Multiple Uses of Performance Appraisal: Prevalence and Correlates

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Performance appraisal is used in organizations for a variety of purposes. However, little empirical research has been conducted to determine (a) the extent to which performance appraisal is used for each of several purposes in industry, (b) the extent to which appraisal data may be used for multiple and possibly conflicting uses within the same organization, and (c) organizational correlates of these uses. A survey questionnaire designed to answer these questions was mailed to 243 members of Division 14 of the American Psychological Association who were employed in industry. A factor analysis of the 106 completed questionnaires indicated four general uses of information from performance appraisals. The use of performance appraisal to simultaneously make distinctions between and within individuals is common. Canonical correlation analyses indicated that organizational characteristics were significantly related to uses of performance appraisal.

Performance appraisal provides information that is relevant for many personnel decisions, including salary increases, recommendations for promotion, transfers, and training programs, as well as for employee development and performance feedback (Huber, 1983; Jacobs, Kafry, & Zedeck, 1980; Landy & Farr, 1983). However, little empirical research has been conducted to examine the extent to which performance information is actually used for various purposes in organizations. The purpose of the present study was (a) to assess the extent to which performance appraisal is used for each of several purposes, (b) to assess the extent to which appraisal is used for multiple and possibly conflicting purposes by the same organization, and (c) to assess organizational correlates of performance appraisal uses.

Although professional and trade journals in the field of personnel provide extensive anecdotal evidence concerning the uses of performance appraisals in organizations, few empirical studies have been devoted to this question. Levine (1986) found that the most common use for performance appraisal was for determining employee training needs, merit review, and salary administration. Rendon (1980) surveyed 24 human resource managers and found that the most frequently mentioned uses included merit review or salary action, employee development, and feedback to employees. Campbell, Dunnette, Lawler, and Weick's (1970) survey of 33 organizations suggested that the performance appraisals were used in placement and promotion decisions, training needs assessment, and as a motivational tool.

These studies sampled few organizations. Furthermore, it is not clear whether the variety of purposes across organizations also reflected multiple uses within an organization of a single performance appraisal system. Therefore, there is a need to obtain empirical information on the extent to which information from performance appraisal is used within an organization for multiple purposes and decisions. This information is important because the different uses of performance appraisal may demand different types of information about performance.

Conflicting Uses of Performance Appraisal

Performance appraisal systems often involve multiple, conflicting goals (Kane & Lawler, 1979; McGregor, 1957; Meyer, Kay, & French, 1965). For example, an organization may desire to use performance appraisal as a tool for making promotion-related decisions and also as a tool for guiding employee development. Using appraisal to make promotion recommendations, the rater is obliged to focus on comparisons between individuals, whereas within-individuals comparisons are necessary for determining employee training and development needs (Drenth, 1984).

There are several reasons why the need to make distinctions between individuals (e.g., for promotion and salary administration) versus within individuals (e.g., for assessing training needs and for feedback regarding strengths and weaknesses) is likely to be a source of conflict for raters. First, there is evidence that the purpose of rating affects both rating processes and rating outcomes (Bernardin & Beatty, 1984; DeNisi, Cafferty, & Meglin, 1984; Murphy, Balzer, Kellam, & Armstrong, 1984; Sharon & Bartlett, 1969; Williams, DeNisi, Blencoe, & Cafferty, 1985); ratings collected for multiple purposes may therefore be different from those collected for any single purpose. Second, there is evidence that accuracy in distinguishing between individuals is largely independent of accuracy in distinguishing an individual's strengths from his or her weaknesses (Murphy, Garcia, Kerker, Martin, & Balzer, 1982; Wiggins, 1973). Third, interviews of raters (e.g., Cleveland & Morrison, 1986; Longenecker, Gioia, & Sims, 1987) suggest that when there are multiple purposes, raters assess the consequences of each purpose and then complete the appraisal form with the
single most important purpose in mind, de-emphasizing all others. Thus, it is unlikely that the same performance appraisal will provide valid information about both between- and within-individuals distinctions. An important objective of the present study was to determine the extent to which organizations use performance appraisal for simultaneously making between- and within-individuals distinctions.

Performance appraisals are not only used for making distinctions between and within individuals but they also serve a variety of organizational needs. For example, performance appraisals may serve as criteria in validity studies, as data in a training needs assessment, or as a component of a personnel planning effort. As noted, these different uses might present the rater with conflicting demands, and these organizationally oriented uses may, in turn, be incompatible with individually oriented uses that focus on differences between and within individuals.

Organizational Characteristics and Uses of Performance Appraisal

Little research has directly addressed the relation between organizational characteristics and uses of performance appraisal information (Cleveland, Murphy, Banks, & Barnes-Farrell, 1987). However, there is theoretical support for the hypothesis that features of the organization and its environment influence the way in which performance appraisal is used to make decisions (Gooding & Wagner, 1985; Huse, 1980; Joyce & Slocum, 1984; Oldham & Hackman, 1981; Walton, 1981). Examples include structural characteristics, such as the complexity and formalization of organizational decision (Birnbaum & Wong, 1985; Fry & Slocum, 1984), and the financial condition of the organization (Nadler, Hackman, & Lawler, 1979).

Finally, the climate and culture of an organization might affect the way in which information from performance appraisals is used in making decisions.

In the present study, we used a survey to obtain information on the ways in which information from performance appraisal is used, from a large and diverse sample of organizations. This study was designed to obtain data on the frequency with which information from performance appraisals is used for several purposes identified in the research literature as well as the extent to which appraisal is used for multiple purposes by a single organization. The final purpose of the present study was to empirically identify characteristics of organizations that were related to the way in which performance appraisal is used by organizations.

Method

Questionnaire Development

Uses of performance appraisal. On the basis of a review of research published in 11 professional and trade journals during the period 1980-1986, we developed a comprehensive list of uses for performance appraisal information. Redundant entries were combined and edited, leaving a list of 20 separate uses for performance appraisal information, which are shown in Table 1.

We asked respondents to rate on a 7-point scale the degree to which information from performance appraisal had an impact on each of the 20 activities listed. Scale anchors were no impact (1), moderate impact (4), and primary determinant (7); the scale also included a not applicable category. We asked respondents to rate the impact of performance appraisal on each activity rather than whether or not appraisal information was used at all for each purpose, assuming that information about performance might be a nominal part of many decisions without really affecting those decisions.

Organizational characteristics. Use of the survey method placed constraints on the number and type of organizational characteristics that could be reliably measured. We felt that formal, objective characteristics of organizations, such as size, complexity, and centralization would be easiest to reliably measure in a short questionnaire; we chose these characteristics for inclusion in our survey.

Price and Mueller's (1986) Handbook of Organizational Measurement presents descriptions of several well-defined constructs that are used in describing organizations. We asked respondents to describe their organization in terms of the 10 structural characteristics defined in Price and Mueller: (a) administrative intensity, (b) organizational autonomy, (c) centralization, (d) complexity, (e) coordination, (f) departmentalization, (g) effectiveness, (h) formalization, (i) prestige stratification, and (j) size. Respondents were asked to rate their organization on a 7-point scale, with scale anchors of very low compared to other organizations (1), average (4), and very high compared to other organizations (7).

Sample

We used the 1985 Directory of the American Psychological Association to identify a sample. We assembled a list of members and fellows of Division 14 (Society for Industrial and Organizational Psychologists) who were known, on the basis of their address, to be employed in personnel departments or related functions in the private sector.

We had several reasons for surveying members of Division 14. First, performance appraisal is currently the focus of considerable attention within the division; the topic covered by the study should be highly salient to the individuals surveyed. Second, it is likely that Division 14 members would be relatively well informed regarding performance appraisal policies in their organizations. Third, we expected that members of this sample would be familiar with the various constructs being measured (uses of performance appraisal and organizational characteristics), making it easier to devise a relatively short questionnaire that would be comprehensible to those surveyed.

In cases where more than one psychologist was employed by the same organization, one was randomly chosen for inclusion in the study to prevent overrepresentation by any single company. Our final list included 243 names.

Procedure

We mailed a questionnaire to each individual in our sample, asking each to respond anonymously by using a self-addressed, postage-paid envelope that was enclosed. A reminder note was sent approximately one month after the initial questionnaire. We continued to receive questionnaires for approximately 2 weeks after mailing this note. Approximately 6 weeks after mailing the reminder note, we sent a synopsis of the results of our survey to each of the individuals on our mailing list.

Table 1
Means, Standard Deviations, and Hypothesized Factor Structure for 20 Uses of Performance Appraisal

<table>
<thead>
<tr>
<th>Use</th>
<th>M</th>
<th>SD</th>
<th>Between individuals</th>
<th>Within individuals</th>
<th>Systems maintenance</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salary administration</td>
<td>5.85</td>
<td>1.16</td>
<td>.79</td>
<td>.68</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Promotion</td>
<td>4.80</td>
<td>1.18</td>
<td>.78</td>
<td>.78</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Retention or termination</td>
<td>4.75</td>
<td>1.40</td>
<td>.62</td>
<td>.74</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Recognition of individual performance</td>
<td>5.02</td>
<td>1.52</td>
<td>.58</td>
<td>.74</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Layoffs</td>
<td>3.51</td>
<td>1.68</td>
<td>.74</td>
<td>.74</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Identify poor performance</td>
<td>4.96</td>
<td>1.54</td>
<td>.75</td>
<td>.75</td>
<td>.75</td>
<td></td>
</tr>
<tr>
<td>Identify individual training needs</td>
<td>3.42</td>
<td>1.40</td>
<td>.77</td>
<td>.77</td>
<td>.77</td>
<td></td>
</tr>
<tr>
<td>Performance feedback</td>
<td>5.67</td>
<td>1.35</td>
<td></td>
<td>.74</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Determine transfers and assignments</td>
<td>3.66</td>
<td>1.53</td>
<td>.76</td>
<td>.76</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>Identify individual strengths and weaknesses</td>
<td>5.41</td>
<td>1.44</td>
<td>.82</td>
<td>.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Personnel planning</td>
<td>2.72</td>
<td>1.58</td>
<td>.82</td>
<td>.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Determine organizational training needs</td>
<td>2.74</td>
<td>1.49</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>Evaluate goal achievement</td>
<td>4.72</td>
<td>1.59</td>
<td>.74</td>
<td>.74</td>
<td>.74</td>
<td></td>
</tr>
<tr>
<td>Assist in goal identification</td>
<td>4.90</td>
<td>1.62</td>
<td>.73</td>
<td>.73</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Evaluate personnel systems</td>
<td>2.04</td>
<td>1.18</td>
<td>.82</td>
<td>.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Reinforce authority structure</td>
<td>2.65</td>
<td>1.60</td>
<td>.82</td>
<td>.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Identify organizational development needs</td>
<td>2.63</td>
<td>1.52</td>
<td>.73</td>
<td>.73</td>
<td>.73</td>
<td></td>
</tr>
<tr>
<td>Criteria for validation research</td>
<td>2.30</td>
<td>1.35</td>
<td>.82</td>
<td>.82</td>
<td>.82</td>
<td></td>
</tr>
<tr>
<td>Document personnel decisions</td>
<td>5.15</td>
<td>1.27</td>
<td>.91</td>
<td>.91</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Meet legal requirements</td>
<td>4.58</td>
<td>1.80</td>
<td>.48</td>
<td>.48</td>
<td>.48</td>
<td></td>
</tr>
</tbody>
</table>

Note: Ratings were based on a 7-point scale. Maximum likelihood estimates of loadings are shown. Values that were fixed at zero prior to analysis are left blank.

Results

Return Rate

Of the 243 questionnaires that were mailed out, 110 were returned by respondents. Another 26 questionnaires were returned by the post office for lack of a forwarding address, yielding an overall return rate of 50.7%.

Four of the respondents indicated that their organization had no formal performance appraisal system. These questionnaires were deleted from our analysis, yielding a total sample size of 106.

Uses of Performance Appraisal

Means and standard deviations for ratings of the impact of performance appraisal on the 20 uses defined previously are shown in Table 1.

Information from performance appraisals had the greatest impact on salary administration, performance feedback, and identification of strengths and weaknesses (M = 5.85, 5.67, and 5.41, respectively) and the least impact on evaluation of personnel systems and validation (M = 2.64 and 2.20, respectively). Our questionnaire asked respondents to indicate three decisions or activities for which performance appraisal had the greatest impact. Salary administration and performance feedback were cited by 69% and 53% of the respondents, respectively. Evaluation of personnel systems, organizational training needs assessment, and transfer were not cited by any of the respondents as activities in which information from performance appraisals had the greatest impact.

On the basis of our review of the literature, we defined four a priori factors that we thought would account for the variance in uses of performance appraisal across organizations. These factors were (a) Between-Individuals Comparisons—uses of performance appraisal that concentrated on comparing individuals in terms of their overall performance levels, (b) Within-Individuals Comparisons—uses of performance appraisal that concentrated on identifying and using information about individual profiles of strengths and weaknesses, (c) Systems Maintenance—uses of performance appraisal to implement and evaluate human resource systems in organizations, and (d) Documentation—uses of performance appraisal to document or justify personnel decisions. Specific variables that are hypothesized to load on these factors are shown in Table 1.

We used LISREL with maximum likelihood estimation to test the fit of the hypothesized factors to the data. Although statistically nonoptimal, \( \chi^2(160) = 246.2, p < .05 \), these factors accounted well for the correlations among the 20 uses; the root mean squared residual correlation was .08. The fit was not significantly improved by performing an exploratory rather than confirmatory analysis. That is, a LISREL solution in which none of the factor loadings or intercorrelations was specified a priori did not result in a significant improvement in fit. The test of the difference between the fit of the model shown in Table 1 and the model in which all loadings were treated as unknowns yielded \( \chi^2(60) = 77.6, p > .05 \). Thus, the hypothesized factors accounted for the correlations as well as could be done with four factors. An exploratory principal factor analysis showed that six factors would be needed to fully account (applying the scree criterion, Gorsuch, 1983) for the correlations among the 20 uses of performance appraisal. When oblique rotation was applied, four of these factors closely resembled the hypothesized...
Table 2
Factor Means, Standard Deviations, and Intercorrelations

<table>
<thead>
<tr>
<th>Factor</th>
<th>Between individuals</th>
<th>Within individuals</th>
<th>Systems maintenance</th>
<th>Documentation</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Individuals</td>
<td>.77</td>
<td>—</td>
<td>—</td>
<td></td>
<td>4.81</td>
<td>1.10</td>
</tr>
<tr>
<td>Within Individuals</td>
<td>.59</td>
<td>.76</td>
<td>—</td>
<td></td>
<td>4.54</td>
<td>1.21</td>
</tr>
<tr>
<td>Systems Maintenance</td>
<td>.42</td>
<td>.67</td>
<td>.76</td>
<td></td>
<td>3.20</td>
<td>1.06</td>
</tr>
<tr>
<td>Documentation</td>
<td>.53</td>
<td>.53</td>
<td>.45</td>
<td>.55</td>
<td>3.97</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Note: Diagonals are coefficient alphas.

factors, and the remaining two were uninterpretable. Thus, we
used the hypothesized factors to summarize the 20 uses of
performance appraisal.

Although, in theory, factor scores are defined in terms of sta-

tistically derived weights, in practice, they are most often de-

fined as unit-weighted composites of the variables that defined
the factor (Gorsuch, 1983). We followed this procedure and
then divided by the number of variables in each factor to restore
the original scale of measurement. Mean ratings for the four
factors are shown in Table 2. These ratings indicated that per-
formance appraisal information had a greater impact on deci-
sions or activities involving between- or within-individuals
comparisons than on systems maintenance or documentation
activities. Correlations among the four factors are also shown
in Table 2. Note that these correlations are not corrected for
attenuation. Corrected correlations, which ranged from .48 to
.82, suggest a very substantial overlap among the four factors.

Between-Versus Within-Individuals Comparisons

All four factors were positively correlated; correlations ranged
from .42 to .67. These correlations were one indication
that the organizations tended to use performance appraisal for
a variety of purposes rather than concentrating on one purpose
(e.g., between-individuals comparisons) to the exclusion of the
others. This is illustrated even more concretely by the fact that
none of the 106 organizations showed ratings of above 4.0 (scale
midpoint) on one of the four factors, and ratings below 4.0 on
the other three. Because a rating of 4.0 indicated that a perfor-
formance appraisal had a moderate impact on the activity de-
scribed by each factor (e.g., between-individuals comparisons),
these data suggest that none of the organizations cited one factor
as clearly dominating the rest.

We noted earlier that attempts by organizations to use appra-
aisal for both between- and within-individuals comparisons
could represent a source of conflict for raters. Nearly 70% (N =
74) of the respondents had mean ratings above the scale mid-
point (4 = moderate impact) on both the Between-Individuals
and Within-Individuals factors. Another 13% (N = 14) had
mean ratings below 4.0 on both of these factors, indicating that
appraisal had small impact on both between- and within-indi-

guals comparisons. Only 17% of the organizations (N = 18)
appeared to concentrate on between- or within-individuals
comparisons in their use of performance data. That is, only 17%
of the organizations indicated that appraisal had a somewhat
substantial impact on one type of comparison (e.g., between-
individuals) and a small impact on the other (e.g., within-indi-

Organizational Characteristics and Uses of
Performance Appraisal

Means and standard deviations for ratings of the 10 organiza-
tional characteristics, with their correlations with the four fac-
tors describing the uses of performance appraisal, are shown in
Table 3. These 10 organizational characteristics were not highly
related; the average absolute value of the correlations among
organizational characteristics was .16, and only 6 of the 45 cor-
relations were greater than .30. Thus, we decided to use the 10
variables as predictors rather than using component or factor
analysis to group them into homogeneous sets.

We used canonical correlation to test the hypothesis that 10
characteristics of organizations were related to the four factors
describing the uses of performance appraisal and found a sig-
ificant, F(40, 263) = 1.82, p < .01, canonical R. Organizational
characteristics accounted for 47% of the variance in uses of per-
formance appraisal. We used multiple regression as a follow-
up analysis and found that organizational characteristics were
significantly (p < .05) related to two of the four factors, Within-
Indians comparisons, R²(10, 72) = .38, and Systems Main-
enance, R²(10, 72) = .26. In both cases, coordination received a
significant positive beta weight (.52 and .41, respectively), and
complexity received a significant negative weight (−.23 and
−.39, respectively).

Discussion

Our respondents indicated that information from perfor-
ance appraisal had the greatest impact on salary administra-
tion, performance feedback, and the identification of employee
strengths and weaknesses. Furthermore, when asked to indicate
three activities or decisions for which appraisal had the greatest
impact, over 50% of the respondents cited salary administration
and performance feedback. The findings were similar to those
in previous surveys (Campbell et al., 1970; Levine, 1986; Ren-
dero, 1980). Our survey is unique in that we attempted to deter-
mine the extent to which a single performance appraisal system
was used for multiple purposes within the same organization.
Our results indicated that within an organization, performance

2 The correlation matrix is available from the authors. Correlation
coefficients ranged from −.10 to +.50.
Appraisal was typically used for a variety of purposes rather than for one purpose only. All 106 organizations in our sample indicated that information from performance appraisal had a moderate impact on at least two or more factors.

A primary objective of the survey was to assess the degree to which organizations used performance appraisal for both between- and within-individuals comparisons. The majority (70%) of the organizations sampled indicated that performance appraisals had at least a moderate impact on both between- and within-individuals comparisons. The findings suggest that many organizations require raters to provide ratings that will be used for potentially incompatible purposes, such as developmental feedback and salary administration. Because this practice appears to be the norm, the correlates and consequences of using performance appraisal for potentially conflicting uses should be examined more thoroughly. It is plausible that many organizations are implementing a single appraisal system to accomplish multiple, incompatible goals. Williams et al. (1985) have shown in a laboratory study that acquiring information for the purpose of making one type of decision may hinder one's ability to make other types of decisions with that information. We do not know whether raters in organizations could provide ratings that are useful for multiple purposes and, if so, whether they would be willing to provide such ratings (cf. Banks & Murphy, 1985; Cleveland & Morrison, 1986).

We advise caution in interpreting the results concerning the precise nature of performance appraisal usage in the responding organizations. We designed the survey to assess the uses of one appraisal system only in each of the organizations sampled. Although organizations may use one appraisal for many purposes, different parts of the appraisal, in fact, may be used for different purposes. We were not able to separate those organizations that use a single, undifferentiated system for multiple purposes from those using a single system with different parts for different purposes or from those using multiple appraisals each for a different purpose. Such clarification in future surveys would enhance the generalizability of the current results.

We found that structural features of organizations predicted the extent to which performance appraisal is used for two of the four purposes identified in this study. In particular, organizations that consist of few departments or subunits (low complexity) and that must work closely together (high coordination) are more likely than others to use performance appraisal for within-individuals comparisons and systems maintenance. One possibility is that these organizations focus more than others on the developmental uses of performance appraisal (e.g., identifying strengths and weaknesses and monitoring goal achievement), because employees must develop a broad range of technical and interpersonal skills in order to function successfully in the organization.

The present study represents a point of departure for future research on performance appraisal in organizations. First, there is a need for more research on organization correlates of performance appraisal systems. Longitudinal research is needed to identify the causal links, if any, between organizational characteristics and the uses of performance appraisal. Second, the prevalence of multiple uses of performance appraisal in organizations suggests that rater perceptions and intentions are important areas for research. There is a need to understand what factors contribute (and how they contribute) to rater perceptions of the organization's appraisal environment. There is reason to believe that the common practice of using the same performance appraisal to make distinctions within and between individuals can be a source of conflict for the rater (Cleveland & Morrison, 1986; Williams et al., 1985). More research is needed on the consequences of these potentially conflicting demands on the rater.

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