

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/232538051>

Public Versus Private Expectancy of Success. Confidence Booster or Performance Pressure?

Article in *Journal of Personality and Social Psychology* · June 1985

DOI: 10.1037/0022-3514.48.6.1447

CITATIONS

176

READS

2,749

3 authors:



Roy Baumeister
Harvard University

713 PUBLICATIONS 155,486 CITATIONS

SEE PROFILE



James C Hamilton
Yale University

53 PUBLICATIONS 1,263 CITATIONS

SEE PROFILE



Dianne Tice
Brigham Young University

87 PUBLICATIONS 28,572 CITATIONS

SEE PROFILE

Public Versus Private Expectancy of Success: Confidence Booster or Performance Pressure?

Roy F. Baumeister, James C. Hamilton, and Dianne M. Tice
Case Western Reserve University

Experiment 1 found that performers' private expectancies of success improved performance, whereas the audience's expectations for success lowered performance. Results were strongest for persons low in trait self-consciousness and for males. In Experiment 2, audience expectations for success raised performance if they were convincing enough that the performer privately began to expect success. Otherwise, (unconvincing) audience expectations of success again lowered performance. These results appear to fit a model holding that audience expectations of success constitute performance pressure, which harms performance except when substantial private confidence is created.

How is performance affected by expectancies of success? We propose that the performer's private expectancy of success will improve performance, due to self-attributions of competence and efficacy leading to increased effort. On the other hand, we propose that an audience's expectancy of success can harm performance by putting added pressure on the performer.

The distinction between the performer's own (private) expectancy and the performer's knowledge of the audience's (public) expectancy may be useful in resolving contradictory findings in past expectancy research. We turn now to this research to derive our hypotheses.

Success Expectancies Improve Performance

A positive correlation between pretask outcome expectancies and actual outcomes was shown by Feather (1966, 1968, 1969). In his studies, subjects who expected to succeed outperformed those who expected to fail; changes in expectancies over successive trials were associated with corresponding changes in performance levels; and manipulations that improved expectancies (such as preliminary success experiences) also improved perfor-

mance. Based on his findings, it seemed reasonable to propose that performers' favorable expectations are good for performance. A more elegant statement of this idea by Bandura (1977) has held that success expectancies lead to self-attributions of competence and increase motivation to succeed.

Interacting with others who expect one to succeed may also facilitate performance. Rosenthal and Jacobson (1968) demonstrated improvements in pupils' intellectual performance caused by erroneous expectancies, held by the teachers, that the pupils would perform well. Pupils in that study were never directly informed of the success expectancies, but the teachers' treatment of the students may have led to self-attributions and motivational changes that, in turn, produced the observed intellectual improvements.¹ In reviewing that literature, Darley and Fazio (1980) argue that true self-fulfilling prophecy effects occur "because the target accepts as accurate the assessment implied by the perceiver's action and continues to act in terms of that assessment" (p. 879). Thus, when others expect the performer to succeed, this expectancy may give rise to a corresponding expectancy on the part of the performer, who then benefits from it just as from any privately held expectancy of success.

We thank Robert Arkin, William B. Swann, Jr., and both anonymous reviewers for their encouraging critiques of previous drafts.

Requests for reprints should be sent to Roy F. Baumeister, Department of Psychology, Case Western Reserve University, Cleveland, Ohio 44106.

¹ Alternatively, the self-fulfilling prophecy may sometimes operate by a direct mechanism, such as if the teacher actually gives better explanations to students who are expected to succeed than to other students.

Success Expectancies Lower Performance

Several studies have suggested that expectancies of success can harm performance, although direct evidence seems lacking. Zanna, Sheras, Cooper, and Shaw (1975) sought to replicate the Rosenthal and Jacobson (1968) effect with an additional manipulation of pupil expectancy. They successfully replicated both the finding that teacher's expectancy for student success led to student success and the typical finding that students' private expectancy of success led to student success. However, when both teacher and student expected student success, performance was *not* improved and was, in fact, worse than either of the single-expectancy (teacher or student, but not both) conditions.

Using card tricks as experimental tasks, Swann and Snyder (1980) showed that subjects performed poorly when they were trained by a teacher who both (a) believed them to have high ability and (b) believed that success at the task depended on intrinsic factors such as ability. It seems likely that those subjects felt the teacher (and perhaps the experimenter as well) expected them to succeed. Performance was good when the teacher held only one (but not both) of those beliefs.

The results of Seta and Hassan (1980) can also be interpreted in terms of expectancies, although their experiment was concerned with social facilitation. Subjects who initially succeeded subsequently performed better in front of an audience than did subjects who initially had failed—but only if the audience was *unaware* of the initial performance. When the audience knew about the initial success, performance was lower than when the audience did not know about it. Thus, performance is lowered in front of an audience who has reason to expect success. It is interesting that Seta and Hassan found no difference as a function of initial success versus failure among subjects who performed alone. This suggests some limitations on the effect that initial success leads to improved performance due to private expectancies.

Lastly, archival data reviewed by Baumeister and Steinhilber (1984) are consistent with the suggestion that public expectancies of success harm performance even for professional performers. They showed that profes-

sional athletes tend to show performance decrements (i.e., to choke under pressure) when playing a championship contest in front of a home audience who expects success.

Public Versus Private Expectancies

Several past studies have suggested that the effects of an expectancy depend on whether it originates in the performing individual or in other people (Baumeister, Cooper, & Skib, 1979; House & Perney, 1974; Seta & Hassan, 1980; see also Swann & Ely, 1984). However, the argument that external, public expectancies produce results different from private ones appears to contradict the argument (cited above) that external expectancies elicit self-fulfilling effects by producing internal expectancies. How can this be resolved?

We distinguish two aspects of a public expectancy: informational and social. Knowing that others expect one to do well constitutes information that there is some reason to expect success. Thus, as Darley and Fazio (1980) suggest, such knowledge may cause performers to expect success themselves, leading to performance facilitation. This analysis implies that if the performer disallows the informational value of the audience's expectancy, the expectancy will have no direct effect on the performer. Indeed, that may be the most common outcome. Swann and Ely (1984) have provided evidence that if people have a basis for forming their own expectancies, they tend not to be influenced by the expectancies of others.

But there is a second aspect to the situation: The performer must still contend with the audience's belief that the performer will succeed. Thus, even if the performer privately rejects the informational aspect of the audience's expectancy, the performer has to deal with its social aspect. The social aspect of an audience's expectancy of success seems to be mainly performance pressure. An audience who expects success will be especially disappointed by failure. The cost of failure (loss of face) is thus increased, thereby creating pressure (Baumeister, 1984).

That an audience's success expectancies constitute increased performance pressure is a basic assumption of self-handicapping theory (Jones & Berglas, 1978). In particular,

Jones and Berglas contend that self-handicapping is most likely to occur when one is publicly expected to succeed but privately expects not to succeed. Kolditz and Arkin (1982) demonstrated that self-handicapping is indeed greatest when one anticipates performing for an audience who expects success.

A problem in interpreting past findings about public expectancies is that the social aspect of public expectancies is often confounded by the informational aspect. In the typical procedure (except for the self-handicapping studies), the performance expectancy is held either by the performer alone (private condition) or by both the performer and the audience (public condition). Thus, the manipulations fail to create the theoretically most interesting condition, in which the performer knows that the audience expects success but the performer privately expects failure. Our Experiment 1 was designed with orthogonal manipulations of public and private expectancies in order to avoid this confound.

Experiment 1

Experiment 1 sought to manipulate private expectancies of success by having subjects do a confidential preliminary test, which was rigged to cause either success or failure. We also had subjects furnish confidential self-reports of expectancies, because of evidence that initial outcomes might not be thoroughly reliable in establishing desired expectancies (e.g., see our discussion of Seta & Hassan, 1980, above). Thus, our first independent variable was the subject's own private expectancy of success versus failure.

The second independent variable was the subject's perception of how well the audience expected him or her to do. We sought to convince subjects that the audience expected them to succeed, without convincing them that they would succeed. In other words, we sought to manipulate public expectancies without disturbing private expectancies.

We hypothesized that private expectancies for success would improve performance but that audience expectancies for success would harm performance. In particular, we predicted a significant difference between the two conditions in which success was expected by one

party but not by both. Performance should be best when the performer privately expects success but is not burdened with an audience who expects success. Conversely, performance should be worst when the performer knows the audience expects success but the performer privately expects failure. The latter condition, in which performance pressure is unmitigated by internal confidence, should elicit "choking under pressure" (cf. Baumeister, 1984).

We predicted that the condition in which both performer and audience expected success would elicit performance levels intermediate between those of the two conditions in which only one party expected success. On the one hand, it seemed likely that private confidence of success would help overcome the debilitating pressure of having an audience with high expectations. On the other hand, the audience pressure would still cause some choking despite private confidence, so performance should be worse when both performer and audience expect success than when only the performer expects it.

A final prediction concerns dispositional self-consciousness. Baumeister (1984) suggested that decrements in performance under pressure are mediated by increases in self-attention, which disrupt overlearned response sequences (cf. Kimble & Perlmuter, 1970; Wine, 1971). Consistent with that, he reported that choking is most common among people who are ordinarily low in self-consciousness, for a suddenly high level of self-attention will be most unfamiliar and thus most disruptive to them. Regarding the present research, if subjects low in self-consciousness are indeed most prone to choking under pressure, then they should be most likely to perform badly when an audience expects them to succeed.

Method

Subjects

The subjects were 64 undergraduate students enrolled in introductory psychology courses at Case Western Reserve University. Of the 64 subjects, 38 were men and 26 were women. The subjects participated in partial fulfillment of a course requirement.

Procedure

The hypotheses were tested in a 2 (private expectancy) \times 2 (audience expectation) factorial design. Subjects were

tested individually, and assignment to experimental condition was random.

Upon arriving for the experiment, the subject was given a brief description of the experiment and was asked to sign an informed consent form.

Cover story. The purported reason for conducting the experiment was to replicate a recent experiment that had allegedly found a strong positive correlation between "personality integration" and anagram-solving ability. This finding was portrayed as unexpected and of dubious reliability. Ostensibly, only the experimenter (and not his colleagues) believed that the relation between "personality integration" and anagram-solving ability was real.

Individual difference measures. After the cover story was explained, the subject was asked to complete two questionnaires, a self-esteem scale (Janis & Field, 1959) and the Self-Consciousness Scale (Fenigstein, Scheier, & Buss, 1975). The subject was led to believe that these two questionnaires would be used to compute the personality integration score.

Private expectancy. When the two individual difference measures were completed, the subject was presented with two lists of practice anagrams. There were 14 anagrams on each of the two lists, and the subject was allowed 5 min to work on each list. Subjects who were assigned to the positive private-success-expectancy condition were given two lists of 14 solvable anagrams. Subjects in the private failure-expectancy condition were given two lists, on each of which only 6 of 14 anagrams could be solved. These subjects were told that the average number of correct solutions was 7 for each list (thus 14 overall). Indeed, all 32 subjects scored below that criterion. Subjects in the initial success (private success-expectancy) condition were told that the average score was 5 correct per list, thus 10 overall; five of the 32 subjects scored below that level, thereby undermining the manipulation. Data from these subjects were retained in the major analyses, but to deal with this problem we shall report supplementary analyses based on self-reported private experiences. It is worth adding that the initial-success-condition subjects did indeed solve more practice anagrams than did initial-failure subjects $F(1, 56) = 108.93, p < .001$.

Manipulation check. Immediately after completing the practice lists, the subject filled out a short form that asked how well the subject expected to perform on the forthcoming anagram test. The item was followed by a 30-point scale with endpoints labeled *very well* and *very poorly*.

Audience expectation. While the subject was working on the practice anagrams, the experimenter was supposedly scoring the personality questionnaires and computing the personality integration score. When the subject finished rating his or her private expectancy, the experimenter gave the subject his or her personality integration score and asked that this number be recorded in a space provided on the manipulation check questionnaire. Subjects assigned to the audience-success expectation condition were told that they had scored 23/25 on the personality integration scale and that only one other person had scored as highly. These subjects were further told that they would probably do very well on the final anagram test. Subjects in the audience-neutral expectation condition were told that they scored an 11/25 and that they should probably be average anagram solvers. To reinforce the

manipulation of public expectations, the subjects circled the word "high" or "low" on the manipulation check questionnaire beside the space provided for their personality integration scores.

Dependent measure. After the subject had recorded his or her personality integration score onto the manipulation check questionnaire and circled the word "high" or "low," the subject was given the main anagram test. The subject was presented with a series of 13 anagrams on flash cards. Each word was shown for 30 s. The subject had to solve the anagram in the allotted 30 s and record it on an answer sheet.

Questioning and debriefing. When the final anagram task was completed, the subject was asked a series of questions designed to reveal any suspicions the subject may have had regarding the true nature of the experiment. The experimenter explained the experiment's true purpose. The subject was then thanked for participating and dismissed.

Pilot test of expectancy manipulation. We predicted that the subjects would base their private expectancies on their own practice scores, largely ignoring the dubious correlation between "personality integration" and their future performance on the anagram test. This assumption was tested on another group of subjects drawn from the same population from which the main sample was selected. Twenty-two subjects were presented with a description of the anagram test along with five possible predictors of anagram performance, among which were "personality tests" and "practice test scores." The subjects rated each of the five predictors on a 30-point scale according to the degree that each was believed to be a reliable predictor of anagram test performance. As expected, the pilot subjects judged practice anagram tests ($M = 24.50$) to be significantly better than personality tests ($M = 11.95$) in terms of the degree to which each would reliably predict anagram test performance, $t(21) = 7.74, p < .001$. These data suggest that the private expectancies of the subjects in the main sample were probably only minimally affected by the information regarding their personality integration scores.

Results

Manipulation Checks

Ratings of private expectancies were much more favorable (success) for subjects who had initial success than initial failure, $F(1, 60) = 56.66, p < .001$. Thus, private expectancies were correctly manipulated by initial outcomes. Still, inspection of the data revealed a few subjects² whose private expectancies

² An anonymous reviewer suggested that we list subjects who responded inappropriately to the manipulation check. The median rating (20) effectively differentiated the high and low private expectancy groups for all but 5 subjects. In the public success/initial success condition, two subjects expressed unfavorable private expectancies; both were men high in self-consciousness. In the public neutral/

did not conform to their outcomes on the pretask. Therefore, we conducted a median split on these self-reported expectancies. We shall report analyses both ways, that is, using initial outcome and using self-reported expectancies as the independent variable.

The manipulation of audience's expectation was checked by asking subjects during debriefing whether they recalled the experimenter's expressed prediction of how they would do. All subjects correctly perceived and remembered the experimenter's statement of expectation.

A final issue was whether subjects would indeed place more weight on their own pretask outcome than on the experimenter's prediction in forming their own private expectancies for success on the main task. Our hypothesis was the subjects would feel that their own pretask performance was a better predictor of task performance than the experimenter's inference based on personality test scores. Ratings by pilot subjects confirmed this, $t(21) = 7.74, p < .001$.

Our subjects' ratings of private expectancies for success on the main task did not differ as a function of audience-expectation condition, $F(1, 60) = 2.71, ns$.

Performance

We conducted a $2 \times 2 \times 2$ analysis of variance (ANOVA) using audience's expectation, initial outcome, and level of trait self-consciousness as independent variables. Table 1 shows the means. A main effect for audience's expectation indicated that performance was harmed by knowing that the audience expected success, $F(1, 56) = 6.90, p = .011$. A main effect for initial outcome indicated that initial success improved subsequent performance, $F(1, 56) = 6.57, p = .013$. These results support the main hypotheses that success expectancies have opposite effects on performance depending on whether they are public or private.

An interaction between audience expectation, initial private outcome, and level of self-

Table 1
Mean Number of Anagrams Solved:
Experiment 1

Audience's expectation (public)	Performer's expectancy (private)	
	Success	Failure
Success		
LSC	5.3	4.4
HSC	6.3	3.7
Neutral		
LSC	9.0	6.1
HSC	5.2	5.6

Note. LSC = low self-consciousness; HSC = high self-consciousness; n is between 5 and 11 for each cell.

consciousness was also obtained, $F(1, 56) = 4.84, p = .032$. Inspection of the means suggested that the interaction was due mainly to the public neutral/initial success condition, for in the other three treatment conditions subjects seemed to respond the same whether high or low in self-consciousness (see Table 1). In that one condition, subjects low in self-consciousness performed extremely well, whereas the performance of subjects high in self-consciousness was unspectacular. Indeed, our prediction that performance in the double-success-expectancy condition would be worse than performance in the public-neutral expectancy/initial-success condition was supported only for subjects low in self-consciousness, $t(56) = 2.85, p < .01$. Among subjects high in self-consciousness, the means showed a nonsignificant trend in the contrary direction. Similarly, only subjects low in self-consciousness confirmed the predicted difference between the two conditions in which only one party expected success. They performed worse when only the audience (and not they themselves) expected success than when only they (and not the audience) expected success, $t(56) = 3.67, p < .001$. Subjects high in self-consciousness showed a nonsignificant trend in the same direction, $t = 1.37, ns$. Among male subjects, however, this comparison approached significance, $t(30) = 1.87, p < .10$. Thus, although our predictions received support across all subjects combined, they were best supported among subjects low in self-consciousness.

Nearly identical results were obtained using self-reported private expectancies as the in-

initial success conditions, one subject expressed an unfavorable private expectancy; she was a woman with low self-consciousness. In the public neutral/initial failure condition, two subjects expressed favorable private expectancies; both were men low in self-consciousness.

dependent variable, replacing initial outcome. Audience expectations for success harmed performance overall, $F(1, 56) = 5.54, p = .022$, whereas private success expectancies raised performance, $F(1, 56) = 8.33, p = .006$. The three-way interaction with self-consciousness also obtained, $F(1, 56) = 4.81, p = .033$.

Supplementary analyses using self-consciousness. The differential effects of the levels of self-consciousness are clarified by analyses using only part of the experimental design. Analysis of variance on performance scores for only the subjects who experienced initial success revealed a significant interaction between level of self-consciousness and public expectation, $F(1, 28) = 11.36, p < .01$, indicating (again) that the public expectation of success mainly harmed the performance of subjects having low self-consciousness.

Of special interest are the two cells in which expectancies conflicted: the public success expectation/initial failure condition and the public neutral expectation/initial success condition. Subjects in the latter condition outperformed those in the former condition, regardless of self-consciousness, as indicated by a main effect, $F(1, 28) = 14.65, p < .001$. The interaction with self-consciousness approached significance, $F(1, 28) = 3.85, p = .06$, suggesting once more that subjects with low self-consciousness were more affected than those with high self-consciousness. Overall, though, subjects with low self-consciousness still performed better than subjects with high self-consciousness in these two conditions, $F(1, 28) = 8.35, p < .01$.

As an additional analysis strategy, we sorted subjects according to the subscales for public and private self-consciousness. Neither subscale furnished a significant interaction (on performance scores) with the expectancy variables. The main effects for both expectancy variables were significant in both subscale analyses, as one would naturally expect.

Sex. It bears mention that none of the effects approached significance when the analysis was restricted to female subjects ($n = 26$). Neither initial outcome (manipulated private expectancy) nor self-reported private expectancy had a significant effect on performance, although the former showed a trend, $F(1, 22) = 2.67, p = .12$.³ Audience expect-

tations of success had no effect on females, nor did any interaction obtain.

Restricting the analysis to male subjects yielded the significant drop in performance due to perceived audience expectancy of success, $F(1, 34) = 9.83, p < .01$. The main effect for initial outcome was not significant, $F(1, 34) = 1.40, ns$. However, when self-reported private expectancies were used as the independent variable, the main effect did obtain, $F(1, 34) = 9.03, p = .005$, indicating that private expectancies for success did improve performance. In both cases, the interaction between public and private expectancy was marginally significant for male subjects, $F(1, 34) = 3.78, p = .06$. The predicted difference between the two single-expectancy conditions was obtained among male subjects, $t(34) = 4.40, p < .001$.

It appears that the hypotheses apply more accurately to males than to females. Indeed, when sex was used as an independent variable, there was a significant interaction between sex and audience expectation, $F(1, 56) = 7.01, p = .01$. As predicted, males tended to choke when confronted with a (male) audience who expected success. Females, however, appeared to do slightly better with an audience expecting success than with a neutral audience.

The interaction between gender and initial outcome (manipulation of private expectancy) was negligible, $F < 1, ns$. Thus, we have no evidence that the effects of private expectancies depend on gender.

Discussion

In Experiment 1, performance was lowered when performers knew the audience expected them to succeed. In contrast, when the performers themselves expected to succeed, performance was improved. Indeed, private expectancies of success were able to overcome the debilitating effects of audience expectations of success.

Performance was thus worst when the performer privately expected failure but knew

³ Because of the small n , analyses reported here did not block by self-consciousness.

that the audience expected success. This is precisely the situation on which self-handicapping research has focused (Berglas & Jones, 1978; Jones & Berglas, 1978; Kolditz & Arkin, 1982). Self-handicapping is by definition a strategy designed to undermine the evaluative validity of performance feedback (Jones & Berglas, 1978). Thus, our results suggest that performance is indeed worst in the situation that other researchers have associated with the greatest efforts to create excuses for anticipated poor performance.

The poor performance of subjects privately anticipating failure but publicly expected to succeed may be an instance of choking under pressure. Baumeister (1984) found subjects low in self-consciousness to be most vulnerable to choking under pressure. Our findings regarding dispositional self-consciousness are consistent with this view. Moreover, Baumeister speculated that private, inner expectancies of success help counteract the effects of performance pressure, and our results provide support for that view.

The finding that audience expectations of success can harm performance appears to contradict previous findings that audience expectancies can be self-fulfilling (cf. Darley & Fazio, 1980). We have suggested that the effects of audience expectancies of success depend on whether the performer is convinced by them to expect success too. In Experiment 1, we furnished performers with private information about their performance levels. This private information was a more powerful and compelling basis for forming private expectancies than was the audience's expectation (cf. Swann & Ely, 1984). Thus, we argue that the informational aspect of the audience's expectancy was nullified by competing information. Experiment 2 was designed to provide direct evidence of the distinction between informational and social aspects of audience expectations, by direct manipulation of the informational power of audience expectations.

Experiment 2

The purpose of Experiment 2 was to verify the hypothesis that audience expectations of success will have opposite effects depending

on whether they are convincing to the performer. If the audience expresses a good reason to expect success, then this expectancy will constitute information to the performer. The performer may thus be persuaded to expect success too, and performance will therefore improve (Darley & Fazio, 1980).

In contrast, if the audience expects success but is not able to persuade the performer that success is likely, then the audience expectation simply constitutes performance pressure. Faced with the burden of such expectations, the performer may choke under pressure (as in Experiment 1), performing below the level of a no-expectancy control group.

Method

Subjects were 30 undergraduate students. They were told that the reason for conducting the experiment was to replicate a recent finding indicating a strong positive correlation between "personality integration" and anagram-solving ability. Subjects completed a personality questionnaire (the Self-Consciousness Scale; Fenigstein et al., 1975) first, then completed a "demographic data questionnaire" while the experimenter ostensibly scored their personality measures. All subjects were told that they had an "integration score" of 75.

Subjects in the control group were not given any information about what a score of 75 would predict in terms of anagram-solving ability. Subjects in both experimental groups were told that, based on their integration scores, the experimenter expected them to do very well on the anagram task. All subjects were shown a bogus graph that depicted a "line of best fit" (in the experimenter's words) showing the alleged relation between anagram solving and personality integration. Individual data points were plotted on the graph, and these either clustered around the line or deviated widely from it, depending on the experimental condition. Subjects in the credible expectation condition were shown a graph indicating that the experimenter's expectations were well supported by past research. The extremely good fit of the prediction line to the data was designed to encourage subjects' acceptance of the experimenter's expectations. Subjects in the unconvincing expectation condition were shown a graph indicating that the experimenter's expectations were not well supported by past research. The experimenter confided that the correlation between personality integration and anagram performance was her own theory and, although others were skeptical of its replicability, she was confident that it was a reliable finding. The high variability was intended to make the experimenter's expectation privately unconvincing to the subject.

All subjects were then given the final anagram task, which was identical to the anagram task in Experiment 1. They then completed a manipulation check sheet and were debriefed.

Results

Manipulation Checks

As predicted, subjects in both expectation conditions thought the experimenter expected them to do well. Indeed, the mean ratings of this perceived expectation were identical ($M = 2.3$ on a 15-point scale) in the two conditions, $t = 0.00$, *ns*.

The manipulation concerned how much the subject was convinced by the experimenter's expectation of success. Subjects in the credible expectation condition accepted it privately far more than did subjects in the unconvincing (high-variance) condition, $t(18) = 3.04$, $p < .01$, and they reported being privately far more influenced by the graph, $t(18) = 3.76$, $p < .01$. Presumably as a result of the success of this manipulation, subjects in the credible expectation condition reported more favorable private performance expectancies than subjects in the unconvincing expectation condition, $t(27) = 2.46$, $p < .05$. Overall, the relation between private expectancies and the manipulation was indicated by the correlations between the manipulation checks. Subjects' private acceptance of the experimenter's expectation was correlated with their private expectancy, $r = .88$, and their reports of being influenced by the graph were also correlated with their private expectancy, $r = .78$.

Performance

Table 2 presents the main results. A one-way ANOVA on performance scores revealed significant variation among the three conditions, $F(2, 27) = 16.62$, $p < .001$. Pairwise comparisons supported the specific predictions. When the experimenter's expectation of success was highly credible (low-variability graph), subjects performed better than no-expectation control subjects, $t(27) = 2.97$, $p < .01$. In contrast, when the experimenter's expectation was not credible (high-variability graph), subjects performed worse than control subjects, $t(27) = 2.81$, $p < .01$.

Gender of subject did not furnish either a main effect or a significant interaction with condition, both F s < 1 , *ns*. Inspection of the means suggested a slight tendency for the males to choke more than females when

Table 2
Mean Number of Anagrams Solved:
Experiment 2

Condition	<i>M</i>	<i>SD</i>
Control	5.2	1.40
Credible expectation	7.1	1.45
Unconvincing expectation	3.4	1.43

Note. $n = 10$ per cell.

faced with an unconvincing expectation of success. In that condition, males performed worse than the control males, $t(24) = 2.83$, $p < .01$, whereas the corresponding difference for females was not significant, $t(24) = 1.35$, *ns*. Still, because the interaction was not significant, no interpretative weight can be placed on this discrepancy. Similarly, dispositional levels of self-consciousness did not affect the results of Experiment 2.

Discussion

The results of Experiment 2 confirmed that audience expectations of success can either raise or lower performance. The mediating variable appears to be the persuasive, informational power of the expectancy. When the audience's expectation appeared well-founded, performance improved. On the other hand, when the audience expressed the same expectation of success, but it was based on apparently weak and unconvincing information, performance deteriorated.

It appears necessary to postulate at least two aspects of public expectancies. As Darley and Fazio (1980) suggest, audience expectancies may have informational value and may affect performance if the performer forms his or her own expectancy based on that information. A purely informational analysis seems inadequate to account for the performance decrements in the unconvincing expectation condition, however. Such an analysis would simply predict that an unconvincing expectation would have no effect. Therefore, it seems that Darley and Fazio's model should be complemented by a notion of a social aspect of expectancies. With public expectancies of success, the social aspect appears to be performance pressure, which may result in lowered performance.

General Discussion

In Experiment 1, performance was facilitated by the performer's private expectancy of success but was harmed by the audience's expectation of success. Experiment 2 showed that audience expectations of success harm performance except when they are sufficiently compelling that the performer privately begins to expect success too, in which case performance is facilitated. Taken together, these results support a model distinguishing between public and private expectancies and between informational and social aspects of public expectancies. Private expectancies of success (i.e., confidence) appear to improve performance. Audience expectations of success may constitute information that boosts the performer's confidence, thereby improving performance. On the other hand, audience expectations of success also constitute performance pressure, which may harm performance.

Relation to Past Research

Expectancies. We found that audience expectancies of success harmed performance, in contrast to findings that teacher expectancies of success have improved student performance (Rosenthal & Jacobson, 1968; Zanna et al., 1975). This apparent discrepancy is attributable to two factors. First, a teacher is not merely an audience to student performance, especially across an academic year or term. The teacher ought also to be considered a coperformer. Second, and more important, our manipulation ensured that the performer knew the audience expected success. Performance pressure can only elicit choking if the performer is aware of the need for good performance (Baumeister, 1984). It seems unlikely that students in the Rosenthal or Zanna studies knew that the teachers expected them to do well, so they probably did not feel pressured. The one exception may have been the students in the double-expectancy condition in the Zanna et al. experiment (as the authors themselves argue). When both teacher and student expected success, the combination may have been enough to make the student begin to realize that he or she was expected by others to succeed, unlike

any other students in the study. That may be why these students choked under pressure.

In Experiment 1, the double expectancy of success did not elicit choking, although some subjects (those low in dispositional self-consciousness) did perform worse in that condition than in the optimal single-expectancy condition. Again, a methodological difference from Zanna et al.'s procedure may explain this (partial) discrepancy. Their manipulation of "student expectancy" resembled our manipulation of public expectancy; that is, it consisted of telling the subjects that based on questionnaire test responses they were expected to do well. Zanna et al. report no evidence of how reliably or effectively this manipulation created corresponding private expectancies in the students' minds.

Our results indicate that the least optimal conditions for performance is when the audience expects success but the performer expects failure. Recent findings regarding nonverbal deceptive behavior support this conclusion, that performance is worst when motivation is high and confidence low (DePaulo, Stone, & Lassiter, 1985).

Thus, an audience's expectation for success may improve performance if the performer is unaware of the expectation and if the audience can interact with the performer to facilitate the performance, or if the audience's expectation can convince the performer privately to expect success too (Darley & Fazio, 1980). The audience's expectation for success may harm performance when the performer is aware of the audience's expectation and especially when the performer privately has reason to expect failure.

Gender differences. In Experiment 1, women did not appear to choke (show performance decrements) when they knew the audience expected success. Again, this result runs parallel to the findings of self-handicapping research, for Berglas and Jones (1978) failed to demonstrate their effects for female subjects.

One possible explanation is that the apparent gender difference is actually an artifact of having an opposite-sex versus same-sex experimenter. We used a male experimenter for all subjects in Experiment 1. Although Berglas and Jones (1978) used a female research assistant, their main experimenter was

male. This reasoning would suggest that if the audience expecting success were female, male subjects would not choke but females would. Experiment 2 contradicted this prediction. In Experiment 2, men choked as much as or (if anything) more than women, when confronted by a female experimenter who expected success.

It could be argued that women often feel expected to perform worse than men, and that this is the most salient performance conflict for women (Horner, 1972; see also Zanna & Pack, 1975). That implies that women might take comfort rather than feel pressure from a situation in which the audience unambiguously expects success. Thus, an audience expecting success might be regarded as supportive encouragement by women, whereas men may regard it as threatening pressure. Another possibility is that women in Experiment 1 were more prone than men to privately accept the experimenter's prediction of their success. There was a trend in the data that supported this view: Specifically, analysis of self-reported private expectancies revealed a marginal ($p = .11$) interaction between subject's gender and experimenter's public expectation. Thus, women in Experiment 1 may have felt like the "credible expectation" subjects in Experiment 2, which would explain their superior performance. Still, these remarks are speculative.

Our expectancy findings held up across all subjects. Unweighted means analyses ruled out the possibility that their generality was simply due to the preponderance of men. Thus, it seems appropriate to conclude that the expectancy effects we tested are true generally for everyone, although they apply to men more than women.

Conclusion

The effects of expectancies on performance may depend on who holds them (see also Swann & Ely, 1984). The performer's private expectancy of success may improve performance. When an audience expects success, and the performer knows this, the effects may depend on whether the informational or social aspect of the expectancy predominates. If (as in past work) the audience's expectation creates a corresponding expectancy in the per-

former's mind, then performance may be improved (Darley & Fazio, 1980). On the other hand, if (as in the present results) the performer forms his or her own private expectancy on information more compelling than what the audience thinks, then the performer may not accept the audience's assessment. Under such circumstances, an audience's expectation of success may constitute performance pressure that may harm performance. The social aspect of perceived audience expectations for success can make them self-defeating rather than self-fulfilling prophecies.

References

- Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavior change. *Psychological Review*, 84, 191-215.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, 46, 610-620.
- Baumeister, R. F., Cooper, J., & Skib, B. A. (1979). Inferior performance as a selective response to expectancy: Taking a dive to make a point. *Journal of Personality and Social Psychology*, 37, 424-432.
- Baumeister, R. F., & Steinhilber, A. (1984). Paradoxical effects of supportive audiences on performance under pressure: The home field disadvantage in sports championships. *Journal of Personality and Social Psychology*, 47, 85-93.
- Berglas, S. C., & Jones, E. E. (1978). Drug choice as a self-handicapping strategy in response to noncontingent success. *Journal of Personality and Social Psychology*, 36, 405-417.
- Darley, J. M., & Fazio, R. H. (1980). Expectancy confirmation processes arising in the interaction sequence. *American Psychologist*, 35, 867-881.
- DePaulo, B. M., Stone, J. I., & Lassiter, G. D. (1985). Telling ingratiating lies: Effects of target sex and target attractiveness on verbal and nonverbal deceptive success. *Journal of Personality and Social Psychology*, 48, 129-144.
- Feather, N. T. (1966). Effects of prior success and failure on expectations of success and subsequent performance. *Journal of Personality and Social Psychology*, 3, 287-298.
- Feather, N. T. (1968). Change in confidence following success or failure as a predictor of subsequent performance. *Journal of Personality and Social Psychology*, 13, 129-144.
- Feather, N. T. (1969). Attribution of responsibility and valence of success and failure in relation to initial confidence and task performance. *Journal of Personality and Social Psychology*, 13, 129-144.
- Fenigstein, A., Scheier, M. F., & Buss, A. H. (1975). Public and private self-consciousness: Assessment and theory. *Journal of Consulting and Clinical Psychology*, 43, 522-527.

- Horner, M. S. (1972). Toward an understanding of achievement-related conflicts in women. *Journal of Social Issues*, 28, 157-175.
- House, W., & Perney, V. (1974). Valence of expected and unexpected outcomes as a function of locus of goal and type of expectancy. *Journal of Personality and Social Psychology*, 29, 454-463.
- Janis, I., & Field, P. (1959). Sex differences and personality factors related to persuasibility. In C. Hovland & I. Janis (Eds.), *Personality and persuasibility* (pp. 55-68 and 300-305). New Haven, CT: Yale University Press.
- Jones, E. E., & Berglas, S. C. (1978). Control of attributions about the self through self-handicapping strategies: The appeal of alcohol and the role of underachievement. *Personality and Social Psychology Bulletin*, 4, 200-206.
- Kimble, G., & Perlmuter, L. (1970). The problem of volition. *Psychological Review*, 77, 361-384.
- Kolditz, T. A., & Arkin, R. M. (1982). An impression management interpretation of the self-handicapping strategy. *Journal of Personality and Social Psychology*, 43, 429-502.
- Rosenthal, R., & Jacobson, L. (1968). *Pygmalion in the classroom: Teacher expectations and pupils' intellectual development*. New York: Holt, Rinehart, & Winston.
- Seta, J. J., & Hassan, R. K. (1980). Awareness of prior success of failure: A critical factor in task performance. *Journal of Personality and Social Psychology*, 39, 70-76.
- Swann, W. B., & Ely, R. J. (1984). A battle of wills: Self-verification versus behavioral confirmation. *Journal of Personality and Social Psychology*, 47, 1287-1302.
- Swann, W. B., & Snyder, M. (1980). On translating beliefs into action: Theories of ability and their application in an instructional setting. *Journal of Personality and Social Psychology*, 38, 879-888.
- Wine, J. (1971). Test anxiety and direction of attention. *Psychological Bulletin*, 76, 92-104.
- Zanna, M. P., & Pack, S. J. (1975). On the self-fulfilling nature of apparent sex differences in behavior. *Journal of Experimental Social Psychology*, 11, 583-591.
- Zanna, M. P., Sheras, P. L., Cooper, J., & Shaw, C. (1975). Pygmalion and Galatea: The interactive effect of teacher and student expectancies. *Journal of Experimental Social Psychology*, 11, 279-287.

Received March 29, 1984

Revision received July 3, 1984 ■

Manuscripts Accepted for Publication in the Section Interpersonal Relations and Group Processes

- Becoming First Among Equals: Moral Considerations in Jury Foreman Selections. Fred L. Strodbeck and Richard M. Lipinski (Social Psychology Laboratory, University of Chicago, 5555 Ellis Avenue, Chicago, Illinois 60637).
- Attraction in Context: Acquisition and Blocking of Person-Directed Action. Robert Ervin Cramer, Robert Frank Weiss (Department of Psychology, University of Oklahoma, 455 W. Lindsey, Room 705, Norman, Oklahoma 73109), Michele K. Steigleder, and Susan Siclari Balling.
- Attributions of Responsibility for Helping and Harmsdoing: Evidence for Confusion of Responsibility. John T. Cacioppo, Richard E. Petty, and Mary E. Losch (Department of Psychology, Spence Laboratories of Psychology, University of Iowa, Iowa City, Iowa 52242).
- Reactions to Being Helped in Cooperating Interracial Groups: A Context Effect. Stuart Cook and Michael Pelfrey (Institute of Behavioral Science, University of Colorado, Boulder, Colorado 80309).
- Motivational Bases of the Public Goods Problem. Toshio Yamagishi (Department of Behavioral Science, Faculty of Letters, Hokkaido University, N10 W7 KITA-KU, Sapporo, Japan 060).
- Effects of Gender Role Disparity on Couples' Decision-Making Processes. Cynthia J. Voelz (Department of Psychology, Tulane University, New Orleans, Louisiana 70118).
- Equity in Effort: An Explanation of the Social Loafing Effect. Jeffrey M. Jackson and Stephen G. Harkins (Department of Psychology, Fordham University, Bronx, New York 10458).
- Real and Ideal Others in Romantic Relationships: Is Four a Crowd? Robert J. Sternberg and Michael Barnes (Department of Psychology, Yale University, Box 11A Yale Station, New Haven, Connecticut 06520-7447).
- Self-Promotion is Not Ingratating. Debra K. Godfrey, Edward E. Jones (Department of Psychology, Green Hall, Princeton University, Princeton, New Jersey 08544), and Charles Lord.
-