Perry and Dickens (1984) found that noncontingent-trained students perceived they had less control and manifested a helpless attribution profile compared to contingent-trained students in a simulated college classroom. To examine the effects of varying amounts of noncontingent success on students' perceived control and attributions, 90 students at the University of Manitoba, Canada completed an aptitude test and were assigned to one of five contingency training conditions: contingent, noncontingent-low success, noncontingent-medium success, noncontingent-high success, and no feedback. Following the aptitude test they responded to a four-item attribution profile and to two items measuring perceived control and perceived success. The results indicated that only the noncontingent-low success students manifested a helpless attribution profile and perceived they had significantly less control than did the contingent, no feedback, noncontingent-medium success, or noncontingent-high success groups. The results are consistent with attributional egotism, which is defined as the tendency to take credit for success and deny blame for failure. (LLL)
Perceived Control in the College Classroom: Attributions and Noncontingent Success

Wenda J. Dickens

University of Manitoba

Running Head: PERCEIVED CONTROL

Presented at the 92nd American Psychological Association annual meeting in Toronto, August, 1984. Requests for reprints should be sent to Wenda J. Dickens, Department of Psychology, University of Manitoba, Winnipeg, CANADA R3T 2N2.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY Wenda J. Dickens TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."
ABSTRACT

Recently Perry and Dickens (1984) found that noncontingent-trained students perceived they had less control and manifested a helpless attribution profile compared to contingent-trained students in a simulated college classroom. The present study further examined this issue by examining the effects of varying amounts of noncontingent success on students' perceived control and attributions. Students completed an aptitude test and received contingent, noncontingent, or no feedback. Noncontingent students received low-success (25% correct), medium-success (50% correct), or high-success (75% correct). Results indicated that only the noncontingent low success students manifested a helpless attribution profile and perceived they had significantly less control than contingent, no feedback, noncontingent medium-success, or noncontingent high-success. The results were discussed in terms of Abramson, Seligman, and Teasdale's (1978) cognitive model of learned helplessness and attributional egotism (Snyder, Stephan, & Rosenfield, 1978).
PERCEIVED CONTROL IN THE COLLEGE CLASSROOM: ATTRIBUTIONS AND NONCONTINGENT SUCCESS

Attribution theory provides a theoretical framework for examining the concept of control within an educational context, and focuses on students' explanations for their successes and failures. Weiner (1979) proposes that students interpret a particular outcome as a success or failure then form a causal explanation (attribution) of the success or failure. The attribution can affect future expectations and emotional arousal which in turn may influence achievement, motivation, or self-esteem. Students' sense of control will be greatest when they make attributions to causes that are internal and controllable (i.e., effort) and least when they make attributions to causes that are external and uncontrollable (i.e., luck).

Empirical evidence has demonstrated the significance of students' perceived control for academic outcomes (e.g., Covington & Omelich, 1981; Perry & Dickens, 1984; Stipek & Weisz, 1981). For example, Stipek and Weisz (1981) reviewed the research on the effect of perceived personal control on children's academic achievement and concluded that "performance is optimized when children accept responsibility for their successes, and understand that effort and persistence can overcome failures" (p. 130).
Academic performance is enhanced when children expect that both their successes and failures are under their personal control.

Recently Perry and Dickens (1984) examined the effects of response-outcome contingency training, instructor expressiveness, and incentive on student achievement and attributions in a simulated college classroom. Perry and Dickens developed an aptitude test as the contingency training manipulation. The aptitude test provided contingent, noncontingent or no feedback to students. Students took the aptitude test, completed an attribution questionnaire, then viewed a videotaped lecture varying in instructor expressiveness (low, high). At the conclusion of the lecture students took an achievement test and completed another questionnaire. The results indicated that immediately after the aptitude test, noncontingent students perceived they had less control than contingent or no feedback students, and they put more emphasis on external attributions to explain their aptitude performance. After exposure to the instructor during the lecture phase noncontingent students were unable to benefit from the effects of the high expressive instructor. They did not increase their achievement performance or feelings of self-confidence as did the contingent or no feedback students.
Perceived Control

The purpose of this study was to extend the findings of Perry and Dickens (1984) by examining the effects of varying amounts of noncontingent success on students' perceived control and attributions. The results of the Perry and Dickens study suggest that exposure to noncontingent outcomes had a negative impact on students. Noncontingent students had lower perceived control and made more external attributions. However, will students' perceptions of control and their attributions be similar when they receive noncontingent success? If students are given a large number of correct answers independent of their actual ability will they accurately perceive they have little control over their success, or will they take personal responsibility for their outcomes? Seligman (1975) stated that any noncontingent outcome whether it is noncontingent success or noncontingent failure will have a negative effect on a person's perceptions of control. Others, such as Miller and Norman (1979), have argued that helplessness deficits will occur only after noncontingent aversive outcomes such as failure.

Method

Subjects

The subjects were 90 male and female volunteer introductory psychology students at the University of Manitoba. Subjects signed up for a session and experimental conditions were randomly assigned to sessions. All subjects
received credit toward a course requirement for participation.

Materials

**Contingency Task.** A 50-item aptitude test developed by Perry and Dickens (1984) was used to manipulate response-outcome contingency and amount of noncontingent success. Multiple-choice answer sheets were designed with four alternatives per question. Each alternative provided feedback indicating whether the students' choice was correct (C) or incorrect (X). Two versions of the answer sheet provided either contingent or noncontingent feedback. The contingent answer sheet contained response alternatives labeled correctly, and a "C" could only be obtained by selecting the right alternative. The noncontingent answer sheets contained some questions which had all four alternatives designated as correct and other questions having all four alternatives marked incorrect. The three noncontingent groups differed in the number of questions with all alternatives designated as correct. The number of correct questions for each group were: (a) noncontingent low-success = 13 (25%), (b) noncontingent medium-success = 25 (50%), (c) noncontingent high-success = 36 (75%). A standard IBM answer sheet was used for the no feedback condition. Subjects recorded their responses on the answer sheet and received no feedback as to the accuracy of their choice.
Dependent measures. Students responded to a four-item attribution profile and to two items measuring perceived control and perceived success. For the attribution profile, students rated the extent to which each of the four causes, ABILITY, EFFORT, TEST DIFFICULTY, LUCK determined their performance (1=Not at all, 10=Entirely). Students rated how much control they had over their performance (1=No control, 10=total control), and how successful they were on the aptitude test (1=unsuccessful, 10=successful).

Procedure

Before the contingency task all subjects were informed that the experiment involved teaching processes, and that they would write an aptitude test and view a videotaped lecture. The subjects were assigned to one of five contingency training conditions: contingent, noncontingent-low success, noncontingent-medium success, noncontingent-high success, and no feedback. They were tested in groups of 15-20 and were seated alternately with a seat between each. The contingent and noncontingent subjects were instructed on how to use their ink-markers and the invisible answer sheets. The no feedback subjects received instructions on the use of the IBM answer sheets. All subjects then received their contingency training by writing the aptitude test using the invisible answer sheets or IBM answer sheets. Following the aptitude test, they
completed the attribution questionnaire. All subjects watched a videotaped lecture presented on an Advent 1000A Videobeam Color Projection Unit which projects a 2.2 meter diagonal color image. The lecture topic was sexrole stereotyping.

Results and Discussion

The perceived success measure was included as a manipulation check of the amount of noncontingent success manipulation. A one-way analysis of variance (ANOVA) indicated significant differences, $F(4,85) = 9.43, p < .001$. The noncontingent low success students felt the least successful ($M=2.29$). The contingent ($M=4.79$), no feedback ($M=4.88$), and noncontingent medium success ($M=4.14$) did not differ in their perceptions of success, but all felt more successful than the noncontingent low group. The noncontingent high students ($M=6.56$) felt significantly more successful than both noncontingent medium and contingent students. See Table 1 for means and standard deviations.

The perceived control measure was analyzed using a one-way analysis of variance (contingent, no feedback, noncontingent low-success, noncontingent medium-success, noncontingent high-success). The analysis indicated significant differences in perceived control among the five groups, $F(4,85) = 10.93, p < .001$. Noncontingent low-success students ($M=2.94$) perceived they had less control
than contingent (6.05), no feedback (5.53), noncontingent medium-success (5.38) and noncontingent high-success students (7.13). The noncontingent high-success students felt significantly more in control than noncontingent medium-success students. Among the three noncontingent groups, the greater the noncontingent success, the greater the perceived control. Both noncontingent medium and high success students felt they had the same degree of control as contingent and no feedback students.

Multivariate and discriminant function analyses were used to assess the effects of contingency on students' attributions using the four items: ability, effort, test difficulty, luck. The overall multivariate ANOVA was significant, $F(16, 248.10) = 3.84$, $p < .001$. A discriminant function analysis was conducted to provide further clarification of the causal attributions. The discriminant function suggests an internal attribution locus which is represented by high structure correlation loadings on the internal attribution factors, ability ($r = .65$) and effort ($r = .87$), coupled with some emphasis on the difficulty of the contingency task ($r = .35$) and a negative loading on the external factor of luck ($r = -.35$). The group centroids for the groups were: contingent, $M = 3.26$, no feedback, $M = 3.61$; noncontingent low success, $M = 1.27$; noncontingent medium success, $M = 3.05$; noncontingent high success, $M = 3.74$. These indicate that the noncontingent low-success students have a
more external locus than the other groups, i.e., only the low success noncontingent students are manifesting a helpless attribution profile.

Exposure to noncontingent success did not produce the cognitive perception of uncontrolability. The helpless responses normally associated with exposure to noncontingency were observed only in the noncontingent students who received very low scores (25% correct). Contrary to helplessness theory predictions (Abramson et al., 1978) noncontingent success did not produce helplessness deficits. Students in the high noncontingent success group felt in control of their performance and saw themselves (their ability and effort) as the cause of their aptitude performance. These results are consistent with attributional egotism which is defined as the tendency to take credit for success and deny blame for failure (Snyder et al., 1978). The students who felt most successful (noncontingent-high, no feedback, contingent) and had greater perceived control also had a greater internal attribution locus; i.e., they took credit for their success. The group that felt least successful and least in control also made more external attributions; i.e., they denied blame for their failure.
TABLE 1

Means and Standard Deviations for the Dependent Measures

<table>
<thead>
<tr>
<th></th>
<th>Contingent</th>
<th>No Feedback</th>
<th>Noncontingent Success</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Control</td>
<td>Success</td>
<td>Ability</td>
</tr>
<tr>
<td></td>
<td>6.05</td>
<td>4.79</td>
<td>5.89</td>
</tr>
<tr>
<td></td>
<td>(1.96)</td>
<td>(2.18)</td>
<td>(2.11)</td>
</tr>
<tr>
<td></td>
<td>5.53</td>
<td>4.88</td>
<td>5.59</td>
</tr>
<tr>
<td></td>
<td>(2.21)</td>
<td>(2.39)</td>
<td>(2.15)</td>
</tr>
<tr>
<td></td>
<td>2.94</td>
<td>2.29</td>
<td>2.82</td>
</tr>
<tr>
<td></td>
<td>(2.19)</td>
<td>(2.47)</td>
<td>(1.47)</td>
</tr>
<tr>
<td></td>
<td>5.38</td>
<td>4.14</td>
<td>4.90</td>
</tr>
<tr>
<td></td>
<td>(1.83)</td>
<td>(1.68)</td>
<td>(2.34)</td>
</tr>
<tr>
<td></td>
<td>7.13</td>
<td>6.56</td>
<td>6.19</td>
</tr>
<tr>
<td></td>
<td>(1.09)</td>
<td>(1.26)</td>
<td>(1.87)</td>
</tr>
</tbody>
</table>
REFERENCES


