The personality disposition of the motive to avoid success (Horner, 1968) is evaluated on theoretical and empirical ground. A situational interpretation is proposed as a more parsimonious explanation of the phenomenon. Presented are a series of studies examining the behavioral effects of the motive to avoid success: anxiety manifesting itself as a decrement in performance and a reluctance to communicate past successes and to present one's self as successful. These studies clearly support the situational interpretation which proposes that females behave in this fashion not as a result of a latent personality disposition, but as a result of attending to cues in the immediate situation which indicate on what quality or type of performance positive consequences or reinforcements are contingent. (Author)
The writing of Horner (1968, 1969, 1972) has produced considerable interest in the concept of the motive to avoid success. Working from the perspective of an expectancy-value theory of motivation (Atkinson & Feather, 1966), Horner conceptualized the motive to avoid success as an "enduring personality characteristic." This personality disposition supposedly results from the internalization of parental and societal values. Persons, who have internalized the belief or expectancy that "success in achievement situations will be followed by negative consequences" are classified as having a high motive to avoid success. Persons with this internal personality disposition or motive are said to have a "psychological barrier" to achieving success.

Most of the research on the motive to avoid success (recently discussed by Tresemer, 1974) has been descriptive and has involved only the measurement of the percentages of different populations who have high fear of success. There are only a few experiments (Horner 1968, Morgan & Mausner 1973, Peplau 1973) which have examined the effects of the motive to avoid success on behavior.
According to Horner (1972) the presence of a high motive to avoid success produces anxiety which can be manifested as a tendency to inhibit achievement activity and as an unwillingness to publicly disclose past success or attempts to disguise abilities and potentials.

In sum, Horner's conception is that of an enduring personality disposition which results in the expectancy, across situations, that high performance will be followed by negative consequences and therefore produces anxiety. The present perspective emphasizes that expectancies about the positive or negative consequences of performance are a function of cues in the specific situation. In more general terms, the difference between the two perspectives can be framed in terms of personality or internal determinants of behavior and situational determinants of behavior.

According to the current perspective, if the cues in a situation indicate that high performance will be followed by positive external consequences then people will perform at a high level. Conversely, if the cues in a situation indicate that high performance will be followed by negative external consequences and that a lower performance will be associated with positive external consequences then people will not perform at a high level.

To test the hypothesis that the quality of an individual's performance will be either high or low as a direct function of whether external rewards are associated with high or low performance a series of experiments were completed.
Experiment I

Method

Overview. As part of a study of impression formation and impression creation each subject took 3 different psychological tests. Each subject was told that a psychologist would form an impression of her based on her performance on the 3 tests. For half of the subjects the psychologist was described as approving high intelligence, and for half he was described as disapproving high intelligence. One of the tests was described as a measure of intelligence and was administered both before and after the experimental manipulation. The change in performance on this test was used as the measure of the dependent variable.

Subjects. A total of 18 females enrolled in an introductory psychology course participated in the study. The subjects were run individually, and were randomly assigned to one of two experimental conditions.

Procedure

Subjects reported individually for a study on the impression formation process. After a description of some examples and studies of impression formation each subject was told that a psychologist would form an impression of her based on her performance on three different psychological tests. Each subject was told the study also dealt with how people create positive impressions.

The experimenter explained that the three tests were short but that one of them, the Symbol Substitution Test (SST) was
unusual in format. Because of this, when the test was typically used by psychologists, people were given an opportunity to take one form of the test in order to get accustomed to the format. The experimenter explained that the subject would similarly take one form of the SST and after it was completed more details of the study would be explained.

The subject was then given a sheet describing the SST as a part of the Wechsler Adult Intelligence Scale and as measuring three basic components of general intelligence. After the subject read the paragraph description, the experimenter emphasized that the SST was a measure of intelligence.

The SST was then described to the subject. The SST consisted of a sheet with one letter of the alphabet listed beneath each of the digits 1-9. Beneath this there were four rows of the nine numbers randomly arranged with 25 digits in each row. Below each digit was a blank square in which the appropriate letter was to be written. The subject was told the test was scored in terms of the number of items completed in sixty seconds and accuracy. The SST was administered and then set aside.

Next the experimenter explained that psychologists often diagnosed and formed impressions of people based solely on psychological tests. Because this was such a common phenomenon it seemed worthy of detailed study. Each subject was then asked to write her name on an envelope and told to place each test, as it was completed, in the envelope. The experimenter then explained that any time someone was trying to create a positive impression it was useful to have some information about the likes and dislikes of the
observer. To this end the subject was given a written transcript of a discussion in which the psychologist, who would be forming the impression, described the kinds of people he liked. The experimenter then said that the only other information she could give the subject was that the psychologist was a 35 year old white male.

The statement of the psychologist's likes was exactly the same in both experimental conditions except for the last sentence. The statement was as follows:

I've thought quite a bit about the personal characteristics that make me really like someone regardless of their age, sex, or profession. I think the most important characteristic is sensitivity. Sensitivity to the needs of others. Someone who recognizes the personal needs of others such as security and acceptance. A sensitive person is a giving person.

In the approve-high intelligence condition the final sentence was: "Sensitivity is important, but unless the person is highly intelligent I can't relate to them because we're on different levels."

In the disapprove-high intelligence condition the final sentence was: "The smarter people are the less sensitive they are, and so I have trouble relating to them."

While the subject read the statement the experimenter supposedly scored the first SST. When the subject indicated she had carefully read the statement, the experimenter said she had scored the subject's test performance. The subject was then briefly
shown her test sheet with "92%" written boldly at the top and was told that she had scored in the ninety-second percentile of a recent sample of college men and women. The sheet was then crumpled and thrown in a waste basket. In order to eliminate any discussion of the score the experimenter averted her eyes when reporting the score and throwing the sheet away. She also quickly began describing the first of the three tests on which the psychologist's impression would be based.

The first test was a short version of the Stroop Color Test and was described as measuring creativity and flexibility. The experimenter tabulated the number of errors and amount of time required for the subject to verbally identify the ink color in which each of the 22 words was printed. When the test was completed, the subject inserted the tabulation sheet in her envelope.

The second test was the SST. The second administration consisted of a different form of the test than the first administration. The only difference between the two forms was the letters that served as the symbols. The order of administration of the two forms of the SST was counterbalanced within each condition. The subject was reminded that she was to try to create a positive impression. The subject was again given 60 seconds to work on the SST and at the end of that time she put her test directly into her envelope.

At this point, when subjects asked if they would be able to see the psychologist's impression. The experimenter told the subjects that while it would be impossible to learn the psychologist's impression, they could learn more about the nature of the
study in an office across the hall. After the subject departed, the experimenter retrieved the first SST from the waste basket for comparison with the second performance on the test.

Results

The measure of change in performance was obtained by subtracting the number of symbols correctly substituted on the first administration of the SST from the number on the second administration. One point was given for each correct symbol substituted. (One point was subtracted for each symbol incorrectly substituted, but overall the number of errors was negligible.) A positive difference score indicates an increase in the performance of the second administration of the SST and a negative difference score indicates a decrease in performance on the second SST.

The means of the difference scores on the two performances of the SST for the two experimental conditions are presented in the first row of Table 1. As predicted,

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
Condition & Difference Score \\
\hline
Approve & 3.68 (df=16, p<.01) \\
Disapprove & 0.25 (df=16, p>.05) \\
\hline
\end{tabular}
\caption{Means of the difference scores on two performances of the SST for the two experimental conditions.}
\end{table}

subjects in the approve-high intelligence condition increased their scores significantly more than subjects in the disapprove-high intelligence condition \(t=3.68, df=16, p<.01\). Further analysis revealed that all subjects in the Approve condition improved their performance while 5 of the subjects in the Disapprove condition decreased their performance. This difference was significant by Fisher's Exact Probability Test \(p<.05\).
Experiment II

Method

Experiment II was designed to determine whether the sex of the stimulus person forming an impression of the subject would affect the pattern of results. To accomplish this, Experiment I was replicated exactly, except the psychologist was described as a "35 year old white female." The subjects were 22 females, who participated under the same conditions described in experiment I.

Results

As in experiment I, the dependent variable was measured by the change in performance from the first to the second SST. The mean change scores for the two experimental conditions are given in the second row of Table 1. As predicted, subjects in the approve-high intelligence condition improved their performance significantly more than subjects in the disapprove-high intelligence condition (t=3.05, df=20, p<.01). Again, all subjects in the approve condition improved their performance and 5 subjects in the disapprove condition decreased their performance, which was significant by Fisher's Test (p<.05).

Experiment III

Method

According to the present theoretical orientation, the performance of males, as well as females, should directly follow the
external rewards. Since males are typically reported to be much lower in fear of success than females, the traditional conception would seem to predict that subjects in both experimental conditions would improve their performance on the second SST.

Experiment III was an exact replication of the first experiment, with the stimulus person described as a 35 year old white male psychologist. The subjects were 24 males, who participated under the same condition described in the previous experiments.

Results

The mean change scores for the two experimental conditions are given in the third row of Table I. As predicted, subjects in the approve-high intelligence condition improved their performance significantly more than subjects in the disapprove-high intelligence condition \((t=4.18, \, df=22, \, p<.01)\). Again, all subjects in the approve condition improved their performance and 7 subjects in the disapprove condition decreased their performance, which was significant by Fisher's Test \((p<.01)\).

Experiment IV

Method

To further demonstrate that males would alter their performance on a measure of intelligence as a function of external rewards, experiment II was replicated. The stimulus person was described as a 35 year old white female psychologist. The subjects were 18 males, who participated under the same conditions previously described.
Results

The mean change in performance scores for the two experimental conditions are given in the fourth row of Table 1. As predicted, subjects in the approve-high intelligence condition improved their performance significantly more than subjects in the disapprove-high intelligence condition ($t=4.31$, df=16, $p<.01$). Again all subjects in the approve condition improved their performance and 5 subjects in the disapprove condition decreased their performance, which was significant by Fisher's Test ($p<.05$).

Discussion

In a series of experiments it was demonstrated that both females and males will improve their performance on a measure of intelligence if high performance is approved, and will only decrease the performance if high performance is disapproved. None of the female subjects in experiments I and II in the Approve-High Performance condition decreased their performance even though they thought they had scored in the 92nd percentile.

Individual differences in fear of success were not assessed in the previous experiments. At the time the present research program was initiated, Horner's (1968) scoring system was undergoing revision. Since the revised system was not available, it was assumed that at least 50% of the female subjects would have been scored as high in fear of success. This assumption seemed especially reasonable since higher percentages are typically reported and because of the traditional female role orientations of the student population from which the subjects were drawn.
Given even the conservative estimate that 50% of the female subjects would be classified as high in fear of success, it is especially dramatic that none of the subjects in the approve-high performance condition ever decreased their performance. In fact, it was difficult to get the females to decrease their performance in the disapprove-high Performance condition.

In sum, the results of these four experiments are clearly in line with the present interpretation that situational cues about external rewards influence changes in performance rather than a hypothesized personality disposition.

Horner (1972) has also suggested that women, who are high in fear of success, may manifest their anxiety by not revealing past intellectual achievements. In discussing this phenomenon in the context of college students, she stated "they prefer not to divulge the fact that they are doing well or have received an 'A' to male peers, preferring instead to make their failures known (p.167)."

To test whether the situational interpretation would apply to this additional manifestation of fear of success a series of experiments were conducted. In these studies the subjects were given the opportunity to report either a high or slightly above average score on a measure of intelligence to someone who would be forming an impression of them. It was predicted that the tendency to choose to give a high or lower test score would be a direct function of whether external rewards were associated with high or low performance. Presumably, the personality interpretation
would predict that essentially the same number (approximately 50%) of low scores would be chosen regardless of the situational cues about rewards.

Experiment V

Method

Overview. As part of a study on impression formation subjects were to imagine they had taken two forms of six different tests. They were to select one of their two results on each of the six tests to send to the person who was going to form an impression of them. For half of the subjects the person was described as approving high intelligence and for half the person was described as disapproving high intelligence. The dependent variable was measured in terms of whether a high or slightly above average score on the test supposedly measuring intellectual dynamism was chosen to be sent to the other person.

Subjects. A total of 20 females enrolled in an introductory psychology course participated in the study. Depending on availability, subjects were either run in groups of 2 or individually. Subjects were randomly assigned to the experimental conditions and when subjects were run in pairs each subject was in a different condition.

Procedure

The experimenter began by explaining that this study of impression formation involved role-playing. The subjects were asked to imagine they were in a particular situation with a
specific goal. The situation was that a male psychologist would be forming an impression of them, and their goal was to create a favorable impression. The subjects were to imagine that four weeks earlier they had taken six brief psychological tests and that two weeks later they had taken a second version of the same six tests. Supposedly, they had taken the tests twice to account for mood changes but the two versions were merely different forms of the same test. The subjects were instructed to choose one of the two performances on each of the six tests and to put it in an envelope to be sent to the psychologist. The experimenter said the psychologist's impression would be based solely on the test results. The psychologist would have no information other than the test results and would not be able to check on the accuracy of the test results.

The subjects were then given a sheet to read which contained a restatement of the nature of the study and a statement of the kind of people the psychologist liked. They were to read this statement carefully because their goal was to make the psychologist like them. This statement was as follows:

I've thought quite a bit about the personal characteristics that make me really like someone regardless of their age, sex, or profession. I think the most important characteristic is self-confidence. I really like people who know who they are, what they want, and where they are going. A person who accepts himself for what he is, and isn't defensive.
The other thing that I really like, and this is probably as important as self-confidence, is sensitivity. Sensitivity to the needs of others. Someone who recognized the personal needs of others such as security and acceptance. A sensitive person is a giving person.

Oh yes; I also like spontaneity and a sense of freedom. A sense of freedom that recognizes the necessity of at least some rules, boundaries and responsibilities so that freedom can result in true creativity.

In the approve-high intelligence condition the last sentence in this second paragraph of this statement was: "Sensitivity is important, but unless the person is highly intelligent, I can't relate to them because we're on different levels."

In the disapprove-high intelligence condition the second paragraph concluded: "The person should have some intelligence, but I find that the smarter people are, the less sensitive they are and so I have trouble relating to them."

The experimenter then exchanged the description for a page which described what the six tests supposedly measured and the meaning of the test results. The subjects read the test explanations and the experimenter explained they could consult this page when selecting which test results to send to the psychologist. The six tests were: Introversion-Extroversion Scale;
Draw A Man Test; Doodle Test; Sentence Completion; Intellectual Dynamism (I.D.) and a Thematic Apperception Test item. The I.D. test, which was crucial to the dependent variable was described as follows:

The test questions are presented in the form of analogies to be completed. The test is designed to assess varying degrees of Intellectual Dynamism: a comprehensive construct which refers to the individual's verbal, quantitative, and analytical reasoning abilities. The numeric score is reported on a scale from 0 (low) to 100 (high).

The subject was then given a packet of twelve 3x5 cards containing her supposed performances on the tests. For the Introversion-Extroversion test and I.D. a number representing the total performance was written on the card. On one card for the I.D. test the score was 89 and on the other card the score was 71. The remaining cards contained relatively innocuous responses (e.g. a geometric doodle on one card and an intricate flowing doodle on another card; four short endings to the typed sentence stems on one card and another group of endings to a different set of sentence stems typed on another card, etc.).

The subjects were allowed to take as much time as necessary in deciding which of the two cards for each of the six test performances to insert in the envelope to send to the psychologist. This completed, the experimenter thanked the subjects and told them where they could obtain more information about the study.
Results

Willingness to reveal oneself as high in intellectual ability was based on whether the subject chose to send the high score (89) on the I.D. test or the lower score (71). The number of subjects selecting the high or low score in each experimental condition are presented in the first row of Table 2. When the psychologist approved of high intelligence all 10 subjects chose the high score but 7 subjects chose the low score when the psychologist disapproved high intelligence. This difference was highly significant using chi-square corrected for continuity ($X^2=7.91$, df=1, $p<.01$).

Experiment VI

Method

The situational interpretation predicts that males, as well as females, would alter their self descriptions as a function of external rewards. The personality approach, however, would seem to predict that the same percentage of males would choose to describe themselves as high in intelligence regardless of the external rewards and that this percentage should be relatively high. Experiment V was replicated exactly using 20 males who participated under the same conditions previously described.
Results

The subjects' choices on the I.D. test are given in the second row of Table 2. In the approve condition 80 percent of the subjects selected the high score and in the disapprove condition 80 percent chose the low score. This difference was also significant ($X^2=5.00$, df=1, $p<.05$).

Experiment VII

In suggesting that high fear of success females would be unwilling to reveal high intellectual performance, Horner (1972) stated that this tendency to disguise high ability would be manifested in relation to male peers. According to the situational analysis, the status or sex of the approving or disapproving observer does not matter so long as the actor values the observer's approval.

Experiment V was replicated exactly except the subjects were told to imagine the person forming an impression of them was a male student they would like to date and with whom they could have a really worthwhile relationship. The subjects were 40 undergraduate females.

Results

From row three of Table 2 it can be seen that the same strong pattern of results was obtained when an attractive male peer was forming an impression of the female subjects. The difference between the approve and disapprove conditions was highly significant ($X^2=10.7$, df=1, $p<.01$).
Experiment VIII

Finally, to counteract the potential criticism that the women in the approve condition chose the high test score but assumed that the male peer would have an even higher score one more experiment was conducted. This final study was a replication of experiment VII but the 24 female undergraduate subjects had to choose between an I.D. test score of 91 or 77. Further, the subjects were given the six test performances of the male peer who was going to form an impression of them. On the I.D. test the man's score was 84. Thus, if the subject chose the high test score she was describing herself as high in intellectual ability and higher than the man.

Results

Table 3 shows the subjects' choices on the I.D. test results. When the male indicated approval of high intelligence

91 percent of the subjects selected the high I.D. score even though this meant they were indicating they were more intelligent than the man. In the disapprove condition 91% of the subjects chose the lower score. This difference between the two experimental conditions was highly significant ($X^2=13.5$, df=1, $p<.01$).
Discussion

The results of these four experiments on self presentation clearly support the situational interpretation. When high intellectual ability was to be rewarded both men and women described themselves as high in ability but described themselves as low in ability when low intellectual ability was to be rewarded. In the final experiment, women, who anticipated that high ability would be rewarded, chose to describe themselves as higher in ability than the man whose approval they were seeking. The strength of these results is clearly inconsistent with Horner's personality approach.

Conclusions

The situational approach to explaining variations in performance and self-presentation suggests that characteristics of each specific situation signal whether rewards or punishments will be associated with high performance and positive self-presentation. The behavior of women and men will be directed toward obtaining what they consider to be maximal rewards in each situation, regardless of whether this means performing at a high, moderate or low level. Horner's conception of an enduring motive to avoid success suggests that persons with this motive will perform at only a moderate or low level in all competitive situations. The data from the current series of studies clearly support the situational approach and are not consistent with Horner's enduring disposition interpretation.
Another way to conceptualize the difference between the current situational approach and Horner's personality analysis is in terms of the locus of reinforcements controlling behavior. Working within the tradition of achievement motivation (Atkinson and Feather, 1966), which emphasizes internal feelings of pride and shame following success and failure, Horner suggests that the anxiety of women high in fear of success is associated with feeling "unfeminine." These internal feelings supposedly represent the crucial reinforcers which determine future behavior. According to the situational approach actual, or anticipated, external rewards and punishments guide behavior. The internal feelings are the consequences of the external reinforcers which direct behavior.

One major implication of the present research deals with the very concept of success. By dictionary definitions, success means obtaining desirable outcomes as a result of an action or performance. Thus, a distinction should be made between quality of performance and the consequences of the performance. Horner has made the valuable point that high performances by women often result in punishment. Although the quality of performance is usually directly related to the desirability of external consequences, there are times when this is not the case for both men and women. The important point is that an action is defined as a success only when the desirable consequences are greater than the undesirable consequences.

Horner has equated high performance on an intellectual test
or on classroom exams as synonymous with success without considering the desirability of the consequences. The situations in which women are likely to feel anxiety or fear, however, are those in which other people, especially valued males, are likely to disapprove and avoid them because they have performed well. A situation characterized by so much punishment is hardly descriptive of success. Indeed, fear of success is a misnomer. Women do not fear performing well on tasks involving intelligence rather they fear the punishments associated with high performance.

Women may be punished for "outstanding" achievements in contemporary society and therefore avoid doing well. This does not mean they have a psychological barrier to success. Rather they are behaving in a reasonable manner by avoiding punishment. Consequently, those interested in improving the conditions of women should direct attention to the reward structure of the immediate life situations of women and avoid concerns about supposed personality structures.

The situational analysis of the achievement behavior of women and men may also have implications for research on social sex roles as determinants of other behavior. A speculative extrapolation from the present research suggests that a supposedly internalized sex-role may be a much less reliable determinant and predictor of behavior than the reinforcement contingencies of specific situations.
Table 1

MEAN CHANGE IN PERFORMANCE

<table>
<thead>
<tr>
<th>Study Number</th>
<th>Subject</th>
<th>Stimulus Person</th>
<th>Total N</th>
<th>Approves high intelligence</th>
<th>Disapproves high intelligence</th>
<th>t</th>
</tr>
</thead>
<tbody>
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<td>I</td>
<td>Females</td>
<td>Male Psychologist</td>
<td>18</td>
<td>6.11</td>
<td>-.67</td>
<td>3.68**</td>
</tr>
<tr>
<td>II</td>
<td>Females</td>
<td>Female Psychologist</td>
<td>22</td>
<td>5.63</td>
<td>.33</td>
<td>3.05**</td>
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<tr>
<td>III</td>
<td>Males</td>
<td>Male Psychologist</td>
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<td>7.75</td>
<td>-4.33</td>
<td>4.18**</td>
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<tr>
<td>IV</td>
<td>Males</td>
<td>Female Psychologist</td>
<td>18</td>
<td>6.56</td>
<td>-5.00</td>
<td>4.23**</td>
</tr>
</tbody>
</table>

** p < .01
<table>
<thead>
<tr>
<th>Study Number</th>
<th>Subject</th>
<th>Stimulus Person</th>
<th>Total N</th>
<th>Condition</th>
<th>Approves high intelligence Scores</th>
<th>Disapproves high intelligence Scores</th>
<th>$\chi^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>V</td>
<td>Females</td>
<td>Male Psychologist</td>
<td>20</td>
<td></td>
<td>10 0</td>
<td>3 7</td>
<td>7.91**</td>
</tr>
<tr>
<td>VI</td>
<td>Males</td>
<td>Male Psychologist</td>
<td>20</td>
<td></td>
<td>8 2</td>
<td>2 8</td>
<td>5.00*</td>
</tr>
<tr>
<td>VII</td>
<td>Females</td>
<td>Male Date</td>
<td>40</td>
<td></td>
<td>18 2</td>
<td>2 18</td>
<td>10.70**</td>
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</table>

* $p < .05$

** $p < .01$
Table 3
CHOICE OF SCORE WHEN DATE HAS SCORE OF 84

<table>
<thead>
<tr>
<th>Score choices</th>
<th>91</th>
<th>77</th>
<th>(X^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approves high intelligence</td>
<td>11</td>
<td>1</td>
<td>13.50**</td>
</tr>
<tr>
<td>Disapproves high intelligence</td>
<td>1</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

** \(p < .001\)
Footnotes

1 Thanks are due to Joan Carangi and Nancy Newhouse for serving as experimenters in two studies.

2 The mean pretest performance for all subjects in these experiments was 41.8. There was never a significant difference between experimental conditions for the mean pretest scores in any of the four experiments.

3 Statistical significance was determined with two-tailed t tests.
REFERENCES


