

# The effect of attribution on perceptions of managers' performance

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## Abstract

Managers can influence the evaluation of their performance by advancing various reasons for or making attributions regarding their financial achievement or the financial achievement of their divisions. In this study, an experimental design is used to determine the effect that the advancing of controllable reasons versus uncontrollable reasons, of which evaluators are either aware or not aware, has on the evaluation of managers' performance in conditions in which they had recorded financial results that are lower or higher than the budgeted figures.

The experiment reveals that performance evaluations are higher when variances are explained by means of controllable reasons in the above-budget setting, whereas higher evaluations result in the below-budget setting when variances are explained by means of uncontrollable reasons. Furthermore, the evaluator's prior knowledge of these reasons results in a difference in the performance evaluation rating. Specifically, known reasons result in higher manager evaluation ratings. The experiment reveals that managers that record above-budget performance are given higher evaluation ratings than managers that record below-budget performance, even when variances are explained by means of reasons that the managers cannot control. This is known as the outcome effect. However, the findings indicate that the outcome effect is smaller when the evaluator has independent knowledge of the reason(s) advanced.

## Key words

*Manager evaluation*  
*Performance evaluation*  
*Attribution*

## Trefwoorde

*Bestuursevaluering*  
*Werksevaluering*  
*Atribusie*

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## **1 Introduction**

Subjective evaluations of performance are an integral part of everyday business life. Managers at all levels, including CEOs that are evaluated by board members and the financial press, are subject to these evaluations. Objective measures, such as financial performance, are used in subjective evaluations. However, many other sources of information are also used, for example what the reason was for not attaining or for exceeding a financial target. If the reason were not controllable by the managers being evaluated, it could be assumed that managers that achieve excellent or poor financial results would be evaluated as equally good or equally poor managers, because they were not responsible for the excellent results or to blame for the poor results. However, experiments and actual data have indicated that managers that achieve good financial results are given better performance evaluation ratings than managers that achieve poor financial results, even when the reasons for their performance are not controllable (Mitchell and Kalb 1981; Lipe 1993; Ghosh and Lusch 2000). This phenomenon is called the outcome effect. In practice, however, an evaluator has many other sources of information regarding the performance of the manager that is being evaluated. These additional sources assist the evaluator in deciding whether the reason cited for the performance recorded is true and whether it is the most important reason.

This paper examines how managers use accounting measures in their subjective evaluation of performance under conditions of uncertainty. The paper specifically investigates the situation in which accounting measures differ from budgeted amounts to determine how the reasons cited for performance affect subjective performance evaluation ratings and whether the evaluator already knows of these reasons. The purpose of this paper is to illustrate that the evaluation of performance is influenced by the reasons given for the financial performance recorded. The paper reveals that the controllability of the reasons (by the manager being evaluated), as well as the evaluator's prior knowledge of the reasons, influence performance evaluation ratings. Knowledge of the reasons influences the extent of the outcome effect. This paper explores the influence that these variables have on situations in which both above-budget and below-budget financial results are recorded.

Since the 1970s, numerous papers have examined the influence of various factors in the use of budgets to control and evaluate managerial performance (for example, Hopwood 1972; Otley 1978). Examples of these factors are culture (Harrison 1992), strategy (Govindarajan and Gupta 1985), task characteristics (Merchant 1984) and budget participation (Brownell 1982). Hartmann (2000:475) suggests that future research should examine among other things the reliance of the performance evaluator on accounting performance measures<sup>1</sup> under conditions of uncertainty.

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<sup>1</sup> The construct of *reliance on accounting performance measures* deals "with the extent to which managers rely on, and emphasize those performance criteria which are quantified in accounting and financial terms, and which are prespecified as budget targets" (Harrison 1993:319).

The paper describes an experiment in which respondents rated the managers of four divisions that reported below-budget and four divisions that reported above-budget performance. The financial performance of the divisions concerned was equally poor or good (5% below or above budget). The attributions provided for the financial performance varied (i.e. whether the reason advanced for the performance was a matter over which the managers being evaluated had control or one over which they did not have control) and whether the evaluator had prior knowledge of these matters.

The experiment revealed that higher performance evaluation ratings were awarded in the above-budget setting when variances were explained by means of matters that are controllable, whereas higher evaluation ratings were awarded in the below-budget setting when variances were explained by means of matters that are not controllable. Furthermore, the evaluator's prior knowledge of these reasons resulted in a difference in the performance evaluation rating. Specifically, known reasons resulted in a higher manager evaluation rating, except where a matter that is not controllable was advanced as the reason for above-budget performance (see figure 1). Under this condition, the difference between known and unknown reasons is not statistically significant. The experiment also indicates that managers that record above-budget performance are awarded a higher evaluation rating than managers that record below-budget performance, even when variances are explained by means of matters that the managers cannot control. This phenomenon is known as the outcome effect. However, the findings indicate that the outcome effect is moderated by the evaluator's prior knowledge of the reason advanced. Specifically, the difference between the evaluation ratings of managers in respect of above-budget and below-budget performance settings is smaller when the evaluator has independent knowledge of the reason(s) for the good or poor performance.

The findings are important for several theoretical and practical reasons. At the theoretical level, the study extends the performance measurement literature by introducing managers' reasoning as an influence on performance evaluation ratings. The literature is also extended by the fact that the study examines the effect of evaluator uncertainty, as suggested by Hartmann (2000). The introduction of the variable of uncertainty (i.e. whether or not the evaluator has prior knowledge of the reason for the performance recorded) also complements accounting/attribution literature, such as Baginski *et al* (1999). Previous studies have failed to account for this variable, which may cast additional light on the finding that voluntary attribution has value relevance. Voluntary attribution occurs when a manager provides a reason when he/she has the choice not to do so. Investors may react in a predictable way to voluntary attributions regarding earnings expectations only when they have prior knowledge of the reason given. They may not react or may react in an unpredictable way to attributions of which they have no prior knowledge. The findings regarding the robustness of the outcome effect and regarding the moderating effect of the prior knowledge of the evaluator also constitute important contributions of the study.

At the practical level, evaluators may find it informative that their subordinates can manipulate evaluations by citing different reasons for financial performance. Evaluators may want to consider this possibility when they perform evaluations. The study has implications for all levels of management, including CEOs whose performance is evaluated by the boards of corporations. Employees may find it informative that they can obtain higher evaluation ratings of their performance by attributing poor performance to matters that cannot be controlled and good performance to matters that can be controlled. This effect is enhanced when the causes cited are known to the evaluator.

Section 2 deals with relevant theory and hypotheses. It is followed by a section that outlines the experiment. Thereafter the findings and, finally, a summary are presented.

## **2 Theory and hypotheses**

The role that the controllability of causes should play in the evaluation of managers is covered by the literature on responsibility accounting. The influence that good or poor financial performance has on performance evaluation ratings has also been studied and is well documented in the literature on accounting. However, the effect of the evaluator's knowledge of the reasons cited for performance has not been recorded in the literature on accounting. The aforementioned aspects, i.e. controllability, financial performance and the evaluator's knowledge, are addressed with reference to the literature on psychology in the three subsections that follow.

### **2.1 Controllability**

The principle of controllability is central to the concept of responsibility accounting. It ensures the fairness of the evaluation system, based on relevant accounting information. The principle of controllability states that a manager should only be held responsible for the factors under his/her control (Choudhury 1986:189; Atkinson *et al* 2001:529). According to this principle, evaluations of manager performance exclude any factors that are not controlled by the manager. The analytical papers that deal with evaluation that is based on controllability (for example Antle and Demski 1988) also accept that an agent's performance should only be evaluated on the basis of controllable factors.

The principle of controllability appears to enjoy almost universal acceptance and suggests that, if the reason were uncontrollable, poor financial performance should not be judged as harshly and good financial performance should not be regarded as highly. It appears reasonable to expect of evaluators to apply the normative argument in their subjective evaluation of performance in order to be fair to the managers that they evaluate.

**Hypothesis 1a:** The controllability of the reasons cited for financial performance influences the evaluation of performance.

**Hypothesis 1b:** There is an interaction between the controllability of the reason cited and the above-budget or below-budget financial results to the extent that evaluation ratings are higher when controllable reasons are cited for good performance and when uncontrollable reasons are cited for poor performance.

## **2.2 Good or poor financial performance and the outcome effect**

For the purposes of this paper, good or poor financial performance refers to above-budget or below-budget performance. Higher evaluation ratings will be awarded to managers of divisions that report above-budget results than to managers that report below-budget results.

If a manager could not control the cause of the performance of the division concerned, it could be assumed that a divisional manager that records an above-budget performance would be awarded the same evaluation rating as a divisional manager that records a below-budget performance. Experiments (Mitchell and Kalb 1981; Baron and Hershey 1988; Brown and Solomon 1987 and 1993; Lipshitz 1989; Lipe 1993) and a field study (Ghosh and Lusch 2000) have found this assumption to be incorrect. The evaluation ratings of managers are influenced by the financial outcome, even when the outcome was not controllable, i.e. the outcome effect is operative. Performance evaluation ratings of managers will therefore be influenced by whether the financial performance of their division is above or below budget, even when the causes of the performance were uncontrollable.

It is posited that the outcome effect will be influenced by whether the evaluator has prior knowledge of the uncontrollable reason that is advanced for the performance. If the evaluator did not know of the reason, he or she would be less certain that there were no other reasons for the performance or that the cited reason is the true one. These other (true) reasons could, potentially, be controllable and managers are held fully accountable for controllable factors. Therefore unknown, uncontrollable reasons will be evaluated more like controllable reasons than like known, uncontrollable reasons. The difference between evaluation ratings for above-budget and below-budget performance will be greater if controllable reasons were cited than if uncontrollable reasons were cited. This relationship implies a greater difference between above-budget and below-budget conditions for unknown reasons than for known reasons.

**Hypothesis 2a:** Managers that report good financial results will be awarded a higher evaluation rating than managers that report poor financial results, even if the reasons for the results were uncontrollable (i.e. the outcome effect).

**Hypothesis 2b:** An evaluator's prior knowledge of the uncontrollable reasons cited for financial performance will lead to a smaller outcome effect than when the evaluator has no prior knowledge of the reasons.

### **2.3 The evaluator's knowledge**

Attribution theory is an umbrella term for a number of related models that examine people's causal reasoning processes (i.e. how we figure out why events occur) (Fiske and Taylor 1991:23; Jones 1990). One of the areas within attribution theory deals with how people evaluate the persuasiveness of a message. Specifically, attribution theory helps to explain how an observer determines the cause of an event when there are multiple plausible causes and the observer has a preconceived expectation of what the message is likely to be (Eagley and Chaiken 1993:355).

The literature on psychology indicates that messages that are perceived to be at odds with situational incentives are more persuasive than messages that are consistent with situational incentives. Specifically, a statement that does not promote self-interest is more persuasive, because a statement that promotes self-interest causes the observer to be uncertain about whether the position is taken for the purpose of self-interest or is based on facts. Given this uncertainty, the observer will process given information more thoroughly in search of additional evidence regarding the facts (Wood and Eagly 1981). For example, assume that two students failed two different tests. The first student says that she or he did not study enough and the second student says that the test was unfair. The statement of the first student will be accepted without question whereas the statement of the second student, being a statement that promotes self-interest, will lead the observer to ask more questions and examine related facts closely before arriving at a conclusion regarding the statement.

Hirst *et al* (1995) provide evidence in an accounting setting that investors consider the self-interest of a financial analyst in reaching a conclusion regarding an investment decision that is based on the analyst's recommendation.

The Wood and Eagly (1981) framework suggests that a manager whose expectation regarding a subordinate's reasoning is not confirmed will assume the reason cited to be based on facts. Whether the manager knows the reason independently will not influence his or her views regarding the veracity of the reason. On the other hand, a manager whose expectation is confirmed, will pay more careful attention to the facts in order to distinguish between the reasons that are based on facts and the reasons that are advanced for the purpose of self-interest. Independent knowledge of a reason will satisfy the evaluator that it is the true reason. The absence of such knowledge leaves room for doubt.

At this juncture it is necessary to ascertain what an evaluator that receives news of good or poor financial performance will expect the subordinate manager to advance as the reason for the financial performance. The situational imperatives would suggest biased reporting by the subordinate manager. In pursuance of the preceding discussion of controllability, the self-interest bias will tend to be to cite an uncontrollable reason for poor performance and a controllable reason for good performance.

The literature on psychology provides further clues. Jones and Nisbett (1972:80) argue that “there is a pervasive tendency for actors to attribute their actions to situational requirements”. The “egotism” model of attribution takes the position of Jones and Nisbett (1972) a step further by predicting the attribution of success to controllable forces and failure to uncontrollable forces (Clapham and Schwenk 1991; Gooding and Kinicki 1995; Baginski *et al* 1999).

Baginski *et al* (1999) studied earnings announcements, specifically the relationship between good or poor results and controllable or uncontrollable attribution. They found empirical evidence that among other things managers are more likely to attribute the cause of negative performance to uncontrollable forces.

It should be recalled that the citing of controllable reasons for good financial results and uncontrollable reasons for poor financial results is in the self-interest of the manager that is being evaluated. Evaluator expectations regarding likely reasons for financial performance were tested in the exit questionnaire of the experiment being reported. The notion that managers would expect subordinates to reason in a self-interested manner was confirmed (see “manipulation and other checks” below).

With this knowledge of the reasons that managers would expect, the Wood and Eagly (1981) framework suggests that evaluators expect controllable reasons to be cited in above-budget conditions. Therefore, when controllable reasons were cited, information was analysed in greater detail. Under these conditions, evaluators’ judgement will be influenced by whether or not they have prior knowledge of the reasons cited. If the evaluator did have prior knowledge of the reason, he/she would find the cited reason convincing and would reward the manager with a high evaluation rating. An unknown controllable reason would lead to a lower evaluation rating. If uncontrollable reasons were cited, evaluation ratings would not differ in respect of known and unknown reasons. Because expectations would not be confirmed, the reason would be regarded as convincing and further analysis suspended.

In the below-budget condition, evaluators expect reasoning that promotes self-interest, i.e. the citing of uncontrollable reasons. If uncontrollable reasons were cited, they would examine any additional information fully and prior knowledge would influence the performance ratings. Known, uncontrollable reasons would therefore lead to higher evaluation ratings than unknown, uncontrollable reasons would. Controllable reasons for below-budget performance would, according to the framework, not be influenced by the prior knowledge of the evaluator.

However, bad news, such as below-budget performance, is treated differently because of the loss-aversion aspect of prospect theory (Wecker *et al* 1985; Tversky and Kahneman 1991; Burgstahler and Dichev 1997). The Wood and Eagly (1981) framework does not address this matter. Prospect theory suggests that evaluators would be more sensitive to below-budget conditions than to above-budget conditions. Therefore further analysis may be done in the below-

budget condition, whether or not message expectations are confirmed. Evaluators may take the position that “if it was that bad, why wasn’t I told the reason earlier so that we could address the problem?” This loss-aversion factor suggests that the information given would be processed further in all below-budget conditions.

The evaluator’s prior knowledge of the reason should therefore lead to higher evaluation ratings for managers under all conditions, except in respect of uncontrollable reasons for above-budget financial performance, where it should make no difference. Panel A of figure 1 reflects these predictions.

**Hypothesis 3:** The evaluator’s prior knowledge of the reasons cited for financial performance influences the performance evaluation rating awarded, except in the above-budget, uncontrollable reason condition.

### 3 Experiment

An experiment was conducted in which respondents rated the performance of the managers of four divisions that achieved below-budget financial results and the managers of four divisions that achieved above-budget financial results. The financial results of the various divisions were equally poor or good (5% below or above budget), but the attributions by the divisional managers differed. They cited controllable or uncontrollable reasons that were either known or unknown to the evaluator. There were therefore eight conditions that applied, namely:

		Above budget		Below budget	
		Reason	Reason	Reason	Reason
		Known	Unknown	Known	Unknown
Uncontrollable	AUK (1)	AUU (2)	Uncontrollable	BUK (5)	BUU (6)
Controllable	ACK (3)	ACU (4)	Controllable	BCK (7)	BCU (8)

The dependent variable was the evaluation of performance and the three independent variables were above-budget, below-budget performance, controllable or uncontrollable conditions and known or unknown reasons. This yielded a 2 X 2 X 2 within-subjects experimental design. A within-subjects design was used, because it approximates a natural setting in which multiple manager’s report to a senior manager and because it reminds subjects that there could be different causes of which one is chosen by the divisional manager.

Evaluation was done, in accordance with Lipe and Salterio (2000), on a 101 point scale from 0 to 100 with 0 labelled “reassign” and 100 labelled “excellent”. The questionnaire is available on request.

The specific controllable and uncontrollable reasons that were either known or unknown to the evaluator (respondent), for example action taken by



competitors and unusual rainfall, were randomised. The order in which the divisions were allocated to respondents was also randomised.

The respondents were 69 executive MBA students that held managerial positions and had enrolled for introductory management accounting at a large state business school in the USA. Their average age was 34 and they had an average of 11 years of work experience.

## **4 Findings**

### ***4.1 Manipulation and other checks***

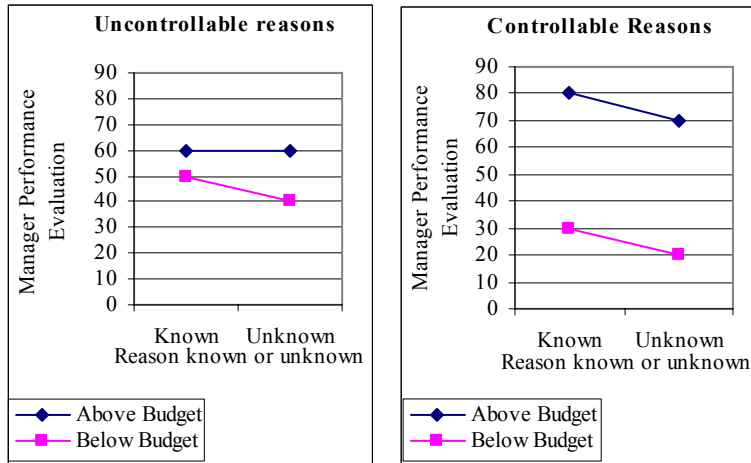
The randomisation of particular reasons, such as unusual rainfall, that were either known or unknown to respondents was successful in that the specific reasons that were known or unknown made no significant difference ( $p = 0.9835$ ) to the results. Similarly, whether the information that the respondents were given had listed the above-budget divisions first or last made no difference ( $p = 0.8300$ ).

In the exit questionnaire, 65 of the 69 respondents indicated that they considered it more likely that uncontrollable reasons would be cited for poor financial results and that controllable reasons would be cited for good financial results. This conviction confirms the expectation stated in the development of hypothesis 3.

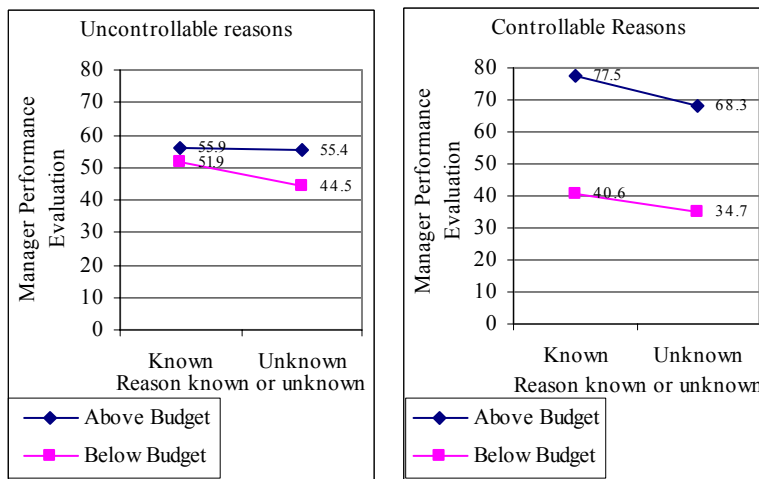
### ***4.2 Experimental results***

Figure 1 and table 1 provide summaries of the average evaluation ratings of managers under the various conditions and the results of a 2X2X2 ANOVA. A significant ( $p = 0.0123$ ) three-way interaction was found. Therefore six follow-up 2X2 ANOVAs were performed.

**Figure 1**  
**Panel A: Theoretical predictions – Mean manager performance evaluations**



**Panel B: Experimental results – Mean manager performance evaluations**



**Table 1**  
**Experimental results for manager performance evaluations**

**Panel A: Mean and standard deviations**

<b>Above-budget Financial Performance</b>	<i>Mean</i>	<i>Std Deviation</i>
Uncontrollable Reason Known to Evaluator	55.9	10.8
Uncontrollable Reason Unknown to Evaluator	55.4	13.7
Controllable Reason Known to Evaluator	77.5	10.8
Controllable Reason Unknown to Evaluator	68.3	13.3

**Below-budget Financial Performance**

Uncontrollable Reason Known to Evaluator	51.9	12.6
Uncontrollable Reason Unknown to Evaluator	44.5	13.2
Controllable Reason Known to Evaluator	40.6	17.4
Controllable Reason Unknown to Evaluator	34.7	15.4

**Panel B: Repeated measures ANOVA within subjects' comparison of overall effects (2X2X2)**

	<i>df</i>	<i>Mean Square</i>	<i>F-Statistic</i>	<i>Probability</i>
Controllability (CONTR)	1	1 563.5	10.06	0.0023
Above/below budget (ABBEL)	1	62 826.7	259.43	<.0001
Evaluator knows/not (KNOW)	1	4 539.7	25.07	<.0001
CONTR * ABBEL	1	26 588.0	158.52	<.0001
CONTR * ABBEL * KNOW	1	905.5	6.62	0.0123

Only interactions significant at the 5% level shown.

**Panel C: Repeated measures ANOVAs within subject's comparison of above-budget and below-budget reasons (2X2)**

<b>Above budget</b>	<i>df</i>	<i>Mean Square</i>	<i>F-Statistic</i>	<i>Probability</i>
Controllability (CONTR)	1	20 523.2	121.35	<.0001
Evaluator knows/not (KNOW)	1	1 607.1	17.36	<.0001
CONTR * KNOW	1	1 313.1	13.84	0.0004

Table 1 (continued)

**Below budget**

Controllability (CONTR)	1	7 628.3	49.51	<.0001
Evaluator knows/not (KNOW)	1	3 046.7	15.13	0.0002
CONTR * KNOW	1	39.9	0.25	0.6182

**Panel D: Repeated measures ANOVAs within subjects' comparison of controllable and uncontrollable reasons (2X2)**

<b>Controllable</b>	<i>df</i>	<i>Mean Square</i>	<i>F-Statistic</i>	<i>Probability</i>
Above/below budget (ABBEL)	1	85 578.3	343.33	<.0001
Evaluator knows/not (KNOW)	1	3 918.8	21.30	<.0001
ABBEL * KNOW	1	188.3	1.09	0.3002

Table 1 (continued)

**Uncontrollable**

Above/below (ABBEL)	1	3 836.4	23.88	<.0001
Evaluator knows/not (KNOW)	1	1 068.3	9.33	0.0032
ABBEL * KNOW	1	831.3	10.81	0.0016

**Panel E: Repeated measures ANOVAs within subjects' comparison of reasons known or unknown to supervisors (2X2)**

<b>Known</b>	<i>df</i>	<i>Mean Square</i>	<i>F-Statistic</i>	<i>Probability</i>
Above/below budget (ABBEL)	1	28 792.6	187.90	<.0001
Controllability (CONTR)	1	1 841.9	17.99	<.0001
ABBEL * CONTR	1	18 653.5	101.62	<.0001

**Unknown**

Above/below budget (ABBEL)	1	34 148.2	169.21	<.0001
Controllability (CONTR)	1	169.0	0.99	0.3229
ABBEL * CONTR	1	8 840.0	73.03	<.0001

Table 1 (continued)

**Panel F: Repeated measures ANOVA within subjects' comparison between various individual reasons using the "contrast" statement**

<b>Above-budget financial performance</b>	AUK	AUU	ACK
Uncontrollable Reason Known to Evaluator (AUK)	-		
Uncontrollable Reason Unknown to Evaluator (AUU)	0.7608	-	
Controllable Reason Known to Evaluator (ACK)	<.0001	<.0001	-
Controllable Reason Unknown to Evaluator (ACU)	<.0001	<.0001	<.0001
<b>Below-budget financial performance</b>	BUK	BUU	BCK
Uncontrollable Reason Known to Evaluator (BUK)	-		
Uncontrollable Reason Unknown to Evaluator (BUU)	0.0001	-	
Controllable Reason Known to Evaluator (BCK)	<.0001	0.1017	-
Controllable Reason Unknown to Evaluator (BCU)	<.0001	<.0001	0.0319

**Above budget and below budget compared for the outcome effect**

Compare AUK with BUK	0.0259
Compare AUU with BUU	<.0001

Support was found for hypothesis 1a as a significant ( $p = 0.0023$ ) main effect was found for the controllability of the reason given for the financial performance recorded. The effect of controllability is highly significant in both the above-budget ( $p = <.0001$ ) and the below-budget 2X2 ANOVAs ( $p = <.0001$ ) (panel C).

There is also an overall interaction ( $p = <.0001$ ) between controllability and above-budget/below-budget performance, which supports hypothesis 1b that uncontrollable reasons lead to higher evaluation ratings for poor financial results and lower evaluation ratings for good financial results. An interaction between these two variables is present in both 2X2 ANOVAs (panel E). The relevant P values are  $<.0001$  for both an ANOVA of reasons known to the evaluator and an ANOVA of reasons unknown to the evaluator.

Table 1, panel B indicates a significant overall effect ( $p = <.0001$ ) for above-budget or below-budget performance. A separate 2X2 ANOVA for uncontrollable reasons only (panel D) also reveals a significant effect ( $p = <.0001$ ) for above-budget or below-budget performance. This finding

supports hypothesis 2a, namely that manager evaluation ratings will differ between high and low financial performance conditions even when the reason for the performance was not controllable. The experiment reveals that the outcome effect is robust to manipulation of the prior knowledge of the evaluator regarding uncontrollable reasons.

Although the outcome effect is observed, whether or not the evaluator has prior knowledge of the uncontrollable reasons, there is a significant difference ( $p = 0.0016$ ) between the size of the effect with and without knowledge. This separate ANOVA provides support for hypothesis 2b, namely that a known reason leads to a smaller outcome effect than an unknown reason.

Whether or not the evaluator has prior knowledge of the reason given for the financial performance is significant ( $p = <.0001$ ) as a main effect. In separate 2X2 ANOVAs for controllable reasons ( $p = <.0001$ ) and uncontrollable reasons ( $p = 0.0032$ ), the evaluator's prior knowledge of the reason has a significant effect. This finding represents support for hypothesis 3. It should be recalled that the prediction was that an evaluator would examine the facts closely and therefore distinguish between known and unknown reasons when the reasons given by subordinates can be regarded as driven by self-interest or are in the below-budget condition. These predictions are all supported (see panel F). There is a significant difference in cases in which the reason cited could be regarded as driven by self-interest. These conditions are uncontrollable reasons for below-budget performance ( $p = 0.0001$ ) and controllable reasons for above-budget performance ( $p = <.0001$ ). There is also, as predicted, a significant difference ( $p = 0.0319$ ) between whether or not the evaluator knew of the reason applicable to the below-budget, controllable reason condition. Finally, as expected, the difference was not significant ( $p = 0.7608$ ) in the above-budget, uncontrollable reason condition.

## **5 Summary, conclusions, implications and limitations**

### ***5.1 Summary and conclusions***

The experiment executed, indicated the effect of the reasons given by managers for good (5% above budget) or poor (5% below budget) accounting performance measures of their divisions on their own performance evaluation ratings. The reasons they cited, were factors they could control or could not control and the evaluator either knew or did not know of the reasons independently. In the experiment, whether a reason given was controllable or not controllable by the subordinate manager made a difference to his/her evaluation rating. Whether or not the evaluators knew about the reason given by their subordinates made a difference to their performance evaluation ratings. A reason known by the evaluator led to a higher manager evaluation rating under conditions in which the reason given would promote the self-interest of the subordinate that cited the

reason as well as under conditions in which below-budget financial performance was recorded. This is the case because a self-promoting reason is only believed when accompanied by other evidence, such as prior knowledge.

The outcome effect was observed where good financial performance led to higher manager evaluation ratings than did poor performance, even when uncontrollable reasons were cited. This effect is significant even when the evaluator already knew of the uncontrollable reason. However, evaluator knowledge of the reason results in a smaller outcome effect.

## **5.2 Implications**

Future research regarding the effect of causal attribution should consider whether the evaluator does know about the reasons advanced for performance.

Subordinate managers could benefit from citing reasons that are known to their evaluator. They could influence the knowledge that the evaluator has before accounting results are available. Therefore their best strategy is to keep their evaluator informed of all relevant controllable and uncontrollable influences on financial performance and then to emphasise the importance of the controllable reasons when good accounting results are recorded, and to emphasise the uncontrollable reasons when poor accounting results are recorded. However, it should be borne in mind that managers are usually expected to implement counter strategies for known, uncontrollable influences. It may therefore not be to their advantage to cite the uncontrollable influences that their evaluators know that they knew about in time to institute counter measures.

## **5.3 Limitations**

The results of the study should be evaluated against the background of the following limitations:

- 1 The ability to generalise experimental results to the population of managers is limited by the composition of the respondent group. The respondents were executive MBA students with an average of just more than 11 years of work experience. They all held managerial positions in the USA.
- 2 The ability to generalise the experimental results is limited by the artificial setting of the experiment. A practical evaluation of managers is a much more complex and time-consuming process (Eccles and Crane 1988) than the experimental setting in which respondents know that no one will suffer the consequence of the evaluation ratings awarded.
- 3 The ability to generalise is limited by the nature, format and type of the information provided to the respondents. According to Eccles and Crane (1988), evaluators have access to a variety of informal and qualitative information, including the individual reputations of subordinate managers.

Most of the limitations discussed are inherent to the experimental method that provides for greater internal validity at the expense of external validity. This method permits manipulations that are superior to, but not practical in terms of, most other research methods. Treatment conditions could be randomised and could include conditions that are not often found in practice. For example, the financial performance of divisions could be kept constant while other aspects are manipulated. An under-budget performance situation could also be created as often as an over-budget performance situation. Finally, the attributions by subordinate managers and the knowledge of evaluators could be manipulated with the assurance that no other information was known.

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