Attributional and Emotional Concomitants of Control Relinquishment

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Past research on the relinquishment of control has assumed that when individuals give up task control they do so because they believe another person possesses a superior and stable controlling response. To date, however, no attempt has been made to assess directly the attributional concomitants of control relinquishment. In the present study, pairs of subjects worked independently on an initial 25-trial task and received feedback indicating that their performance was superior, comparable, or inferior, relative to their partners' performances. On a second task, subjects combined their efforts, but only one could work on a given trial, necessitating a decision concerning how many trials each would attempt to solve. Subjects made these decisions and then evaluated the performances on the first task in terms of quality and causal structure. Results indicated that more trials were allocated to the superior member of the pair when performances on the first trial differed to a high degree. More importantly, allocation of trials to the superior member of the pair was accompanied by attributions for initial task performance that were more stable and global, but not more internal, compared with the evaluation of the inferior member's performance in each dyad. These results are consistent with the presumed conceptual underpinnings of the control relinquishment process and demonstrate an important specificity in the use of causal attribution dimensions. Subjects' affective reactions were also influenced by performance feedback and indicated that emotional experiences were more negative when subjects performed at an average level as opposed to an above average level. This tendency was greatest, however, when the partner had above average performance. Taken together, these results suggest somewhat different influences of performance feedback on attributions and affect.

The relinquishment of control represents a decision process of both theoretical and practical importance. A large number of day-to-day decisions can be

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characterized by the giving up of control over a task to another person. For example, the delegation of responsibility represents a control relinquishment decision of central importance for effective management (e.g., Beach, 1975; Cooper & Marshall, 1977; Dowling & Sayles, 1978; Pfiffner, 1958). The request for aid in solving a problem also requires giving up partial control over the eventual outcome. In health care settings, the seeking of treatment and compliance with a prescribed regimen require a patient to give up partial control over daily activities (cf. Rhodewalt & Strube, 1985). Similarly, cooperation requires all participants to relinquish some control to guarantee effective performance. From a purely theoretical perspective, control relinquishment lies at the heart of what is being recognized as a key human motive: the need to experience a perception of control over the environment (e.g., Langer, 1983; Perlmutter & Monty, 1979; Rodin, Bohm, & Wack, 1982). A complete understanding of control motivation will benefit from a consideration of the conditions under which people willingly give up control.

Initial interest in the conceptual underpinnings of control relinquishment arose with respect to the effects of controllability over stressful stimuli (Miller, 1980). Counter to the internality hypothesis, which suggests that control over stressful stimuli is always preferred to no control, Miller (1980) proposed a "minimax" hypothesis. According to this view, humans attempt to minimize the maximum danger to which they are exposed, a motive that should lead them to readily give up control if someone else's performance can provide a more stable guarantee of minimum danger. Miller tested these alternative hypotheses in a study in which subjects competed against a confederate on an initial reaction-time task and learned that they had superior, comparable, or inferior reaction-time abilities. During a second phase of the study, subjects were asked to decide who should control the reaction-time switches on a task in which the subject and confederate would be yoked and the failure to respond quickly would result in shock for both participants. As might be expected, the majority of subjects who thought they were superior or comparable to their partners in terms of reaction time chose to keep control of the switches on the second task. More importantly, the majority of subjects who thought their partners had superior reaction times chose to relinquish control on the second task, consistent with the minimax view.

More recent research has extended understanding of control relinquishment in several important ways. For example, it is now evident that control is not always relinquished in a completely rational manner. Strube and Werner (1985; see also Strube, Berry, & Moergen, 1985) found that Type A individuals, who appear to have a high need for control, were more reluctant to relinquish control to a superior partner than were Type Bs (who appear to be less concerned about personal control). Miller, Lack, and Asroff (1985) obtained similar results, with the additional finding that inappropriate relinquishment strategies may be more characteristic of males than females. Strube and
Werner (1984) also found that individuals may fail to relinquish control under conditions conducive to eliciting psychological reactance (Brehm & Brehm, 1981). Finally, control relinquishment to superior others appears to be quite general, occurring regardless of whether the controlling response avoids shock (Miller, 1980), loud noise (Miller, Lack, & Asroff, 1985), or enhances the likelihood of winning a prize (Strube & Werner, 1984, 1985; Strube et al., 1985).

Control relinquishment has been demonstrated in a variety of settings and appears to be influenced by a number of individual difference and situational factors, but there has been little attempt to examine the types of attributions that accompany relinquishment of control. Although Miller’s (1980) minimax hypothesis was developed to account for influence of control in aversive settings, it provides a convenient heuristic for nonaversive or appetitive situations as well (e.g., the present study), particularly in its attributional implications. According to Miller (1980), the decision to relinquish control to another person, based on that person’s previous superior performance, should be accompanied by a belief that the high level of performance will reliably occur on future occasions. On an attributional level, control relinquishment should be accompanied by the assignment of a stable cause to another person’s superior performance. As has been demonstrated repeatedly (e.g., Weiner & Litman-Adizes, 1980; Weiner, Nierenberg, & Goldstein, 1976), it is the stability dimension underlying causal attributions that most influences future expectations for performance.

By contrast, the internality dimension should have little influence over relinquishment decisions, and only to the extent that internal causes are often assumed to be more stable than external causes (Miller, 1980). In other words, the minimax viewpoint suggests an important degree of specificity in the attributional comcomitants of control relinquishment: (a) more control is relinquished to individuals who exhibit superior task performance than to individuals who exhibit comparable or inferior task performance, (b) control relinquishment is accompanied by stable attributions for prior superior performance, and (c) control relinquishment is unrelated to the internal/external nature of attributions for prior performance. (A weaker version of this hypothesis would state that the internality dimension should be less related to control relinquishment than the stability dimension.) The above predictions were examined in the present study.

We also examined the global-specific attribution dimension as a concomitant of relinquishment decisions. Although the minimax hypothesis makes no predictions concerning global-specific attributions, we expected that control relinquishment would be accompanied by global attributions. Control relinquishment decisions are typically made in situations that differ from an initial performance setting along more dimensions than simple time displacement (i.e., stability dimension). The relinquishment of control should be
based in part on the assumption that another person will be able to adjust to minor changes in future performance settings (i.e., the basis for their prior superior performance is somewhat general in its influence).

A second major purpose of this study was to examine whether control relinquishment is influenced by locus of superiority. Given the presence of a widespread self-serving bias in attribution (e.g., Weary-Bradley, 1978), decision-makers may be somewhat egotistical in their performance evaluation and control allocation when they, instead of another person, have exhibited superior performance. In particular, a superior decision-maker may keep a proportionately larger amount of control than is relinquished by an inferior decision-maker under the assumption that his or her own superior performance is based on a more stable cause than is the superior performance of another person. Accordingly, we manipulated the decision-maker’s prior performance independently of another person’s performance in order to examine additive and interactive effects on control relinquishment and performance attributions. Thus, the present study examined the manner in which decision-makers evaluate and use their own prior performance information, as well as the performance information of another person, in arriving at a control allocation decision.

Two additional issues were addressed in this study. We examined the influence of prior performances by subjects and their partners on subjects’ moods. Any asymmetry in control allocation as a function of prior performances may also be reflected in subjects’ mood ratings and, prior performances may exert different influences on mood compared to attributions and relinquishment decisions. We also included both males and females in order to explore further the possibility that males are more reluctant than females to relinquish control (Miller et al., 1985; Strube et al., 1985).

METHOD

Overview

Male and female undergraduate volunteers, participating in same-sex pairs, took part in what was described as a problem-solving experiment. During an initial phase, each subject worked independently on a 25-trial choice discrimination task and received bogus feedback about their own performance (13 or 23 correct) and that of their partner (14 or 22 correct). Subjects were then told that they would team up on another 25 trials of the tasks where only one person would be able to work on each of the next 25 trials. Each subject was led to believe that he or she had been chosen to make that decision. (Subjects were in separate rooms.) In addition, all subjects completed performance at-
tribution and quality ratings for their own and their partner's performance on the first task.

Subjects

Eighty-one undergraduate volunteers (40 males, 41 females) participated in the study in exchange for $4.00. Average age of the sample was 20.8 years.

Apparatus and Task Description

The choice discrimination task used in this study was programmed on a small computer. The task stimuli were the four symbols found on common playing cards (i.e., clubs, diamonds, hearts, spades). Each of 25 trials began with a computer-generated tone and the identification of one of the symbols as the target for that trial (the target appeared for 3 seconds in the middle of the screen). After 3 seconds, the target disappeared from the screen, and a varying number of the distractors (the remaining symbols) began to appear and move randomly about the screen. From 3 to 10 seconds later, a randomly determined number of target stimuli appeared on the screen and remained stationary. (The distractors continued to move about the screen.) The subject's task was to count the number of targets within 7 seconds. After 7 seconds, the screen went blank and then prompted the subject for the number of targets. The subject entered this information into the computer. According to a predetermined schedule, subjects received feedback about their own and their partners' performances. This information was displayed on the screen, and a running total appeared at the end of each trial. All 25 trials followed the above format.

The computer program had two additional features designed to enhance the perceived validity of the feedback. First, the computer stored the results of each trial, keeping running totals of actual success and failure and their match to the predetermined feedback. If a subject was performing very poorly and failing on trials where the feedback indicated correct performance, the computer program self-adjusted and made subsequent "correct" trials easier. This was accomplished by presenting fewer distractors and fewer targets. Likewise, if subjects were performing very well and getting "incorrect" trials correct, subsequent incorrect trials were made more difficult. The second program feature was designed to overcome problems of suspicion concerning incorrect feedback. Whenever incorrect feedback was given, the subject was also shown a display on the screen that indicated the location of the targets (without the distractors), so subjects could see why they were incorrect. If the subject was actually incorrect in counting the targets, then the actual number of targets was shown. If, however, the subject had cor-
rectly counted the targets, then an incorrect display containing from 1 to 3 (randomly determined) additional targets was shown to convince the subject that his or her count was wrong.

Feedback Manipulation

The feedback that subjects received after each trial was given according to a predetermined random order and constituted the independent variables (subject's performance, partner's performance). Subjects were led to believe that they had achieved success on either 13 or 23 trials, whereas the partner achieved success on 14 or 22 of the 25 trials. The numerical levels of feedback were based on pilot work, and were designed to span a range of values where one could expect considerable variability in relinquishment. Note that when the subject and partner performed at comparable levels, their performances differed by 1 trial (i.e., subject = 13, partner = 14, or subject = 23, partner = 22); when either the subject or partner was in a position of relative superiority, there was a difference of 9 successful trials (i.e., subject = 23, partner = 14, or subject = 13, partner = 22).

Dependent Measures

The major dependent variable was the number of trials on the second task that were relinquished to the partner. Relinquishment was measured by having subjects enter their trial-by-trial decisions into the computer. For each trial, the computer prompted subjects by asking whether they would like to perform on that trial or give it to the partner. Immediately after making a decision for a given trial, the computer would prompt the subject regarding the next trial.

Immediately prior to the initial task, subjects completed an expectancy measure that asked them to predict the number of trials out of 25 on which they expected to succeed and to rate how important it was for them to do well on the task. Immediately after the initial task, subjects completed the 36-item short form of the Nowlis Mood Adjective Check List (Nowlis, 1965). This scale is scored on 12 subdimensions that reflect a variety of affective states.

Subjects also completed an evaluative questionnaire concerning performance on the first task (both their own and their partners'). Subjects rated the overall quality of performance and were then asked to specify what they perceived to be the major cause for that performance. These causal descriptions ranged in length from 1 to 3 sentences. The causes that subjects generated were then rated along the dimensions of internal-external, stable-unstable, and global-specific. This procedure of having subjects generate causes and then rate them on common dimensions has been used successfully in research with the Attribution Style Questionnaire (e.g., Peterson et al., 1982). The
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procedure has two major advantages: (a) subjects generate what they view as the most important causes for performance, rather than choosing from an investigator-generated list of possible causes (of unknown restrictiveness); and (b) the causes are rated along dimensions of direct relevance to the research questions, rather than being inferred indirectly from the causal sources.

Subjects also indicated the proportion of trials they expected themselves and their partners to perform successfully on the second task, and rated the confidence they had in their own and their partners’ chances of success. Additional measures of perceived task similarity, ability similarity (for the two tasks), and attractiveness of prizes (see “Procedure”) were obtained to check on the perception of task characteristics. All ratings were made on 7-point bipolar scales.

Procedure

Male and female subjects were randomly assigned to one cell of a 2 (Level of Subject’s Performance) × 2 (Level of Partner’s Performance) factorial design. Pairs of same-sex subjects participated in the study and were assigned to the same condition. Subjects who knew each other were not allowed to participate together. Upon arrival for the experiment, subjects were seated in separate rooms to eliminate interaction and to reduce any potential suspicion about the feedback manipulations. The experimenter communicated with subjects from a third room via an intercom system. The purpose of the study was described to the subjects as examining the “types of problem-solving strategies used during effective and ineffective information processing.” The experimenter explained the task in detail (as outlined in the “Apparatus and Task Description” section), allowing subjects to familiarize themselves with the keyboard and to complete one practice trial. Subjects were then informed that the task in which they were about to engage was a sensitive and valid measure of information processing abilities and that, in the past, high performance had been related to high intelligence and academic potential. The purpose of this was to maximize task involvement and effort.

In order to avoid arousing suspicion as to the true purpose of the task, and consistent with the cover story, subjects were asked to verbalize their problem-solving strategies during the 25 trials. Their attention was directed to a tape recorder on their right, which was started at the beginning of the 25 trials. The “importance” of the recordings and that they speak up during the task were emphasized. Subjects then completed the expectancy measure, which asked them to predict the number of trials out of 25 on which they expected to succeed, and to rate how important it was for them to do well on the task. The subjects then proceeded through the 25 trials (approximately 15 minutes), after which they completed the mood measure.
In describing the second phase of the study, the experimenter told the subjects that they would team up and combine their efforts on another 25 trials of the choice-discrimination task. It was explained that the object of the second task was for the team to do as well as possible. In this way, team versus individual strategies could be examined. To emphasize the cooperative nature of the second task, subjects were told that if the team's performance was in the top 10% for the entire study, it would be eligible for one of three prizes: a clock-radio, a digital watch, or a calculator. Subjects were then informed that only one person at a time would be allowed to perform on any given trial. This requirement necessitated a decision as to who would work on each of the next 25 trials. The experimenter explained that this decision would be made by one of the subjects. In actuality, each subject was led to believe that he or she was the decision-maker. The experimenter stated that prior to the experiment one of the rooms had been chosen at random and a star had been placed on the back of the brown envelope on the table in that room. (Both rooms had a brown envelope on the table.) The star signified who would be the decision-maker. Each subject was asked to examine the envelope in his or her room, and, if it contained a star, to signal the experimenter. In fact, both envelopes had stars, so that both subjects signaled that they were the decision-maker. Next, the experimenter communicated instructions that were meant to further convince each subject that he or she alone had been chosen as decision-maker. Immediately upon receiving the affirmative responses from the subjects, the experimenter addressed the decision-maker specifically: "Ok, Subject #2, you will be the decision-maker for the next task." The words "Subject 2" were prominently displayed on the computer terminals of both subjects. Both subjects were instructed to open an envelope on their tables and read the enclosed sheet describing how to make their relinquishment decisions.

The completion of the relinquishment decision and the attribution/evaluation measures concluded the experimental session. No second task was actually conducted. Subjects completed a short postexperimental questionnaire and were thoroughly debriefed. Subjects were told that a raffle (in lieu of a prize for high teamwork) would be held at the end of the study. Examination of responses on the postexperimental questionnaire indicated that subjects were unaware of the true purpose of the experiment, were unsuspicious of the feedback manipulations, and did not question the integrity of their choice as decision-maker.

RESULTS

Analyses were conducted using 2(Sex of Subject) × 2(Level of Subject's Performance) × 2(Level of Partner's Performance) analyses of variance. Be-
cause several subjects failed to complete one or more measures, the degrees of freedom vary slightly in the following analyses.

Manipulation Checks

Analyses indicated a significant main effect for level of subject's performance, $F(1,69) = 193.04, p < .001$. As intended, subjects who were led to believe that they had achieved success on 13 of 25 trials rated their performance as being of lower quality ($M = 3.50$) than did subjects who were told that they had succeeded on 23 trials ($M = 6.24$). Likewise, subjects who were informed that their partners had achieved success on 14 trials rated that performance as being of lower quality ($M = 4.36$) than did subjects who were told that their partners had succeeded on 22 trials ($M = 6.13$), $F(1,69) = 80.19, p < .001$.

Several additional findings are pertinent to interpretation of results. Overall, subjects appeared to take the task seriously. The modal rating for the importance of doing well on the task was 6 on a 7-point scale ($M = 4.58$). The prizes available for high team performance were also found to be attractive, with a modal rating of 7 ($M = 4.36$). Relevant to the presumed applicability of the feedback on the first task to the relinquishment decisions for the second task are results indicating that subjects perceived the two tasks to be fairly similar ($M = 3.50, Mo = 5.00$, reversed scale) and the abilities required for both tasks as quite similar ($M = 2.49, Mo = 1.00$, reversed scale). These latter two results indicate that the two tasks were not seen as identical, implicating the potential importance of the globality dimension.

Relinquishment of Control

Analysis of the number of trials relinquished indicated significant main effects for level of subject’s performance, $F(1,73) = 27.48, p < .001$, and level of partner's performance, $F(1,73) = 18.99, p < .001$. No other effects were reliable (all $Fs \leq 2.40$). The main effect for the manipulation of the subject's performance level indicated that subjects who achieved success on 13 trials relinquished more trials to their partners ($M = 15.26$) than did subjects who achieved success on 23 trials ($M = 10.90$). The main effect for the manipulation of the partner's performance indicated that subjects relinquished more trials to partners who achieved success on 22 trials ($M = 14.91$) than to partners who succeeded on 14 trials ($M = 11.25$). The absence of an interaction between both forms of feedback indicates that subjects utilized information in an additive manner. Examination of individual cell means further indicates that subjects were not biased in their utilization of information provided about their own versus their partners' performances. When both the subject and the partner performed at comparable levels (13 vs. 14 or 23 vs. 22
trials correct) subjects divided the trials nearly equally (13.30, 12.60 trials relinquished, respectively). When one member of the pair was clearly superior, that member was allocated the majority of trials (17.22 trials relinquished to a superior partner; 15.80 trials kept by a superior subject), with the locus of superiority making little difference.

**Ratings of Performance Quality**

In addition to the intended effects of manipulated feedback on ratings of performances quality (see "Manipulation Checks"), two additional significant results emerged. Subjects' ratings of their own performances were influenced by the level of their partners' performances, \( F(1,69) = 13.54, p < .001 \). Subjects rated their own performance higher if their partners succeeded on 14 trials (\( M = 5.22 \)) than when their partners succeeded on 22 trials (\( M = 4.52 \)). This finding suggests that subjects evaluated their own performances at least in part by comparing it with their partners' performances. A similar pattern emerged for ratings of the partners' performances. Subjects who achieved success on 13 trials rated their partners' performances higher (\( M = 5.47 \)) than did subjects who succeeded on 23 trials (\( M = 5.02 \)), \( F(1,69) = 6.45, p < .025 \).

**Attribution Ratings**

Analyses of the attribution ratings were consistent with the hypotheses regarding attributional concomitants of control relinquishment. Subjects rated their partners' performances as being due to less stable (\( M = 4.65 \)) and less global (\( M = 4.10 \)) causes when the partner succeeded on 14 trials than when the partner succeeded on 22 trials (\( M = 5.82, M = 5.01 \)), \( F(1,68) = 29.98, p < .001 \); \( F(1,68) = 9.83, p < .005 \). A similar pattern was obtained for subjects' self-attributions. Subjects who succeeded on 13 trials rated the cause of their performances as being less stable (\( M = 4.85 \)) and less global (\( M = 3.77 \)) than did subjects who succeeded on 23 trials (\( M = 6.02, M = 5.68 \)), \( F(1,69) = 18.45, p < .001 \); \( F(1,69) = 30.34, p < .001 \); neither level of subjects' performances nor level of partners' performances influenced internality ratings reliably. The only effect to approach significance was that for level of subjects' performances on internality ratings for the partners' performances. Subjects who succeeded on 13 trials rated the cause for their partners' performances as being more internal (\( M = 2.31 \)) than did subjects succeeding on 23 trials (\( M = 2.99 \)), \( F(1,68) = 3.87, p < .10 \), reversed scale.

**Confidence Ratings and Expected Success**

The previous attribution analyses indicated that subjects who performed at a superior level rated the causes for their performance as being more stable
and global in nature than did subjects who performed at more moderate levels. These findings imply that subjects who performed well on the first task should also expect to perform well on the second task. An analysis of the confidence ratings indicated support for this hypothesis, $F(1,66) = 45.56$, $p < .001$. Subjects who succeeded on 23 trials on the first task rated their confidence in performing well on the second task higher ($M = 5.68$) than did subjects who succeeded on 13 trials ($M = 3.69$). Likewise, subjects who performed at a superior level on the first task expected to succeed on a greater proportion of the trials than would attempt ($M = .86$) those who performed at a more moderate level ($M = .65$), $F(1,58) = 30.66$, $p < .001$.

Again, the pattern of results for ratings of the partners’ performances paralleled the ratings of the subjects’ performances. Subjects had more confidence in partners who had succeeded on 22 trials of the first task ($M = 5.96$) than partners who succeeded on 14 trials ($M = 4.00$), $F(1,58) = 55.56$, $p < .001$. Similarly, partners who performed at a superior level on the first task were expected to succeed on a greater proportion of the trials on which they would work ($M = .87$) than partners who succeeded on 14 trials of the first task ($M = .72$), $F(1,58) = 13.21$, $p < .001$.

Mood Ratings

The Mood Adjective Checklist is scored on 12 subscales: anger, anxiety, surgency, elation, concentration, fatigue, social affection, sadness, skepticism, egotism, vigor, and nonchalance. These subscales (score range 1 to 3) were subjected to a multivariate analysis of variance, which revealed a significant main effect for level of subject’s performance, $F(12,62) = 6.01$, $p < .001$, and a significant interaction between level of subject’s performance and level of partner’s performance $F(12,62) = 2.18$, $p < .05$. Examination of univariate analyses indicated that compared with subjects who succeeded on 23 trials of the first task, subjects who succeeded on 13 trials rated themselves as being more angry ($M = 1.33$ vs. 1.08), more anxious ($M = 1.62$ vs. 1.34), less carefree ($M = 1.58$ vs. 2.03), less elated ($M = 1.29$ vs. 2.02), less attentive ($M = 1.90$ vs. 2.37), more fatigued ($M = 1.51$ vs. 1.27), less socially affectionate ($M = 1.34$ vs. 1.62), more depressed ($M = 1.54$ vs. 1.04), less egotistical ($M = 1.23$ vs. 1.45), and less vigorous ($M = 1.40$ vs. 2.00), all $F(1,73) \geq 5.31$, $p < .03$.

The multivariate interaction effect was accounted for primarily by univariate interactions on the anger, depression, concentration, and fatigue subscales, all $F(1,73) \geq 3.95$, $p \leq .05$. Table 1 contains the relevant means for interpreting the interactions. In each case, the mean for the subjects who succeeded on 13 trials and whose partners succeeded on 22 trials differs from the other three means. When subjects performed less well than their partners, they reported themselves as being more angry, more depressed, less attentive,
and more fatigued than when they performed as well as or better than the partner. The latter two results suggest an attempt by subjects to excuse their inferior performance by claiming interfering physical states.

**DISCUSSION**

The results of this study provide a number of important extensions to an understanding of control relinquishment. Of primary importance are the attributional findings. As outlined previously, an important assumption underlying the control relinquishment concept is that control will be given up to the extent that a more stable controlling response is possessed by someone else. Furthermore, to the extent that the task on which control can be relinquished differs from prior tasks, an attribution to more global causes for superior performance should also be necessary. Consistent with these predictions, subjects who were paired with highly successful partners relinquished more trials and rated the causes for the partners' performances as being due to more stable and global causes than did subjects paired with moderately successful partners. A similar pattern of results emerged with respect to the subject's own performance. Subjects who performed at a high level on the first task kept more trials for themselves on the second task, and rated the causes for their performance as being more stable and global than did moderately successful subjects. No reliable differences were found on the internality ratings. By demonstrating the existence of these key attributional differences, the present study confirms the attributional specificity suggested by the minimax hypothesis, at least in a nonstressful situation.

A second major purpose of this study was to examine whether control relinquishment is affected by the locus of superiority. No support for such a
biased relinquishment strategy was obtained. Similar numbers of trials were
allocated to the superior member of the pair, regardless of whether it was the
subject or partner. In other words, subjects exhibited a rather remarkable
level of objectivity in their control relinquishment decisions. A likely explana-
tion is that the public scrutiny of performance on the anticipated second
task attenuated the subjects' expected self-serving allocation styles. A similar
attenuation of the self-serving attribution bias when future public scrutiny is
expected has been suggested by Weary-Bradley (1978). These results should
not be interpreted as indicating that objective, rational control relinquish-
ment is without exception, however. As has been demonstrated previously,
under appropriate conditions, individuals will adhere to apparently irra-
tional decision strategies in order to keep from relinquishing control (e.g.,
Miller et al., 1985; Strube et al., 1985; Strube & Werner, 1984). Indeed, even
within the present study, subjects did not adhere to a completely rational
strategy. When subjects performed at a superior level, or were paired with a
superior partner, the superior member was allocated fewer trials than would
be appropriate given a probabilistic use of the feedback.

This study failed to find evidence for sex differences in control relinquish-
ment (cf. Miller et al., 1985) contrary to results obtained by Miller et al. indi-
cating a greater reluctance to relinquish control by males than females.
Strube et al. (1985), however, failed to obtain sex differences. There is a key
distinction that may account for the divergent findings. The Miller et al.
study used a physically aversive noise avoidance task, whereas the Strube et
al. study used a nonphysically aversive achievement task. The present study
also used an appetitive task and failed to find sex differences. It may be that
traditional sex roles dictate that males attempt to keep control of physically
threatening situations, producing the differences obtained by Miller et al.
The task type distinction may also account for another difference between
the present results and those obtained by Miller and her colleagues (Miller,
1980; Miller et al., 1985). Miller found that subjects retained control when
they and their partners exhibited comparable performances, whereas the
present results indicate a more equal distribution of control following com-
parable performances. Subjects may be more reluctant to give control to a
comparable partner when the potential consequences are physically aversive.
However, the subjects in Miller's research also believed that the partner
would not be aware that they had been given a choice regarding retention of
control, whereas in the present study, the partner knew of the subject's
choice. This difference may also contribute to the divergent findings in that
subjects may adopt a more equalitarian strategy following comparable per-
formances when the decision is under the scrutiny of the partner.

It is also important to point out here the results reported by Strube and
Werner (1984). They found that subjects experiencing poor performance
failed to relinquish control to a superior partner (interpreted as reactance),
whereas subjects experiencing average performance exhibited more rational decision-making. When compared with the present findings, the results suggest that for different levels of performance, subjects may base their decisions on radically different strategies. One implication is that attributionally mediated relinquishment may only occur when the decision-maker’s self-esteem has not been seriously threatened. These speculations will, of course, require additional research to verify them. They do, however, point to potentially important situational characteristics that may moderate the decision to relinquish control.

The effects of the manipulated feedback on self-reported mood were as expected. In general, subjects who performed at moderate levels reported more negative mood than subjects who performed at higher levels. The performance level of the partner was also found to influence mood in conjunction with the subject’s own performance. In particular, subjects reported themselves as being more angry, more depressed, more fatigued, and as having lower concentration when their performance was inferior to the partner’s than when their performance was superior or comparable. The latter two ratings appear to indicate an attempt on the subjects’ part to protect their threatened self-esteem. The pattern of results suggests the interesting possibility that under appropriate conditions, subjects may resent their partners’ superior performances and excuse their own inferior performances, with potentially important implications for interpersonal transactions following relinquishment decisions. These results also indicate that performance feedback had different effects on mood compared with attributions and relinquishment. Whereas the performance of the partner and the performance of the subject had an additive influence on postperformance attributions and relinquishment decisions, they had an interactive effect on emotional reactions. Thus, there is some amount of divergence in the emotional and decisional consequences of performance feedback.

Given the apparent generality of the control relinquishment process and the likelihood that it will often be carried out inappropriately, it is important that future research turn its attention to examining ways of modifying maladaptive decision styles. For example, the present results suggest that relinquishment decision strategies could be altered via manipulation of attributions for prior performance. Accordingly, one possible way to alter maladaptive control relinquishment (e.g., the inability to delegate responsibility by managers) may be through use of attribution “therapy” or retraining (e.g.,

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1The argument for attributional mediation of control relinquishment would be enhanced were it possible to demonstrate reliable correlations between the attributional measures and number of trials relinquished within the separate conditions. Such an analysis was precluded in the present study due to restricted range on the attribution and relinquishment measures imposed by the effective manipulation of performance feedback.
Abramson, Seligman, & Teasdale, 1978; Wilson & Linville, 1982). However, only interventions that operate on the stability (and possibly globality) dimension should prove to be effective. In addition, the present findings suggest that there are two major components of control relinquishment: self-evaluation and other-evaluation. A crucial question for future research is the extent to which poor relinquishment strategies stem from an inability to evaluate and utilize information about one's own performance versus the inability to evaluate and utilize information about someone else's performance. Perhaps situational and/or individual difference factors are important mediators in this regard. In any case, identifying the location of the attributional deficit will be necessary prior to attempts at intervention.

All of these recommendations must be tempered, however, by a consideration of the laboratory nature of this study. The task, although providing a well-controlled analogue to the performance-relinquishment situation, deviates from actual relinquishment decision settings in important ways (e.g., prior task experience, familiarity of partner, etc.). The degree to which the results generalize beyond the laboratory awaits future research.

In summary, the present study supports the presumed underlying attributional dynamic of the relinquishment decision process on an appetitive task. Interesting areas for future research include examination of the conditions under which males and females diverge in their relinquishment decisions, the impact of mood on postrelinquishment interactions, and the potential for altering maladaptive decision styles. The future investigation of control relinquishment along the lines suggested should further extend our understanding of this ubiquitous and important decision process.

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