In a one try at success condition, prisoners high in an Achievement-low in test anxiety (HL) performed significantly better than those low in Achievement-high in test anxiety (LH) in a noncontingent but not a contingent path. These results are consistent with previous findings involving prisoners and at variance with results derived from students. Under the two tries at success condition, HL's performed significantly better than LH's in a contingent but not a noncontingent path and hence are more in line with results obtained from students. The hypothesis that prisoners behave as if they were failure threatened is explored. (Author)
In a one try at success condition, prisoners high in n Achievement-low in test anxiety (HL) performed significantly better than those low in n Achievement-high in test anxiety (LH) in a noncontingent but not a contingent path. These results are consistent with previous findings involving prisoners and at variance with results derived from students. Under the two tries at success condition, HL's performed significantly better than LH's in a contingent but not a noncontingent path and hence are more in line with results obtained from students. The hypothesis that prisoners behave as if they were failure threatened is explored.
The present study was an attempt to substantiate the relationship between achievement motivation and future orientation for a prison population. The relationship was also evaluated when the subject was told he had more than one attempt at success.

The theory of achievement motivation (Atkinson and Feather, 1966, Chapter 20) has been elaborated recently by Raynor (1969) to embrace future orientation. Operationally in the laboratory future orientation is conceptualized as a contingent path where success at the immediate next step in the path is a necessary condition to proceed on to the next step and failure precludes any further work in the path (Raynor and Rubin, 1971). The contingent path is contrasted with a noncontingent path in which success or failure has no bearing on proceeding to the next step in the path. The theory implies that anticipation of future successes or failures at steps in the contingent path arouses a future oriented component tendency. For a success oriented individual, one whose motive to approach success ($M_S$) is relatively greater than his motives to avoid failure ($M_A$), that future oriented component tendency is positive and augments the positive value of his resultant achievement tendency to engage in the immediate task. For an individual who is failure threatened, one whose motive to avoid failure
(M_s) is relatively greater than his motive to approach success (M_a), this future oriented component tendency is negative. Added to his negative resultant achievement tendency this will create further inhibition to undertake the task. In other words, an interaction between achievement motivation and type of path is predicted. M_s > M_a individuals should perform better in a contingent than a noncontingent path while the M_a > M_s individuals should perform poorer in a contingent than a noncontingent path. The results of Raynor and Rubin (1971) employing four step and Entin and Raynor (1973) using two step paths confirm these predictions.

In an attempt to generalize these results to other populations Entin (1972) conducted a study similar in design to Raynor and Rubin (1971) within the walls of a maximum security prison. The subsequent results were counter to the previous findings. Prisoners who were M_s > M_a tended to perform better in the noncontingent than contingent path while M_a > M_s prisoners showed no difference in performance between the two paths. Entin interpreted these results by assuming that all prisoners behaved as if they were failure threatened. It was pointed out, however, that all this was tentative for the sample was small and possibly not representative of the whole prison population. Furthermore so little work with motivational variables has been done with prison populations that no past research could be cited for support.

Method

One hundred and one prisoners ranging in age from 19-25 years were solicited from Alto Prison, Alto, Georgia, for participation in this study. All subjects were selected from inmates currently enrolled in
academic classes at Alto.

Motive for achievement was assessed employing the projective technique devised by McClelland, Atkinson, Clark and Lowell (1953), but sentence cues were used in lieu of pictures (see Entin, 1973). The first third of the Test Anxiety Questionnaire (Mandler and Sarason, 1952) was employed to measure test anxiety. Each measure was then rank ordered and split at its respective median. Ss were then simultaneously classified high and low on Achievement and Test Anxiety to produce the four motive groups, HH, HL, LH, LL. It was assumed that Ss in the HL group were $M_A > M_M$, in the LH group were $M_A > M_S$, and in the HH and LL groups were $M_S = M_M$.

The dependent task was a booklet of arithmetic problems eight pages in length. Each page consisted of 72 addition problems (two digits added to two digits) constructed from a random table of numbers. The booklet was organized into four sections, demarked with blank green pages, of two pages each.

All Ss were read instructions leading them to believe that the test they were about to take had been adjusted to their ability and would provide them with a 50/50 chance of success. Ss in the one try contingent path were told that they had two minutes to work on each of the two pages comprising test 1. Only those who scored in the top half of the group for that test would be allowed to go on to test 2 and likewise successful at test 2 to go on to test 3, etc. Those who failed would remain in their seats until the testing was over. Ss in the one try noncontingent path were told essentially the same instruction, except regardless of their success or failure they all would have an opportunity to work on all the tests. Ss in
the two tries contingent path were given similar instructions except they were told that the two pages represented alternative forms of each test. Those who scored in the top half of the group on the first form (page) could skip the second form (page) and go right to test two, however, those who fail on form 1 could try again on form 2. Only those who failed twice would not be allowed to go on to test 2, etc. In the two tries noncontingent path Ss were told regardless of their success or failure on the two forms they would be allowed to go on to all the tests.

Upon completion of the first page in the math booklet all Ss were told to stop and the booklets collected.

Results and Discussion

The mean number of problems correct is depicted in Table 1. A 4 (Motivation) by 2 (Tries) by 2 (Experimental Condition) ANOVA revealed main effects for motivation and experimental condition ($F = 2.22, df = 3/84, p < .09$ and $F = 6.98, df = 1/84, p < .01$, respectively). More interestingly, within the one try condition, HL Ss performed better in the noncontingent than contingent condition ($t = 2.33, df = 84, p < .05$) while LH Ss showed no difference between the two path conditions. Furthermore, HL Ss performed significantly more problems than LH Ss in the noncontingent path ($t = 2.15, df = 84, p < .05$) while the same comparison in the contingent path was not significant. These results closely match those reported by Entin (1972) who also employed prisoners as Ss and are at variance with the results reported by Raynor and Rubin (1971) and Entin and Raynor (1973) where the Ss were college students.
In the two tries condition the comparisons between the noncontingent and contingent paths for the HL and LH motive groups were not significant. Within paths, HL Ss outperformed the LH Ss ($t = 1.49$, df $= 84$, $p < .08$) in the contingent path whereas in the noncontingent path this comparison yielded nonsignificant results. Results within the two tries condition appear similar to results obtained when college students are employed as Ss.

A further examination of the differences between the one and two tries conditions showed a tries by experimental condition interaction within the HL motive group but no such interaction within the LH motive group. That is, Ss in the HL group performed better in the one try than two tries condition when faced with a noncontingent path while two tries produced higher performance than the one try condition within the contingent path ($t = 1.83$, df $= 84$, $p < .05$). This is further evidence that having two tries at success tends to mitigate, for the HL Ss at least, the strong difference observed between the paths in the one try condition.

To interpret what occurred in the two tries condition, consider a S in the noncontingent path working on alternate form 1. If he succeeded, he was free to move on, but if failure occurred, that S was constrained to work on alternate form 2. This tended to give the noncontingent path the appearance of a contingent path. Hence inhibition increased and, as would be expected, "failure threatened" Ss performed less well. Alternately, as the contingent path took on aspects of a noncontingent path (a S could go on to alternate form 2 regardless of whether failure occurred on alternate form 1), inhibition decreased and, as expected, "failure threatened" Ss performed better.

In general, the above patterns of results demonstrate that individual differences in achievement motivation appear to be related to performance
in prisons in the same way they are related in college students. Findings for the one try condition replicate those reported by Entin (1972). In particular, M prisoners performed better in the noncontingent than contingent path. Entin’s hypothesis that prisoners appear to behave as if they were all failure threatened is viewed as consistent with these findings. Raynor’s elaborated theory (1969, 1971) predicts that failure threatened Ss should perform better in the noncontingent than contingent path.
References


Entin, E.E. Effect of future orientation and achievement motivation on performance in a maximum security prison population. Final report to Ohio Division of Corrections, Grant No. 236-00-F-70, February, 1972.


Table 1

Number of Problems Correct as a Function of Motive Groups, Tries, and Experimental Condition

<table>
<thead>
<tr>
<th>Motive Group</th>
<th>One Try</th>
<th></th>
<th>Two Tries</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>noncont</td>
<td>contingent</td>
<td>noncont</td>
<td>contingent</td>
<td>noncont</td>
<td>contingent</td>
<td>noncont</td>
<td>contingent</td>
</tr>
<tr>
<td></td>
<td>n</td>
<td></td>
<td>n</td>
<td></td>
<td>n</td>
<td></td>
<td>n</td>
<td></td>
</tr>
<tr>
<td>High-low</td>
<td>6</td>
<td>36.00</td>
<td>8</td>
<td>23.50</td>
<td>8</td>
<td>27.38</td>
<td>8</td>
<td>28.25</td>
</tr>
<tr>
<td>High-high</td>
<td>5</td>
<td>36.80</td>
<td>7</td>
<td>20.70</td>
<td>9</td>
<td>32.11</td>
<td>6</td>
<td>26.17</td>
</tr>
<tr>
<td>Low-low</td>
<td>9</td>
<td>22.89</td>
<td>4</td>
<td>25.50</td>
<td>5</td>
<td>34.40</td>
<td>5</td>
<td>26.40</td>
</tr>
<tr>
<td>Low-high</td>
<td>4</td>
<td>22.25</td>
<td>6</td>
<td>22.33</td>
<td>5</td>
<td>25.20</td>
<td>5</td>
<td>19.80</td>
</tr>
</tbody>
</table>

Note: MSE = 98.37, df = 84