order to enhance credibility. Thus, as in Experiment 1, the subject was induced to engage in behavior intended to lower the felt self-esteem of another individual. Accordingly, the confederate was "set-up" to perform poorly on an ostensible test of creativity, apparently answering only two of twelve items correctly; and the subject, in turn, consistent

with his prior expectation, appeared to have performed acceptably. However, in Experiment 2, the subject appeared to have answered correctly seven of the twelve items on his assigned form of the test, instead of ten items correctly as in Experiment 1. This modification was made so that the ostensible performance of the subject in each of the transgression conditions would be equated with that of the subject in the No-Transgression condition, and also, to enhance the credibility of the procedure.³ As previously, the dependent variable was helping behavior as measured by the number of telephone calls volunteered by the subject in response to the request by the victim. In addition, two college-age male confederates served in the role of the victim. One-half of the subjects in each of the transgression conditions were assigned to each confederate.

UNDISCOVERED TRANSGRESSION CONDITION

With minor modifications, the subsequent procedure was the same as that employed for the Undiscovered Transgression condition in Experiment 1. As previously, after the subject had been told that he had performed fairly well on the bogus test of creativity, the experimenter indicated to the confederate that he had performed poorly and urged him to concentrate harder on the subsequent task since the present research was important. And, as previously, the confederate responded in a manner which indicated that he felt badly about his prior poor performance. In a contrite manner, the confederate stated: "I'm sorry. (After a slight pause.) I'll try harder."

DISCOVERED TRANSGRESSION - NO IMPLICATION CONDITION

With minor modifications, the subsequent procedure was the same

as that employed for the Discovered Transgression condition in Experiment 1 with the following exception: the subject was not implicated in the transgression which became discovered. Thus, as previously, the confederate, after expressing disbelief concerning the actual intent of the experiment, discovered that he had been "set-up" to perform poorly on a bogus test of creativity in order that his self-esteem would be lowered. However, he did not "know" that the subject had engaged in the transgression committed against him (see Appendix O).

DISCOVERED TRANSGRESSION - IMPLICATION CONDITION

The subsequent procedure was identical to that employed for the Discovered Transgression - No Implication condition with the exception that the subject was implicated in the transgression which became discovered. The confederate "knew" that the subject had engaged in the transgression committed against him (see Appendix P).

DISCOVERED TRANSGRESSION - IMPLICATION WITH DISAPPROVAL CONDITION

The subsequent procedure was identical to that employed for the Discovered Transgression - Implication condition with the addition that, following implication of the subject in the discovered transgression (see Appendix P), the confederate expressed disapproval of what had previously been done to him, and in so doing, also directly cited the subject for his involvement in the transgression committed against him. Thus, the confederate stated the following: "That wasn't a very nice thing that you guys did. And [pointing and looking directly at the subject], you were a part of this too. I really don't think its right to do something like that to someone."

NO-TRANSGRESSION CONDITION

With minor changes made in order to enhance credibility, the procedure was the same as that employed in the No-Transgression condition in Experiment 1. Thus, as previously, the subject was not induced to engage in behavior intended to lower the felt self-esteem of another individual. Accordingly, as in Experiment 1, the ostensible performances of both the subject and confederate on a test of creativity were controlled so that it appeared that each had performed acceptably. Each participant appeared to have answered correctly seven of the twelve items on the form of the test assigned him. Following completion of this test by both participants, the experimenter provided a brief description of the supposed second part of the experiment. The subsequent procedure was identical to that in the Undiscovered Transgression condition.

RESULTS

Helping Behavior

The mean number of telephone calls volunteered in each of the ten cells is presented in Table 2. For each level of transgression collapsed across confederate, the mean number of telephone calls volunteered was as follows: No-Transgression, $\bar{X} = 13.03$; Undiscovered Transgression, $\bar{X} = 20.00$; Discovered Transgression - No Implication, $\bar{X} = 12.48$; Discovered Transgression - Implication, $\bar{X} = 13.13$; Discovered Transgression - Implication with Disapproval, $\bar{X} = 31.00$. Inspection of Figure 1 reveals that the pattern of these obtained means follows the predicted order.

Given the unknown nature of the distribution of the dependent variable measure employed for helping behavior and the high variability obtained, the Kruskal-Wallis one-way analysis of variance was used to test the effectiveness of the independent variable, transgression. It was found that there was a significant effect for transgression upon help volunteered ($H = 15.49$, $df = 4$, $p < .005$). The differences among the various levels of transgression with regard to help volunteered were tested through employment of the Kolmogorov-Smirnov two-sample test (Siegel, 1956). Since the hypothesis which was formulated predicted the direction of the difference for each individual comparison, all tests employed were one-tailed.

As predicted, significantly more help was volunteered in the Undiscovered Transgression condition than in each of the No-Transgression ($D = 8$, $n = 20$, 20 , $p < .05$) and Discovered Transgression - No Implication ($D = 9$, $n = 20$, 20 , $p < .05$) conditions. Although the

TABLE 2

Cell Means for Number of Telephone Calls Volunteered

Condition	Confederate 1		Confederate 2	
	Mean	S. D.	Mean	S. D.
No-Transgression	14.55	14.99	11.50	17.65
Undiscovered Transgression	20.50	17.19	19.50	8.23
Discovered Transgression - No Implication	10.50	18.02	14.45	20.65
Discovered Transgression - Implication	13.00	16.87	13.25	13.25
Discovered Transgression - Implication with Disapproval	28.00	15.08	34.00	18.23

In each cell, $n = 10$.

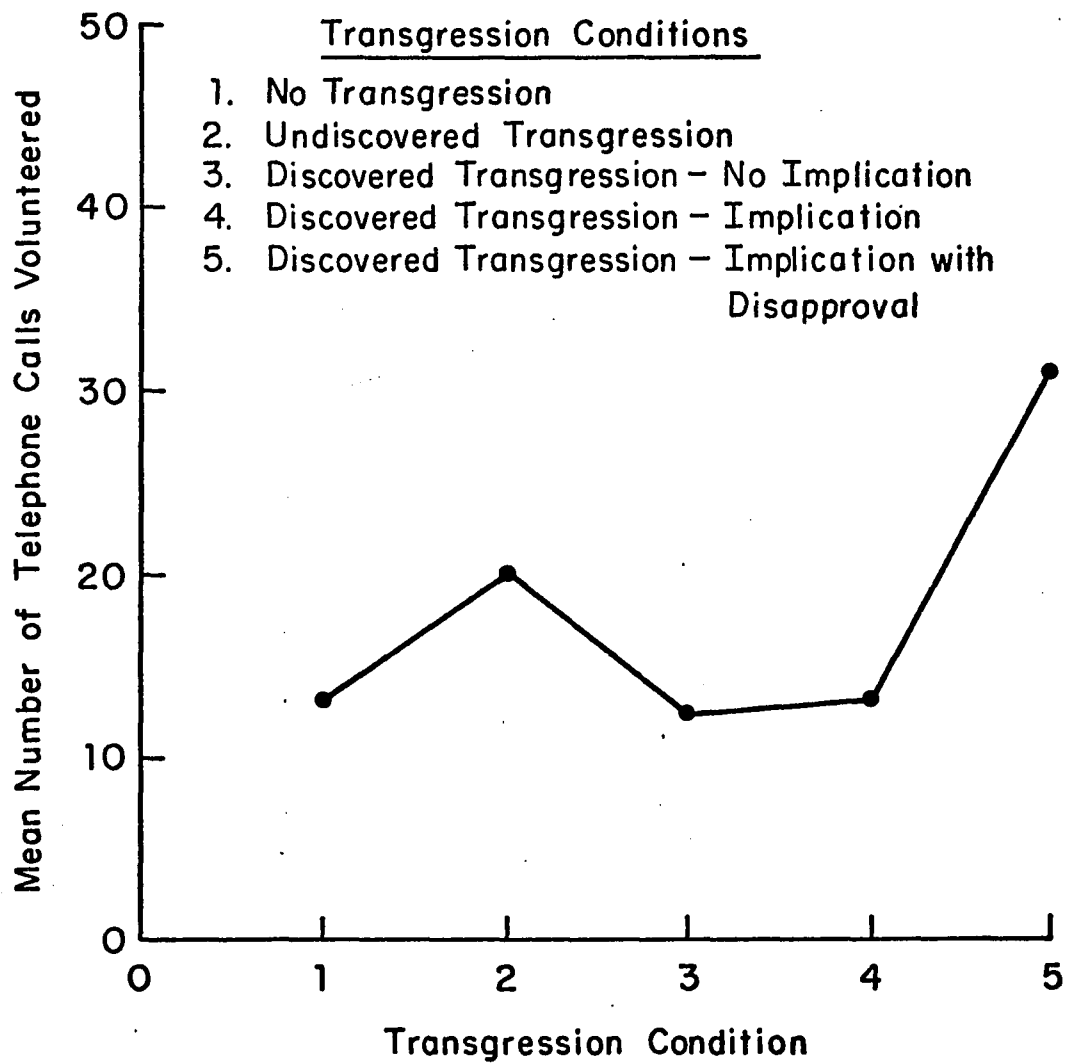


Figure 1. Mean Number of Telephone Calls Volunteered in Each Transgression Condition.

value for help volunteered was greater for the Undiscovered Transgression than for the Discovered Transgression - Implication condition, their obtained difference ($D = 6, n = 20, 20$) approached, but did not reach significance. Also, as predicted, significantly more help was volunteered in the Discovered Transgression - Implication with Disapproval condition than in each of the No-Transgression ($D = 10, n = 20, 20, p < .01$), Undiscovered Transgression ($D = 8, n = 20, 20, p < .05$), Discovered Transgression - No Implication ($D = 12, n = 20, 20, p < .001$), and Discovered Transgression - Implication ($D = 9, n = 20, 20, p < .05$) conditions. And, as predicted, there were no significant differences obtained with regard to help volunteered among the No-Transgression, Discovered Transgression - No Implication, and Discovered Transgression - Implication conditions (between No-Transgression and Discovered Transgression - No Implication conditions, $D = 2, n = 20, 20$; between No-Transgression and Discovered Transgression - Implication conditions, $D = 2, n = 20, 20$; between Discovered Transgression - No Implication and Discovered Transgression - Implication conditions, $D = 3, n = 20, 20$).

For each level of transgression employed, there was no difference in help volunteered as a function of confederate: No-Transgression, $D = 2, n = 10, 10$; Undiscovered Transgression, $D = 3, n = 10, 10$; Discovered Transgression - No Implication, $D = 2, n = 10, 10$; Discovered Transgression - Implication, $D = 1, n = 10, 10$; Discovered Transgression - Implication with Disapproval, $D = 3, n = 10, 10$.

The results obtained are thus supportive of the hypothesis for Experiment 2. Help volunteered was increased subsequent to a trans-

gression which remained undiscovered. However, discovery of the transgression which occurred without implication of the harm-doer resulted in an attenuation in helping to the level obtained following no transgression. Help volunteered remained at this baseline level following implication of the harm-doer in the discovered transgression, but was again increased, and to a level higher than that obtained following an undiscovered transgression, when the implicated transgressor received disapproval from the victim.

Post-Experimental Measures

All subjects completed a post-experimental questionnaire which consisted in four ten-point self-rating scales. These were designed to assess the degree of the subject's reaction to the experimental procedures with regard to each of experienced guilt, shame, liking for "the other subject," and desire for further contact with "the other subject" following completion of the experiment (see Appendix Q).

Table 3 presents the mean score for the measure of guilt obtained for each of the ten cells. A two-way analysis of variance performed on these means, summarized in Table 4, revealed a significant main effect for the variable of transgression ($F = 11.87$, $df = 4/90$, $p < .001$). There was no significant main effect for the variable of confederate ($F = .32$, $df = 1/90$), and no significant transgression X confederate interaction effect ($F = .57$, $df = 4/90$). The mean guilt score obtained for each of the five transgression conditions collapsed across confederate appears in Table 5 along with the results for individual comparisons performed through use of the Tukey A procedure. Each of the Undiscovered Transgression, Discovered Transgression -

TABLE 3

Cell Means for Measure of Guilt

Condition	Confederate 1		Confederate 2	
	Mean	S. D.	Mean	S. D.
No-Transgression	1.20	.63	1.70	1.49
Undiscovered Transgression	5.70	2.63	5.30	2.45
Discovered Transgression - No Implication	4.50	2.17	4.80	2.86
Discovered Transgression - Implication	5.90	2.38	5.40	2.88
Discovered Transgression - Implication with Disapproval	4.70	2.41	6.10	2.08

Note. Based on $n = 10$ in each cell, the higher the mean value, the greater the guilt.

TABLE 4

Analysis of Variance of Measure of Guilt

Source	<u>df</u>	MS	F
Transgression (A)	4	62.27	11.87*
Confederate (B)	1	1.69	.32
A x B	4	2.97	.57
Within	90	5.25	
Total	99		

* $p < .001$

TABLE 5
Mean Score for Measure of
Guilt for Each Transgression Condition

Condition	Mean	S. D.
No-Transgression	1.45a	1.15
Undiscovered Transgression	5.50b	2.48
Discovered Transgression - No Implication	4.65b	2.48
Discovered Transgression - Implication	5.65b	2.58
Discovered Transgression - Implication with Disapproval	5.40b	2.30

Means with different lowercase subscripts significantly differ, based on the Tukey A procedure (H S D = 2.44, df = 95, $p < .01$).

No Implication, Discovered Transgression - Implication, and Discovered Transgression - Implication with Disapproval conditions yielded significantly greater guilt than did the No-Transgression condition (H S D = 2.44, $df = 95$, $p < .01$). No other differences were significant.

Table 6 presents the mean score for the measure of shame obtained for each of the ten cells. A two-way analysis of variance performed on these means, summarized in Table 7, revealed a significant main effect for transgression ($F = 2.97$, $df = 4/90$, $p < .025$). There was no significant main effect for confederate ($F = .10$, $df = 1/90$), and no significant transgression X confederate interaction effect ($F = 1.24$, $df = 4/90$). The mean shame score obtained for each of the five transgression conditions collapsed across confederate appears in Table 8 along with the results for the individual comparisons performed through use of the Tukey A procedure. The Discovered Transgression - Implication with Disapproval condition yielded significantly greater shame than did the No-Transgression condition (H S D = 2.21, $df = 95$, $p < .05$). No other differences were significant.

Table 9 presents the mean score for the measure of liking for "the other subject" obtained in each of the ten cells. A two-way analysis of variance performed on these means, summarized in Table 10, revealed no significant main effect for transgression ($F = 1.17$, $df = 4/90$), no significant main effect for confederate ($F = .31$, $df = 1/90$), and no significant transgression X confederate interaction effect ($F = .56$, $df = 4/90$). The mean score for liking obtained for each of the five transgression conditions collapsed across confederate appears in Table 11.

TABLE 6

Cell Means for Measure of Shame

Condition	Confederate 1		Confederate 2	
	Mean	S. D.	Mean	S. D.
No-Transgression	1.60	1.07	1.70	1.06
Undiscovered Transgression	3.80	2.74	2.50	2.42
Discovered Transgression - No Implication	2.40	2.07	3.90	3.35
Discovered Transgression - Implication	4.30	3.13	2.80	2.62
Discovered Transgression - Implication with Disapproval	4.10	2.77	4.50	2.72

Note. Based on $n = 10$ in each cell, the higher the mean value, the greater the shame.

TABLE 7

Analysis of Variance of Measure of Shame

Source	<u>df</u>	MS	F
Transgression (A)	4	18.66	2.97*
Confederate (B)	1	.64	.10
A x B	4	7.79	1.24
Within	90	6.28	
Total	99		

* $p < .025$

TABLE 8

Mean Score for Measure of
Shame for Each Transgression Condition

Condition	Mean	S. D.
No-Transgression	<u>1.65</u>	1.04
Undiscovered Transgression	3.15	2.60
Discovered Transgression - No Implication	3.15	2.81
Discovered Transgression - Implication	3.55	2.91
Discovered Transgression - Implication with Disapproval	<u>4.30</u>	2.68

Means commonly underlined significantly differ, based on the Tukey A procedure (H S D = 2.21, df = 95, $p < .05$).

TABLE 9

Cell Means for Measure of
Liking for the "Other Subject"

Condition	Confederate 1		Confederate 2	
	Mean	S. D.	Mean	S. D.
No-Transgression	4.60	.70	5.00	1.49
Undiscovered Transgression	5.20	1.75	5.60	1.58
Discovered Transgression - No Implication	4.40	2.12	5.40	2.07
Discovered Transgression - Implication	6.00	1.05	5.50	2.80
Discovered Transgression - Implication with Disapproval	4.90	1.79	4.60	1.84

Note. Based on $n = 10$ in each cell, the higher the mean value, the more the "other subject" was liked.

TABLE 10

Analysis of Variance of
Measure of Liking for the "Other Subject"

Source	<u>df</u>	MS	F
Transgression (A)	4	3.82	1.17
Confederate (B)	1	1.00	.31
A x B	4	1.83	.56
Within	90	3.26	
Total	99		

TABLE 11
Mean Score of Measure of Liking for the
"Other Subject" in Each Transgression Condition

Condition	Mean	S. D.
No-Transgression	4.80	1.15
Undiscovered Transgression	5.40	1.64
Discovered Transgression - No Implication	4.90	2.10
Discovered Transgression - Implication	5.75	2.07
Discovered Transgression - Implication with Disapproval	4.75	1.77

Table 12 presents the mean score for the measure of desire for further contact with "the other subject" following completion of the experiment in each of the ten cells. A two-way analysis of variance performed on these means, summarized in Table 13, revealed a significant main effect for transgression ($F = 2.62$, $df = 4/90$, $p < .05$). There was no significant main effect for confederate ($F = .12$, $df = 1/90$), and no significant transgression X confederate interaction effect ($F = .13$, $df = 4/90$). The mean score for desire for further contact obtained in each of the five transgression conditions collapsed across confederate appears in Table 14 along with the individual comparisons performed through use of the Tukey A procedure. The Undiscovered Transgression condition yielded significantly greater desire for further contact with "the other subject" than did the No-Transgression condition ($H S D = 2.04$, $df = 95$, $p < .05$). No other differences were significant.

TABLE 12

Cell Means for Measure of Desire
for Further Contact with the "Other Subject"

Condition	Confederate 1		Confederate 2	
	Mean	S. D.	Mean	S. D.
No-Transgression	3.30	1.83	3.60	2.01
Undiscovered Transgression	5.90	1.66	5.50	1.96
Discovered Transgression - No Implication	4.80	3.88	4.20	2.15
Discovered Transgression - Implication	4.80	1.81	4.60	2.72
Discovered Transgression Implication with Disapproval	4.00	1.89	4.10	2.28

Note. Based on n = 10 in each cell, the higher the mean value, the greater the desire for further contact.

TABLE 13

Analysis of Variance of Measure of
Desire for Further Contact with the "Other Subject"

Source	<u>df</u>	MS	F
Transgression (A)	4	13.92	2.62*
Confederate (B)	1	.64	.12
A x B	4	.67	.13
Within	90	5.31	
Total	99		

* p <.05

TABLE 14

Mean Score for Measure of Desire for Further
Contact with the 'Other Subject' in Each Transgression Condition

Condition	Mean	S. D.
No-Transgression	<u>3.45</u>	1.88
Undiscovered Transgression	<u>5.70</u>	1.78
Discovered Transgression - No Implication	4.50	3.07
Discovered Transgression - Implication	4.70	2.25
Discovered Transgression - Implication with Disapproval	4.05	2.04

Means commonly underlined significantly differ, based on the Tukey A procedure (H S D = 2.04, df = 95, $p < .05$).

GENERAL DISCUSSION

The two experiments reported here were designed to investigate the effect of transgression which occurred under varying conditions of discovery upon subsequent helping behavior, and thus to provide an empirical basis for inferred mediating process. The transgression manipulation employed consisted in an operation by which the subject was induced to engage in an undertaking devised to lower the felt self-esteem of another individual through implementation of a bogus creativity test procedure. In this manner, the subject was led to believe that he had committed behavior which had resulted in psychological harm to another.

The results of Experiment 1 suggested an increase in helping behavior following commission of an undiscovered transgression. However, the effect upon helping of a socially recognized transgression remained unclear due to the fact that the procedure employed for the Discovered Transgression condition involved the manipulation of three situational factors — discovery of the transgression by the victim, implication of the subject in the recognized transgression, and the resulting disapproval received by the subject from the victim. Thus, a second experiment was conducted in order to permit an assessment of the particular effect of each of the above factors which concern discovery upon post-transgressional helping behavior.

More specifically, however, Experiment 2 was devised with the intent of providing a continuum of sequential events which occur following commission of a transgression. In this manner, it was possible to effect an essential transgression operation, and then to systema-

tically introduce at predetermined successive intervals additional situational occurrences with regard to the previously committed transgression. Such an arrangement, then, can be conceptualized as the construction of an entire transgression situation programmed to unfold in a series of stages in terms of external events which proceed along an undiscovered-discovered dimension. Accordingly, the independent variable was manipulated in such a way as to yield a structure of five sequentially ordered levels of transgression: The corresponding experimental manipulations were, therefore, continuous in nature. For each particular condition, until the point at which a new situational event intervened, the procedure employed, and thus also, the succession of all antecedent events, was the same as for that condition assigned a prior sequential order.

Employment of this design provided a method for "isolating" the transgression at each point in its development, and thus for assessing the particular effect upon helping behavior of each situational factor which was successively introduced. Determination of the observable relationship between helping behavior and each external operation performed with regard to transgression, in turn, allowed an interpretation of the obtained results in terms of corresponding internal process.

In the present investigation, subjects assigned to each of the transgression conditions can be viewed as initially experiencing guilt as a result of commission of behavior which resulted in psychological harm to another. For those subjects who participated in the Undiscovered Transgression condition, the transgression remained unknown to

the victim. Therefore, at the point at which the latter provided a request for help, the harm inflicted upon the victimized other remained, and thus also, the guilt feelings of the subject. Having previously committed a negative act, the transgressor is thus viewed as here motivated to employ the available opportunity to assist the injured person through some pro-social behavior, and in this manner, to "right" the still existing "wrong." Accordingly, compliance with this request can be interpreted as an attempt to reduce the distress of guilt through subsequent benevolent behavior. In accord with the results of the first experiment, it was found that those individuals who had engaged in an undiscovered transgression subsequently demonstrated an increase in helping as compared to those who had not transgressed. These findings are consistent with the guilt hypothesis offered which assigns an expiatory function to post-transgressional helping behavior.

In the Discovered Transgression - No Implication condition, the situation proceeded in such a way that, prior to his request for help, the victim discovered the transgression committed against him. However, he remained unaware of the subject as transgressor. Thus, without implication of the subject, the harmed individual learned that he had been manipulated into believing that he had performed poorly on a prior bogus test of creativity in order that his self-esteem would be lowered. It was hypothesized that the subject who was placed in this context would here infer that the initial harm which resulted from his transgression had been mitigated since the victim now knew that his previous performance did not actually indicate poor creative

ability. As a result, there should occur a corresponding reduction in the level of guilt experienced by the subject prior to such discovery. In turn, he is viewed as less motivated to aid the other person since psychologically, at this point, helping behavior becomes unnecessary for reparation of the original misdeed. Therefore, it was reasoned that the increase in helping behavior which was found to occur subsequent to a transgression which remained undiscovered would be attenuated when the transgression, however, became known to the victimized individual. The results obtained are consistent with this interpretation. As predicted, help volunteered did not differ for the Discovered Transgression - No Implication and the No-Transgression conditions, but was greater for the Undiscovered Transgression than for the Discovered Transgression - No Implication condition. These findings thus offer some added support for the guilt hypothesis. If, as discussed above, guilt mediates increased helping subsequent to an undiscovered transgression, then the intervention of some external operation which provides a mechanism for guilt reduction antecedent to the request for help should, in turn, reduce the level of helping which occurs. It appears that, as introduced within the present experimental context, discovery of the transgression by the victim operates to effect such prior expiation.

Manipulation of the two implication conditions produced dramatically different effects upon post-transgressional helping behavior. In the Discovered Transgression - Implication condition, discovery of the transgression by the victim was made to intervene at the same point in the procedure as it had in the prior ordered condition.

However, in addition, the subject was revealed to the victim as his transgressor. As expected, the obtained data indicated that such social recognition of the harm-doer which occurred within the existing context of face-to-face contact with the injured person produced no effect upon subsequent helping. It was found that help volunteered in this Discovered Transgression - Implication condition did not differ from that volunteered in either the No-Transgression or Discovered Transgression - No Implication condition.

It was found, however, that when social recognition of the transgressor was followed by the receipt of explicit disapproval from the victimized other, helping behavior was again increased. And this increase was of such magnitude that helping behavior in the above situational context attained a level even higher than that which occurred subsequent to a transgression which remained undiscovered. As predicted, help volunteered was greater in the Discovered Transgression - Implication with Disapproval condition than in each of the No-Transgression, Undiscovered Transgression, Discovered Transgression - No Implication, and Discovered Transgression - Implication conditions. Thus, the obtained data are also consistent with the previously postulated notion that shame functions as a powerful mediator of post-transgressional helping.⁴ As suggested, although his guilt feelings have been mitigated by prior discovery of the transgression itself, the caught transgressor, however, experiences subsequent shame as a result of the direct negative evaluation which he receives from the individual whom he had previously harmed. Thus made to endure a loss of felt public image in the presence of his victim, the harm-doer is

viewed as highly motivated to comply with the latter's subsequent request for help. Having previously exhibited negative behavior, the transgressor thus seizes the available opportunity to display prosocial behavior as a means with which to provide his disapproving victim with some additional positive information about himself. By so demonstrating that he is, in fact, an individual who is capable of altruism, the transgressor can be considered as attempting to raise the latter's evaluation of him, and in this manner, to reduce the discomfort of shame which he experiences. As such, the shamed individual is viewed as essentially employing post-transgressional helping behavior as a self-presentation device.

As previously discussed, it was stated that the revealed transgressor who is caught within the context of face-to-face contact with his victim could possibly experience shame through the attribution of his negative evaluation by the latter. Thus, although not hypothesized, it was suggested that mere social recognition of the harm-doer which occurs in the absence of verbalized disapproval might provide the sufficient situational factor to produce an increase in helping subsequent to actual discovery of the transgression. These latter findings, however, indicate that, at least with regard to the present transgression operation, explicit disapproval which is received from the harmed individual is necessary for the occurrence of an increase in shame-mediated helping.

The results obtained from the post-experimental measures designed to assess the effectiveness of the external operations employed provide support for the above explanation of the observed transgression-

helping relationship in terms of intervening process. As compared to subjects who did not transgress, those assigned to each of the transgression conditions reported experiencing a greater degree of guilt as a result of their participation in this experiment. These findings thus indicate that the harm-doing manipulation employed was of sufficient power to produce guilt feelings in subjects by inducing them to experience the commission of a moral transgression. No differences were found to occur among the transgression conditions with regard to degree of guilt reported. These latter findings are consistent with the fact that in each of these conditions, prior to the intervention of additional situational events, the subject's transgressive behavior was initially performed in an undiscovered context. Therefore, since help volunteered was found to be greater for the Undiscovered Transgression than for the No-Transgression condition, these data are supportive of the postulated notion of a guilt-mediated increase in post-transgressional helping.

Only those subjects assigned to the Discovered Transgression - Implication with Disapproval condition reported a greater degree of shame experienced as compared to those who did not transgress. Thus, the finding that explicit disapproval received by the socially recognized transgressor from his victim produced an increase in both felt shame and demonstrated helping behavior is supportive of the notion that, in addition to guilt, shame considered as a reaction to external censure functions to mediate post-transgressional helping. Although the largest mean value for shame reported was obtained in the Discovered Transgression - Implication with Disapproval condition, the above

support remains qualified since no significant differences were found to occur among the transgression conditions.

The post-experimental data also yielded results which indicated that the obtained differences in help volunteered which were produced by the external operations employed were not mediated by corresponding changes in felt liking for "the other subject." These findings provide added support for the hypothesized function of each of guilt and shame as intervening process for post-transgressional helping. Subjects assigned to each of the five conditions did not report differential regard for the individual who had requested help. However, it was found that, as compared to subjects who did not transgress, only those assigned to the Undiscovered Transgression condition reported a greater desire to "have further contact with the other subject" following completion of the experimental session. In this latter condition, as opposed to the case in each of the three discovered transgression conditions, the psychological harm done to the victimized other apparently continued since the actual transgression had remained unknown to this individual. Thus, among all treatment conditions, the subjects in the Undiscovered Transgression condition can be viewed as most highly motivated to seek additional contact with their victim in order to employ the opportunity to relieve the latter's distress through explanation of the prior bogus creativity test procedure. Such positive behavior would provide the undiscovered transgressor with an additional mechanism for the diminution of any remaining guilt still experienced subsequent to compliance with the prior request for help.

In summary of the results of Experiment 2, the obtained data with regard to helping provide support for the hypothesis which was tested. It was found that help volunteered was increased subsequent to an undiscovered transgression which resulted in psychological harm to another. However, under the condition in which the victim discovered the transgression which had been committed against him, but in the absence of social recognition of the transgressor, post-transgressional helping behavior was returned to a baseline level — that which was found following no transgression. The additional occurrence of mere social recognition of the transgressor within the context of the revealed misdeed had no effect upon subsequent helping. Help volunteered was again increased only when the socially recognized transgressor received explicit disapproval from his victim. And, helping behavior in this latter condition attained a level even higher than that which occurred following a transgression which remained undiscovered. Accordingly, these results have yielded empirical findings which are consistent with the previously offered notion that each of guilt and shame function to mediate an increase in post-transgressional helping behavior. And furthermore, that within the present transgressional context shame operates to mediate a greater increase in such pro-social behavior. In addition, the post-experimental self-report findings provide additional support for the present explanation of the obtained transgression-helping relationship in terms of intervening process.

Based on prior conceptualization of this term (A. Freud, 1942; S. Freud, 1955; 1957; 1961; 1962; Mead, 1950; 1953), guilt has

been considered as a psychological reaction to inner-directed sanction in the form of self-censure for transgression of internalized moral standards. Thus, with regard to guilt, the corresponding locus of sanction can be viewed as residing within the individual, more specifically in the negative self-evaluation rendered by conscience, the internalized agent of self-regulation. Shame, however, has been conceptualized as a reaction to outer-directed sanction in the form of censure by another for failure to comply with existing societal standards (Ausubel, 1972; Benedict, 1972; Gilligan, 1976; Leighton and Kluckhohn, 1949; Mead, 1950; 1953). In turn, then, the corresponding locus of sanction for shame can be viewed as residing outside the individual, more specifically in the behavior of others who direct disapproval at the former for his inappropriate act.

When considered from a sociological perspective, guilt and shame function to maintain the behaviors of individuals in compliance with normative standards of moral conduct. As such, they provide essential devices for the maintainance of social order. Society attempts to regulate the performance of the individual by subjecting his behavior, where possible, to peer evaluation. In this manner, he is held accountable to other societal members for the merits of his actions. Accordingly, when behavior is committed which is contrary to the commonly shared values of the group, and which is thus deemed inappropriate by an available witness, the actor cannot directly avoid the negative social consequences of his deed. If so exposed and publicly reprimanded, the transgressor is made to suffer the agony of shame as a result of his negative evaluation by another. In addition

to its value as a method of controlling behavior in particular situations, the regular employment of such shame-inducing external sanction furnishes society with a means for the continual clarification and reinforcement of those standards of personal behavior to which adherence is deemed important.

Sole reliance upon the use of external sanction, however, provides insufficient means with which to preclude the occurrence of unacceptable actions. Individuals, in fact, learn to avoid the negative social consequences of their transgressions. Condemnation by others along with possibly resulting other forms of physical sanction are circumvented when such behaviors are committed in an unsurveilled context, and in a manner which maximizes subsequent non-detection. Society must therefore also rely upon the operation of internal sanction. Accordingly, once established within the individual through the socialization process as an internally generated instrument of self-control, guilt serves to regulate the moral conduct of the individual, particularly with regard to those behaviors which occur in a private context.

Returning to a psychological level of analysis, guilt and shame which are, in fact, experienced following commission of a transgression, have consequences for subsequent behavior. The individual can be considered, upon the arousal of each, as motivated to seek means with which to reduce the degree of his discomfort. According to the present theorization, when guilt is felt, the individual attempts to alleviate his distress through the employment of techniques which appease the particular agent of censure, violated conscience. In

parallel fashion, the individual seeks to diminish the distress of shame, when this occurs, through means which appease that corresponding agent of censure, the disapproving witness. The current study has provided evidence which is consistent with the above suggested notion that post-transgressional helping behavior is utilized as one such mechanism of balance with regard to each of guilt and shame. In the case where guilt operates, subsequent helping can be interpreted as assuming atonement value for the individual. By performing an act of benevolence as a means of counterbalancing his prior misdeed which resulted in negative self-evaluation, the individual seeks to expiate his guilt feelings through behavior which is worthy of self-approval. Where shame operates, subsequent helping can be considered to acquire value for the individual as an instrument for the restoration of social acceptance. Accordingly, by demonstrating positive social behavior to his prior disapproving witness, the transgressor attempts to secure this other's approval, and thus to reduce his shame through elevation of the latter's appraisal of him.

FOOTNOTES

1. On the basis of a post-experimental interview given prior to the debriefing, five subjects were dropped from the study who indicated their belief that the experiment involved a ruse. These consisted in two males and two females who thought that the confederate, and thus also his request for help, were part of the experimental design; and, one female whose suspicion was due to the fact that she had recently participated in a prior study which also involved a ruse.
2. On the basis of the post-experimental interview given prior to the debriefing, twelve subjects were dropped from the study who indicated their belief that the experiment involved a ruse. These consisted in seven females and one male who thought that the confederate, and thus also his request for help, were part of the experimental design; and, four females whose suspicion was due to the fact that they had recently participated in prior studies which also involved ruses.
3. In the transgression conditions for Experiment 2, the ostensible performances of the subject and confederate on the "Creative Association Test" were not equated. The former appeared to have answered seven of the twelve creativity items correctly while the latter appeared to have answered only two of the twelve items correctly. While this arrangement might have involved a slight technical confound, it was essential to the transgression operation employed. The transgressing subject, in fact, understood that the test score obtained by each participant was bogus, not real, and was the direct result of his involvement in a procedure intended solely to lower the felt self-esteem of the "other subject." Thus, while he could not conclude that the ostensible test results indicated that he possessed creative ability greater than that of the other participant, the subject was induced to commit behavior which "resulted" in psychological harm to this other person.
4. The obtained data are consistent with the hypothesized notion that, in a given context in which the same transgression occurs, shame which results from explicit disapproval of the recognized transgressor mediates a greater increase in subsequent helping than does guilt which results from an undiscovered transgression. These findings, however, do not allow one to conclude that a given amount of shame produces more helping than does an equivalent amount of guilt.

APPENDIX A

No-Transgression Condition:

Administration sheet for "Creative Association Test"

employed by confederate in Experiment 1

CREATIVE ASSOCIATION TEST
FORM A

	<u>STIMULUS WORDS</u>	<u>ANSWER</u>
1.	WISH HOPE DREAM	INCORRECT
2.	PROFOUND COMPLEX DEEP	CORRECT
3.	WASHER SHOPPING WINDOW	INCORRECT
4.	CHAMBER STAFF HALL	CORRECT
5.	BELL HIGH TOLL	INCORRECT
6.	SUN EARTH MOON	INCORRECT
7.	GUN BOW KNIFE	CORRECT
8.	TOWN CITY VILLAGE	CORRECT
9.	SHUTTER FILM FILTER	INCORRECT
10.	FACE SOAP OILY	CORRECT
11.	RIVER STREAM LAKE	CORRECT
12.	RICHES TREASURE JEWEL	INCORRECT

APPENDIX B

No-Transgression Condition:

**Administration sheet for "Creative Association Test"
employed by subject in Experiment 1 and in Experiment 2**

CREATIVE ASSOCIATION TEST
FORM B

	<u>STIMULUS WORDS</u>			<u>ANSWER</u>
1.	LIBRARY	HOSPITAL	MUSEUM	MONUMENT
2.	WHISTLE	BLOW	TRAIN	SMOKE
3.	SQUARE	BOX	CUBE	SURFACE
4.	MUSIC	SONG	SOUND	NOTE
5.	STEM	FLOWER	LEAF	STALK
6.	MUTTON	LAMB	SHEEP	WOOL
7.	MOUNTAIN	PEAK	SNOW	SKY
8.	CHEESE	CRACKER	MILK	CREAM
9.	CITIZEN	CIVILIAN	COMRADE	COMMON
10.	BOOT	FOOT	WALK	TRAVEL
11.	MEMORY	THINK	MIND	CONSIDER
12.	SEW	DRESS	SEAM	FABRIC

APPENDIX C

Transgression Conditions:

Administration sheet for "Creative Association Test"

employed by confederate in Experiment 1

CREATIVE ASSOCIATION TEST
FORM A

	<u>STIMULUS WORDS</u>	<u>ANSWER</u>
1.	PROFOUND COMPLEX DEEP	CORRECT
2.	CHAMBER STAFF HALL	CORRECT
3.	RICHES TREASURE JEWEL	INCORRECT
4.	GUN BOW KNIFE	CORRECT
5.	BELL HIGH TOLL	CORRECT
6.	TOWN CITY VILLAGE	CORRECT
7.	SHUTTER FILM FILTER	CORRECT
8.	WASHER SHOPPING WINDOW	INCORRECT
9.	FACE SOAP OILY	CORRECT
10.	RIVER STREAM LAKE	CORRECT
11.	SUN EARTH MOON	INCORRECT
12.	WISH HOPE DREAM	CORRECT

APPENDIX D

Transgression Conditions:

Administration sheet for "Creative Association Test"

employed by subject in Experiment 1

CREATIVE ASSOCIATION TEST
FORM B

	<u>STIMULUS WORDS</u>			<u>ANSWER</u>
1.	LIBRARY	HOSPITAL	MUSEUM	INCORRECT
2.	SQUARE	BOX	CUBE	INCORRECT
3.	MUTTON	LAMB	SHEEP	CORRECT
4.	STEM	FLOWER	LEAF	INCORRECT
5.	WHISTLE	BLOW	TRAIN	INCORRECT
6.	MEMORY	THINK	MIND	INCORRECT
7.	MUSIC	SONG	SOUND	INCORRECT
8.	CHEESE	CRACKER	MILK	CORRECT
9.	MOUNTAIN	PEAK	SNOW	INCORRECT
10.	BOOT	FOOT	WALK	INCORRECT
11.	CITIZEN	CIVILIAN	COMRADE	INCORRECT
12.	SEW	DRESS	SEAM	INCORRECT

APPENDIX E

No-Transgression Condition:

Answer sheet for "Creative Association Test"

employed by subject in Experiment 1 and in Experiment 2

CREATIVE ASSOCIATION TEST
FORM A

ANSWER SHEET

1.	HAPPINESS	WANT	THOUGHT
2.	SLEEP	DREAM	PROBLEM
3.	STORE	AUTOMOBILE	CLOTHES
4.	MUSIC	ROOM	LEGAL
5.	TOWER	BRIDGE	CHURCH
6.	REVOLVE	ORBIT	LIGHT
7.	HAND	PIERCE	KILL
8.	PROVINCE	COUNTRY	CAPITAL
9.	DIAPHRAGM	LENS	PRINT
10.	WASH	CLEAR	SKIN
11.	BEND	DAM	VALLEY
12.	ANCIENT	RAID	STONE

APPENDIX F

No-Transgression Condition:

Answer sheet for "Creative Association Test"

employed by confederate in Experiment 1

CREATIVE ASSOCIATION TEST
FORM B

ANSWER SHEET

1. BANK
2. SMOKE
3. CORNER
4. HEAR
5. STALK
6. WOOL
7. RIDGE
8. CREAM
9. LOYAL
10. TRAVEL
11. ABILITY
12. FABRIC

APPENDIX G

Transgression Conditions:

Answer sheet for "Creative Association Test"

employed by subject in Experiment 1 and in Experiment 2

CREATIVE ASSOCIATION TEST
FORM A

ANSWER SHEET

1. DREAM
2. MUSIC
3. RAID
4. PIERCE
5. TOWER
6. PROVINCE
7. LENS
8. CLOTHES
9. SKIN
10. BEND
11. LIGHT
12. WANT

APPENDIX H

Transgression Conditions:

Answer sheet for "Creative Association Test"

employed by confederate in Experiment 1

**CREATIVE ASSOCIATION TEST
FORM B**

ANSWER SHEET

1. **BANK**
2. **CORNER**
3. **WOOL**
4. **BRANCH**
5. **STOP**
6. **ABILITY**
7. **HEAR**
8. **CREAM**
9. **RIDGE**
10. **SOLDIER**
11. **LOYAL**
12. **MACHINE**

APPENDIX I

No-Transgression Condition:

Administration sheet for "Creative Association Test"

employed by confederate in Experiment 2

CREATIVE ASSOCIATION TEST
FORM A

	<u>STIMULUS WORDS</u>			<u>ANSWER</u>
1.	WISH	HOPE	DREAM	CORRECT
2.	PROFOUND	COMPLEX	DEEP	INCORRECT
3.	WASHER	SHOPPING	WINDOW	CORRECT
4.	CHAMBER	STAFF	HALL	CORRECT
5.	BELL	HIGH	TOLL	INCORRECT
6.	SUN	EARTH	MOON	CORRECT
7.	GUN	BOW	KNIFE	INCORRECT
8.	TOWN	CITY	VILLAGE	INCORRECT
9.	SHUTTER	FILM	FILTER	CORRECT
10.	FACE	SOAP	OILY	CORRECT
11.	RIVER	STREAM	LAKE	INCORRECT
12.	RICHES	TREASURE	JEWEL	CORRECT

APPENDIX J

Transgression Conditions:

Administration sheet for "Creative Association Test"

employed by confederate in Experiment 2

CREATIVE ASSOCIATION TEST
FORM A

	<u>STIMULUS WORDS</u>			<u>ANSWER</u>
1.	PROFOUND	COMPLEX	DEEP	CORRECT
2.	CHAMBER	STAFF	HALL	INCORRECT
3.	RICHES	TREASURE	JEWEL	CORRECT
4.	GUN	BOW	KNIFE	CORRECT
5.	BELL	HIGH	TOLL	INCORRECT
6.	TOWN	CITY	VILLAGE	CORRECT
7.	SHUTTER	FILM	FILTER	INCORRECT
8.	WASHER	SHOPPING	WINDOW	INCORRECT
9.	FACE	SOAP	OILY	CORRECT
10.	RIVER	STREAM	LAKE	CORRECT
11.	SUN	EARTH	MOON	INCORRECT
12.	WISH	HOPE	DREAM	CORRECT

APPENDIX K

Transgression Conditions:

Administration sheet for "Creative Association Test"

employed by subject in Experiment 2

CREATIVE ASSOCIATION TEST
FORM B

	<u>STIMULUS WORDS</u>			<u>ANSWER</u>
1.	LIBRARY	HOSPITAL	MUSEUM	BANK
2.	SQUARE	BOX	CUBE	SURFACE
3.	MUTTON	LAMB	SHEEP	WOOL
4.	STEM	FLOWER	LEAF	STALK
5.	WHISTLE	BLOW	TRAIN	STATION
6.	MEMORY	THINK	MIND	PROBLEM
7.	MUSIC	SONG	SOUND	tone
8.	CHEESE	CRACKER	MILK	CREAM
9.	MOUNTAIN	PEAK	SNOW	SLOPE
10.	BOOT	FOOT	WALK	TRAVEL
11.	CITIZEN	CIVILIAN	COMRADE	PATRIOTIC
12.	SEW	DRESS	SEAM	FABRIC

APPENDIX L

No-Transgression Condition:

Answer sheet for "Creative Association Test"

employed by confederate in Experiment 2

CREATIVE ASSOCIATION TEST
FORM B

ANSWER SHEET

1. MONUMENT
2. STOP
3. SURFACE
4. HEAR
5. STALK
6. WOOL
7. RIDGE
8. CREAM
9. LOYAL
10. TRAVEL
11. ABILITY
12. FABRIC

APPENDIX M

Transgression Conditions:

Answer sheet for "Creative Association Test"

employed by confederate in Experiment 2

**CREATIVE ASSOCIATION TEST
FORM B**

ANSWER SHEET

1. SCHOOL
2. CORNER
3. WOOL
4. BUD
5. STOP
6. ABILITY
7. NOTE
8. CREAM
9. RIDGE
10. SOLDIER
11. LOYAL
12. MACHINE

APPENDIX N

**Questionnaire employed by
subject and confederate in Experiment 1**

SUBJECT INFORMATION SHEET

Please fill in the information requested below. Do not write your name on this form. All information is completely anonymous and will be destroyed when the research project has been completed.

AGE: _____

SEX: (CHECK ONE) MALE _____ FEMALE _____

RACE: (CHECK ONE) BLACK _____

ORIENTAL _____

WHITE _____

OTHER _____ (Please Specify) _____

RELIGION: _____

ACADEMIC STATUS: (CHECK ONE) FRESHMAN _____

SOPHOMORE _____

JUNIOR _____

SENIOR _____

ACADEMIC MAJOR: (If Selected) _____

MOTHER'S OCCUPATION: _____

FATHER'S OCCUPATION: _____

NUMBER OF BROTHERS: _____

NUMBER OF SISTERS: _____

COUNTRY WHERE YOU WERE BORN: (CHECK ONE)

UNITED STATES _____

OTHER _____ (Please Specify) _____

LIST LANGUAGES IN ADDITION TO ENGLISH IN WHICH YOU ARE FLUENT:

APPENDIX O

**Script employed by experimenter in
revealing transgression to confederate in
Discovered Transgression - No Implication condition in Experiment 2**

O. K. I guess I'll have to tell you what the experiment is really all about before we continue. The experiment actually doesn't involve what it supposedly did when you first came here. It actually involves the relationship between self-esteem and sensitivity to physical stimulation, not creativity and such sensitivity. So, the test you both just took was not a real test of creativity at all. It was simply made to appear that way. And, it was designed so that it would appear that one of the two subjects here had performed poorly. And [pointing at confederate], you just happened to be selected for this condition so that you would feel badly about yourself and so your feeling of self-esteem would be lowered.

You see on the form of that supposed test of creativity which you took, it was impossible for you to get most of the items correct, because for these items, none of the word answers on your answer sheet matched what appeared as the correct word answer on the administration sheet from which you were read the stimuli words. So, for all of these items, according to the procedure of the test, you received 'Incorrect' feedback. So that it would seem a believable test, you were given a chance to get a few of the items correct — I believe there were four of these. So, in this way, it appeared that you got only two correct answers and had done poorly.

On the form of the test which the other subject took, unlike with your test form, it was actually possible for him/her to get most of the items correct with the way that the answer sheet and administration sheet were designed, with the way that these words happened to appear on these sheets.

The intention of this whole experimental set-up, then, was to make it appear that one of you had performed poorly, and as I said, you [pointing at confederate] were just selected for this, particularly in relation to another subject's apparently acceptable performance.

APPENDIX P

**Script employed by experimenter in revealing transgression
to confederate in each of the Discovered Transgression - Implication
and Discovered Transgression - Implication with Disapproval conditions
in Experiment 2**

O. K. I guess I'll have to tell you what the experiment is really all about before we continue. The experiment actually doesn't involve what it supposedly did when you first came here. It actually involves the relationship between self-esteem and sensitivity to physical stimulation, not creativity and such sensitivity. So, the test you both just took was not a real test of creativity at all. It was simply made to appear that way with the help of the other subject [pointing at subject] who was in on the experimental set-up.

subject [pointing at subject] who was in on the experimental set-up. formed poorly [points at confederate] so that you would feel badly about yourself and so your feeling of self-esteem would be lowered. You see, on the form of that supposed test of creativity which you took, it was impossible for you to get most of the items correct, because for these items, none of the word answers on your answer sheet matched what appeared as the correct word answer on the administration sheet from which you were read the stimulus words. The other subject knew in advance that whatever answer you gave had to be wrong for all of these items. So for these, he/she gave you 'Incorrect' feedback. So that it would seem a believable test, you were given a chance to get a few of the items correct — I believe there were four of these. So, in this way, it appeared that you got only two correct answers and had done poorly.

On the form of the test which the other subject took [pointing at subject] unlike with your test form, he/she got more of the items correct than you had, because he/she had the correct word answer on his/her answer sheet for the majority of the items. So when he/she

gave his/her answer, it appeared to you that she had gotten the item correct.

The intention of this whole experimental set-up was to make it appear that you [pointing at confederate] had performed poorly, particularly in relation to the other subject's apparently acceptable performance.

APPENDIX Q

**Post-experimental questionnaire
administered to subjects in Experiment 2**

DIRECTIONS: Please answer each of the questions which appear below as accurately as possible. Rate each of the following statements according to how much each is indicative of your feelings. The number is to be circled which best represents your position on each scale.

1. How much guilt did you feel as a result of your participation in this study?

1 2 3 4 5 6 7 8 9 10

1 = Felt no guilt at all
10 = Felt extremely great amount of guilt

2. How much shame did you feel as a result of your participation in this study?

1 2 3 4 5 6 7 8 9 10

1 = Felt no shame at all
10 = Felt extremely great amount of shame

3. How much do you like the other subject?

1 2 3 4 5 6 7 8 9 10

1 = Do not at all like the other subject
10 = Very much like the other subject

4. How much do you desire to have further personal contact with the other subject when this study is over?

1 2 3 4 5 6 7 8 9 10

1 = Do not at all desire further personal contact with the other subject
10 = Very much desire further personal contact with the other subject

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