TEST ANXIETY, LOW SELF-ESTEEM, AND CONFORMITY

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TEST ANXIETY, LOW SELF-ESTEEM, AND CONFORMITY

THESIS

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BY

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CHAPTER I

PRESENTATION OF THE PROBLEM

Introduction

The study of an individual's conforming behavior to the group is now a well-known issue in social psychology. A person in a group is no longer indifferent to the members of that group. He may influence others, but he is more dependent on the majority of the group in defining his behaviors. Usually the group enforces its members to follow certain norms, stated or implicit. In case, if an individual does not conform to the norms, he may be accused as an outsider, and sometimes the others "gang up on" him. In order to defend himself, he may blindly follow the group's consensus, or at other times, based on his reason and fair judgment, he may struggle to assert his individuality.

The effect of a group to create pressure on a minority has been explored by Asch (2, pp. 451-457). A group of seven to nine students were called in a classroom and asked to select a line from the three distinctly different lines to be equal in length to the standard line. The subjects, except for one naive subject, were pre-arranged stooges, and they were instructed to call out judgments contrary to the naive subject. In this situation, the naive subject often yielded to the group's unanimously spurious judgment.
against his own convictions.

In the studies of conformity, a debate has gone on about whether conformity is an elicited behavior in certain situations or a trait of behavior highly characteristic of a person in numerous situations. The group of studies taking the former position pointed out the lack of significant relationships between personality traits, as measured by the various measurements and conforming behavior in a given situation, and maintained that conformity is highly situational, and prediction of behavior in a certain direction on the basis of personality attributes is only occasional and adventitious (1, 6, 7, 18).

However, those taking the latter position contended that there were certain persisting predispositions in a person regarding conformity or non-conformity. Thus, some people are readily susceptible to the social influence, whereas others are predisposed to be resistant against it. Furthermore, this individual response pattern has been found to be relatively consistent throughout the situational variations (10, 11, 14).

The third group of studies has shown a moderate position between the two extremes. The results of the studies in this group came to conclusion as follows: conformity is not a persisting personality trait but a highly transitory behavior displayed in a given situation. However, the personality determinants can not be completely ruled out. On the contrary, they play important roles in conformity behavior. Thus, both
personality and situational factors have been taken into account as determinants of conformity (3, 4, 9, 15, 21, 22, 23).

Among other personality traits, anxiety has produced conflicting findings in the studies of its relationship to conformity. A person's level of anxiety has been found to be either positively or negatively related to conformity in different studies. One of the speculative reasons is that the nature of instrument might not be sensitive to measure the anticipated construct (8, pp. 265-266). For example, Janis (11) suggested that the type of anxiety reaction is important in relation to conformity. Thus, anxiety being related to personal inadequacy may be positively related to susceptibility to social influence. He made this assumption on the basis of his "self-esteem hypothesis."

Janis (11, pp. 515-516), with his Yale group engaging in research on communication and attitude change, pointed out that yielding to social influence is a form of defensive behavior to ward off disapproval by one's fellowmen, and this predisposition is especially salient in those persons lacking in a sense of personal adequacy in connection with everyday interpersonal relationships. He stated:

Excessive compliance might therefore be a compensatory mechanism which leads to Chameleon-like changes in response to any prestigious communicator who attempts to influence them. Thus, the compliance manifested by people with low self-esteem might be a defensive form of behavior that permits the individual to agree with almost everyone in an attempt to guarantee that nobody will be displeased with him (10, pp. 191-192).
Cohen (5, pp. 103-104), in his analysis of self-esteem, pointed out that self-esteem is affected by a person's experiences of success and failure in the situations satisfying his central needs. He further said that self-esteem may be viewed as "a function of the coincidence between an individual's aspiration and his achievement of the aspirations." Moreover, the way he evaluates himself in the future situations is largely depending on his experiences in the past. Thus, a person with high self-esteem, based on his experiences of success, will expect to be more successful in meeting variety of needs in the future, whereas a person with low self-esteem will suffer failure experience. Being applied to the social pressure situation, the above discussion implies that a person with high self-esteem will evaluate himself higher than other persons and less responsive to the external influence, while a person with low self-esteem is more sensitive to unfavorable evaluation and more vulnerable to the external pressure.

If Cohen's assumption is warranted, it is also expected that self-esteem will be affected by success or failure experiences in testing situations. Then, Janis (12, p. 666) should receive credit for his predicting certain connections between self-esteem and test anxiety. He postulated that anxiety about academic achievement and intellectual capabilities in testing situations may be another form of expression of personal inadequacy. If this were true, there would be positive relationships between test anxiety and persuasibility.
Based on this assumption, Janis designed and executed a study to investigate relationships between the level of test anxiety and persuasibility, and the findings have been borne out in the expected direction. He concluded that the low test anxiety may indicate a relative absence of feelings of personal inadequacy.

Purpose of the Study

The present study has a threefold purpose. First, it will attempt to investigate whether the presentation of the bogus group norm is effective to exert influence on an individual subject to modify his original response in the direction of the norm. Secondly, it will investigate relationships between the subject's level of test anxiety and his conformity behavior in the simple judgmental situation. Thirdly, it will further explore whether test anxiety, as measured by a questionnaire, and low self-esteem, as measured by feelings of personal inadequacy, are comparable constructs.

Measurements

Two measurements were utilized in this study. Both are self-rating scales which can be administered in the classroom situations. Test Anxiety Questionnaire, College Form (thirty-nine items of which four are fillers), devised by Mandler and Sarason (16), was used for the purpose of screening the critical subjects from the pool of the population. Feelings of Inadequacy Scale (twenty-three items), by Janis and Field (13),
was used to study relationships of test anxiety to low self-esteem.

Test Anxiety Questionnaire contains questions dealing with the students' subjective experiences such as uneasiness, accelerated heartbeat, perspiration, emotional interference, and worry before and during a testing session in three kinds of testing situations: individual intelligence tests, group intelligence tests, and course examinations. The subjects were asked to mark their answers for each question anywhere along the fifteen-centimeter line, which was later converted to ten points in scoring (16, 17, 19, 20). A split-half reliability (N=100), with odd vs even questions, was computed to be .91 (Spearman-Brown), and the test-retest reliability (N=70) of six-week interval was .82(20). The validity of the scale has been found to be encouraging, on the basis of the correlation between an observer's behavior ratings of the subjects and their Questionnaire scores. Also, experimental data on relationships between the subjects' performance in intelligence tests and in learning and their level of anxiety on the basis of the Questionnaire showed that the high anxiety subjects performed significantly poorer than the low anxiety subjects (16, 19, 20).

Feelings of Inadequacy Scale consists of statements describing the subject's "anxiety in social situations, self-consciousness, and feelings of personal worthlessness." The subjects were requested to mark their answers on the five-
point continuum from "very often" to "practically never." A split-half reliability (N=185) was estimated to be .83, and reliability estimate based on Spearman-Brown formula was .91 (13, p. 58).

Hypotheses

Within the confines of the present experiment, the following hypotheses were formulated and tested.

1. The presentation of the bogus norm, which is ostensibly an average judgment of the in-group members, will be effective to exert influence on an individual subject to modify his previous judgment in direction of the norm.

2. The amount of conformity, when the subjects are exposed to the bogus norm, will be significantly different from that of the group unexposed to the norm, regardless of the level of anxiety, as measured by the Mandler-Sarason questionnaire.

3. A positive and significant relationship will be found between the level of test anxiety, as measured by the Mandler-Sarason questionnaire, and degree of conformity in the judgmental task.

In order to establish the comparability between test anxiety and low self-esteem, the following hypothesis was formulated and tested.

4. A positive and significant correlation will be found
between test anxiety, as measured by the Mandler-Sarason questionnaire, and low self-esteem, as measured by the Janis-Field Feelings of Inadequacy Scale.
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CHAPTER II

RELATED STUDIES

It has been pointed out in the previous chapter that the effect of a person's state of anxiety on conformity behavior is an unsettled issue. This chapter will review and analyze some of the studies previously done in this particular area.

General Anxiety* and Conformity

Lawson and Stagner (14, p. 308), in their research on attitude change under the group discussion situation, found that the subject who yielded to the majority view opposing his own view scored significantly higher on Taylor Manifest Anxiety Scale (Taylor MAS) than his counterparts. This result was in agreement with the studies by Crutchfield (4) and Smith and Richards (26). Smith and Richards (26, pp 125-126) showed that their subjects high in Taylor Manifest Anxiety (Taylor MA) readily yielded to the group's unanimous judgment in the perceptual judgmental situation. The results were discussed on the basis of "ego-defense hypothesis": people become anxious when confronted by the unanimous group response and resolve this dilemmatic situation by conforming to the group.

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*Term "general anxiety" will be used to designate anxieties other than test anxiety which will be specified in the later discourse.
On the contrary, another set of studies presented conflicting evidence. The studies by Mangan and his associates (17, p. 208; 18, pp. 146-7) resulted in no appreciable difference in the degree of conformity between the high anxiety and low anxiety groups, as selected on the basis of the obtained scores on Taylor MAS. However, if the conformity pressure became severe, the subjects low in anxiety were significantly more yielding to the group's unanimous judgment, compared with those high in the measure. This result was partially confirmed by the study of Tuddenham (20, p. 278). He stated that Taylor MA gave negative though non-significant correlations with yielding for both men and women.

A striking, rather interesting finding in the study with respect to relationship between anxiety and conformity is that the subject's sex is an important variable. Goldberg and his associates (6, p. 378) found that Taylor MA was negatively related to conformity among the males, whereas it was positively related to conformity among the females. On the basis of the results, they made an assumption that conformity in a social situation might have different meanings for the different sexes.

Later studies by Steiner and Rogers (27) and Vaughan (29, 30) confirmed the implication of sex difference on conformity, although one of Vaughan's studies (30) failed to confirm a positive relationship between anxiety and conformity among the females. However, he pointed out that high
conforming females appeared to be more anxious than low con-
forming females (30, p. 721). There are also evidences
reported in which the degree of conformity is different de-
pending on the subject's sex. Thus, the males are generally
less susceptible to the social influence or group pressure
than the females (4, 13, 28).

The sex difference in relation to conformity was
speculated in terms of sex role difference in our culture.
Vaughan stated:

The resistance to group pressure associated with
anxious males is a form of compensatory activity for
the social value of the qualities of masculinity and
a cultural pattern marked by a lack of sympathy to
emotional disorders in males (30, p. 722).

The studies cited above attempted to investigate rela-
tionship between the subject's chronic anxiety state, as
measured by the scales, and conforming behavior in the given
task. The remainder of this section will be concerned with
the studies in which conformity was treated as an independent
variable and anxiety as response. In this case, the subject's
anxiety will be expected to change in certain directions on
the dimension of increase or decrease, while conformity will
occur under given situations.

Hoffman (8, p. 384; 9, pp. 412-18), based on his Psycho-
analytic theory, suggested that conformity is "inner need"
which can be in origin traced back to the childhood experience
with the restrictive and coercive parents. The child repres-
ses hostile feeling toward such parents because the unfavorable
attitude raises guilt-feeling, develops positive attitudes, and later it is generalized to all authority figures and social norms. On the basis of this assumption, he expected that the more the subject had conformity-need, the more he would conform to the pressure, and the consequence of this behavior would reduce his anxiety. The results were borne out in the expected direction. The subjects high in the conformity-need, on the basis of California F Scale scores, when they conformed to social pressure, showed less anxiety, as measured by Galvanic Skin Response (GSR), than the non-conforming subjects. Low conformity-need subjects had not shown this response pattern.

The study by Lawson and Stagner (14) previously mentioned also presented evidences of which attitude shift was accompanied by decreases in palmar sweat and emotional tension. In other words, the more the subject was anxious, the more he conformed to the group's opinion. However, if he came to agree with the group, he was relaxed and became less anxious. They interpreted the results on the basis of learning theory: the drive reduction is rewarded and hence that response is strengthened. By the same token, the attitude shift was assumed to have been reinforced by the anxiety reduction (14, p. 309).

The studies cited above were further confirmed by the study of Holder (10, pp. 152-153). He found that the subjects attaining the highest scores on the value attitude inventory
showed the lowest anxiety mean on Welch Anxiety Index, whereas the lowest conformity subjects obtained the highest anxiety mean. However, the relationship between conformity and anxiety has been found to be curvilinear. Thus, the lower conformists were most anxious, but the extreme conformists were not less anxious than the average conformists. He conjectured that "being outside the culturally-defined range of permissible variation resulted in anxiety, but within the permissible range of variation the degree of conformity was not as closely related to anxiety."

In summary, the studies reviewed above have produced contradictory results showing that a person's anxiety state may facilitate or retard conformity, depending on the situations. However, it has been unequivocally agreed that once a person conforms to the pressure, whatever the situations are, he becomes less anxious and more relaxed. These findings imply that non-conformity is a person's last and most striving effort to resist against the social influence. They also imply that people usually remain anxious prior to conformity under such situations. Whether they yield to or rebel against the conformity pressure appears to be difficult to predict in the various situations.

Self-esteem, Test Anxiety, and Conformity

As noted previously, depending on how a person perceives himself in comparison with others in social situations, he may assert his position firmly or yield to the others'
influence.

Asch described the independents as follows:

Their independence seems the results of a basic confidence, sufficiently strong to control their doubt and to support a determination to hold their ground (1, p. 466).

About the yielder, he stated:

They suffered from a primary doubt, which sapped both their confidence and the energy to resist. Quickly they transformed their disagreement with the majority into a sign of personal defect (1, p. 470).

Janis (11, pp. 515-516), based on his "self-esteem hypothesis" mentioned in the previous chapter, postulated that those who suffer from personal inadequacy, shyness, and social inhibition in interpersonal relationship may be predisposed to be susceptible to the external influence more readily than others. He designated the cluster of these traits as "socially oriented anxiety," and he said it might be closely related with a person's self-esteem. Under this assumption, he designed and executed a study. The results showed that the subjects high in the "socially oriented anxiety" tended to be more suggestible to the persuasive communication than their counterparts.

Later studies by Crutchfield (4), Berkowitz and Lundy (2), Cohen (3), Linton and Graham (15), Di Vesta (5), and Nisbett and Gordon (21) presented further confirmatory evidences on relationships between self-esteem and conformity. They advocated that the more a person has confidence in himself, the more he is immune to any social influence or pressure. A
mechanism involved in their different reactions to the social pressure was described by Cohen (3, p. 166) as follows: those with high self-esteem identify with the majority influencing-agent, under the assumption that the others are reliable and favorable.

Janis (12, p. 663) expanded his hypothesis and made an assumption that anxiety being related to success and failure in the various testing situations, could be another indicator of "socially oriented anxiety." He utilized Mandler-Sarason Test Anxiety Questionnaire to measure the level of his subjects' test anxiety.

Mandler and Sarason (16, pp. 166-167) reasoned that test anxiety is a learned drive from the past experiences in the testing situations and it will be manifested as "feelings of inadequacy, helplessness, heightened somatic reaction, anticipations of punishment or loss of status and esteem, and implicit attempts at leaving the test situations" in the responses to the statements describing various experiences and feelings meeting in the testing situations.

It has been found that the Test Anxiety Questionnaire does not share much common variance with general anxiety. However, it is a reliable and valid measure to predict academic and intellectual performance, whereas the other anxiety scales including the Taylor MAS are not sensitive enough to do these functions (7, 22, 23, 25).

Back to Janis' study, it was found that a significant
and positive relationship existed between test anxiety and 
"socially oriented anxiety," and that those high in test anx-
xiety were more susceptible to the persuasive communication 
than those in low test anxiety (12, p. 666). Further 
confirmatory evidence was obtained from the studies by 
Meyers and Hohle (20), and Meunier and Rule (19). Meyers and 
Hohle (20, p. 436) found that among three anxiety scales (the 
others were Freeman "MA" and "PS" test and Taylor MAS), only 
Mandler-Sarason Test Anxiety Questionnaire was significantly 
and positively related to conformity measure in a given per-
ceptual judgmental task. Meunier and Rule (19, pp. 501-502) 
found, in their Asch-type situation, that the subjects high 
in test anxiety conformed to the group’s unanimous judgment 
significantly more than those low in test anxiety, as meas-
ured by Mandler-Sarason Test Anxiety scale.
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2. Berkowitz, Leonard and Richard M. Lundy, "Personality Characteristics Related to Susceptibility to Influence by Peers or Authority Figure," Journal of Personality, XXV (March, 1957), 306-316.


28. Tuddenham, Read D., "Correlates of Yielding to a Distorted Norm," Journal of Personality, XXVII (June, 1959), 272-284.


Preparations

Prior to the experiment proper, the Test Anxiety Questionnaire (3) and the Feelings of Inadequacy Scale (2) were administered on two separate occasions to the undergraduate students in the Introductory Psychology classes at North Texas State University. In order to prevent the subjects from being aware of any connection between administration of tests and the experiment, the measurements, under the titles of "Questionnaire on Attitude toward Testing Situations" and "Health and Adjustment Survey," were administered by the classroom instructors. Among 218 students who participated in this pre-experimental screening test, ninety-four male students completed Test Anxiety Questionnaire, and eighty-six male students completed both Test Anxiety Questionnaire and Feelings of Inadequacy Scale. Since the present study was concerned exclusively with the male subjects, the female students have not been counted into the subject pool.

Subjects

The critical subjects in this study were forty male undergraduates, twenty each for high and low anxiety groups, Most of them were freshmen. Originally, the high anxiety
group included the upper one third, and the low anxiety group included the lower one third, of ninety-four subjects on a frequency distribution of those who completed the Test Anxiety Questionnaire. Then, the subjects of each anxiety group were randomly assigned to the two sub-groups: half of the subjects in each group were exposed to the bogus norms (Bogus Norm Group), and the other half were not exposed to the bogus norms (No-bogus Norm Group). In short, the entire study was based on a 3 x 2 factorial design. But, for the final sample, each cell was filled by any ten subjects from the sub-group on the basis of priority of participating in the experiment. That is, whenever a particular cell was filled by the ten subjects, it was closed, and the rest of subjects were not utilized in this study.

Apparatus and Materials

The entire experiment was conducted in a Psychology Department classroom. The apparatus consisted of a slide projector and a screen. The screen was fixed on the wall, and the distance between the two instruments was constant throughout the experiment.

The experimental stimuli were the three drawings of circles which were different in size in proportion of 1 : 1 1/2 : 2 1/2. One drawing was mounted on each slide. The three drawings of circles were projected on the screen as black, filled circles (or "balls"). On the screen, the actual perimeter of Drawing I was thirty-seven inches; that
of Drawing II was fifty-six inches, and Drawing III has a perimeter of ninety-one inches.

Procedure

The entire experiment consisted of two different sessions. The subjects of the Bogus Norm Group participated in both Session I and Session II, and the subjects in the No-bogus Norm group served only for Session I.

Session I. For the Bogus Norm Group, the purpose of this session was to exert the effect of group on an individual subject and to lead him to believe that the bogus norm being presented in Session II was "really" the average judgment of his in-group members. The subjects always met in a group. The size of the group was flexible. Whenever more than four subjects were gathered, the group session was administered. A previous study (1, p. 328) has shown that the size of the group was not a significant variable when the norm was presented to the subjects by the experimenter, probably because the effect of the group pressure upon the individual subject in this situation was indirect and the subject might conform to the experimenter than the group.

When a group of subjects were seated in a line facing the screen, the recording sheet and pencil were distributed to them, and the experiment was administered by the following instructions:

This is a part of research to study human perception. The purpose of this experiment is to see how accurate
people can judge the size of the objects without using mathematical computation. We think people are different in accuracy in judging size, so probably some of you will be more accurate than others. I am going to show you three different drawings of circles or balls. You will see each drawing more than once. The reason for this is to give more chances to improve your judgment. I will show you each slide for two seconds. During this time, look at each drawing carefully, try to guess the length of the perimeter as accurately as possible, and then write down your judgment in inches on your sheet.

Two trials were given to the group. One trial was to expose three drawings in a sequence. The presentations of the drawings in each trial were constant in the order of the small (Drawing I) to the larger one (Drawing III).

The procedure for the subjects of No-bogus Norm Group was basically same as that for Bogus Norm Group. However, the experiment was administered whenever they appeared in the experimental room individually or as a group. They were given three trials (nine judgments) continuously without intermission.

Session II. This was the second meeting for all the subjects in the Bogus Norm Group. The experiment in this session was administered to each group member individually. Each subject received back his previous response sheet to which a new recording sheet was stapled. The bogus norms were typed on the new attached sheet, so he could look at his previous judgments and compare them with the bogus norms. This session was preceded by the following instructions:

This is a continuation of the previous session. You will see exactly the same drawings you saw before. However, this time I have put down the average judgment
made by the group of which you were a member in the
previous session. The first numeral represents the
average of the first drawing you will see, the second
numeral the average of the second one, and so on. The
reason for this is that we want to know whether your
judgment accuracy increases or decreases when you know
what the group as a whole thinks about the drawings.
I will show you each one for two seconds. During this
time, look at each one carefully, try to judge the
length of perimeter in inches objectively, and write
down your judgment next to the group average.

One trial was given to all the subjects in this session.

The bogus norms were manipulated to be different in
seven, eleven, and eighteen inches for three drawings respec-
tively from the subject's estimates in the second trial of the
previous session. The ratios of these distances were approxi-
mately 1 : 1 1/2 : 2 1/2.

The directions of bogus norms were determined as follows:
whenever the subject's estimate was shorter than the actual
length of perimeter for any drawing, the bogus norm was given
in the direction of increase, and if the subject's estimate
was longer than the actual length, the bogus norm was given
in the direction of decrease. For example, with the actual
perimeter of thirty-seven inches for Drawing I, if a subject
judged its length as thirty-four inches, the bogus norm would
be forty-one inches. But if he made his judgment as forty-
three inches, thirty-six inches would become a bogus norm.
In case, if some of the subject's estimates were longer than
the actual lengths, and some of them were shorter than the
actual lengths, the direction of norm would be determined
in terms of the majority among three drawings. Thus, if a
subject judged three drawings thirty-nine, fifty-one, and ninety-five inches respectively in the second trial of the previous session, the bogus norms of three drawings would be given in the direction of decrease. Therefore, in this case, thirty-two, forty, and seventy-seven inches would be bogus norms. If the subject's judgments of any two drawings were incidentally identical with the actual lengths, the bogus norms could be given in any directions, i.e. increase or decrease.

At the end of session, the subject was asked if he was aware of the actual purpose of the experiment, and the debriefing followed.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

RESULTS

The amount of change in the numerical value a subject made on any given drawing of a circle, from his judgment in the second trial to his judgment in the third trial, was taken as his conformity score for that drawing. The sum of his three individual conformity scores (for the three circles) rendered his total conformity score.

For the bogus Norm Group, the direction of change was taken into account. If a subject changed his previous judgment in the direction of the bogus norm, he showed positive conformity; if away from the bogus norm, he demonstrated negative conformity. No change in judgment was denoted as zero conformity.

For the subjects in the No-bogus Norm Group, the direction of change between the second and the third trials was randomly decided, since they were not given the bogus norm. Thus, for the half of the subjects in each cell who were selected at random, the conformity score for any given drawing of a circle was obtained by subtracting the subject’s estimate in the second trial from that in the third trial. For the other half, the conformity score determined by subtracting the subject’s estimate in the third trial from that in the second trial.
Table I summarizes analysis of variance of conformity under the variables of anxiety and norm.

**TABLE I**

**ANALYSIS OF VARIANCE OF CONFORMITY AS A FUNCTION OF ANXIETY AND NORM**

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Table I shows that the F test between Bogus Norm Group and No-bogus Norm Group is significant far beyond the .01 level of confidence. Therefore, the first and second hypotheses, that the presentation of the bogus norm will influence the subjects to modify their previous judgments in the direction of the norm and that a significant difference in judgment will exist between the Bogus Norm Group and the No-Bogus Norm Group, were supported.

But the F value between the high and the low anxiety groups resulted in zero, and the third hypothesis, that a positive and significant relationship will exist between the
level of anxiety and the degree of conformity, was rejected. The $F$ value of zero indicates most vividly that anxiety is not a significant variable in relation to conformity in this particular study.

Table II summarizes means and standard deviations on the Test Anxiety Questionnaire and the Feelings of Inadequacy Scale. It also presents the Pearson product-moment coefficient of correlation between two measurements, based on the scores of eighty-six subjects who completed the tests.

**TABLE II**

**MEANS AND STANDARD DEVIATIONS ON TEST ANXIETY QUESTIONNAIRE (TAQ) AND FEELINGS OF INADEQUACY SCALE (FIS), AND PEARSONIAN CORRELATION BETWEEN TWO MEASUREMENTS (N=86)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Means</th>
<th>S.D.</th>
<th>$r$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>TAQ</td>
<td>194.1</td>
<td>44.0</td>
<td>.554</td>
<td>.01</td>
</tr>
<tr>
<td>FIS</td>
<td>37.5</td>
<td>14.2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As expected, there was a positive and significant relationship between the Test Anxiety Questionnaire and Feelings of Inadequacy Scale. The $r$ value of .554 which was obtained is significant at better than the .01 level of confidence. Therefore, the fourth hypothesis, that a positive and significant relationship will exist between test anxiety and low self-esteem, was supported.
Furthermore, the two measurements have been found to deal with comparable constructs to the considerable extent.

Discussion

The most striking variable in respect to conformity behavior in this study is the presence or the absence of the bogus norm, not the level of anxiety. This is true since both the high anxiety and the low anxiety subjects changed their previous judgments in response to the bogus norm to the almost same degree. Therefore, the hypothesis on relationships between conformity and personality traits is rejected, and the position that conformity is determined by situational factors is primarily supported.

However, the hypothesis on the relationship between test anxiety and low self-esteem was supported. Thus, the present study gives warrant to Janis' assumption (3) that anxiety, being related to success and failure in the various testing situations, may be another expression of personal inadequacy.

Among the situational factors bearing on the results of the present study, the nature of stimuli and task, and the degree of group pressure need to be analyzed. Graham (2, pp. 246-249), in his review of the studies, pointed out that ambiguity of stimuli, difficulty of task, and subjective uncertainty about accuracy of judgment, are some of the important variables to effect directly the degree of conformity. Thus, the subjects are most readily susceptible to external
influence when the stimulus is extremely ambiguous and the
given task is sufficiently difficult that they can not be
certain about their judgment accuracy.

The physical stimuli in this study were not ambiguous.
However, the task itself was certainly difficult when the
subjects were required to judge the length of perimeter of
circles visually, using a small unit of measure (inch), with-
out relying on mathematical process. Most of the subjects
probably were not familiar with this kind of task before
they were called in the experimental room. Thus, in a situ-
ation like this, a subject could hardly be confident about
the accuracy of his judgment. This subjective uncertainty
about his judgment could well be a predominant factor over
the personality traits in all the subjects. Consequently,
when the norm, "an average judgment" of the group, was pre-
sented, the subjects naturally showed a marked tendency to
accept this information.

The present experiment differs from that of Asch (1)
in which the stimuli were almost completely unambiguous and
the task was extremely easy. Asch reported that ninety-
five per cent of the subjects in the control group made no
errors in judgment. Under an unambiguous situation, such
as Asch's, the subjects can be certain about their judgment
accuracy in the pre-influence session. Whether or not they
change their previous judgment in the post-influence session
may be due to individual differences. However, under a
situation in which a subject can not have confidence in his own judgment, it may be a natural tendency for him to modify his uncertain response to correspond to any "reliable" information.

What was the degree of group pressure in this research, compared with other studies? The group pressure in this study was relatively mild, since the bogus norm was reported by the experimenter and accordingly its effect on an individual subject was indirect. Under such a condition a subject might not feel as much pressure as would be present when he is confronted face-to-face with the group and hears directly its unanimous judgment.

In this mild pressure situation, resistance or "compensatory activity" on the part of the high anxiety subjects, and firm independence on the part of the low anxiety subjects, may not be expected, since these are reactions against pressures. In other words, the terms, "resistance" and "compliance" in a social situation should always presuppose existence of antitheses. In the absence of strong oppositions or pressures, it is hard to expect these dynamic behaviors.

Suppose certain external influences were not quite strong enough to awake a subject's predispositions and to mobilize them in different directions. Under these conditions, even if information was offered to modify his uncertain responses, the predispositions would remain static.
If this speculation were warranted, under such condition both the high anxiety and the low anxiety subjects would respond to that informational influence in a same direction.

The above assumption has the supporting evidence of a previous study by Mangan, Quartermain, and Vaughan (4, p. 208). In a study on relationship between anxiety and conformity in the perceptual judgment, they found no appreciable difference in the amount of yielding between the high anxiety and the low anxiety groups under a mild pressure situation. However, when conformity pressure increased, the high anxiety subjects conformed significantly less than the low anxiety subjects.

Besides the variables related to the task and to the group, there may be still other variables such as sex of the subjects which produce different effects on conformity. On this point of view, the debate on determinants of conformity discussed in an earlier chapter, often centers on one contested point without taking the various factors into account. The conformity may not be defined in terms of any single factor. Rather it appears to be an interactive behavioral phenomenon due to the multiple factors. Whether or not people conform to an external source of influence depends on various variables. It is hard to say that one person is predisposed to conform and that another person tends to resist certain influences without taking the situational factors into consideration, since he may or may
not conform to that influence under different conditions. All that can be said is that there may be certain conditions under which he conforms to or, on the other hand, resists an external influence along the variations of situations.

What needs to be done is to study systematically behavioral patterns of a relatively homogeneous group of the subjects under different situations, or under a same condition, to study the response patterns of the subjects of different personality attributes. At the present time, there is not enough information to give definitive answers to these topics. Thus, until enough data in this field are accumulated, and it becomes possible to derive general patterns of responses out of them, the conclusions can only be made tentatively and segmentally on the basis of the individual studies. Thus, the present study is concluded as follows: when the subjective uncertainty about judgment is great, and the group pressure is relatively mild, there are no significant differences in the degree of conformity between the high test anxiety and the low test anxiety males.


CHAPTER V

SUMMARY AND CONCLUSIONS

The present study attempted to investigate whether test anxiety is a significant variable in respect to the subject's conformity behavior in a simple judgmental situation. It also further explored Janis' assumption that test anxiety is another expression of personal inadequacy or low self-esteem.

The subjects for the experiment were forty male undergraduates, twenty each for high and low anxiety groups. They were selected on the basis of Mandler-Sarason Test Anxiety Questionnaire. Then, the subjects of each anxiety group were randomly divided into two sub-groups: half of the subjects in each group were exposed to the bogus norms (Bogus Norm Group), and the other half were not exposed to the bogus norms (No-bogus Norm Group). In short, the study was based on 2 x 2 factorial design.

The experimental task was perceptual judgments in which the subjects were required to judge visually the lengths of perimeters of three differently sized circles. The circles were projected on the screen by means of a slide projector. There were a pre-test and a post-test.

In the confines of the experimental situation, the following hypotheses were formulated and tested:

1. The presentation of the bogus norms will effect the
subjects on the post-test to modify their original responses in the direction of the norm.

2. Significant differences in the degree of conformity will be found between Bogus Norm Group and No-bogus Norm Group.

3. A positive and significant relationship will be found between the level of test anxiety and the degree of conformity.

Hypotheses one and two were supported, and hypothesis three was rejected. Therefore, the important variable was shown to be the presence or the absence of the bogus norm, not the level of test anxiety.

In order to establish the comparability between test anxiety and low self-esteem, the following hypothesis was formulated and tested:

4. A positive and significant correlation will be found between test anxiety, as measured by the Mandler-Sarason questionnaire, and low self-esteem, as measured by the Janis-Field Feelings of Inadequacy Scale.

This hypothesis was supported. Pearsonian correlation was computed, based on the scores of eighty-six subjects who completed both measurements in the pre-experimental tests.

The results showed that the situational factors were more significant variables than personality traits, as determinants of conformity behavior, in this study. Among the situational factors bearing on the results, the nature of
stimuli and task, and the degree of group pressure, were analyzed and discussed.

Thus, in the present experiment, the task was quite difficult, and accordingly the subject could hardly be confident in his own judgment. This subjective uncertainty about judgment could be a predominant factor over the personality trait, and consequently all the subjects might accept the bogus norm as "reliable" information when presented. On the other hand, since the group pressure was relatively mild, the subject's predispositions were not aroused and not mobilized in different directions. That is, conformity and resistance in social situations are responses against the source of external influence. In the absence of strong pressures, these dynamic behaviors are hardly expected. On the basis of the above conjecture, it is concluded that test anxiety is not a significant variable to affect degree of conformity when the subjective uncertainty about judgment is great and the group pressure is relatively mild.
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