Does Leadership Make a Difference to Organizational Performance?

Alan Berkeley Thomas


Stable URL:
http://links.jstor.org/sici?sici=0001-8392%28198809%2933%3A3%3C388%3ADLMADT%3E2.0.CO%3B2-C

Administrative Science Quarterly is currently published by Johnson Graduate School of Management, Cornell University.

Your use of the JSTOR archive indicates your acceptance of JSTOR’s Terms and Conditions of Use, available at http://www.jstor.org/about/terms.html. JSTOR’s Terms and Conditions of Use provides, in part, that unless you have obtained prior permission, you may not download an entire issue of a journal or multiple copies of articles, and you may use content in the JSTOR archive only for your personal, non-commercial use.

Please contact the publisher regarding any further use of this work. Publisher contact information may be obtained at http://www.jstor.org/journals/ejohn.html.

Each copy of any part of a JSTOR transmission must contain the same copyright notice that appears on the screen or printed page of such transmission.

JSTOR is an independent not-for-profit organization dedicated to creating and preserving a digital archive of scholarly journals. For more information regarding JSTOR, please contact support@jstor.org.
Does Leadership Make a Difference to Organizational Performance?

Alan Berkeley Thomas
Manchester Business School, University of Manchester, U. K.

This paper evaluates research on the impact of chief executive officers on corporate performance, taking Lieberson and O’Connor’s pathbreaking study as its starting point. Although that study is commonly regarded as the principal source of empirical support for the view that leaders have little impact on organizational performance because they are constrained by situational factors, it is argued here that the study and its derivatives have provided consistent and compelling evidence that individual leaders do make a difference. The results of a study of large retail firms in the United Kingdom, designed to overcome the methodological problems of earlier studies of leadership and performance, are presented in support of this argument.

THE LEADERSHIP-PERFORMANCE DEBATE

Conventional views of organizational leadership have generally assumed that leaders have a significant and possibly crucial impact on the performance of the organizations they head, but this “individualist” view has been increasingly questioned by “contextualists,” who emphasize the constraints that are placed on leaders by situational factors (Hall, 1977; Pfeffer and Salancik, 1978). Although there have been few studies that have a direct bearing on this important issue, research on sports organizations (Grusky, 1963; Gamson and Scotch, 1964; Eitzen and Yetman, 1972; Allen, Panian, and Lotz, 1979), governmental institutions (Salancik and Pfeffer, 1977), and industrial organizations (Lieberson and O’Connor, 1972; Samuelson, Galbraith, and McGuire, 1985) has tended to support the contextualist position. In practice, however, the contextualist argument has rested heavily on the findings of just one major study, that of Lieberson and O’Connor (1972), which has become the most commonly cited evidence of the “inertial” organization (Hambrick and Mason, 1984) and which is widely regarded as the major counterpoint to the proposition that leadership makes a difference.

In view of this study’s “startling” implications for those who “really believe in leadership” (Hall, 1977:242), it is perhaps not surprising that it has been subjected to substantial criticism. Predominantly this has focused on Lieberson and O’Connor’s methodology, which has been held by some to be inadequate and insufficient to support the contention that leaders don’t make a difference. Their contribution to leadership research therefore remains controversial.

This paper aims to resolve the leadership-performance issue. First, through a review of the main methodological criticisms that have been directed at Lieberson and O’Connor’s and related studies, it is argued that their implications for the leadership-performance issue have largely been misstated and that certain specific criticisms are unfounded. Second, on the basis of this review it is argued that, contrary to general opinion, Lieberson and O’Connor’s study provides definite support for the individualist view of leadership and that its findings are wholly consistent with those of later studies that appear to have yielded opposite results. The intent is not only to clarify this particular aspect of the leadership-performance problem but also to go some way toward reducing the more
general conceptual confusion that surrounds the study of leadership (Bryman, 1986).

LIEBERSON AND O’CONNOR’S STUDY

Lieberson and O’Connor’s (1972) research into leadership and performance in large corporations was set in the context of an examination of environmental constraints on leader influence. “A key research issue,” they wrote, “is simply to determine the relative importance of leadership and organizational environment for organizational outcomes. How much variance in organizational performance can be attributed to persons in top leadership roles?” (Lieberson and O’Connor, 1972:118).

To address this question, they obtained data on sales, earnings (profits), profit margins, and periods of leader incumbency for 167 major publicly owned, U.S. corporations for the years 1946–1965. Samples of from six to eighteen firms were drawn from within each of thirteen industries, these being chosen to reflect varied conditions with respect to technology, market attributes, government influence, size, and so on. Leadership periods were defined as those during which a firm was under the leadership of the same president or chairman. The analysis therefore used three dependent performance variables (sales, earnings, and profit margins) and four independent variables in the form of year, industry, company, and leadership. The year variable was taken to indicate the effects of general economic conditions, such as interest rates and inflation, on the firms over time; the industry variable to represent effects common to an industry, such as technology and competition; the company variable to reflect differences between firms, such as size, location, facilities, and reputation; and the leadership variable to represent the influence of leaders during their periods of office.

The analytical strategy was to attribute variance in each of the performance measures to each of the independent variables by means of a sequential decomposition of variance. For each performance variable the data were organized in a matrix in which the rows were defined by firms and the columns by years, each cell entry being a performance value (e.g., dollar sales) for a given firm in a given year. Having calculated the variance of the aggregate set of performance values, the cell entries were adjusted to discount first the year effect, then industry, then company, and finally leadership. The end product is a set of statistics that indicate the percentage of performance variance that is explained by each independent variable. The same approach was used by Salancik and Pfeffer (1977) in a study of mayoral effects on city budgets.

On the basis of these studies it has commonly been concluded that leadership differences have little or no impact on organizational performance, for in each case the vast majority of performance variation is accounted for by nonleadership factors. Pearce, Stevenson, and Perry (1985:275), for example, noted that “the appointment of new corporation presidents can make headlines in the business sections of the newspapers, but Lieberson and O’Connor (1972) found leadership change to have no effect on organizational indicators, such as profits.” Similarly, Hambrick and Mason (1984:194)
stated that in comparison with the effects of other independent variables “the apparent added effect of leadership was nil.” Finally, Pfeffer and Salancik (1978:19) commented that “studies estimating the effect of administrators have found them to account for about 10 percent of the variance in organizational performance,” which, they went on to say critically, is “a striking contrast to the 90 percent of intellectual effort that has been devoted to developing theories of individual action.” Leadership, it seems, doesn’t make a difference.

**Methodological Criticisms**

The most comprehensive critique of these studies is that of Weiner (1978). In a replication study, based on a sample of 193 publicly owned U.S. manufacturing corporations over the period 1956–1974, Weiner showed that the order in which the independent variables are discounted in the decompositon analysis makes an important difference to the results. Using both the order adopted by Lieberson and O’Connor (year, industry, company, leadership) and the reverse order, Weiner found that under the former, leadership accounted for 16.1 percent of profit variance, 19.0 percent of sales variance, and 8.7 percent of profit margin variance, which was in line with Lieberson and O’Connor’s original findings. But when the variables were discounted in reverse order, leadership accounted for 96.1 percent of profit variance, 94.8 percent of sales variance, and 77.5 percent of profit margin variance. Weiner therefore concluded that Lieberson and O’Connor’s results were merely an artifact of the order in which the variables had been entered into the analysis.

In his influential text on organizations and environments, Aldrich (1979) noted that Lieberson and O’Connor had found only limited effects of leadership changes on company performance. He added that “Generalizing from their findings is risky, however, given definitional dependence between their three performance variables and the lack of organization-specific control variables” (1979:19). Later he made an important point that seemingly uncovered a fatal flaw. Lieberson and O’Connor’s results showed that leaders had little impact on net earnings (profits) and sales but a sizable impact on profit margins. Since the latter is the ratio of the former and hence definitionally dependent on them, Aldrich argued that “it is simply implausible that executives who failed to have an impact on sales or net earnings could nevertheless have an impact on profits” (by which he clearly meant profit margins). He concluded that Lieberson and O’Connor’s findings were “highly suspect” (1979:144).

Finally, in their advocacy of an “upper echelons” perspective on organizations, Hambrick and Mason (1984:194) suggested that Lieberson and O’Connor employed “a combination of dependent variables and data analysis that made it almost impossible for the leadership variable to take a major role.” Both Lieberson and O’Connor’s and Salancik and Pfeffer’s studies are seen as flawed because they do not allow the leadership variable to enter earlier into the equation (cf. Weiner, 1978) and because the choice of independent and dependent variables renders the results “almost tautological” (Hambrick and Mason, 1984:194).
The four main methodological criticisms of Lieberson and O’Connor’s study can thus be listed as (1) the arbitrary effect of the order of entry of the independent variables to the decomposition of variance analysis, (2) the definitional dependence between the performance measures, (3) the absence of organization-specific control variables, and (4) internal inconsistency in the results that cannot be interpreted plausibly. Here it is intended to show that these criticisms are less valid than they appear and that they do not seriously undermine the findings of the studies they address. In doing this, it is necessary to examine one further methodological issue, that of sample design.

Critical Reassessment

**Entry order.** Weiner’s (1978) replication study showed that the percentages of performance variance accounted for by the independent variables are highly sensitive to the order in which they are treated. The impact of leadership appears either to be substantial or negligible purely as a consequence of its being assessed first or last. While this is undoubtedly correct, the issue is not so much whether the sequencing makes a difference but whether it makes substantive sense to conduct the analysis in reverse order. It is contended here that it does not.

Consider, for example, the effects of inflation. Price inflation has the effect of increasing the nominal values of the performance measures. In Lieberson and O’Connor’s analysis this effect is discounted by the initial elimination of the year effect. If, however, leadership had been discounted first, this would have resulted in a misleading overestimation of its impact on performance. A comparison of the mean values of the performance measures for each successive leader period would show that leaders in office in later periods appear to achieve higher levels of performance than those in earlier periods, but this could be due solely to the effects of inflation rather than to any real differences between leaders. The underlying strategy of Lieberson and O’Connor’s analysis is to eliminate such contaminating influences so that leaders can be fairly compared. If leaders are compared without doing so, the leader effect is bound to be overestimated.

The same considerations apply to the order in which industry and company effects are discounted. If the mean performance values associated with different leader periods are compared without discounting variations between industries or firms, then leaders in larger firms in higher-performing industries will appear to achieve higher levels of performance than those in smaller firms in lower-performing industries. But to make valid comparisons between leaders it is necessary to equalize these conditions, and it is this that Lieberson and O’Connor’s methodology attempts to do. To say that their results are a statistical artifact is in a sense true, but given that the substantive implications of Weiner’s reverse-order analysis are even less plausible than those derived from Lieberson and O’Connor’s original analysis, the point seems to apply with greater force to her reverse-order results.

**Sample design.** A second problem, noted by both Weiner (1978) and Salancik and Pfeffer (1977), concerns the influence of the sample design on the subsequent analysis. Assess-
ments of the variances in the performance matrices are calculated by subtracting the mean performance values associated with each value of each independent variable from the grand mean. The larger the variance of these means, the greater the percentage of performance variation that is accounted for. The relative significance of the year, industry, and company variables is therefore highly sensitive to the characteristics of the sample. As Salancik and Pfeffer (1977:488) said of their city budgets study, “The point is simply that by sampling homogeneous or heterogeneous cities or years, the city or year effect can be made relatively smaller or larger respectively.” If leadership influence is assessed against the percentage of total variance accounted for by such variables, the observed effect of leadership will be highly dependent on these sample characteristics. This leads to a crucial point.

If the leadership effect is assessed against the total performance variance exhibited by some sample of organizations over some period of time, the percentage attributed to leadership for a given degree of leader effect will vary arbitrarily depending on the sample characteristics. If a time period were selected that exhibited no variation in the aggregate values of the performance measures, if a single industry were studied so that no variation could be attributed to industry differences, and if a set of firms were selected that were identical in all respects except leadership, then the percentage of performance variance attributable to year, industry, and firm would, by definition, be zero. The percentage of performance variance attributable to leadership could then fall anywhere between zero and 100 percent. The magnitude of the leader effect, when assessed in relation to the total performance variation, may therefore vary widely between samples even if it is constant when assessed in relation to the amount of variation that is unexplained by nonleadership factors.

It must be remembered that the impact of leader differences on performance can be assessed in two distinct ways. First, we may ask about the contribution of leadership relative to that of other independent variables, in which case the leader effect is compared with the proportions of total variation accounted for by year, industry, and firm. Second, we can assess the leader effect after the influence of the other independent variables has been discounted, in which case the proportion of variance that is explained by leadership is compared with that which could be so explained once other factors have been eliminated. Both of these are reasonable inquiries, but it is important not to confuse one with the other and, in particular, not to treat the outcomes of one inquiry as if they were the outcomes of the other. The only circumstance in which the results of the type of analysis discussed here answer both questions simultaneously is when the sample consists of units that are homogeneous with respect to the performance variables, for only then do the two bases for assessment, the total variation and the variation that remains unexplained by nonleadership factors, coincide. When studies do not operate under conditions of unit homogeneity, their results must be interpreted with considerable care.
Leadership and Performance

Because Lieberson and O’Connor were chiefly interested in assessing the relative impact of leadership in comparison with environmental factors, it is this issue that received most attention in their discussion. Yet they also dealt with the question of the impact of leaders on variations in performance that are not explained by such factors, and there they said clearly that leadership does make a difference (1972:123). Unfortunately, the significance of this aspect of their findings tends to have been obscured subsequently by heavy emphasis being placed on the contribution of leadership to total performance variance.

**Internal inconsistency and definitional dependence.** Aldrich (1979) argued that Lieberson and O’Connor’s results are highly suspect because they show that leaders have a significant impact on the ratio of profits to sales (profit margin) but little influence on profits and sales themselves and that this is implausible. It is suggested here that the opposite is the case.

Quite understandably, in view of Lieberson and O’Connor’s treatment of this point, Aldrich drew his conclusions from the statistics showing the additional percentages of total performance variance for each performance measure that are attributable to leadership after year, industry, and company effects have been discounted. These are 6.5 percent for sales, 7.5 percent for profits, and 14.5 percent for profit margin. It therefore appears that leaders have a much greater influence over the latter than either of the former, and this, as Aldrich rightly said, is implausible.

However, these statistics cannot be used to compare the degrees of influence exerted by leaders on different performance variables because each depicts leader influence relative to that of the other independent variables. What they tell us is that while sales and profit variance is largely accounted for by these, profit margin variance is much less so. The proportion of profit margin variance that remains unexplained prior to considering the effect of leadership is therefore greater than in the case of profits and sales. A given degree of leader impact will appear larger for profit margin because it is based on a relatively larger amount of unexplained variance. If, for example, leadership accounted for all of the unexplained variance for each dependent variable in Lieberson and O’Connor’s study, the increments due to leadership would be represented as 9.1 percent (sales), 12.0 percent (profits), and 47.1 percent (profit margin), the maximum figures possible, given the effects of year, industry, and company. The implausibility detected by Aldrich arises because relative measures are being treated as if they were directly comparable. Put differently, relations that hold for the total sample of organizations are being treated as if they held in the same way and to the same degree in each and every organization in the sample.

If we are interested in whether leaders have a differential impact on performance at the level of individual organizations, then the valid basis of comparison is the unexplained rather than the total variation. Although the amounts of unexplained variation may differ from variable to variable, differences in the degree of leader impact will be directly comparable. If leadership accounts for all of the unexplained variance in each
case, this will be represented by 100 percent, and so on. When interpreted in this way, Lieberson and O’Connor’s results show that leaders have a greater influence over sales and profits than they do over profit margins, rather than a lesser one. Leadership accounts for 71.5 percent of the unexplained variance in sales, 62.8 percent of that in profits, but only 30.8 percent of that in profit margins (1972:123). This, far from being implausible, is very much what would be expected. Different leaders may well have a significant impact on sales and profits while remaining indistinguishable in terms of profit margins. Although the performance measures are to some degree “definitionally dependent,” the confusion arises not from this but from deeper problems of interpretation. When the data are interpreted differently, the relationship of leadership to sales, profits, and profit margins identified in Lieberson and O’Connor’s research becomes entirely plausible. Despite appearances to the contrary, these relations are not contradictory and do not undermine the study.

**Control variables.** Both Aldrich (1979) and Weiner (1978) commented on the absence of organization-specific control variables in Lieberson and O’Connor’s research. The implication, quite correctly, is that leadership effects cannot be properly assessed unless contaminating influences, such as organizational variables, are controlled. However, the procedure for discounting the company effect in the decomposition analysis does constitute a control for organizational differences, albeit of a crude kind, and in any case, when more specific organizational variables are included, the results turn out to be much the same.

In a second paper (Weiner and Mahoney, 1981), Weiner reported the results of a multiple regression analysis that she applied to the same sample of corporations as had been used for the replication and reverse-order analyses. In this study, the relationships of GNP, industry sales, industry competition, corporate size, corporate technology, capital structure strategy, retained earnings strategy, and leader variation, with profit, profitability (ratio of profits to assets), and stock price variance were examined. Here, then, some organization-specific control variables were included, and the multiple regression technique was intended to overcome the problem of the sequential treatment of the independent variables in the decomposition analysis.

In their discussion of the contribution of leadership (termed “stewardship” by these authors) to performance, Weiner and Mahoney (1981:468) stated that “Consideration of stewardship in the analysis of profitability and stock prices accounted for an additional 40 percent of variance not explained by environmental, organizational or leadership strategies—in sharp contrast with the findings of Lieberson and O’Connor and Salancik and Pfeffer.” Now, the sharp contrast that Weiner and Mahoney mentioned is clearly not between these findings and those of the two studies cited, because neither of these included profitability and stock prices among their performance measures. Clearly, the intention is to emphasize the general point that leadership can be shown to be strongly associated with variations in some performance measures, but, as has been argued above, this observation does not so
Leadership and Performance

much contrast with the findings of the earlier studies as complement them.

The only directly comparable performance measure is profit, which appears in both Lieberson and O’Connor’s and Weiner and Mahoney’s research. Following the multiple regression analysis, Weiner and Mahoney (1981:465) found that “stewardship” accounted for 12.8 percent of the variance in corporate profits which, they said, “is similar to that obtained in Lieberson and O’Connor’s study (8 percent) and in a replication analysis using the data employed here (16 percent).” These percentages are based on the total performance variation rather than the unexplained variation, but when the data are transformed to this base, the consistency becomes even more striking. Converting the percentages in this way yields 62.8 percent (Lieberson and O’Connor), 72.8 percent (Weiner replication), and 62.8 percent (Weiner and Mahoney regression analysis). On the only directly comparable measure, profit, Weiner and Mahoney’s results are highly consistent with those of Lieberson and O’Connor, despite differences in methodology. Moreover, all three studies show that while environmental variables account for most of the total performance variation, leaders have a substantial impact on the performance variation that is not accounted for by contextual factors.

To further illustrate and reinforce the points made so far, the results of the author’s own study of leadership and organizational performance are presented below.

LEADERSHIP AND PERFORMANCE IN U.K. RETAILING

In order to unravel the complexities of the analyses discussed above, an identical analysis was conducted on a quite different sample of firms in a different context. Given that the leadership-performance problem needs an approach that controls for nonleadership sources of performance variance, firms of similar size were selected from within a single industry. A sample of U.K. retailing firms was drawn from the first two hundred firms appearing in the Times 1000 listing, which ranks the major publicly owned companies active in Britain by turnover. Since the analysis required data over a twenty-year period (1965–1984), the sample was restricted to those firms appearing in the listing throughout the period. The selected firms were therefore not only very large, but had remained so throughout the twenty years. With these constraints, the resulting sample consisted of twelve firms.

Data on sales, profits, and net assets were obtained for each firm, together with details of the periods of office of each chairman or managing director. Leadership periods were defined, as in previous studies, as sets of consecutive years during which the firm was headed by the same chief executive officer, the managing director being regarded as the CEO unless the firm had either no or joint managing directors, in which case the chairman was taken to be the relevant officer. These data were analyzed in exactly the same way as in Lieberson and O’Connor’s work. The main results are displayed in Tables 1 and 2.

It could be objected that a sample of only twelve firms in one industry in a different national context across a different time
Table 1

Percentages of Total Performance Variances Explained in Three Studies

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>Lieberson &amp; O'Connor</th>
<th>Weiner replication</th>
<th>U.K. retail study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>1.7</td>
<td>1.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Industry</td>
<td>18.6</td>
<td>25.3</td>
<td>–</td>
</tr>
<tr>
<td>Company</td>
<td>67.7</td>
<td>50.7</td>
<td>89.6</td>
</tr>
<tr>
<td>Leadership</td>
<td>7.5</td>
<td>16.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Total</td>
<td>95.5</td>
<td>94.0</td>
<td>97.6</td>
</tr>
<tr>
<td>Sales</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>3.1</td>
<td>2.6</td>
<td>16.7</td>
</tr>
<tr>
<td>Industry</td>
<td>23.0</td>
<td>22.9</td>
<td>–</td>
</tr>
<tr>
<td>Company</td>
<td>64.8</td>
<td>47.7</td>
<td>72.7</td>
</tr>
<tr>
<td>Leadership</td>
<td>6.5</td>
<td>19.0</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>97.4</td>
<td>92.2</td>
<td>96.4</td>
</tr>
<tr>
<td>Profit margin</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year</td>
<td>1.8</td>
<td>2.4</td>
<td>5.6</td>
</tr>
<tr>
<td>Industry</td>
<td>28.5</td>
<td>20.5</td>
<td>–</td>
</tr>
<tr>
<td>Company</td>
<td>22.6</td>
<td>45.8</td>
<td>83.2</td>
</tr>
<tr>
<td>Leadership</td>
<td>14.5</td>
<td>8.7</td>
<td>5.7</td>
</tr>
<tr>
<td>Total</td>
<td>87.4</td>
<td>77.4</td>
<td>94.6</td>
</tr>
</tbody>
</table>

period makes any comparison illegitimate, yet the results of the retail study show striking similarities to those previously available. As shown in Table 1, despite the differences in sample size and context, the company variable accounts for the bulk of the total performance variations and the year variable much less in all three studies. Similarly, when the retail data are compared with the industry-based data presented in the later part of Lieberson and O'Connor's paper, the findings are again complementary. In their study, the mean percentage of the total variation accounted for by year and company (which were not treated separately at this point) across the thirteen industries was 77 percent for profits, 85 percent for sales, and 58 percent for profit margin, which compares with 94 percent, 89 percent, and 89 percent in the retail analysis. Although there are differences of detail, broadly speaking, the findings are consistent.

The source of this consistency lies with the company variable. In both Lieberson and O'Connor's study and Weiner's replication, the company effect is greatest because the variance between the firms is large. Even when, as in the retail research, an attempt is made to homogenize the firms via the sample design, the remaining differences in firm size are still sufficient to account for most of the total performance variance. In the retail sample, the mean size of the largest firm

Table 2

Percentages of Unexplained Performance Variances Attributable to Leadership in Three Studies

<table>
<thead>
<tr>
<th>Performance measure</th>
<th>Lieberson &amp; O'Connor</th>
<th>Weiner replication</th>
<th>U.K. retail study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit</td>
<td>62.8</td>
<td>72.8</td>
<td>61.4</td>
</tr>
<tr>
<td>Sales</td>
<td>71.5</td>
<td>70.9</td>
<td>66.0</td>
</tr>
<tr>
<td>Profit margin</td>
<td>30.8</td>
<td>27.8</td>
<td>51.2</td>
</tr>
</tbody>
</table>
Leadership and Performance

over the period was seven times that of the smallest when measured by net assets, and it is this that accounts for the high percentage of performance variance that is attributed to the company variable. This confirms that unless matching of the firms is achieved either in the sample design or by statistical manipulations post hoc, the same sorts of results are likely to recur. Attempts to overturn Lieberson and O’Connor’s findings at the aggregate level are likely to prove fruitless.

If the analysis is based on the unexplained variance that remains after discounting the effects of the nonleadership variables, the results are again consistent with those of earlier studies. As Table 2 shows, all three studies confirm that in relation to the two performance variables, profit and sales, for which leader influence is most likely to be detected, leadership differences have a substantial impact. Although much performance variance remains to be explained, such figures give a very different impression of the significance of leadership than do the 10 percent or even nil estimates that have frequently been given to date.

DISCUSSION

I have suggested that the methodological weaknesses that have been attributed to Lieberson and O’Connor’s study and related studies are insufficient to undermine the validity of their findings and that these consistently show that leadership has little impact on performance at the aggregate level but a substantial one at the level of the individual firm. Paradoxically, the data show that leadership doesn’t make a difference and that is does. How can these contradictory implications be reconciled?

As was noted earlier, most of those who have cited Lieberson and O’Connor’s research have focused exclusively on the results of their aggregate analysis where the percentage of the total variation in organizational performance attributable to leadership is small. In all the studies it is the organizational variable that accounts for the bulk of the performance variance, and this is largely a function of the sample characteristics. As Weiner (1978) has pointed out, the independent variable that displays the largest variance necessarily accounts for the largest portion of total performance variation, and in each study it is the organizational variable that does this. What this reflects is that each firm’s level of performance tends to be very different from that of any other firm and that these differences persist over time.

Leaders are constrained with respect to different kinds of performance outcomes. One of these consists of the performance outcomes of the firm the leader heads, and the leader is constrained by the firm in the sense that the performance values that can be generated are limited by the firm’s size. Each leader operates within the limits of the firm’s performance set by its size, and it is the extent to which leaders account for the variations within these limits that is of interest if we wish to assess the impact of leaders on organizational performance. The second outcome is represented by the consistent differences in performance that exist between
firms. Since the range of performance possibilities for any leader is always heavily determined by the size of the firm, and since firms do differ greatly in size, it is not surprising to find that leaders account for little of the variation in performance between firms. In other words, the magnitude of the impact of leaders on performance differences between firms will be determined largely by the degree of similarity or difference in their sizes rather than by anything their leaders do.

This is, of course, precisely the point that Lieberson and O’Connor wished to make, and it is not disputed here. But as these authors showed, the impact of leaders on differences between firms must not be conflated with their impact on differences within firms. Leaders may account for all of the variations within firms while accounting for little of the total variation if the bulk of this is generated by differences between firms. In particular, we must be especially careful not to treat the magnitude of environmental constraints on leaders’ capacity to influence total variation as if this were a measure of the magnitude of constraint on leaders of individual firms. It is this error that underlies the problem of interpretation identified by Aldrich (1979). If we are interested in accounting for the total variation in performance values for a set of firms and we find that 90 percent of this is explained by environmental variables, then it is legitimate to infer that leaders are highly constrained relative to that specific set of outcomes or, if only 10 percent, that they are weakly constrained. But these conclusions will always be relative to the total variation, and this may differ from sample to sample. If we were to include the same firm in both a homogeneous and a heterogeneous sample and treat the magnitude of environmental constraint in each case as if it applied to that firm, then that firm’s leaders will appear to be less constrained in influencing the performance of their firm in the former than in the latter case. But the constraints that are imposed on the behavior of the leader of a firm cannot differ just because we examine it first in one sample and then in another. Organizational constraints are constant across samples, just as the constraints that are imposed on a racing driver by the characteristics of the car are the same regardless of whether it is raced against identical cars or very different ones.

Two distinct questions can be asked about the relationship between leadership and organizational performance. One concerns the extent to which leader differences account for performance variations within each firm over time. This is indicated by the proportion of variance unexplained by contextual variables that is accounted for by leader differences. The second question concerns the extent to which leader differences account for the total variation displayed by the whole set of organizations, which includes both within- and between-firm variance, in comparison with that accounted for by contextual variables. Since the two bases for assessment are different, it is not surprising that the conclusions in each case are different. They only appear contradictory if it is assumed that they are different answers to the same question rather than answers to two different questions. A good deal of the confusion that surrounds the leader-performance issue may therefore be attributable not to deficiencies in methodology but to an unwitting conflation of two distinct issues.
CONCLUSION

Lieberson and O’Connor’s study has rightly secured a prominent place in the literature of leadership research, but subsequent investigators have tended to overemphasize the counterintuitive aspect of their findings. Since, as Davis (1971) has suggested, it is counterintuitive that propositions that tend to generate the greatest and most lasting interest, this is understandable, but the resulting confusion has been considerable.

Taken as a whole, the limited evidence that is available on the leader-performance issue points to two general conclusions. First, leader differences do account for performance variations within firms to a substantial degree, and second, these impacts are generally insufficient to outweigh the inbuilt differences among firms that largely account for performance variation among firms. This does not mean that causal inferences can be imputed directly to the observed relationship between leadership and performance. Other factors may be associated with changes in CEOs that are of greater significance to performance than leader change itself. Most obviously, defining leadership periods solely in terms of the period of office of the CEO is far from ideal, but it is difficult to justify further exploration of important issues such as this unless it is acknowledged that leaders do matter.

Finally, it is evident that it will require very considerable additional research before we can offer a general assessment of the impact of leadership on organizational performance. Because there are many potential performance measures that could be related to leader differences, such as those suggested by Campbell (1977), it may be some time before this assessment is possible. Irrespective of the theoretical point of view that is adopted, this will continue to be a valid and important issue for both organizational theory and practice.

REFERENCES

Aldrich, Howard E.

Allen, Michael P., Sharon K. Panian, and Roy E. Lotz

Bryman, Alan

Campbell, John P.

Davis, Murray S.

Eitzen, D. Stanley, and Norman R. Yetman

Gamson, William A., and Norman A. Scotch

Grusky, Oscar

Hall, Richard H.

Hambrick, Donald C., and Phyllis A. Mason

Lieberson, Stanley, and James F. O’Connor

Pearce, Jane L., William B. Stevenson, and James L. Perry
Pfeffer, Jeffrey, and Gerald R. Salancik

Salancik, Gerald R., and Jeffrey Pfeffer

Samuelson, Bruce A., Craig S. Galbraith, and Joseph W. McGuire

Weiner, Nan

Weiner, Nan, and Thomas A. Mahoney