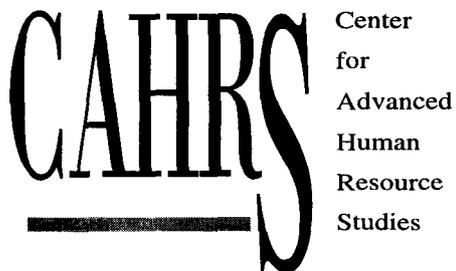


WORKPLACE 2000: A DELPHI STUDY

WORKING PAPER 92-10

Lee Dyer and Donna Blancero



WORKPLACE 2000:

A Delphi Study

Working Paper #92-10

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This paper has not undergone formal review or approval of the faculty of the ILR School. It is intended to make the results of Center research, conferences and projects available to others interested in human resource management in preliminary form to encourage discussion and suggestions.

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No matter how much you study the
future, it will always surprise you;
but you needn't be dumbfounded!

Kenneth Boulding

I. INTRODUCTION

Prognosticate and one thing is certain: you are likely to be wrong.

Then why speculate about Workplace 2000? Because Boulding is right; as the future unfolds, surprise is preferable to astonishment. Informed speculation enhances anticipation and understanding, the bases of informed decision-making. It produces a vision with which to agree or disagree, and the means to ascertain why. If the vision proves disagreeable, there is a baseline from which to plot a preferred scenario. For in the end, Workplace 2000 will emerge not from prediction, but from choice.

Here we have a peek at Workplace 2000 as seen through the eyes of 57 informed observers. It is an extensive picture, covering a wide range of outcomes and activities, and an intensive one, resulting from three passes at the data. The focus is descriptive rather than prescriptive, and firmly anchored in an organizational context. For better or worse, both process and product differ considerably from the gee-whiz speculations and "future schlock" so common today.

The questions are: To what extent have the panelists provided a coherent and useful framework for Workplace 2000? Will what is envisioned be adequate to meet the economic and social challenges that lie ahead?

II. METHODOLOGY AND SAMPLE

Views of Workplace 2000 were collected using a modified Delphi technique. Three rounds of questionnaires were distributed to a carefully selected panel. In rounds two and three, data from the previous round were included with the questionnaire, offering the panelists an opportunity to consider the views of their colleagues when responding.

The questionnaire had two parts. The first provided an overview and context for the study. Included here was a description of Servico, a fictitious company which the panelists were asked to consider in making their judgments about the year 2000. The second part, and heart, of the questionnaire is where these judgments were made. It included many, sometimes complex questions covering such areas as work force composition, organization and work design, staffing, and the like. In pre-testing, participants took an average of two hours to complete the questionnaire. Many panelists provided unsolicited comments concerning its comprehensiveness and the challenging nature of the questions.

Eighty-one potential panelists were originally solicited. Sixty-one agreed to participate, and 57 (93%) actually completed at least one round. Fifty-six percent of the respondents were corporate human resource executives, 18 percent were academics, 12 percent were consultants, 7 percent were from government agencies, 5 percent were labor leaders, and 2 percent were from non-profit organizations. On average, they had 20 years of experience in the field.

Additional information on the methodology and the panelists is reported in Appendix

I.

III. GUIDING MODELS: A STRATEGIC VIEW OF HRM

All research is driven by paradigms; that is, by theories and models that guide decisions about topics, issues, variables, and relationships. This study has its foundation in an emerging strategic view of human resource management (Tichy, Fombrun and Devanna, 1982; Schuler, 1987; Dyer and Holder, 1988; Walker, 1992), and in two related models.

The first (which was replicated in the questionnaire and is shown in Figure 1) suggests that the shape and form of Workplace 2000 will emerge as a result of changes which occur in a broader organizational context. The key element of this context is the organization's business strategy. The dynamics of this strategy, in conjunction with events and conditions in the organization's external and internal environments, will give rise to critical human resource issues (opportunities or challenges) which must be resolved. As these issues are identified, clarified, and analyzed, a series of human resource policies, programs, and practices will be designed and implemented to deal with them. The nature of these policies, programs, and practices, in turn, will shape and form Workplace 2000.

Some organizations engage these developments head on, using human resource planning to anticipate issues and formulate appropriate human resource strategies. Researchers who are interested in the content of these strategies study what are in effect the intentions of key decision-makers; that is, what they say they hope or would like to do (Mintzberg, 1978).

In many organizations most of the time and all organizations some of the time human resource strategies are not planned. Rather, they emerge from a series of more or less discrete, and often reactive, decisions. Researchers studying content in this context turn their attention to the results of the various decisions rather than to intentions. This is what

was done in the present study. Respondents were asked to place themselves in the year 2000, to visualize the human resource decisions that will have been made by that time, and to report the results of their visions.

Prevailing patterns in the respondents' ruminations constitute, in effect, an emergent (not intended) human resource strategy for Workplace 2000 (Mintzberg, 1978).

The second model was required to guide the choice of factors on which to focus these ruminations. The one adopted is shown in Figure 2 (Dyer and Holder, 1988). It suggests that organizational effectiveness -- as indicated by such outcomes as productivity, quality, innovation, and responsiveness -- is the *raison d'être* of human resource management. To this end, it is necessary simultaneously to manage three sets of human resource outcomes: population or headcount (the number and types of employees in the organization), contribution (individual or group behavior and performance), and morale (employees' affect toward the organization and degree of commitment to it).

The next section of this report presents the data pertaining to organizational and human resource outcomes in Workplace 2000.

Population, contribution, and morale cannot be managed directly. Instead they are shaped by a configuration of human resource activities. These activities can be conceptualized in many different ways; our model breaks them into organization and work design (Section IV), staffing (Section VI), training and development (Section VII), supervision and performance management (Section VIII), rewards and recognition (Section IX), and employee and labor relations (Section X).

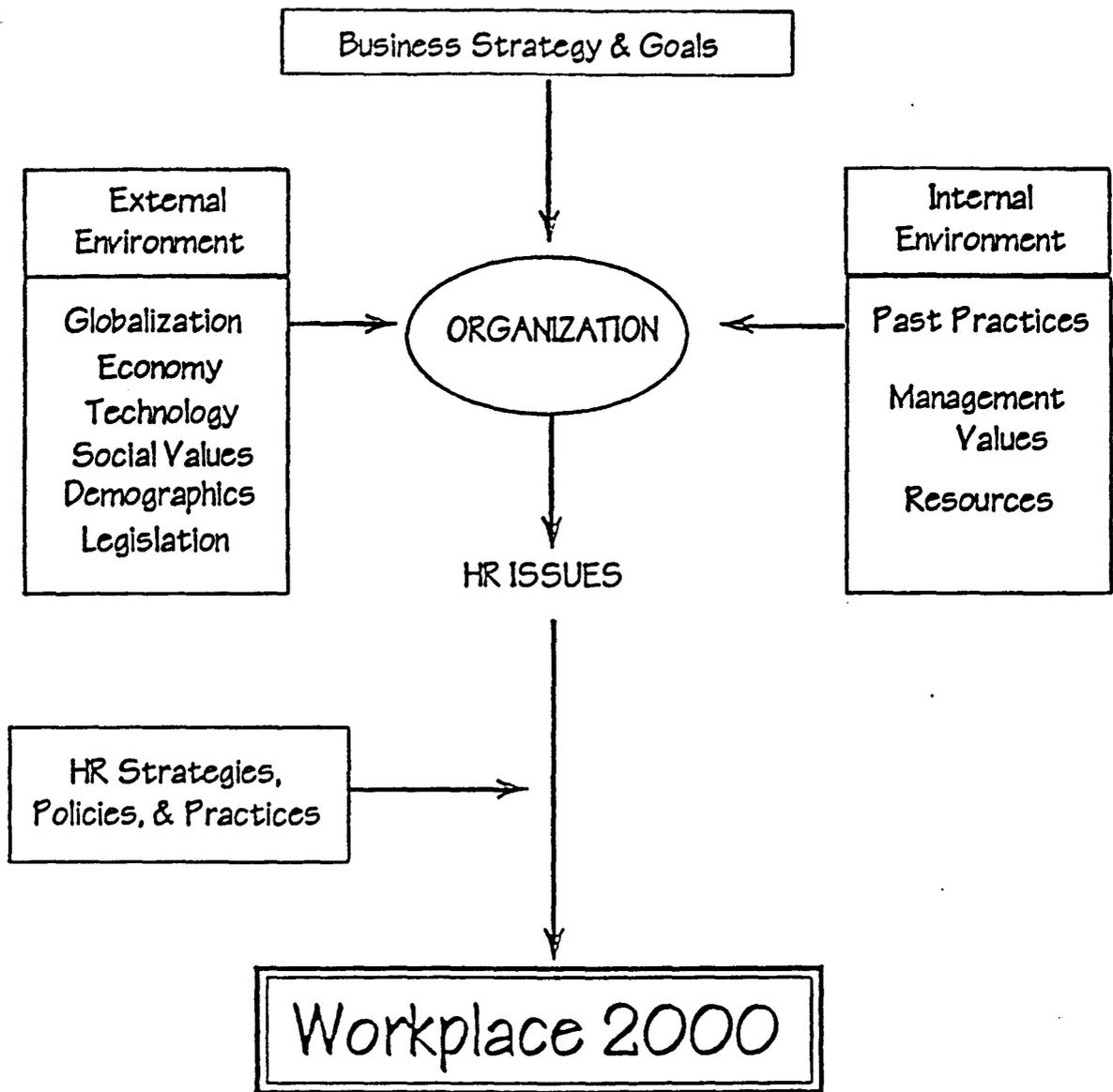


Figure 1



Figure 2

IV. Outcomes



*Productivity is high;
Headcount control is tight*

Revenue per employee is \$217,875, up from \$118,800 in 1991. By this measure, the average annual increase in productivity is seven percent; the overall increase is 83 percent (see Table IV-A). Revenue (as projected in the questionnaire) is up 10 percent a year, or 136 percent over the nine years, in real dollars. But, headcount (as projected by the respondents) is tightly controlled. Overall, it goes from 50,000 in 1991 to 64,303 in 2000, a total increase of 29 percent and an average annual increase of only 3 percent.

Performance is multi-dimensional

Organizational effectiveness is attained by simultaneously focusing employee attention on several dimensions of performance: quantity, quality, innovativeness, speed or response time, process improvements, and human resource development (Table IV-B). Quality is job one across all four employee groups. Speed or response time, while of less general significance, is nonetheless highly rated across the board.

Managers (as a group) keep their eyes on all six outcomes. Otherwise, there is a division of labor. Beyond quality and speed or response time, executives focus primarily on innovativeness and human resource development, while professional and technical employees emphasize innovativeness and support staff push quantity of output.

*Individual performance is high;
morale is mixed*

Overall, employee performance is rated 3.9 on a 5-point scale; fairly high, although perhaps lower than what might be expected given the impressive improvements in organizational productivity.

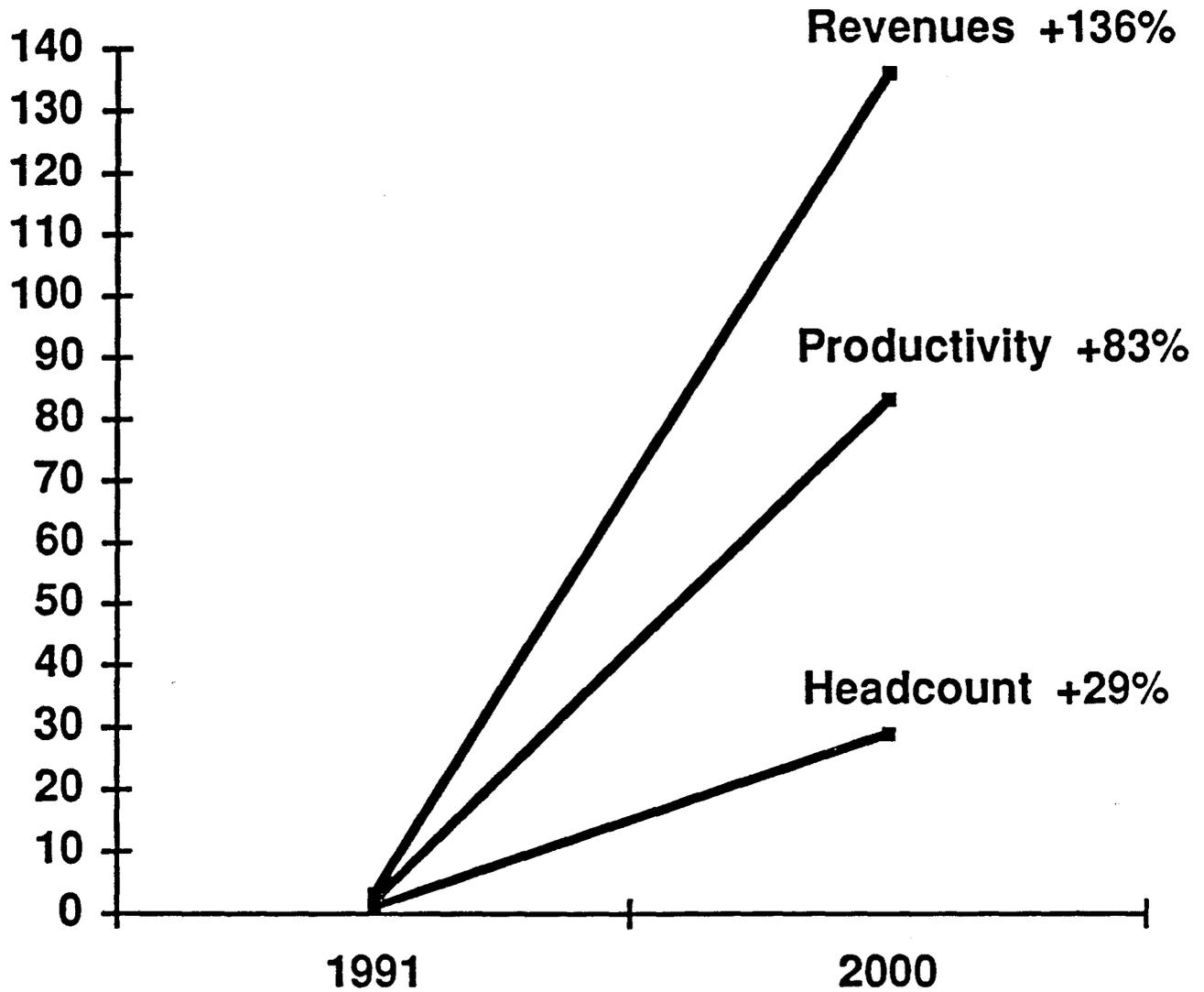
Indicators of psychological engagement come in marginally to considerably lower. Sense of challenge and empowerment, for example, are rated 3.6 (again on a 5-point scale), while motivation and organizational commitment are at 3.7 (Table IV-C).

The workplace is fairly stressful (3.7) (Table IV-D). There is very little perceived employment security (2.7) and, perhaps as a consequence, not much loyalty to the organization (3.0).

On average employee satisfaction is reasonably high (the mean rating is 3.5 across five common dimensions (Table IV-E). High satisfaction with the work itself (3.9) and, to a lesser extent, the social dimensions of work -- co-workers (3.8) and supervisors (3.6) -- are offset by low levels of satisfaction with the more tangible rewards of pay (3.3) and career opportunities (3.1).

Table IV - A

**Revenues, Productivity & Headcount
Annual Percentage Increases
1991-2000**



	<u>1991</u>	<u>2000</u>	<u>Total Inc %</u>	<u>Annual Inc %</u>
* Revenues	5.94	14.00	136%	10%
* Productivity	118,800	217,875	83%	7%
* Headcount	50,000	64,303	29%	3%

Table IV - B

Ratings of dimensions of performance

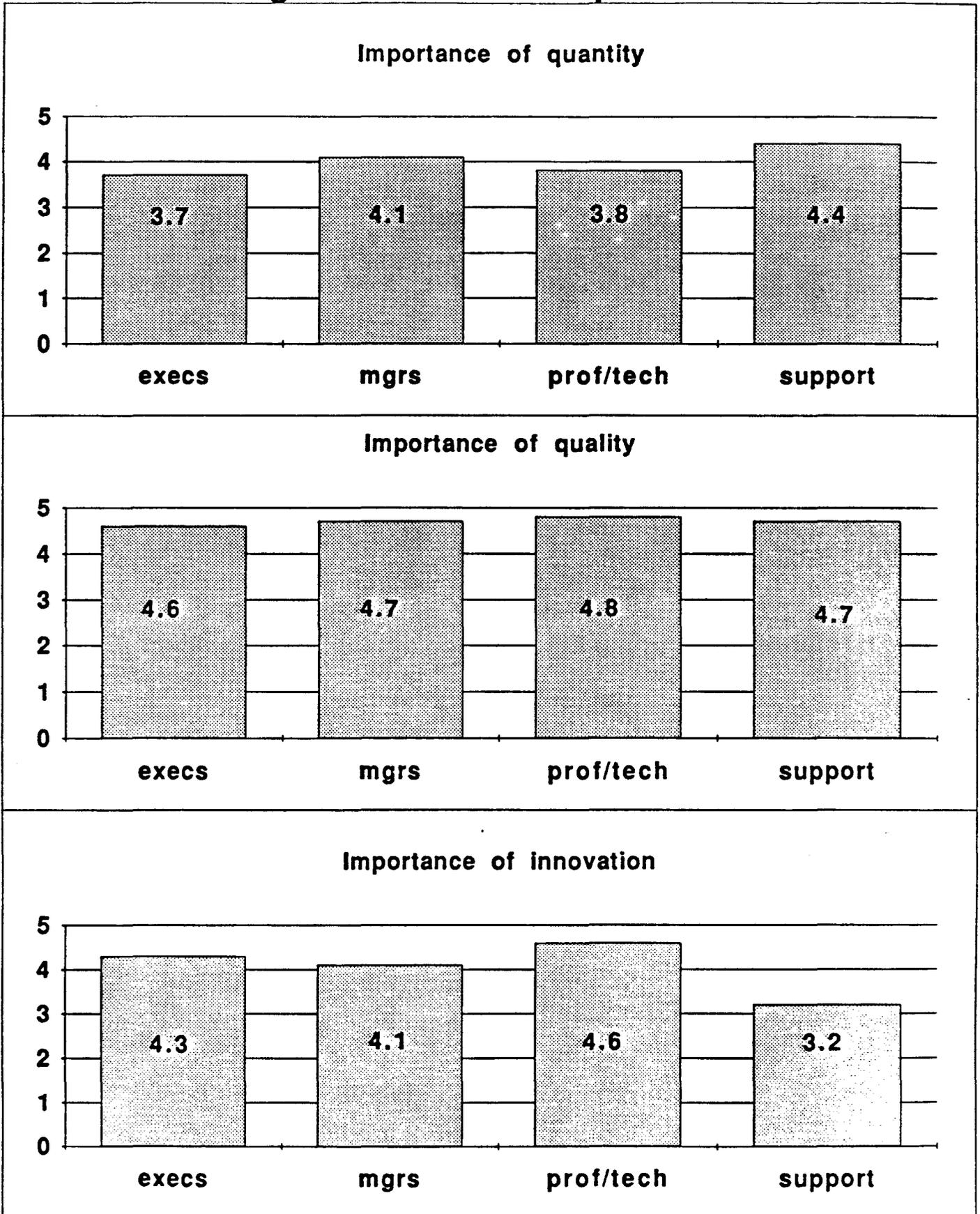


Table IV - B (cont.)

Ratings of dimensions of performance

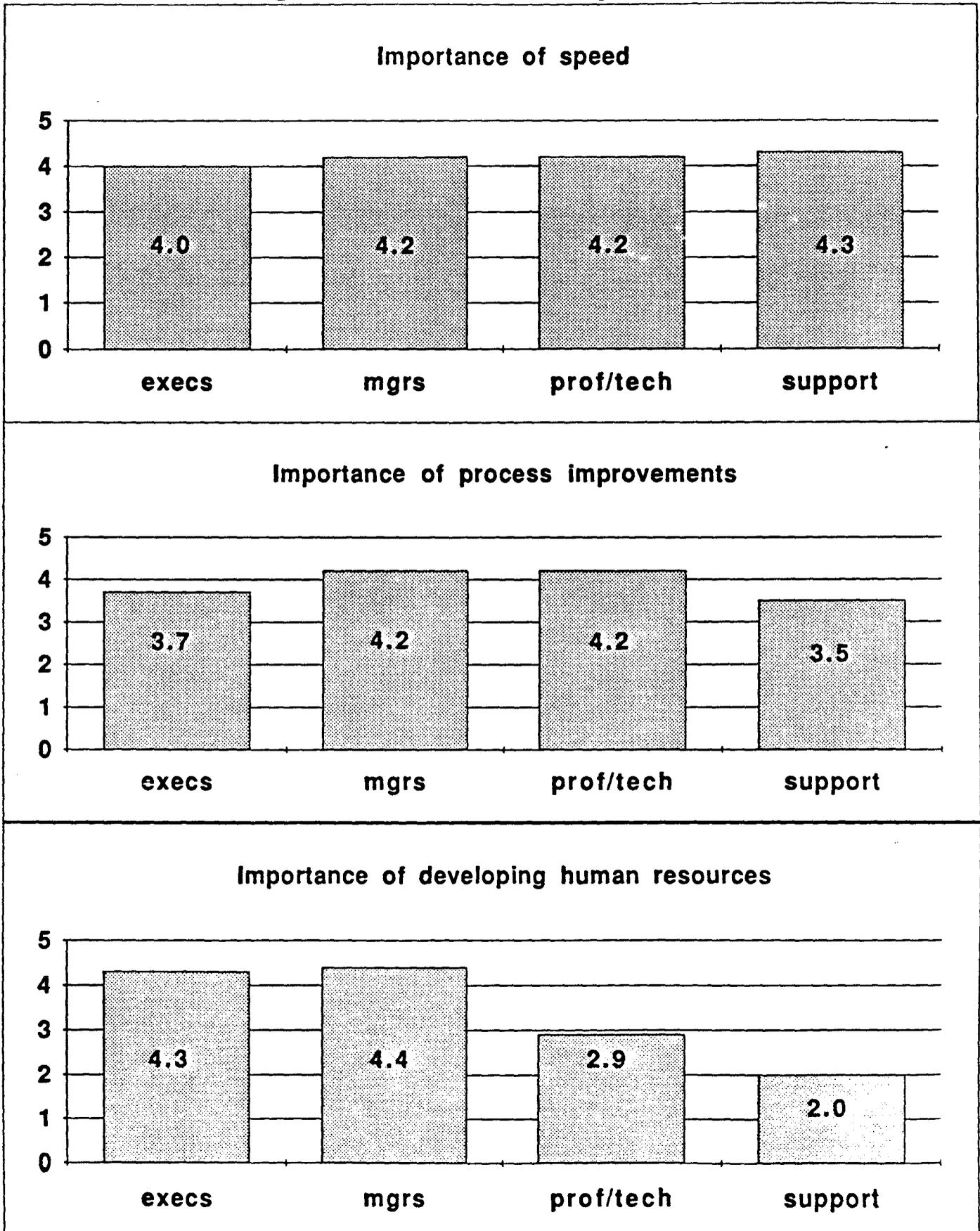


Table IV - C

**Levels of challenge, empowerment, motivation,
commitment, and performance**

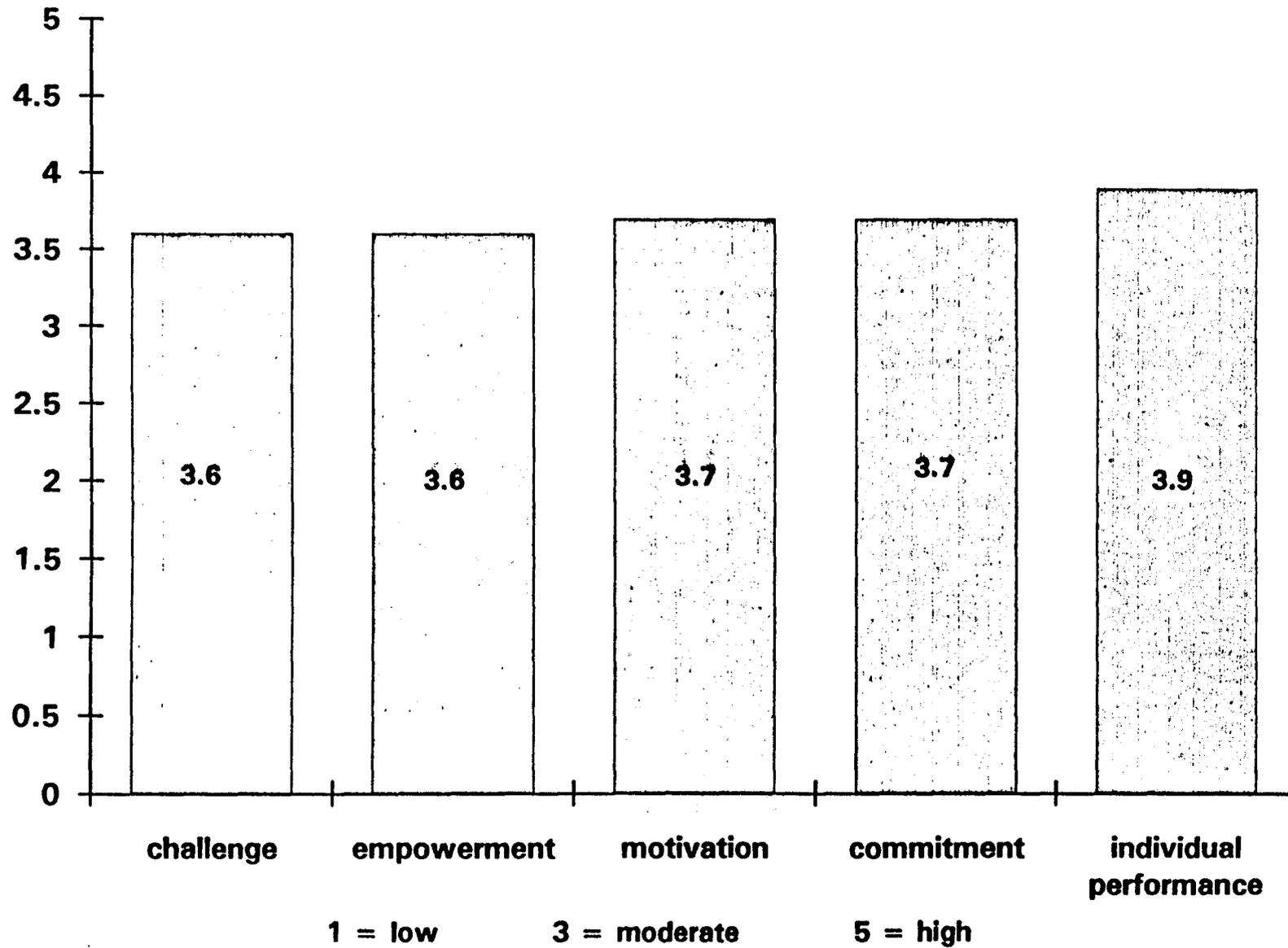


Table IV - D

Levels of stress, security, & loyalty

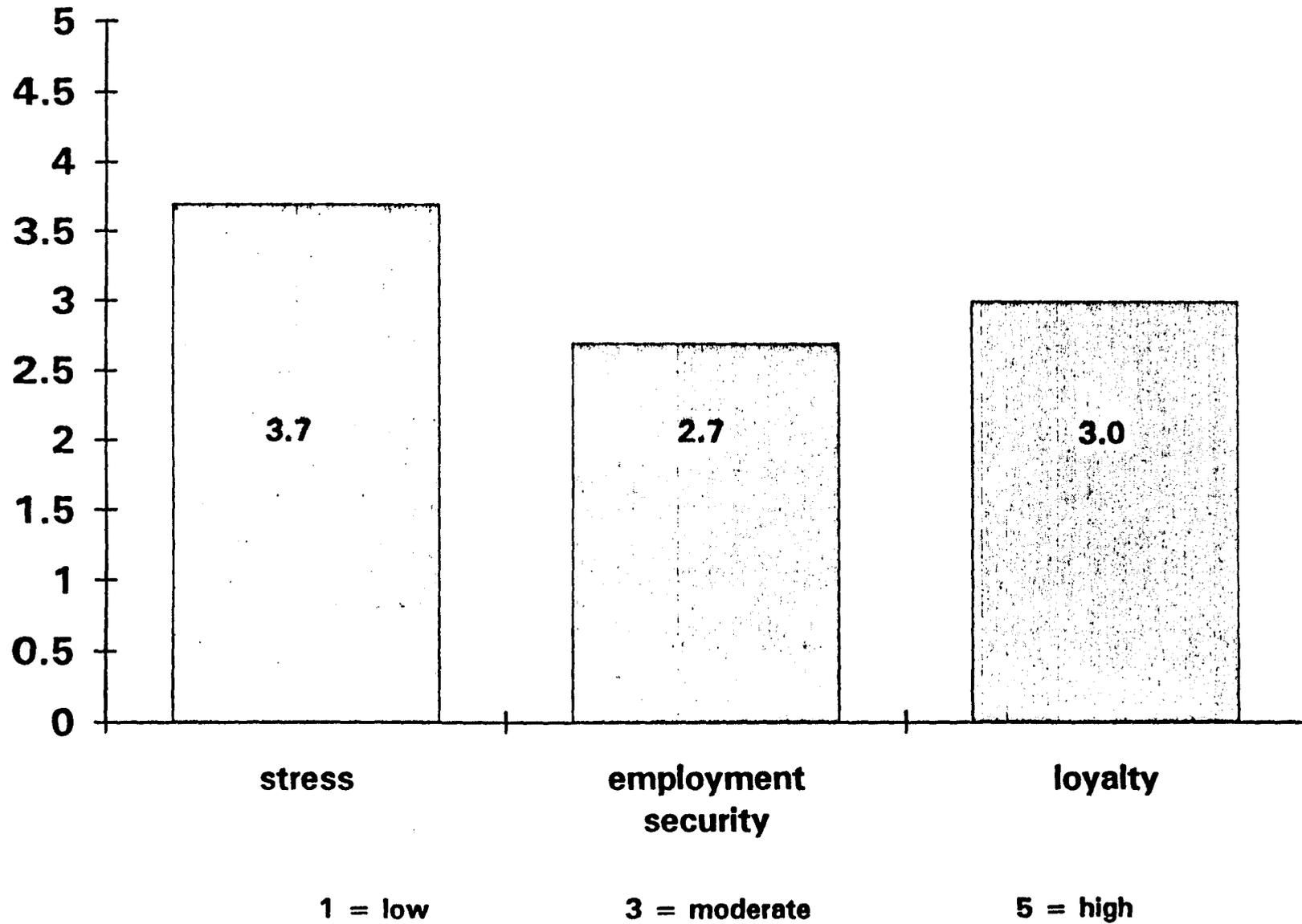
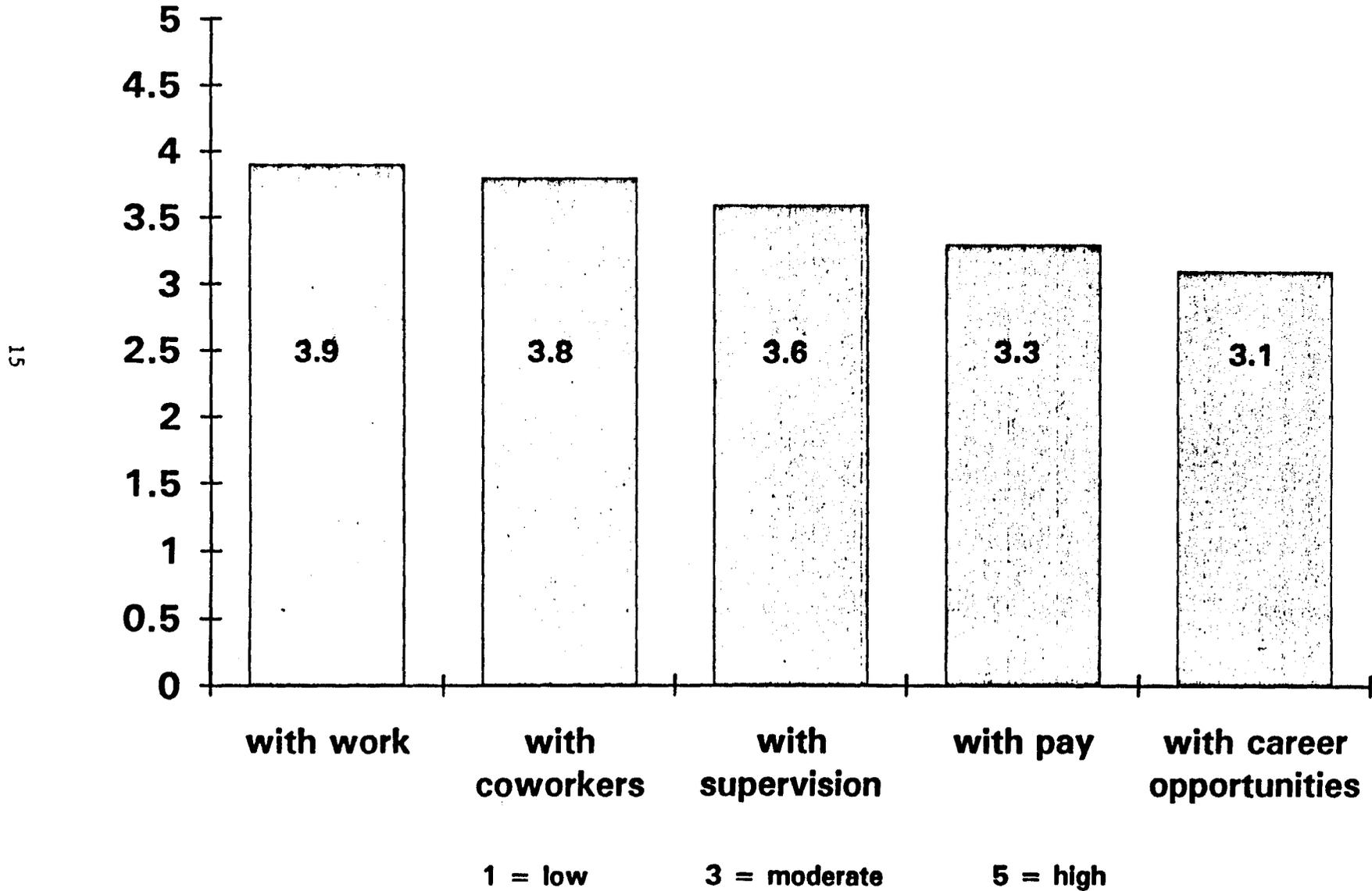


Table IV - E

Ratings of Satisfaction



V. Organization and Work Design



The organization is flatter, but not flat

Workplace 2000 retains a traditional hierarchical structure, albeit flattened. From top to bottom there are 23 hierarchical levels, compared with 36 in 1991 (Table V-A). The reductions were about equal across the four major employee groups.

Teams permeate the traditional hierarchy

Teams are prevalent, particularly below the executive level. They are most common at the professional and technical level (3.7 on a 5-point scale), somewhat less common at the support staff and managerial levels (3.4 and 3.1, respectively). As one moves down the organizational hierarchy, the teams tend to become progressively more permanent (less ad hoc), more single- (as opposed to multi-) tasked, and less autonomous. Multi-level teams, though, are more common among professional and technical employees than among either managers or support staff (Table V-B).

Employee involvement in decision-making is limited

Despite a flatter structure with team overlays, decision-making is only moderately decentralized (Table V-C). Corporate strategy and policy-making is the exclusive province of the top executives. Managers are heavily involved in the development of business unit strategy

and policy (4.0 on a 5-point scale) and even more deeply involved in setting unit performance goals (4.5). They are also involved in allocating work tasks (3.8). Professional and technical employees participate to some extent in setting unit performance goals (3.7) and in allocating work tasks (3.5). But, support staff enter the decision-making picture in any meaningful way only when it comes to problem-solving at the work place. Here they are about as involved as managers (3.6 and 3.7, respectively), although still quite a bit less involved than professional and technical employees (4.3).

Managers tend to dominate human resource decisions such as hiring, training, determining pay increases, and handling discipline.

Overall, this arrangement seems satisfactory to employees; satisfaction with the work itself (as reported earlier) is very high.

Information-sharing is widespread

Despite the centralized decision-making, information sharing is quite widespread in Workplace 2000 (Table V-D). Managers are very well informed, and professional and technical employees are quite well informed, about corporate mission and strategy, the firm's competitive position, and both company and business unit performance. Even support staff are reasonably well informed on these issues. To some extent this may reflect the widespread usage of electronic mail and personal computer networks throughout the organization.

The culture is moderately strong

Workplace 2000 has only a moderately strong culture (Table V-E). It is seen as very dynamic, quite hectic and quite flexible (perhaps because of the hybrid hierarchical and team structure), and quite open (consistent with the data on information-sharing). Risk-taking and creativity are encouraged and supported, although there is only a moderate level of trust. The culture is described as more participative than the decision-making data would seem to support.

Also, there is some indication of instability and egalitarianism, but not much differentiation when it comes to cooperativeness vs. competitiveness and (surprisingly, given the earlier data on perceived employment insecurity) security vs. insecurity.

Table V - A

Number of heirarchical pay levels by employee group

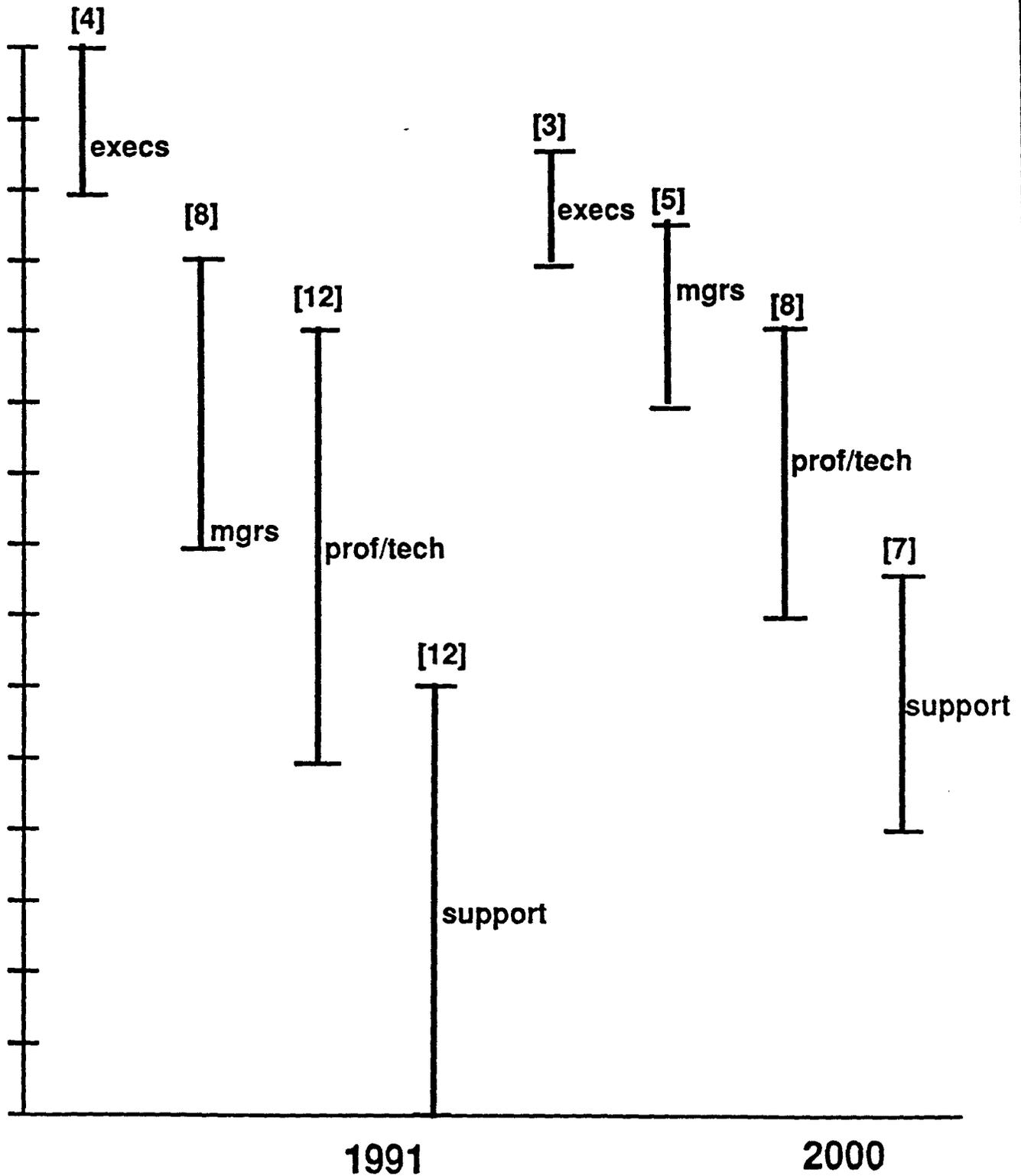


Table V - B
Teams

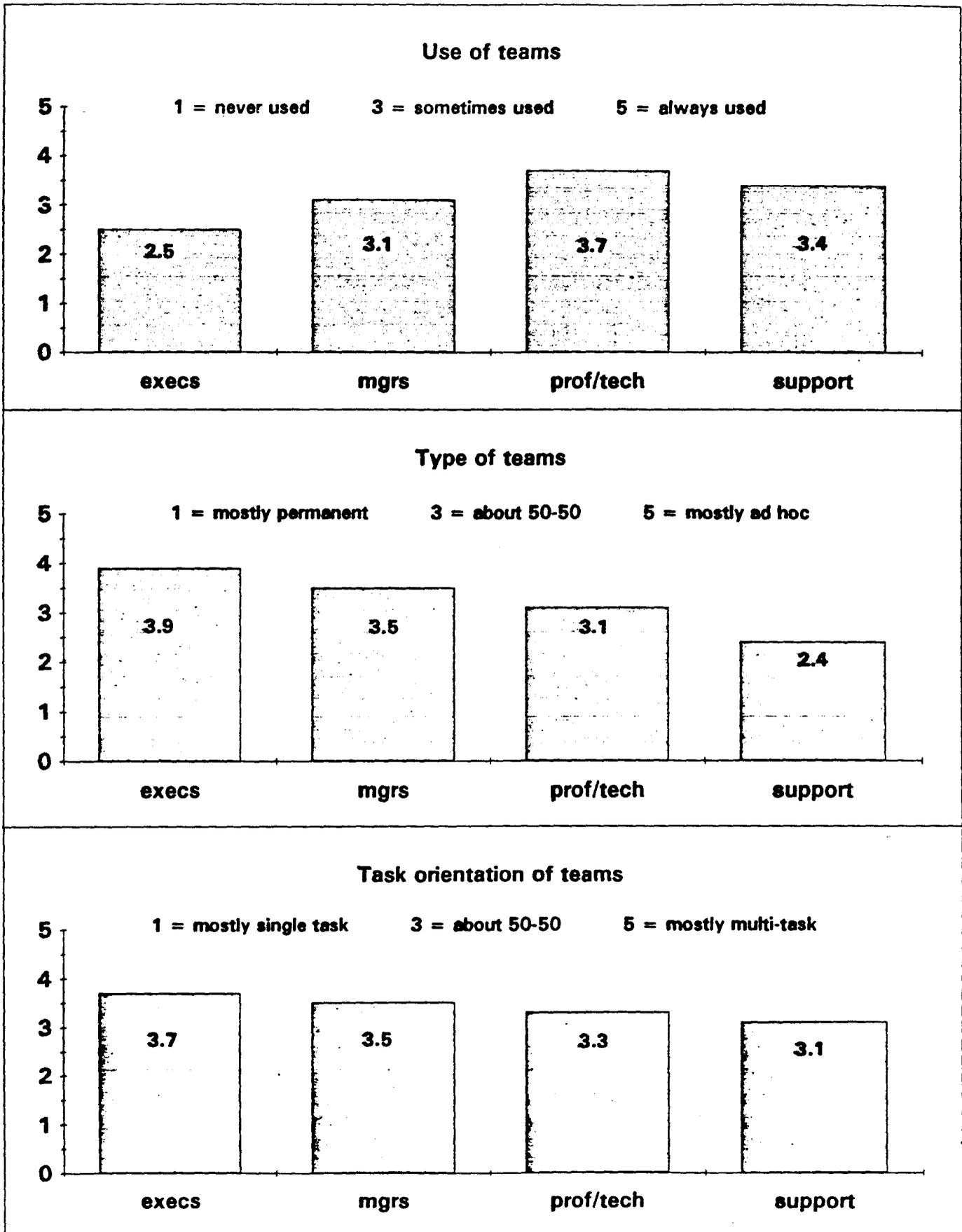


Table V - B

Teams

(continued)

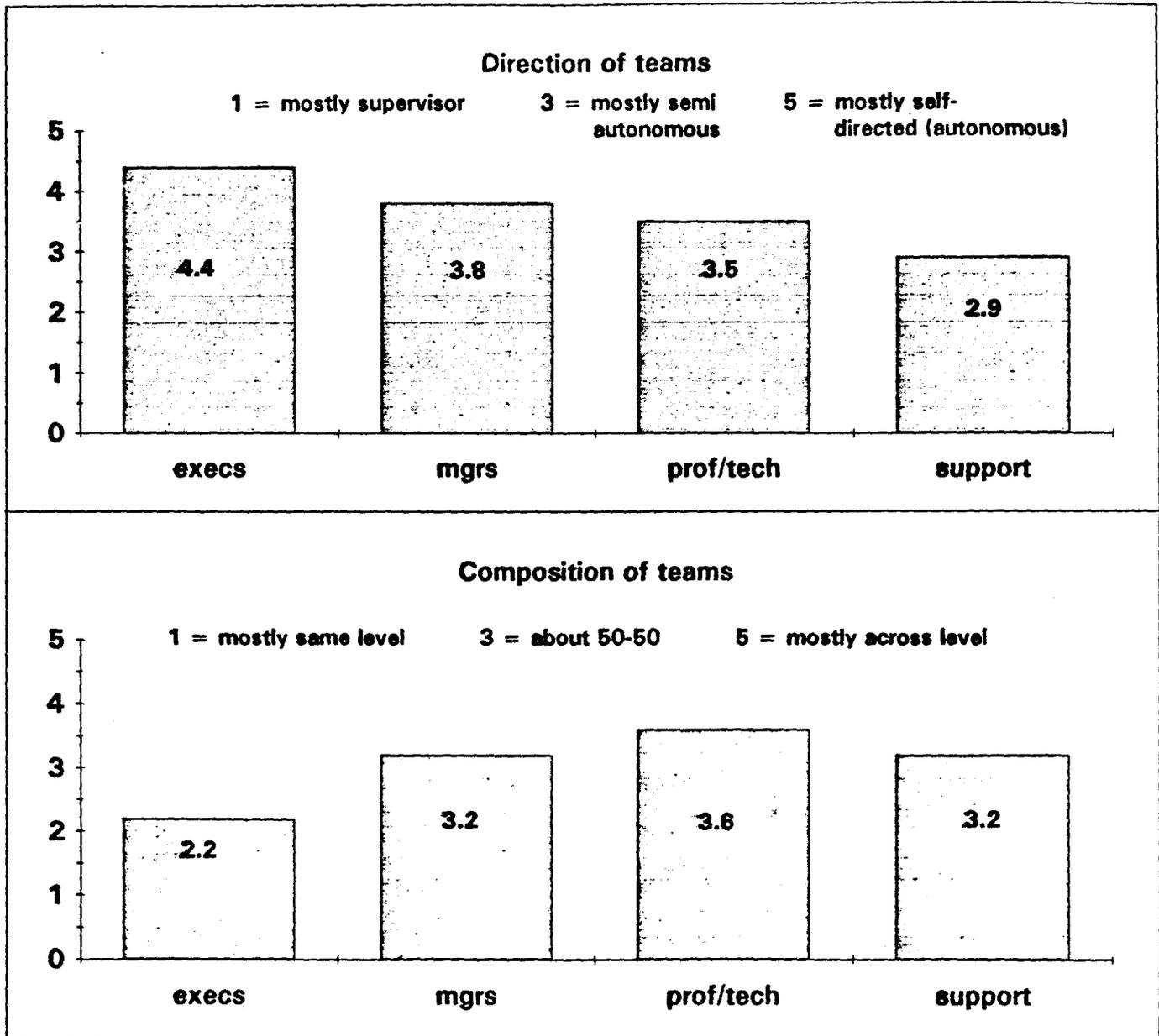
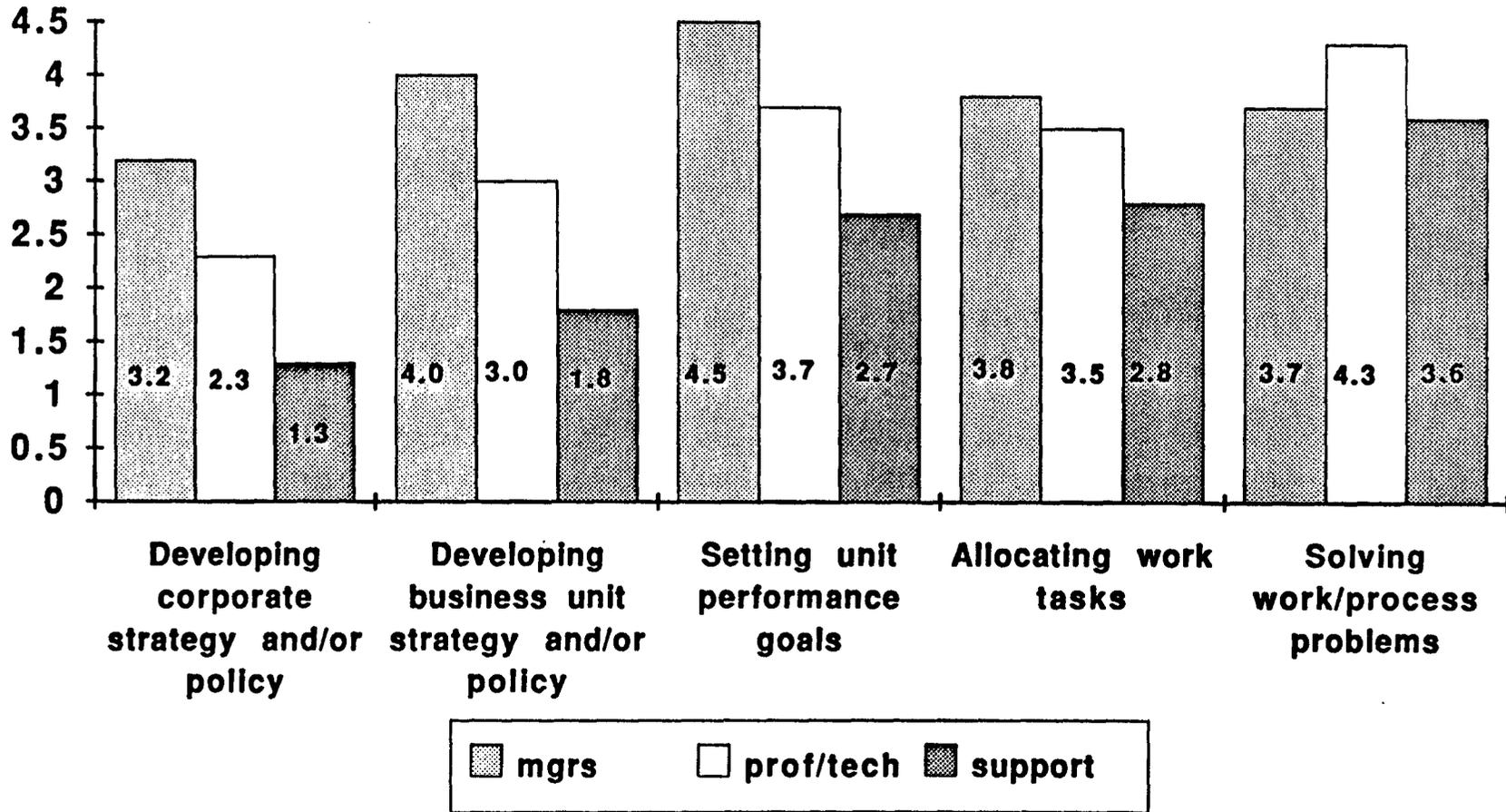


Table V - C
Level of employee involvement
in decision making



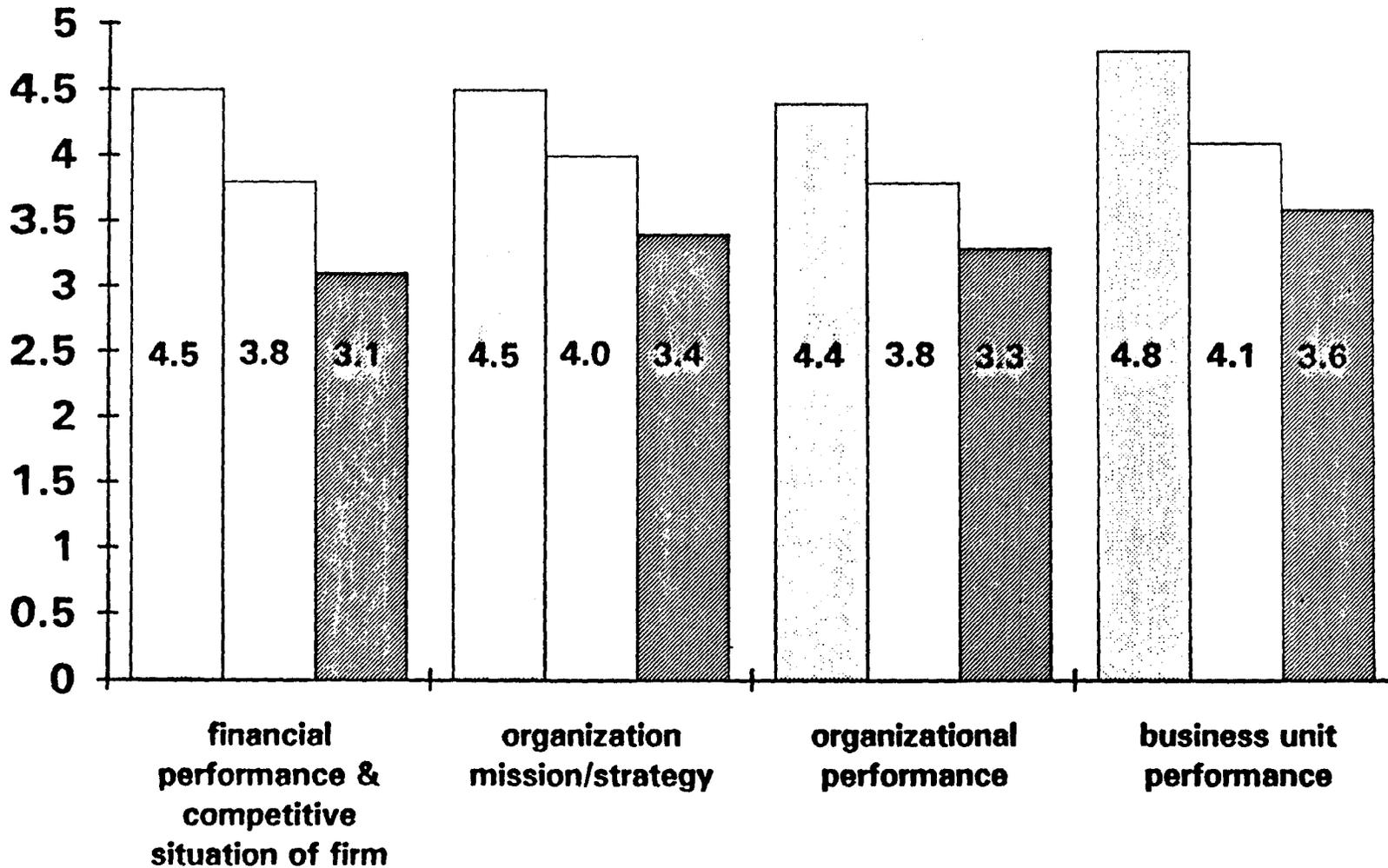
1 = not at all involved

3 = somewhat involved

5 = very involved

Table V - D

Employees informed about

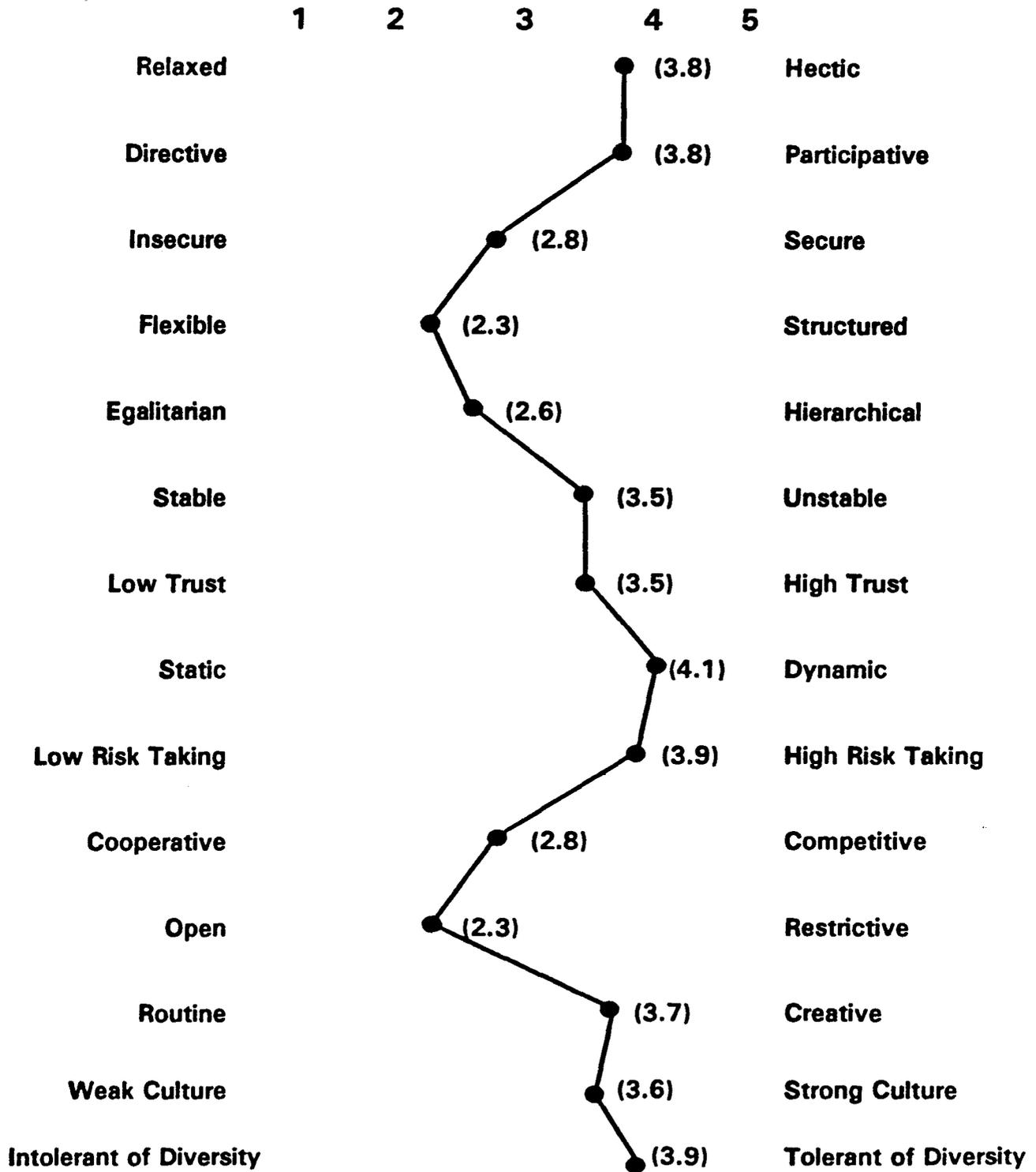


1 = not at all informed
3 = moderately informed
5 = very informed

□ mgrs □ prof/tech ■ support

Table V - E

DESCRIPTORS OF SERVICO'S CULTURE



VI. Staffing



With respect to staffing, consideration is first given to work force composition, then to flows, and finally to the employment of women and minorities.

Work Force Composition

Workplace 2000, as noted earlier, is a lean organization. Total headcount is 64,303, up from 50,000 in 1991. This reflects an annual growth rate of only 3 percent, far below the 10 percent projected growth in real revenues.

*Fewer managers, more professional
and technical employees*

Managers constitute just a little over 22 percent of total employment in 2000, down from 30 percent in 1991 (Table VI-A). Notwithstanding the overall increase in headcount, the organization actually has fewer managers in 2000 (14,147) than it had in 1991 (15,000). In contrast, professional and technical employment stands at 43 percent of the total (27,650), up from 33 percent (16,500) in 1991. Executives and support staff account for about two and 33 percent of the total population, respectively, roughly the same proportions as existed in 1991.

Contingent employees at lower levels

The great majority of executives and managers (94 and 93 percent, respectively) are regular employees who work full-time (Table VI-B). About four percent of each group work

under fixed-term contracts, either full- or part-time. Temporary employment is a minor factor at these levels.

A little over two-thirds of the professional and technical group are regular full-time employees. Of the remaining, 14 percent are also classified as regular employees, but they work only part-time, 13 percent are temps working either full- or part-time, and only four percent are on fixed-term contracts.

Among the support staff, a very substantial 43 percent are contingent employees. Over half of these are regular part-timers and most of the rest are temporary employees. There is little use of fixed-term contracts at this level.

(Note that all data in this report apply only to regular employees, both full- and part-time unless otherwise noted.)

Work hours stabilize

In Workplace 2000 full-time executives work an average of 55 hours per week. Corresponding figures for full-time managers, professional and technical employees, and support staff are 51, 43, and 38, respectively. These figures are basically unchanged from 1991.

More employees work at home

Approximately nine percent of the employees (about 5,800 in all) work at home a majority of the time (Table VI-C). Among executives, managers, and support staff the

percentages are only two, four, and five percent, respectively. Among professional and technical employees, however, the figure is 15 percent, or nearly 4,148 in total. Interestingly, the proportion of employees working at home is only a bit larger than the proportion that works at other off-site locations (e.g., with customers or suppliers or at universities).

Flows

The internal labor market is open

Workplace 2000 relies heavily on internal placements to fill job openings. But, between 1991 and 2000 the use of outside hiring increased markedly among all employee groups except the support staff (where outside hiring predominates anyway) (Table VI-D).

When it comes to outside hiring, the company experiences only moderate difficulty in recruiting qualified executives (3.3 on a 5-point scale) and managers (3.4). It experiences somewhat more difficulty in the case of support staff (3.6) and, especially, professional and technical employees (4.0), presumably because of the relative scarcity of qualified applicants at these levels (Table VI-E).

Promotional opportunities decline

Since the internal labor market is more open and (as was reported earlier) the organization structure is flatter, it comes as no surprise that promotional opportunities declined

between 1991 and 2000 (Table VI-F). Executives can now expect an average of nine promotions during their careers (vs. 12 earlier); the corresponding numbers for managers is six (vs. eight), for professional and technical employees, five (vs. six), and for support staff, four (no change). Recall the low level of employee satisfaction with career opportunities reported earlier.

The company experiences some difficulty in inducing geographic and lateral moves to open up career opportunities even among executives (3.3 on a 5-point scale) and managers (3.6), let alone professional and technical employees (3.9) and support staff (4.0) (Table VI-E, again). This despite the fact that it routinely offers relocation assistance for dual career couples.

Career employees decline

Fewer and fewer employees spend (or are expected to spend) their entire careers with the company (Table VI-G). Among executives this figure fell from 94 to 79 percent, among managers from 78 to 66 percent, among professional and technical employees from 77 to 61 percent, and even among support staff from 60 to 49 percent. (Note the moderate level of employee loyalty to the organization reported earlier.)

Severance packages and outplacement assistance are standard fare. Perhaps because some of the turnover is company-induced, the retention of qualified employees appears to be a difficult challenge only within the professional and technical employees group (3.9 on a 5-point scale) (Table IV-E one more time).

Retirement ages stabilize

Executives and managers who stay with the company retire, on average, at age 62. Professional and technical employees and support staff tend to be about one year older. Early retirement packages are only occasionally used. Perhaps this is why the average retirement ages have remained stable since 1991.

Women and Minorities

Diversity, diversity

Given growth, turnover, and prevailing demographic trends, Workplace 2000 should be characterized by an increasingly diverse work force. And it is. The "glass ceiling" was cracked, if not shattered; 11 percent of the executives are women, up from just two percent in 1991 (Table VI-H). Further, nearly one-third of the managers and two-fifths of the professional and technical employees are women, up from just over one-fifth and one-quarter, respectively, in 1991. Women continue to constitute about two-thirds of the support staff. Overall, Workforce 2000 employs a little over 28,000 women, which is about 45 percent of its total employment. Of these, about 4,700, or nearly 17 percent, are in executive or managerial positions. (Note that all the gender and race/ethnicity representation data are based on total employment figures rather than on only regular full- and part-time employment figures.)

Whites (non-Hispanic) continue to constitute the majority among all employee groups except support staff (Table IV-D). Nonetheless, all minority groups experienced increased representation in all job categories between 1991 and 2000. Blacks (African Americans) were and are the most prevalent of the minority groups across the organization. Their representation increased at the executive level from 1 to 4.2 percent, at the managerial level from 10 to 13.2 percent, at the professional and technical level from 11 to 13.5 percent, and at the support staff level from 30 to 34 percent.

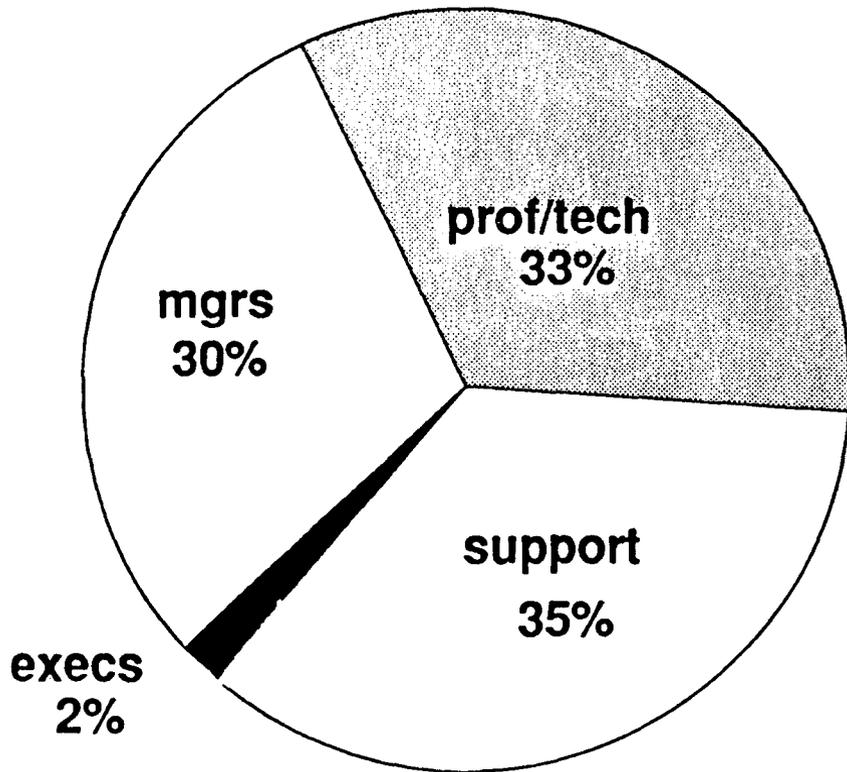
Hispanics and Asians display common patterns between 1991 and 2000, basically increasing their representation in all job categories by two to three percent. Exceptions to the patterns occurred among Asians at the professional and technical level, where representation increased from 3 to 8.1 percent, and among Hispanics at the support staff level, where representation went from 9 to 14.6 percent. Native Americans continue to have miniscule representation throughout the organization.

Workplace 2000's culture is described as quite tolerant of diversity (3.9 on a 5-point scale; refer back to Table V-E).

Table VI - A

Composition of workforce by employee group

1991



2000

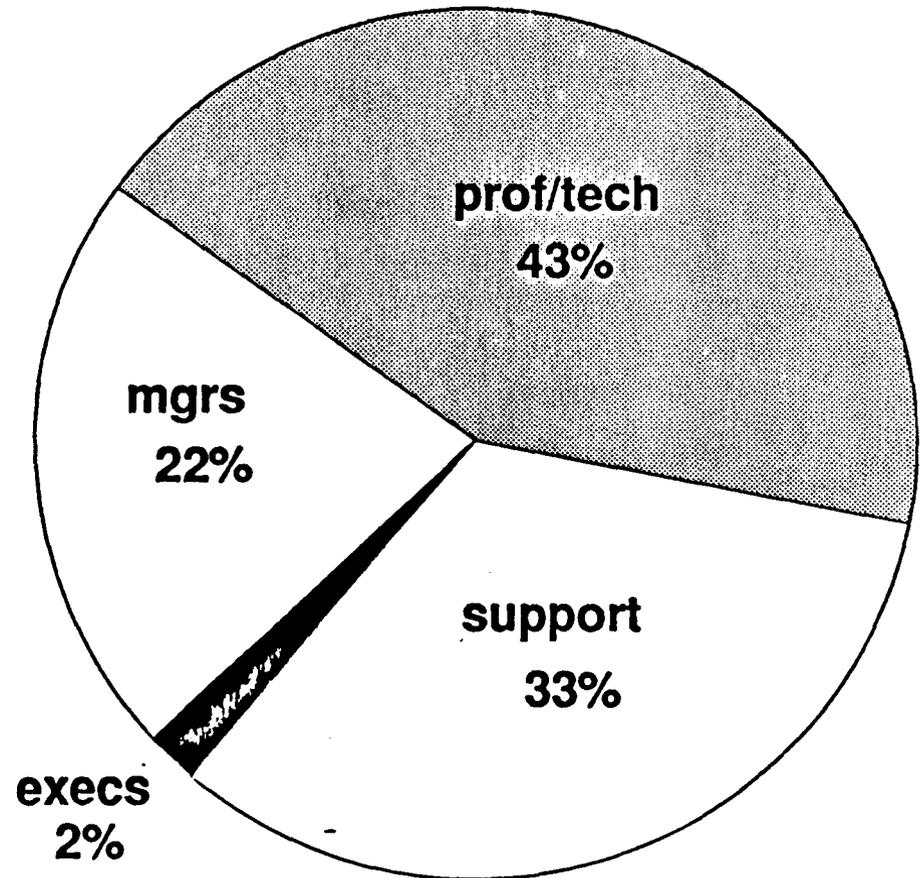


Table VI - B

Types of Employment

	Execs		Mgrs		Prof/Tech		Support	
	1991	2000	1991	2000	1991	2000	1991	2000
Regular full time	100%	94%	100%	93%	80%	69%	70%	57%
Other	--	6%	--	7%	20%	31%	30%	43%
Regular part time	--	1.1%	--	2.3%	10%	13.7%	20%	24%
Temporary full time	--	.4%	--	.8%	5%	7.1%	5%	8.2%
Temporary part time	--	.3%	--	.5%	5%	6.2%	5%	7.8%
Fixed term contract full time	--	3.9%	--	2.6%	--	2.9%	--	2.1%
Fixed term contract part time	--	.3%	--	.8%	--	1.1%	--	.9%

Table VI - C

Work Locations

	Execs		Mgrs		Prof/Tech		Support	
	1991	2000	1991	2000	1991	2000	1991	2000
Designated work location	100%	96%	100%	92%	80%	71%	100%	93%
At home	0%	2%	0%	4%	10%	15%	0%	5%
Somewhere else (e.g., suppliers, customers, universities)	0%	2%	0%	4%	10%	14%	0%	2%

Table VI - D

Use of outside sources for filling positions,
by employee group

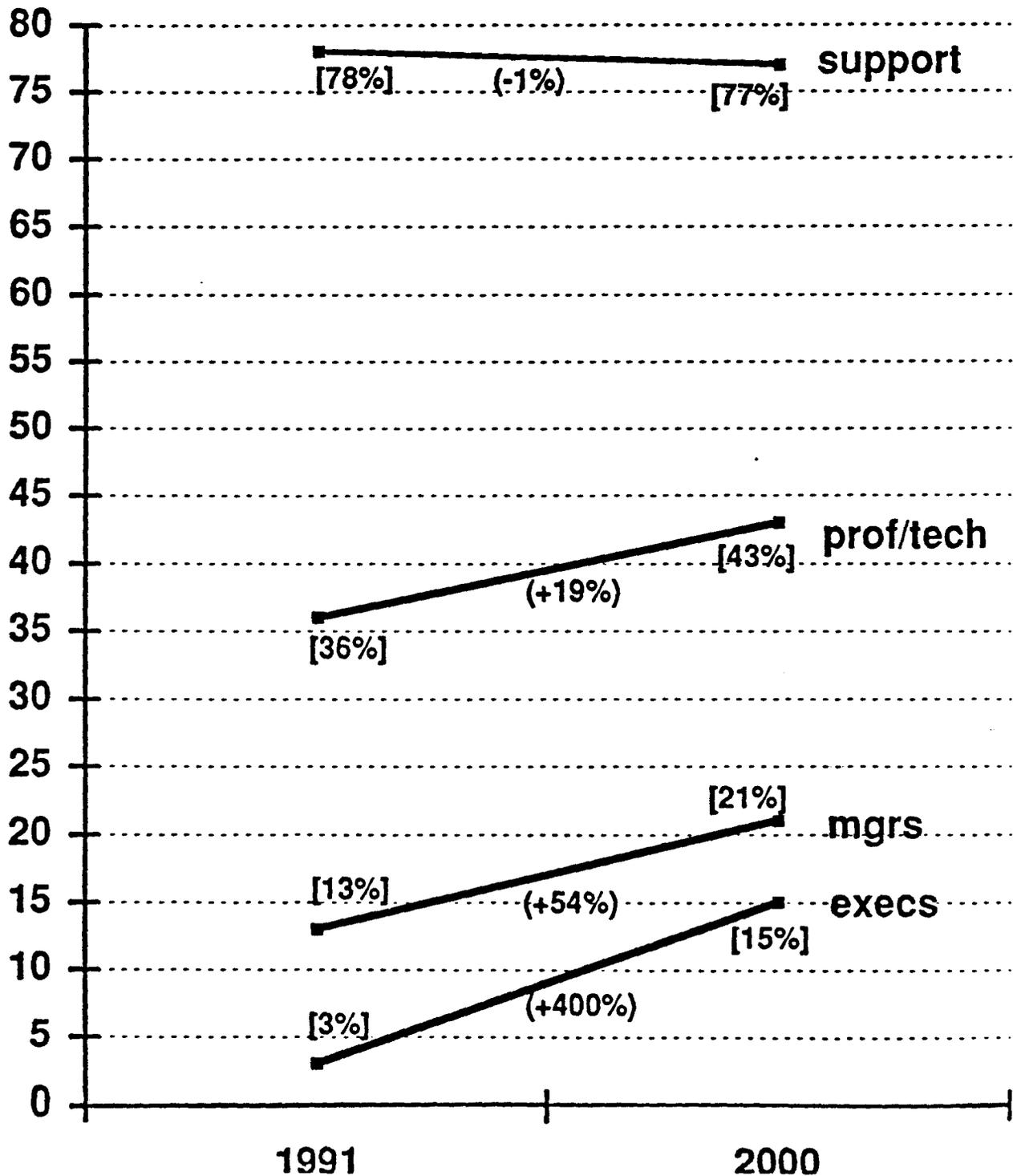


Table VI - E

Difficulty recruiting, retaining, & moving employees

37

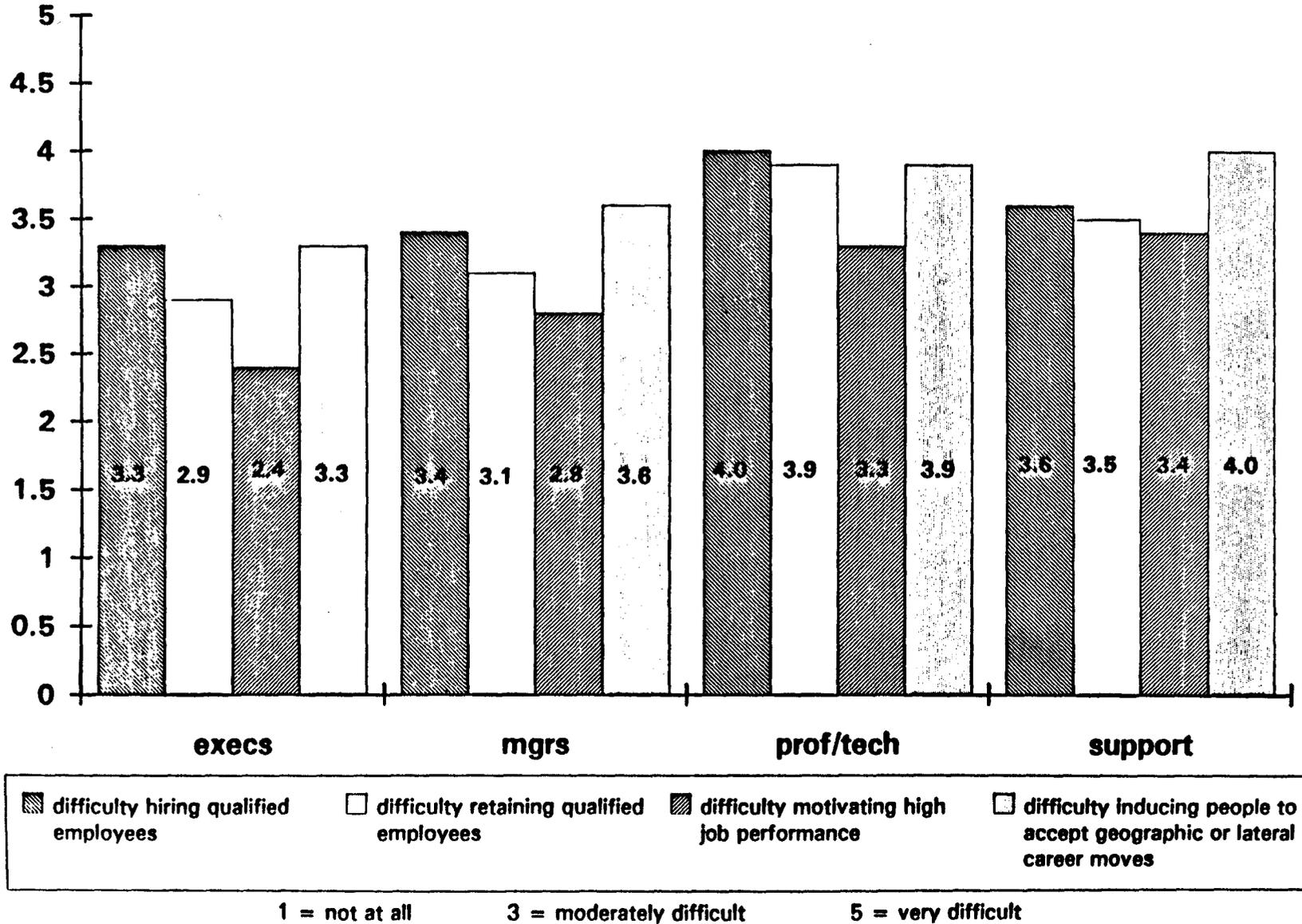


Table VI - F

Average # of Promotions by Employee Group

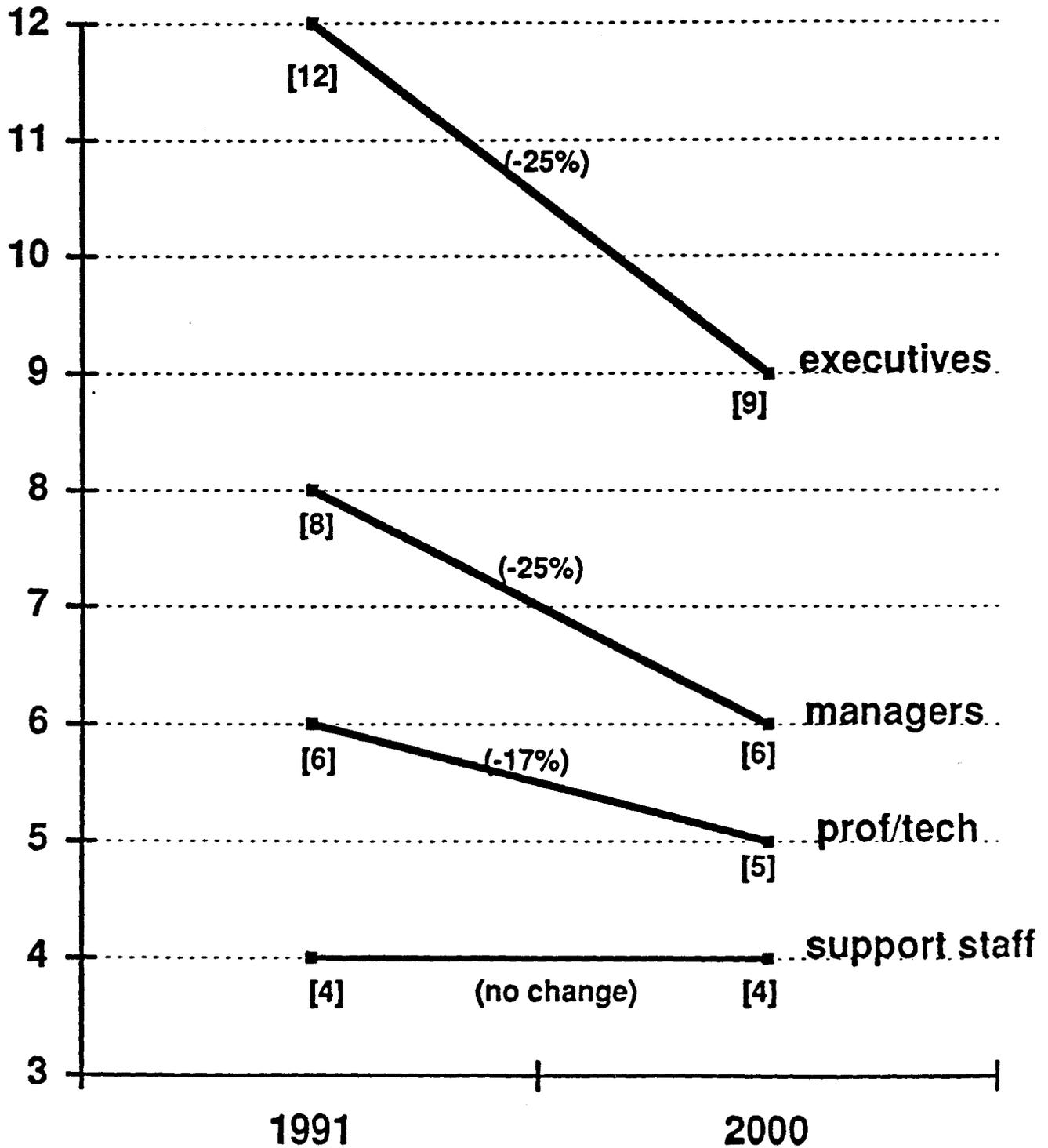


Table VI - G

Percent of employees who will spend their entire career at Servico

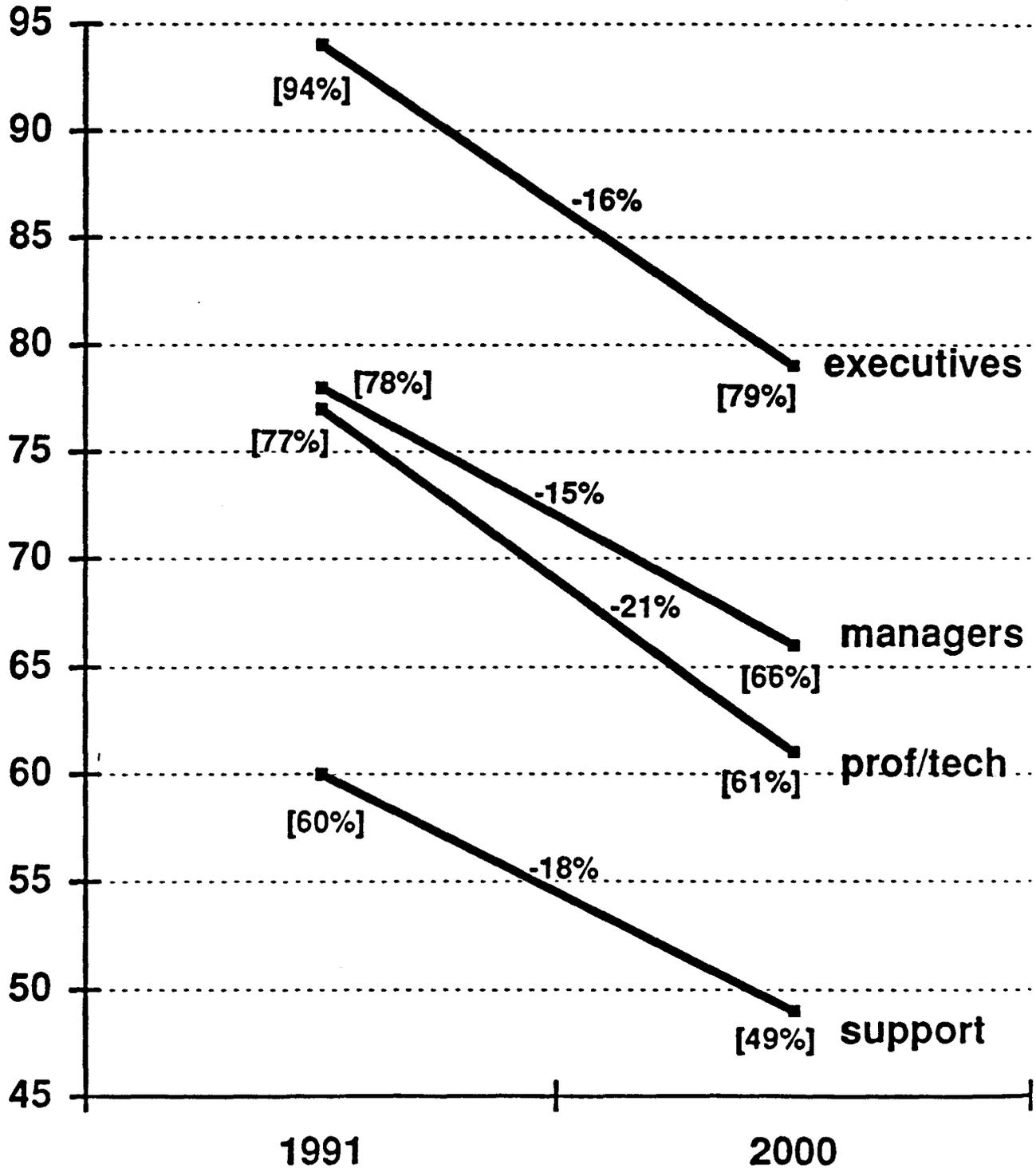


Table VI - H

Percent of workforce that will be female,
by employee group

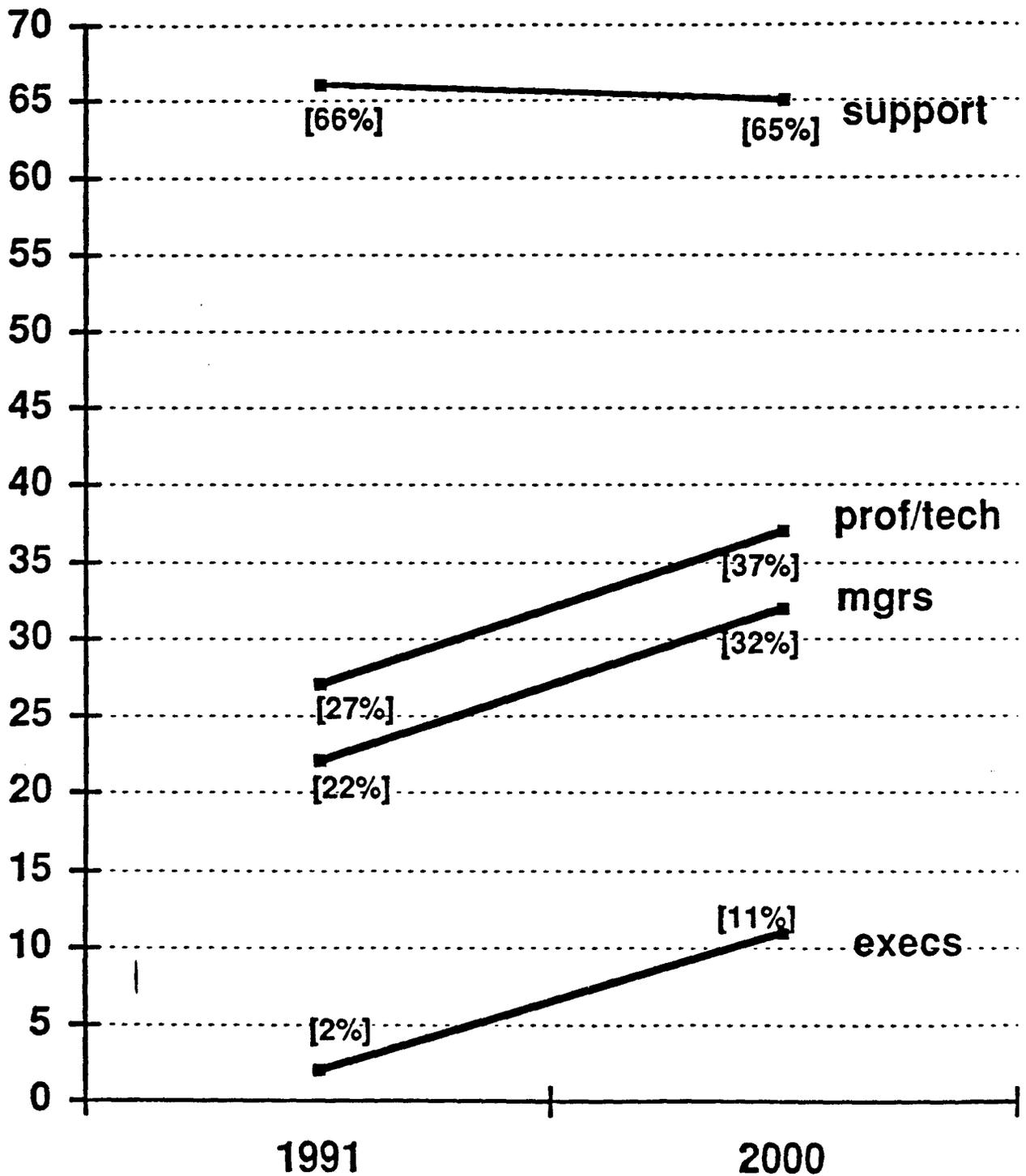
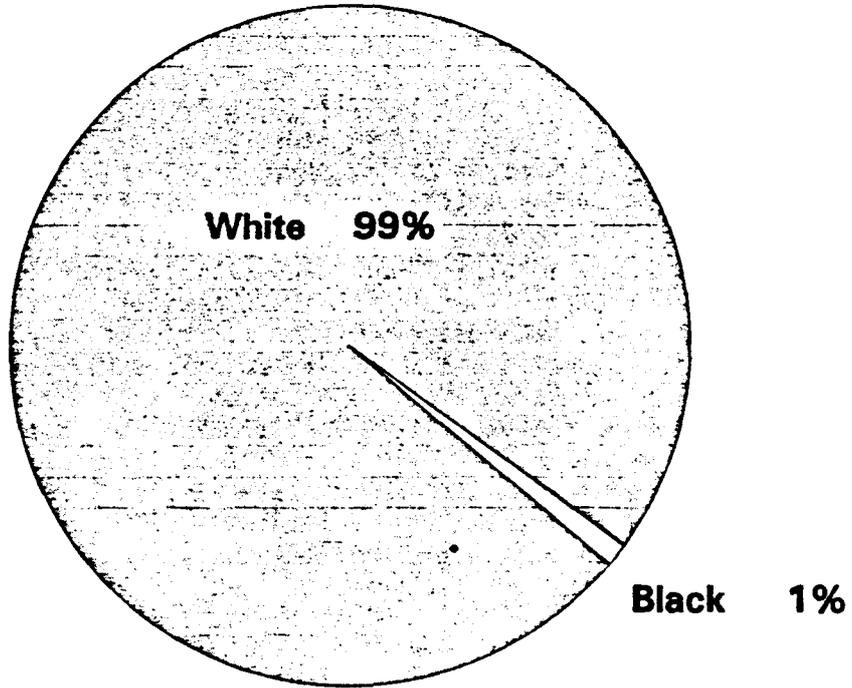


TABLE VI - I
RACE/ETHNICITY FOR EXECUTIVES

1991



2000

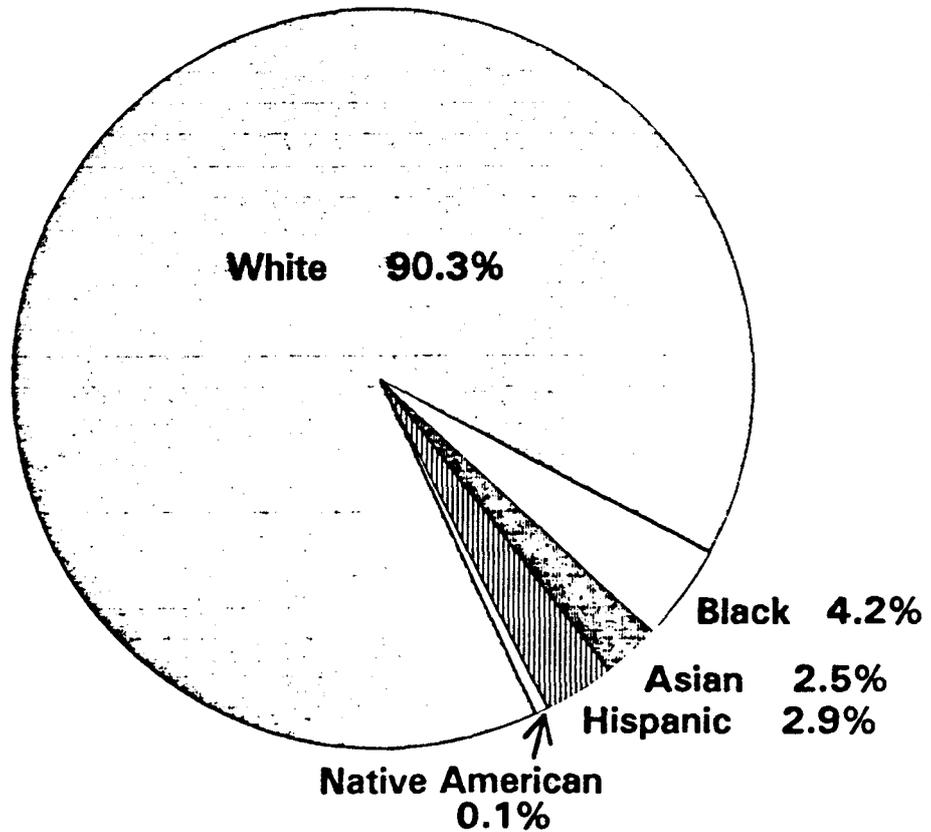
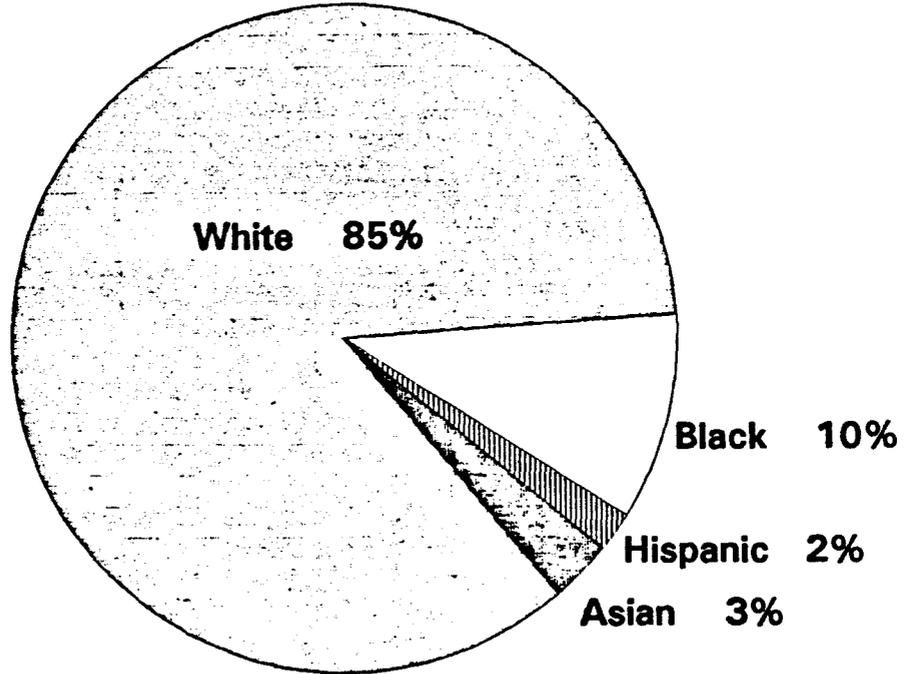


TABLE VI - I
RACE/ETHNICITY FOR MANAGERS

1991



2000

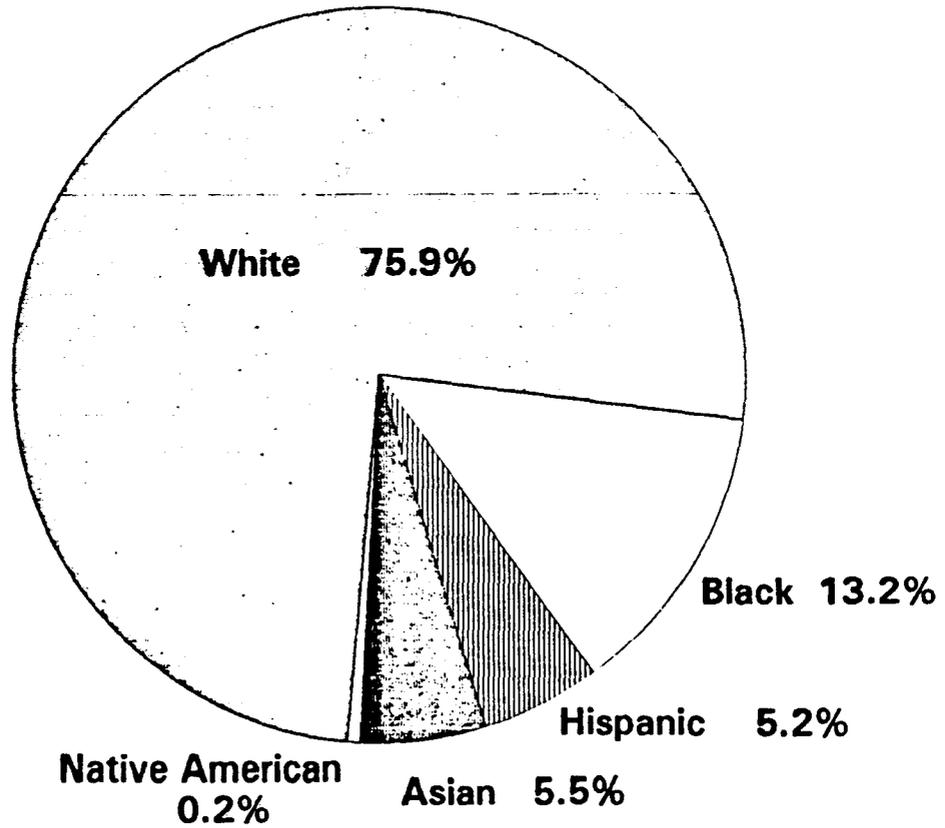
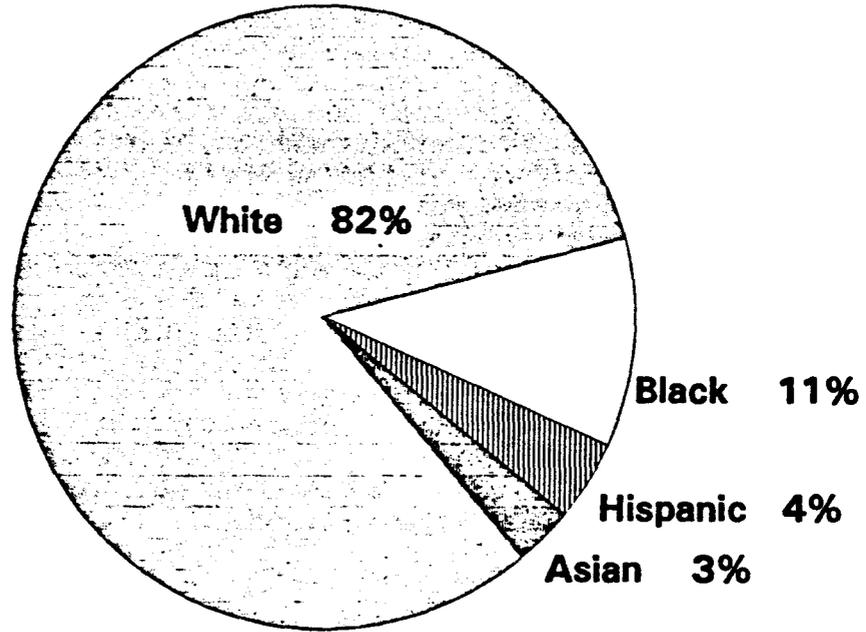


TABLE VI - I
RACE/ETHNICITY FOR PROF/TECH

1991



2000

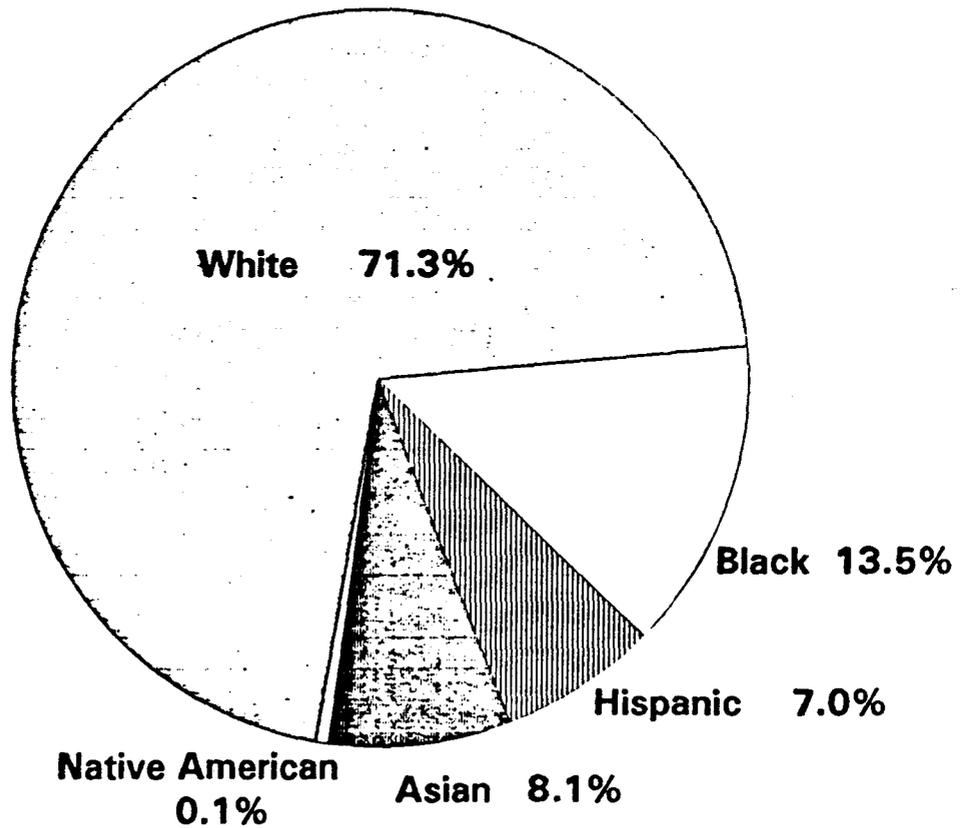
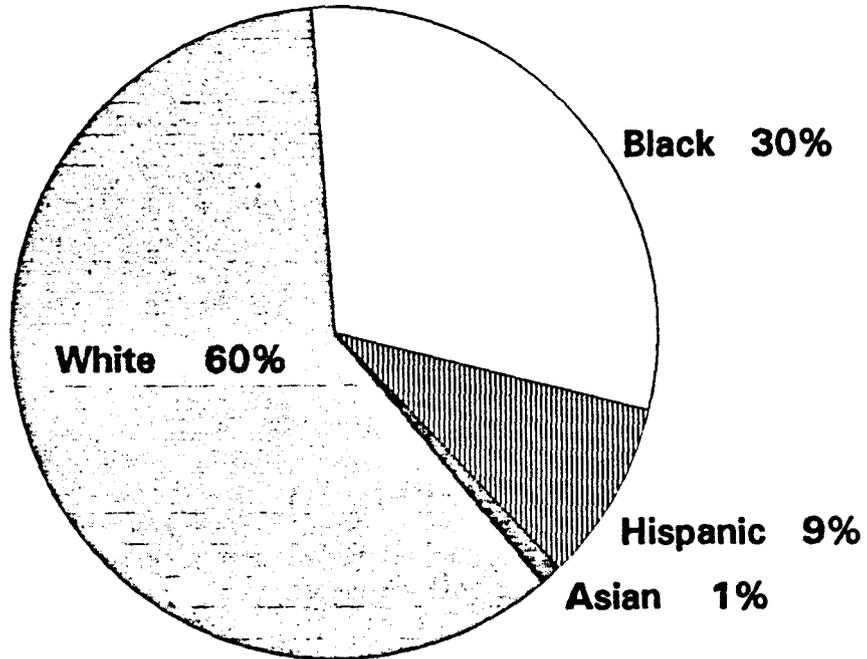
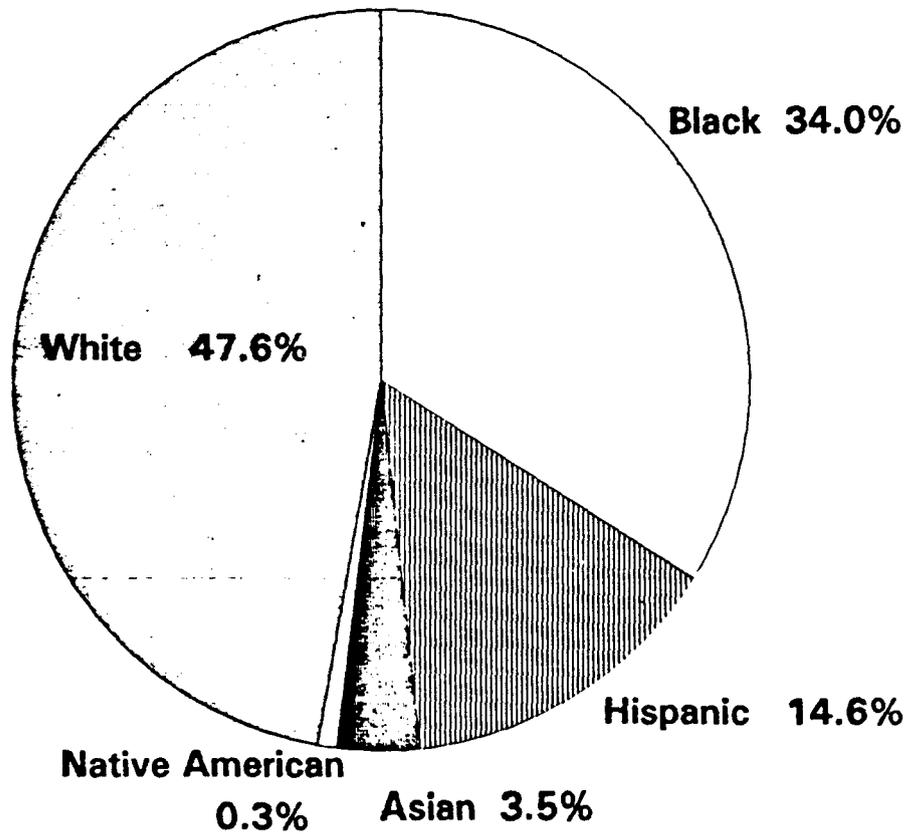


TABLE VI - I
RACE/ETHNICITY FOR SUPPORT

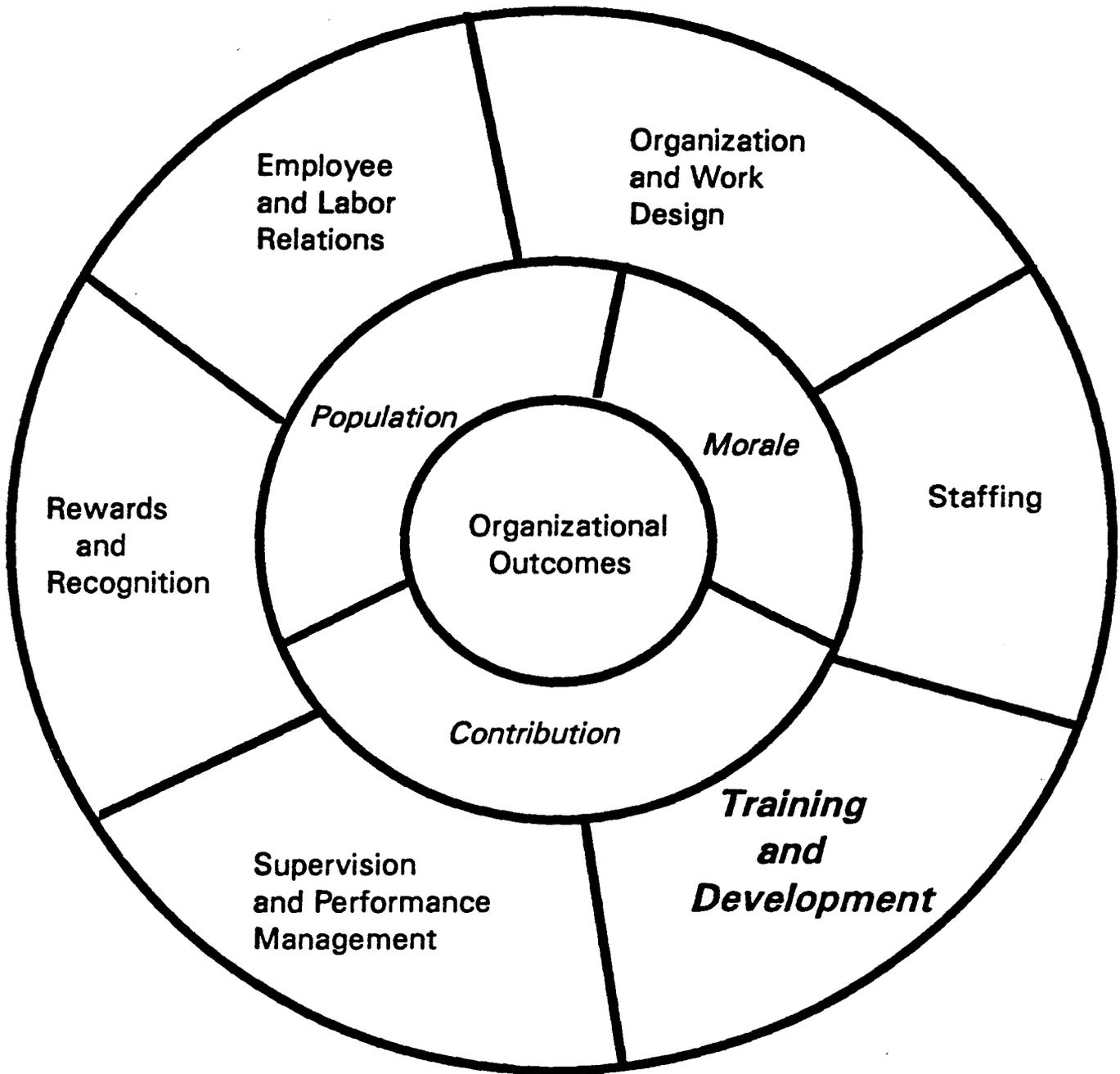
1991



2000



VII. Training and Development



Training expenditures mushroom

Workplace 2000 spends a lot of money on training and development. Direct expenditures in this arena run to 3.5 percent of total payroll compared with 1.4 percent in 1991 (a 233 percent increase).

Training dollars trickle down

Training dollars are allocated across the four employee groups more evenly in 2000 than was the case in 1991 (Table VII-A). Between the two years the percentage of these expenditures dedicated to executives and managers declined by 26 and 10 percent, respectively. Conversely, during the same period professional and technical and support staff allocations increased by 30 and 40 percent, respectively. Fewer dollars for the top of the house? Not at all; just a smaller slice of the vastly expanded pie: 1.8 percent of payroll [(53)(.034)] in 2000, compared with 1.0 percent of payroll [(65)(.014)] in 1991.

The training mission is refocused

Between 1991 and 2000 the proportion of training and development expenditures dedicated to career enhancement declined among all four employee groups (perhaps reflecting the diminution of promotional opportunities and career employees), while the proportion going

to remedial training increased among all four employee groups (perhaps reflecting the shift to more outside hiring combined with the shortages of skilled applicants). (Table VII-B)

Nonetheless, virtually all of the training and development money spent on executives and managers goes toward career enhancement (56 percent for each group) and improving current job performance (39 and 36 percent, respectively). Remedial training is of greater significance among professional and technical employees (13 percent) and, especially, the support staff (28 percent). Interestingly, very few resources are dedicated at any level to employee self-improvement in areas unrelated to work.

*Training on the job is preferred
to training off the job*

With respect to delivery, on-the-job training is clearly preferred over off-the-job training (Table VII-C). Informal on-the-job training is especially popular across all four employee groups, as is the use of special assignments (e.g., task forces) among all but the support staff. Job rotation and cross-functional moves are only slightly less frequently used among managers and, to a slightly lesser extent, executives and professional and technical employees. Formal on-the-job training done in teams follows in significance among all employee groups except executives (among whom, it will be recalled, there is very little use of teams).

Well down the list is classroom training, both on- and off-site for managers, mostly off-site for executives, and mostly on-site for professional and technical employees and support staff. Formal on-the-job training on an individualized basis, the use of job enlargement for development purposes, and educational leaves find currency only among professional and

technical employees. No employee group is very much exposed to special assignments outside the organization, individualized off-the-job training (e.g., computer-aided instruction), or sabbatical leaves.

Virtually all training and development is paid for by the company. Most of it takes place during normal working hours (and, as noted above, on-the-job). But, a surprising amount of training and development is given after normal working hours: about one-third of the total among executives, 29 percent among managers, 28 percent among professional and technical employees, and 15 percent among support staff.

Skill requirements vary

Training content, of course, depends on specific diagnosed needs. Given the general nature of the work in Workplace 2000, however, the five most needed skills, plus ties, for each employee group are as follows. (Ratings are on a 5-point scale, where 5 = "very high skill"; Table VII-D.)

Executives require leadership skills (5.0), followed in order by oral communication skills (4.9), business knowledge (4.7), problem-solving skills (4.6), change management skills (4.5), and interpersonal skills (4.5). Managers, too, require leadership skills (4.6), oral communication skills (4.7), and interpersonal skills (4.6). They also need to develop the ability to work in and with teams (4.6) and to listen (4.6).

Professional and technical employees require creative abilities (4.4) (recall their responsibility for innovativeness), as well as analytical (4.7) and problem-solving skills (4.7). Computer literacy is a must (4.7), as is the capacity for continuous development (i.e., learning

to learn) (4.4). Somewhat surprising, given the prevalence of teams at this level, are the relatively low ratings for teamwork (4.3) and interpersonal skills (4.0).

Both teamwork (4.2) and interpersonal skills (3.9) are important for support staff, however, as are oral communication skills (3.6). But, these employees also need problem-solving skills (3.6) and computer literacy (3.7). And, again, it is important that they develop the capacity for lifelong learning (3.8).

Table VII - A

Percent of training budget spent by employee group

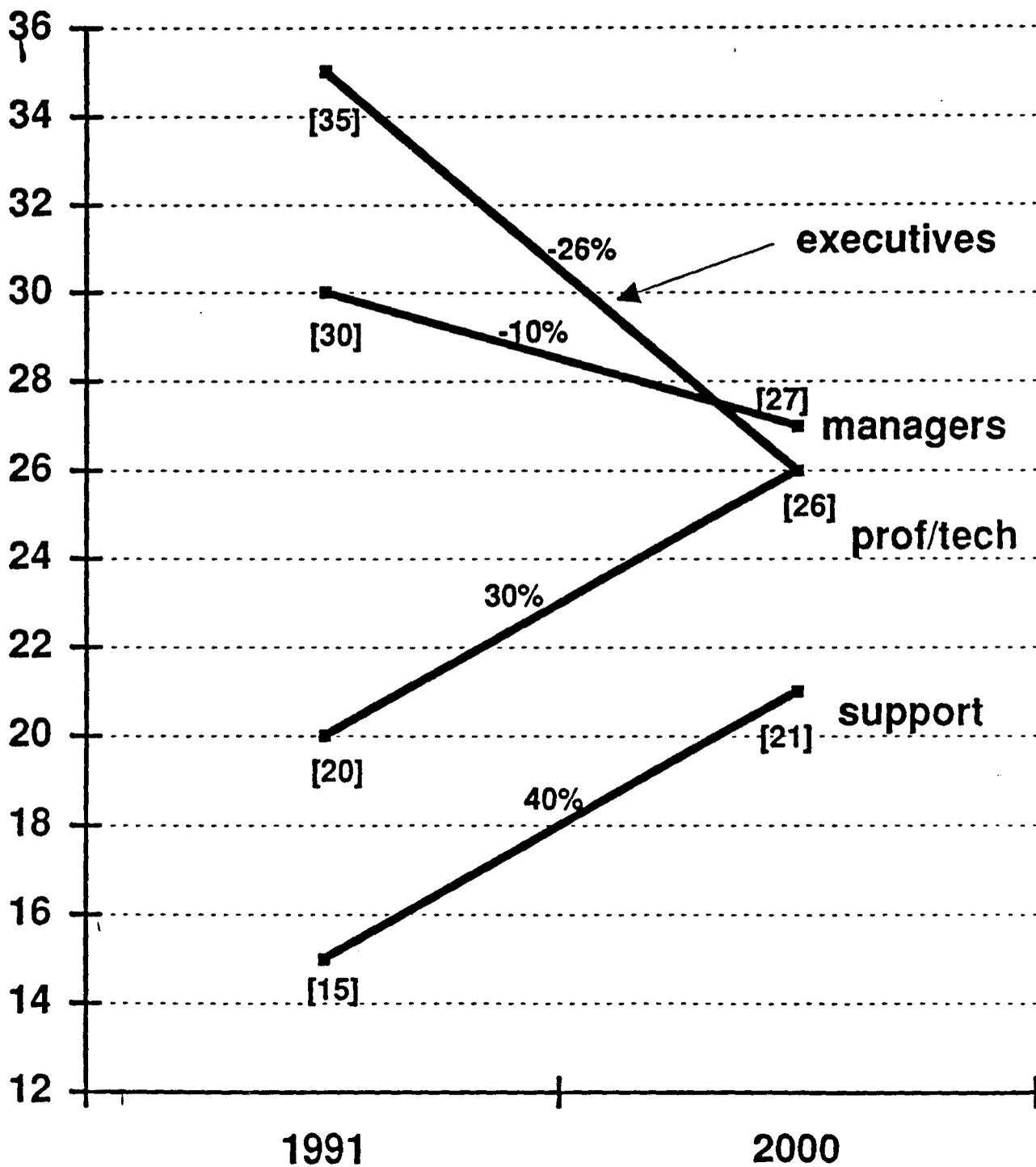


Table VII - B

Purposes of Training

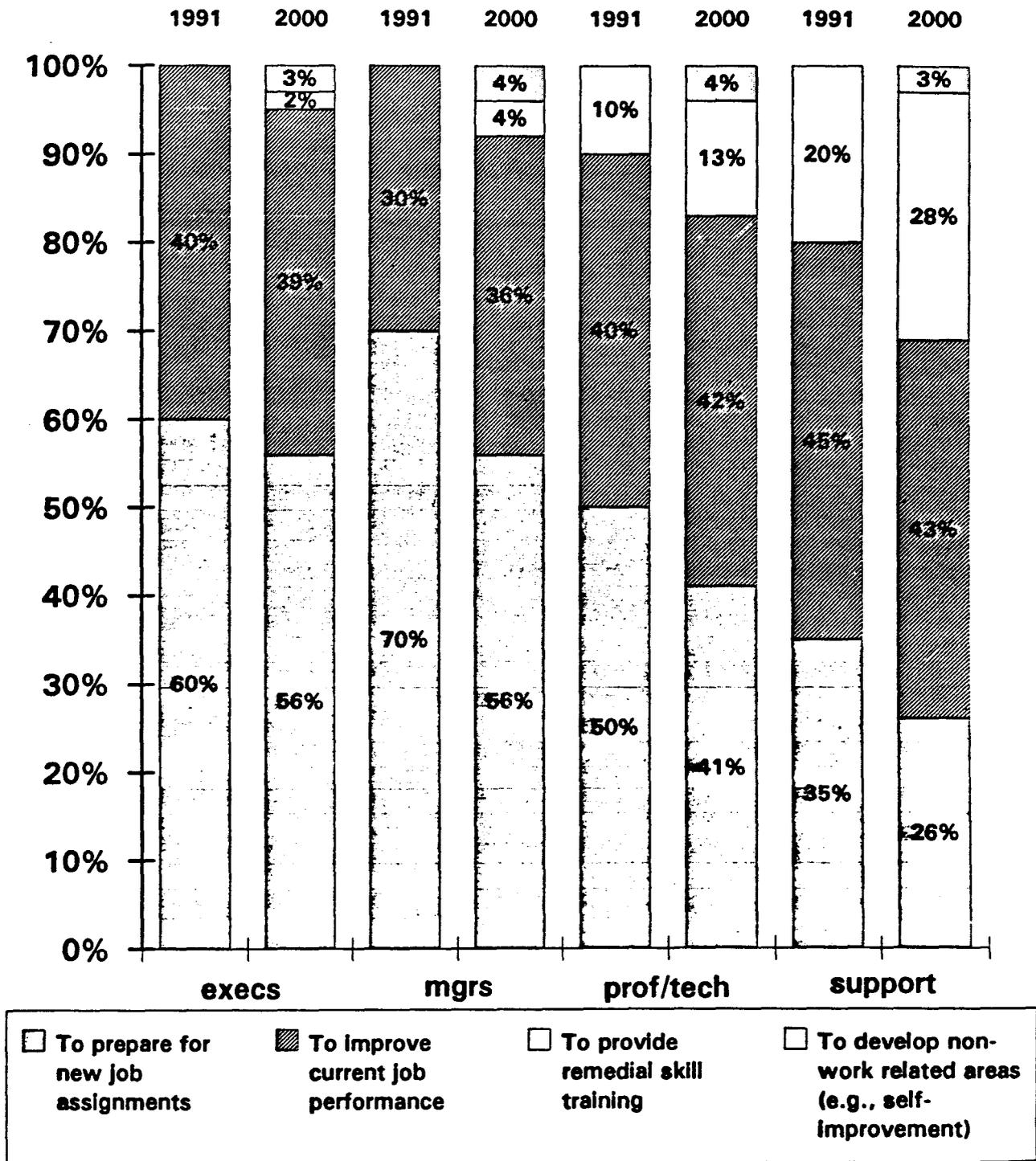


Table VII - C
Training Techniques Used

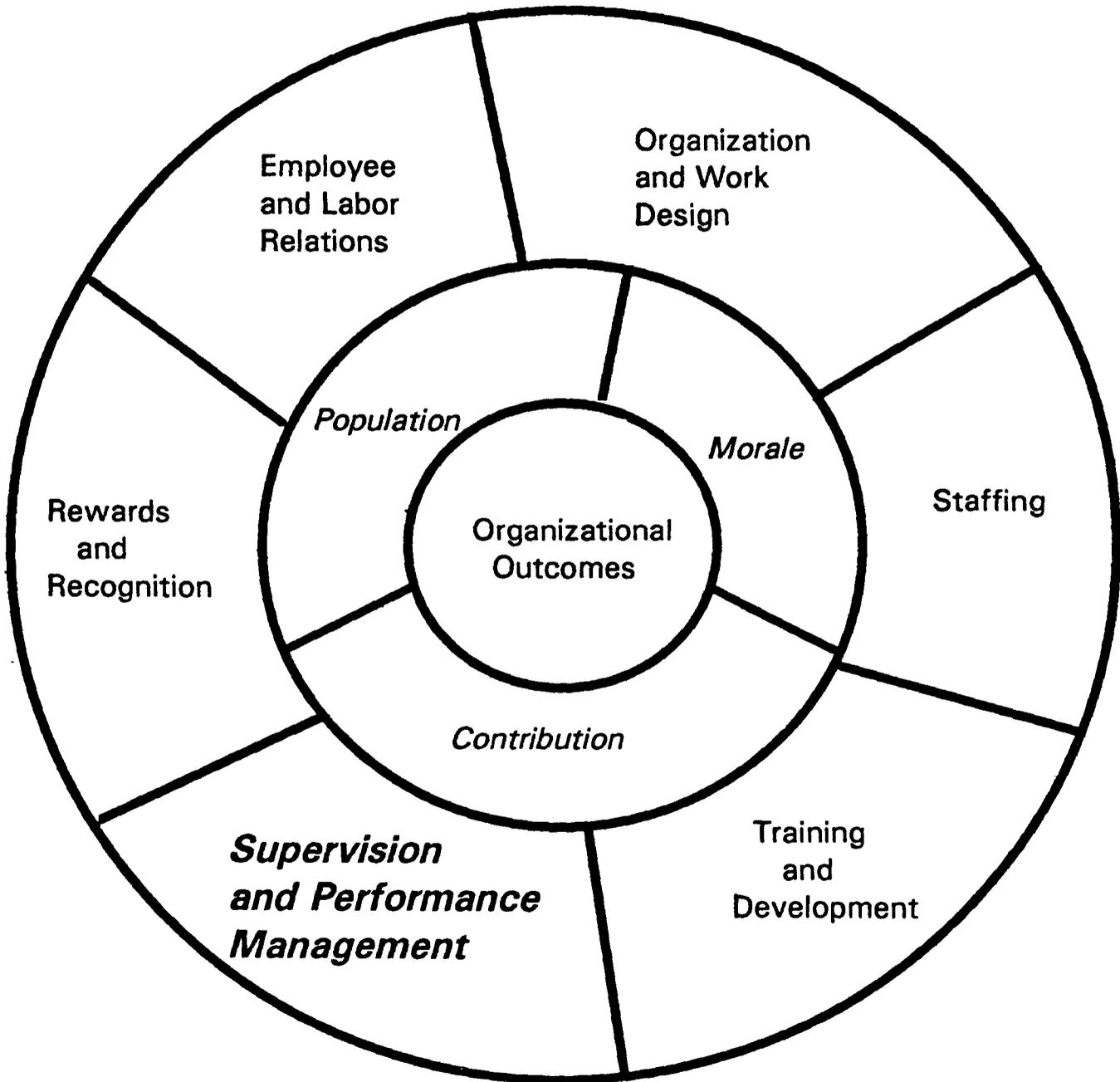
	Execs	Mgrs	Prof/tech	Support
<i>On-the-Job Training</i>				
Informal on-the-job	3.8	3.9	3.8	4.2
Formal on-the-job individual	2.7	3.0	3.5	3.3
Formal on-the-job group	2.9	3.5	3.6	3.7
Job enlargement	3.2	3.3	3.5	3.3
<i>Off-the-Job Training</i>				
Individually (e.g., computer aided instruction)	2.6	2.9	3.4	3.1
In a group setting on-site	3.1	3.5	3.5	3.4
In a group setting offsite	3.5	3.5	3.4	2.5
<i>Special Training Techniques</i>				
Job rotations	3.6	3.8	3.4	3.2
Special assignments inside Servico	3.8	3.9	3.8	2.6
Special assignments outside Servico (e.g., university)	2.5	2.5	2.6	1.4
Cross functional moves	3.5	3.8	3.4	2.6
Educational leaves	2.8	3.0	3.6	2.7
Sabbaticals	2.5	2.2	2.5	1.2

Table VII - D**Skill Levels**

	Execs	Mgrs	Prof/tech	Support
Psychomotor	2.0	2.1	2.7	3.5
Written communication	4.4	4.3	4.0	3.1
Oral communication	4.9	4.7	4.0	3.6
Analytical skills	4.4	4.3	4.7	3.3
Problem solving	4.6	4.5	4.7	3.6
Leadership	5.0	4.6	3.4	2.7
Teamwork	4.3	4.6	4.3	4.2
Change management	4.5	4.4	3.3	2.7
Coping with stress	4.1	4.1	3.7	3.3
Computer literacy	3.4	3.8	4.7	3.7
Math skills	3.2	3.3	4.1	3.0
Business knowledge	4.7	4.2	3.8	2.8
Project management	3.8	4.4	4.1	2.5
Multi-cultural awareness/ handling diversity	4.1	4.4	3.9	3.5
Learning to learn	3.9	4.1	4.4	3.8
Creativity	3.9	3.9	4.4	3.2
Listening	4.4	4.6	4.1	3.7
Interpersonal skills	4.5	4.6	4.0	3.9
Risk taking	4.4	4.1	3.5	2.6

1 = very low skill**3 = moderate skill****5 = very high skill**

VIII. Supervision and Performance Management



Leaders replace managers

Workplace 2000 has no managers, supervisors, bosses, and the like, at least not behaviorally. In their places are leaders, catalysts, partners, delegators, developers, facilitators, and coaches (Table VIII-A). Employees are less than overwhelmed, however; recall that satisfaction with supervision is only 3.6 on a 5-point scale.

Performance appraisals are primarily top down

Performance standards are high in Workplace 2000 (as noted earlier). Appraisals are performed semi-annually (annually among executives). The task falls primarily to "supervisors" (Table VIII-B). Only moderate use is made of self, peer, and, especially, subordinate appraisals among the various employee groups. The major exception is the use of peer appraisals among professional and technical employees (the group most likely to be working in teams). Appraisals by outsiders (e.g., customers) are of greater importance in judging executive and managerial performance than are peer, self, or subordinate appraisals. But, the concept of 360-degree appraisal is basically a non-starter in Workplace 2000.

Employees know where they stand

Performance feedback is ubiquitous (Table VIII-C). Employees at all levels are well-informed as to how their performance has been assessed. In addition, executives and managers, and to a lesser extent professional and technical employees as well, are quite well informed about ratings of their short-term promotability and even long-term career potential.

TABLE VIII - A
ROLE OF MANAGERS

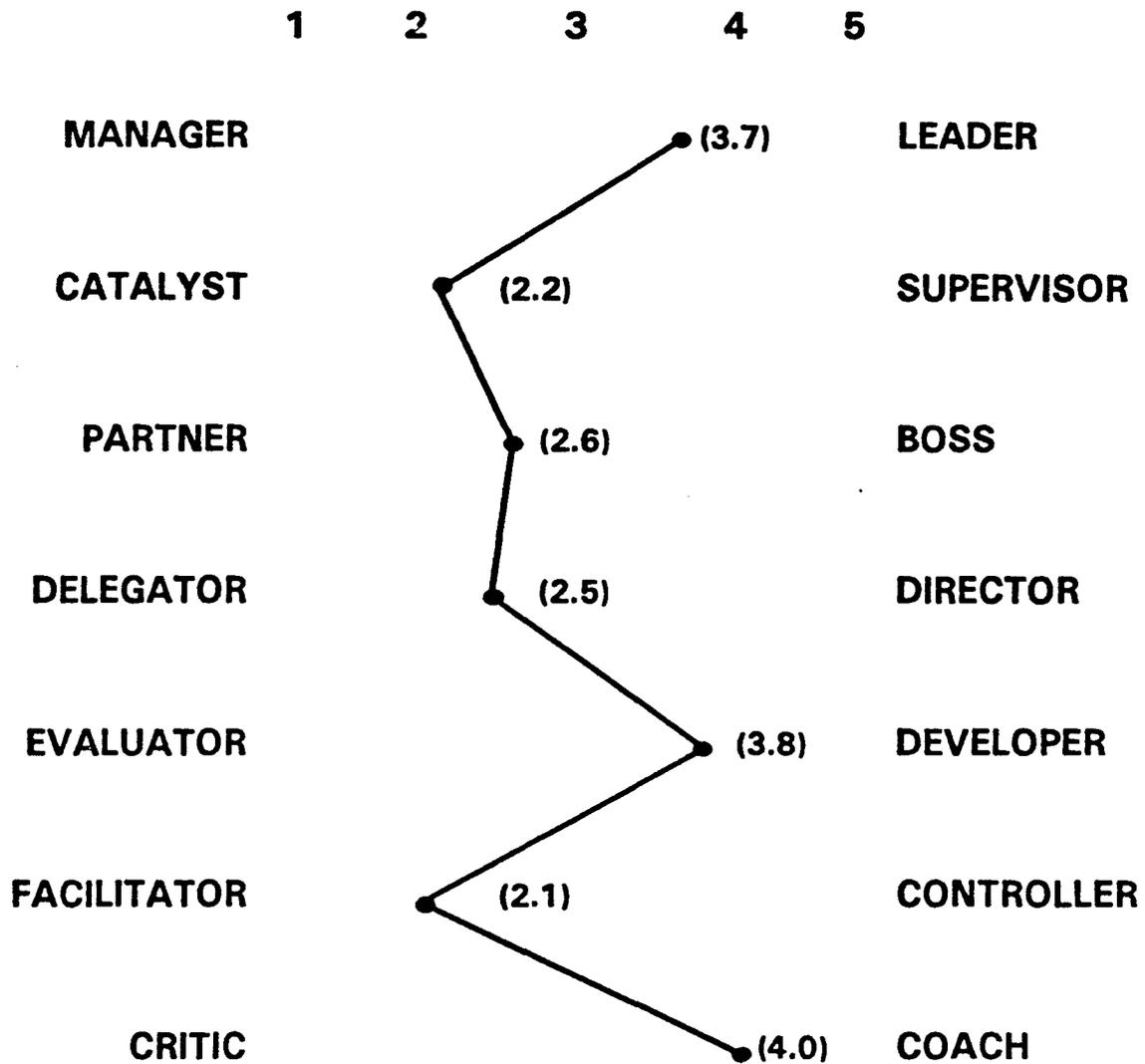
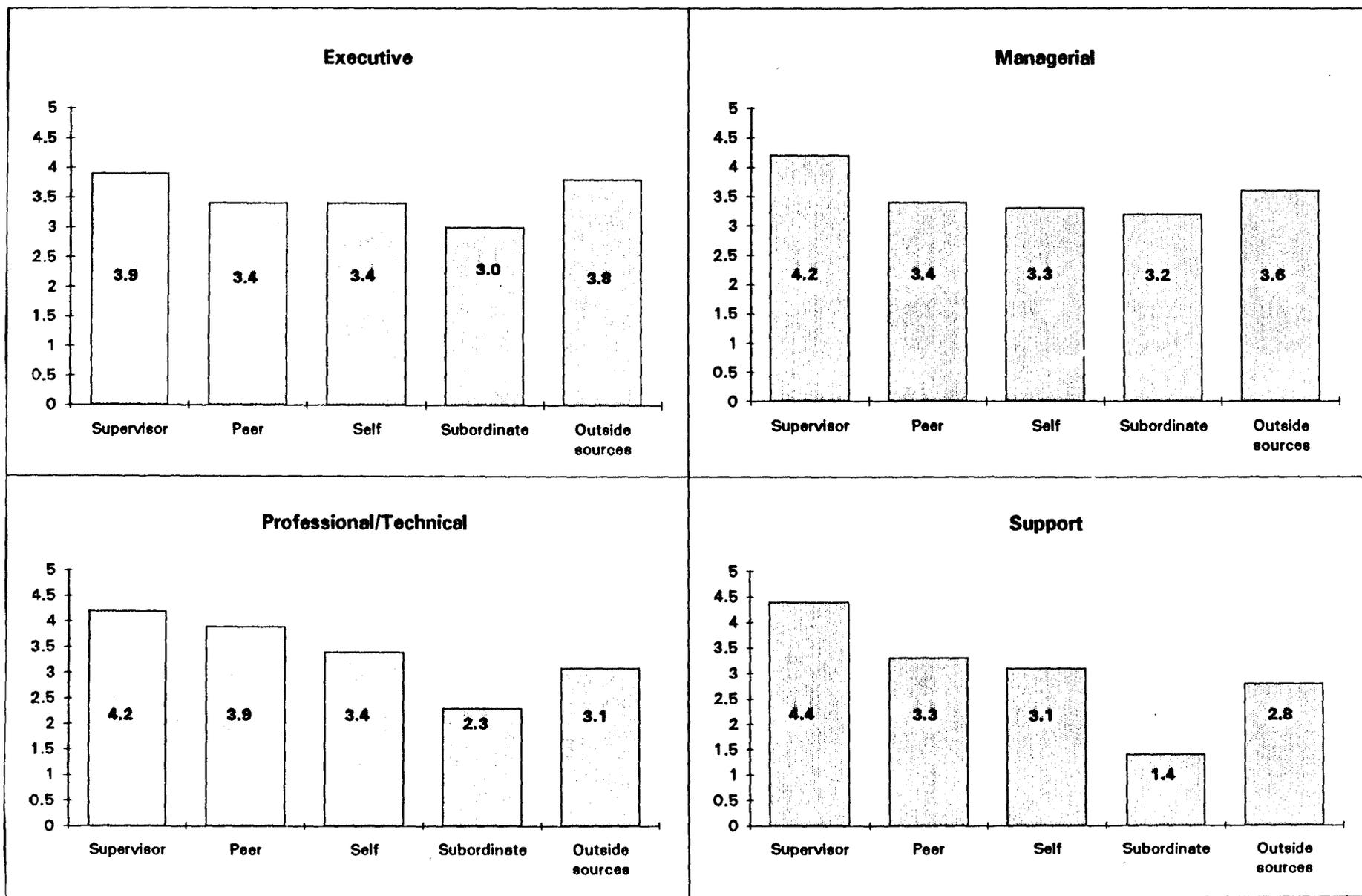


Table VIII - B

Who does performance appraisal

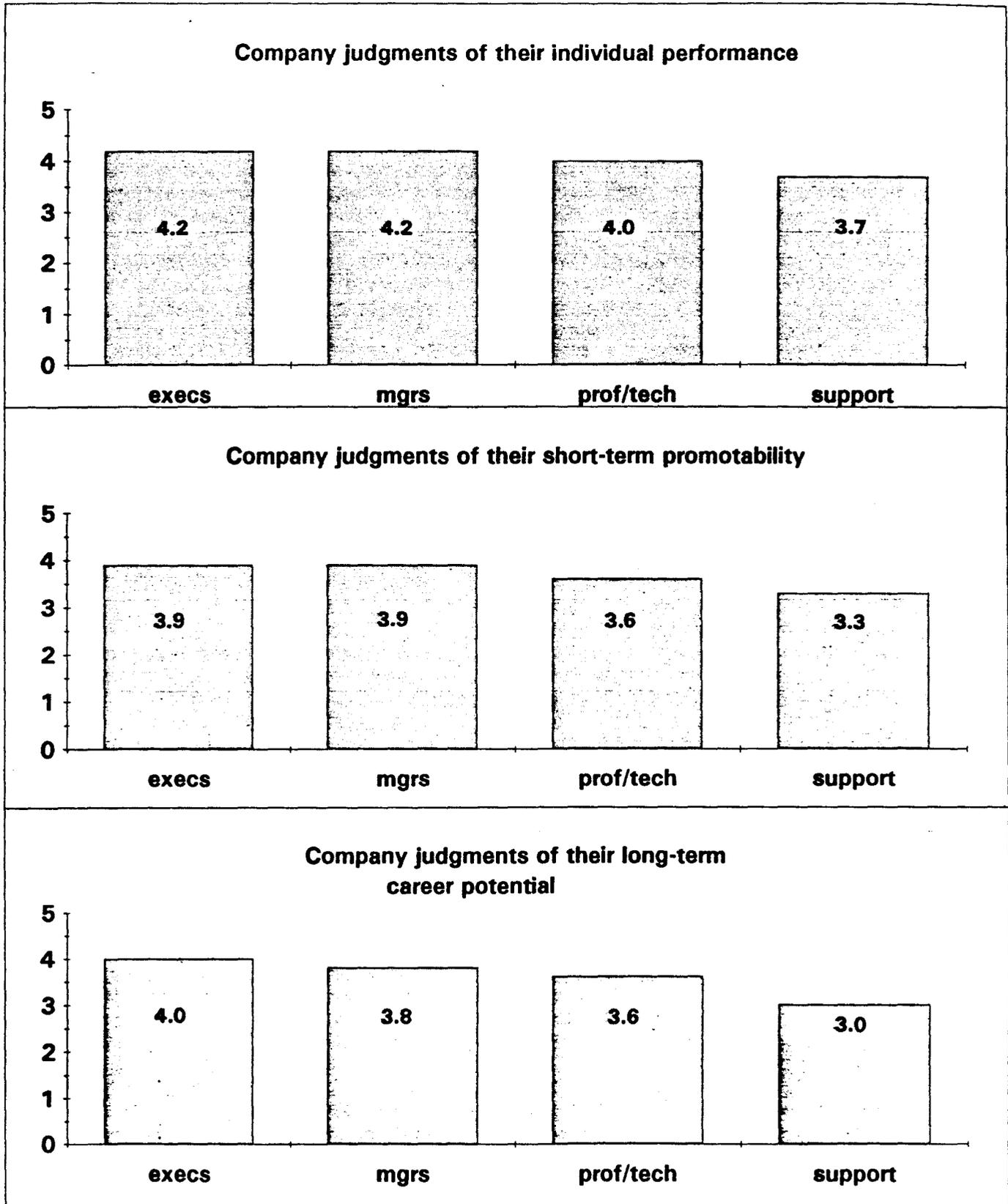


1 = not at all important

3 = moderately important

5 = very important

Table VIII - C
Informed about Ratings



KEY: 1 = not at all informed 3 = moderately informed 5 = very informed

IX. Rewards and Recognition



Pay is competitive

Workplace 2000 does not skimp on compensation. Competitive pay and benefits are seen as primary in the ongoing drive to be an "employer of choice" (rated 4.6 and 4.5, respectively; the next highest factors are rated 4.3). Fifty-nine percent of the firm's operating budget is allocated to direct and indirect compensation, a figure that is basically unchanged from 1991 despite the relatively low growth in headcount. Fifty-eight percent of total compensation is in the form of direct pay and the remainder goes to benefits (the ratio was 60-40 in 1991).

CEO pay is holding up

The pay structure is flatter than it was in 1991 (in keeping with the flatter organizational structure). Previously the CEO earned 85 times as much as the lowest paid person on the payroll; in 2000 the comparable ratio is 81:1, a five percent decline. (No comparable data are available on Europe and Japan.)

Variable pay proliferates

Direct pay is partially fixed (i.e., in the form of wages and salaries with increases that fold into base) and partially variable (i.e., in the form of incentive payments and

bonuses that do not fold into base). In 2000 the variable component constitutes a larger percentage of total earnings among all employees than it did in 1991. Among executives it averages 32 percent of total earnings (vs. 20 percent nine years ago), among managers 23 (vs. 10) percent, among professional and technical employees 18 (vs. 10) percent, and among support staff 14 (vs. 10) percent.

Pay increases based on individual merit, plus...

Wage and salary levels are established through job evaluation and salary surveys. Pay increases are based primarily on individual merit, but other factors also come into play (individual merit was the only consideration in 1991) (Table IX-A). One additional factor, across the board, is work group performance. Another, particularly prevalent among professional and technical employees and support staff, is the acquisition of knowledge or skills. Both changes are consistent with the firm's increasing, but still tentative, use of work teams, particularly at lower organizational levels.

Bonuses based on individual merit, plus...

Variable pay, like fixed pay, is still mostly based on individual performance among all four employee groups, but, again, its importance has declined (from 80 to about 60 percent in all cases) (Table IX-B). Among executives, the major move is toward bonuses based on firm profits and business unit performance (about equally).

Among the other three employee groups, it is toward bonuses based on business unit performance and work group performance. The former is a bigger factor among managers, while the latter is more important among the other two employee groups. Again, the pattern appears to be quite consistent with the overall allocation of decision-making responsibilities reported earlier.

More variable compensation and collective criteria may help to enhance employee motivation and commitment (both are rated 3.7 on a 5-point scale, as noted earlier). They seem to do little to enhance employee satisfaction with pay, however, which is rated 3.3 on a 5-point scale, second lowest of the five dimensions rated).

Flex benefits: Inchmeal

Flex benefits have found their way into Workplace 2000, but again somewhat tentatively. Sixty-three percent of the total benefits package is pre-determined, leaving only a little over one-third to be allocated as employees choose.

Not by bread alone

Rewards, yes; but recognition, too (Table IX-C). Praise is the most widely-used non-monetary reward (4.3 on a 5-point scale). Also important are awards (3.7), ceremonies (3.6), and letters of recognition (3.6). Gifts and trips (3.2) and compensatory time off (3.2) are less prevalent. Perquisites (e.g., company cars, plush offices, and the like) (2.3) are non-players, at least as formal means of recognition.

Table IX - A

% Pay increase based on

	Executives		Managers	
	1991	2000	1991	2000
Individual merit	100%	83%	100%	80%
Individual seniority	0%	1%	0%	1%
Pay for knowledge	0%	3%	0%	4%
Workgroup perform.	0%	13%	0%	15%

	Professional/Technical		Support staff	
	1991	2000	1991	2000
Individual merit	100%	72%	100%	71%
Individual seniority	0%	1%	0%	3%
Pay for knowledge	0%	15%	0%	14%
Workgroup perform.	0%	12%	0%	12%

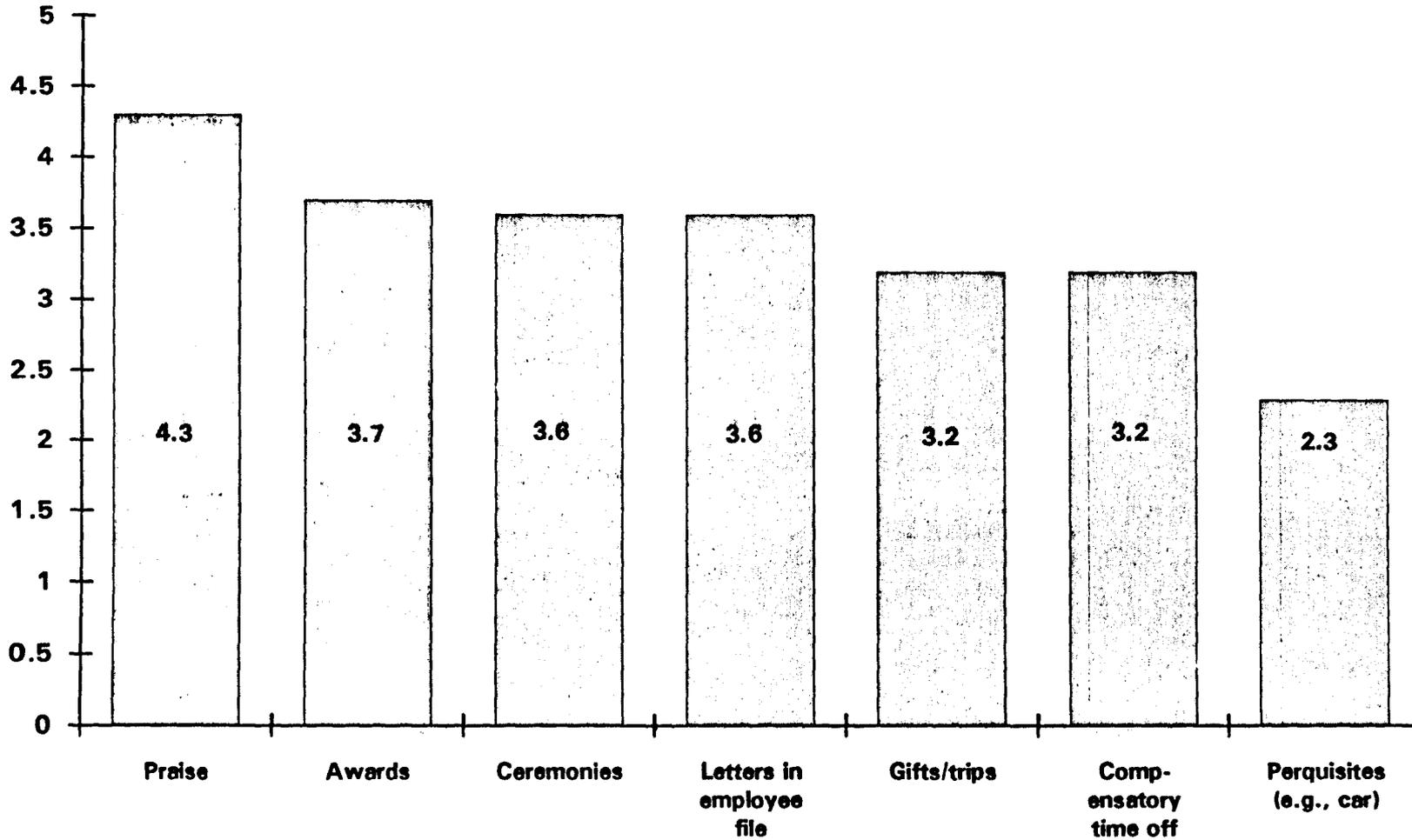
Table IX - B

Determinants of variable pay by employee group

	Execs		Mgrs		Prof/Tech		Support	
	1991	2000	1991	2000	1991	2000	1991	2000
Firm profits	10%	20%	0%	9%	0%	5%	0%	3%
Business unit performance	10%	18%	10%	19%	10%	14%	10%	13%
Work group performance	0%	3%	10%	14%	10%	17%	10%	23%
Individual performance	80%	59%	80%	58%	80%	64%	80%	61%
Total	100%	100%	100%	100%	100%	100%	100%	100%

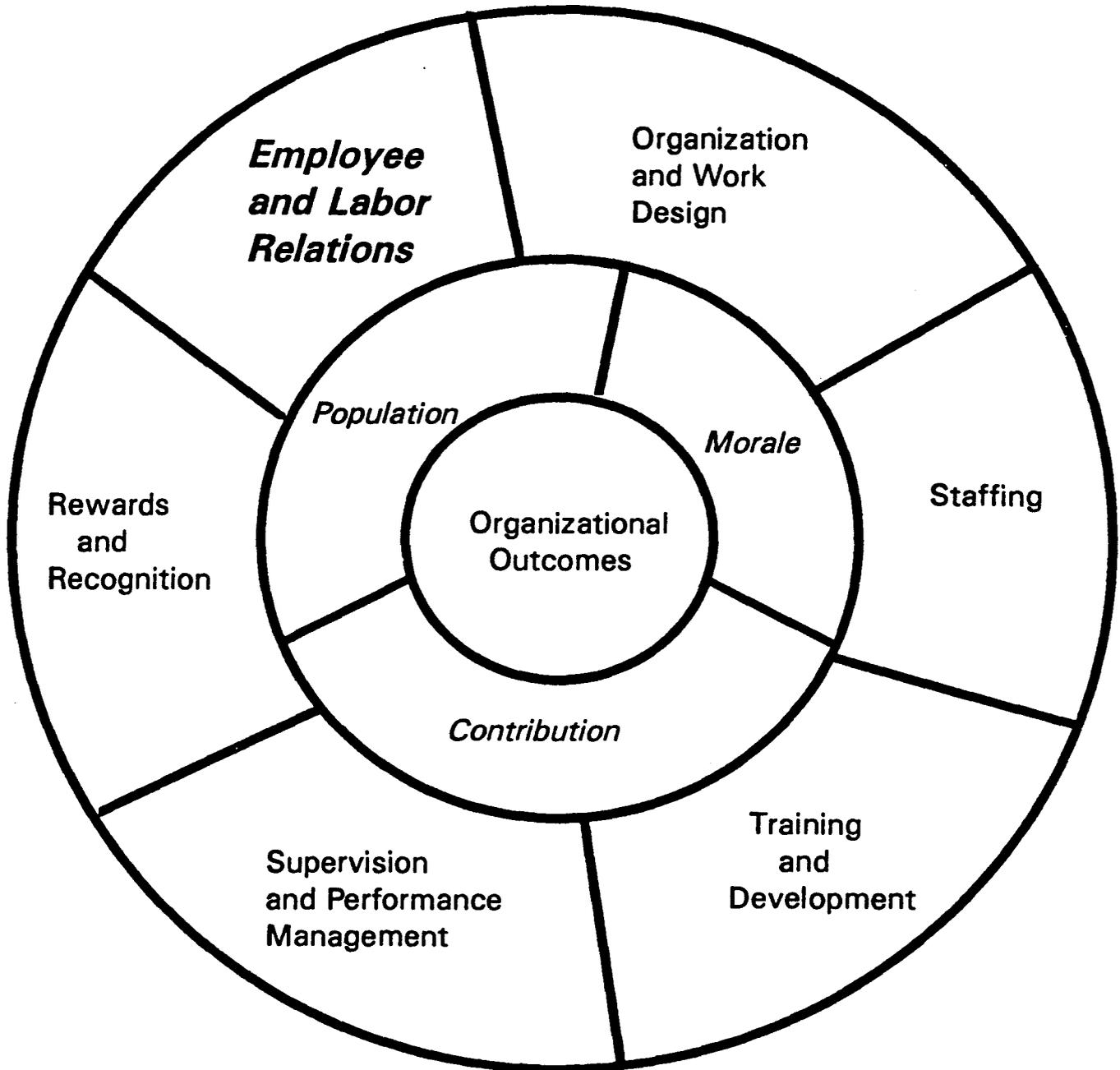
Table IX - C

Non-monetary rewards



KEY: 1 = never used 3 = sometimes used 5 = always used

X. Employee Relations



Employee relations concerns continue

Employee health and safety is a major employee relations concern in Workplace 2000 (3.9 on a 5-point scale) (Table X-A). So is substance abuse (3.8). The threat of EEO litigation lingers, more so with respect to age (3.7) than gender, race, or handicap/disability (all rated 3.5). Assuring adequate advance notice in the event of layoffs (3.6) is still on the employee relations agenda, and of greater concern than issues pertaining to employment at will/wrongful discharge (3.3). AIDS is also still in the picture (3.4), although not in a major way. The same is true of employee privacy (3.3) and the threat of whistleblowing (2.9).

Employee relations activities flourish

Activities designed to cope with these and other employee relations concerns and achieve "employer of choice" status in 2000 are many and varied. Above all (as noted earlier) are the basics: competitive pay and benefits (rated 4.6 and 4.5, respectively, on 5-point scales) (Table X-B). Next in importance is an employee assistance plan (EAP) (4.3) to address lingering concerns about substance abuse and employees' mental health. Also important are a couple of activities intended, at least in part, to head off the threat of litigation (not to mention unionization): upward communication programs (4.0) and due process (grievance) procedures for nonunion employees (4.0).

In addition, activities are in place to mitigate employee concerns about mobility (and perhaps, in some cases, to ease the threat of employment at will/wrongful discharge

litigation): relocation assistance for dual career families (4.0), outplacement assistance (3.8), severance payments (3.9), and early retirement programs (3.5).

Being "family friendly" is de rigueur; included here are flexible work schedules (4.3), child care subsidies and referrals (3.9), elder care subsidies and referrals (3.6), and parental leaves (3.8).

Farther down the list, but still important, perhaps in the context of safety and health (including health care cost containment) concerns, are programs having to do with promoting physical and mental fitness (3.6) and disability prevention and management (3.5). Trailing are activities having to do with multi-lingual communication (3.3) and, not surprisingly in the context of earlier findings, providing employment stability (3.0).

Unionization perseveres

About one-fourth of the support staff are unionized in 2000, up from 18 percent in 1991. Unions, however, have made few inroads among the other employee groups. Union-management relations are described as somewhat cooperative (3.6 on a 5-point scale, where 5 is very cooperative). The union is very much involved in bargaining over mandatory issues (4.4 on a 5-point scale) and quite involved in the day-to-day management of the contract (e.g., grievance handling) (3.9). There is some bargaining over non-mandatory issues (3.6) and some joint union - management efforts at the shop floor level aimed at providing employee retraining (3.5) and redesigning work (3.3). But, the union has virtually no involvement in strategic business decisions (1.9), which remain the exclusive province of top management.

Table X - A
Employee Relations Concerns

Health & safety issues	3.9
Substance abuse	3.8
EEO litigation based on age	3.7
Advanced notification of layoffs	3.6
EEO litigation based on race	3.5
EEO litigation based on gender	3.5
EEO litigation based on handicap/disability	3.5
Acquired Immune Deficiency Syndrome (AIDS)	3.4
Wrongful discharge/ employment-at-will	3.3
Employee privacy	3.3
Whistle blowing	2.9

Table X - B
Employee Relations Activities

Competitive pay	4.6
Competitive benefits	4.5
Employee assistance programs	4.3
Flexible work scheduling (e.g.,telecommuting,flextime,etc.)	4.3
Grievance (due process) procedures	4.0
Formal upward communication	4.0
Relocation assistance for dual career families	4.0
Day care (subsidies or referrals)	3.9
Severance packages	3.9
Outplacement assistance	3.8
Parental leave	3.8
Eldercare (subsidies or referrals)	3.6
Fitness programs	3.6
Disability management/ prevention	3.6
Early retirement packages	3.5
Multi-lingual communication	3.3
Employment stability	3.0

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Appendix I

Methodology

Workplace 2000 data were collected using a modified Delphi technique. The Delphi technique utilizes a panel of experts. The researcher acts as a collector of the information and mediates the exchange of the data among the experts. This allows experts to "voice" their predictions anonymously.

Delphi is a consensus method that provides for efficient solicitation and collation of judgments on a particular topic (Paliwoda, 1983; Preble, 1982), in this case predictions about the future of the workplace. Carefully designed questionnaires are distributed to a panel of experts for a specified number of rounds (usually three or four); additional information, such as experts' comments, assumptions, questions, etc. are provided for each subsequent round. Research has suggested that, when faced with a issue that requires the pooled assessment of experts, where the cost and inconvenience of bringing people together face-to-face is quite high, and when the issue does not require immediate attention, the Delphi technique is a more effective tool than conventional interacting groups (Van De Ven & Delbecq, 1974).

Three rounds were used for this study. After the first round data were collected, descriptive statistics (means & ranges) were reported back to the panelists, so were any comments that had been made. (This will be discussed further when describing the questionnaire.) Panelists were given the opportunity to make changes and/or to provide additional comments during Round Two also; this information was fed back to the panel in Round Three.

Pilot Test

A pilot test was conducted in late May 1991, using 10 respondents, including academics, consultants, corporate executives and researchers. The test subjects generally found the exercise informative and easy to follow. The average time needed to complete the questionnaire was approximately 2 hours. There were few changes made in the questionnaire after the pilot test; mostly some minor re-wording of questions.

Procedures and setting

The Delphi questionnaire consisted of two parts.

Part I provided an overview and context for the study, instructions to participants, and the overall model structuring the research.

Participants were given a description of Servico -- a fictitious company preparing to enter the year 2000 -- and six topical scenarios of predictions about the external environment in the year 2000. Servico was described as a large, U.S. based, service-oriented corporation operating its business on a worldwide basis. Eighty percent of Servico's revenues are generated domestically, and the study focused on the domestic issues. Servico was described as a company that has human resource practices that are fairly standard, and sometimes slightly below standard; however the organization is striving to be an "employer of choice" by the year 2000, and is ready to make changes. For the purposes of the study, Servico's employees were divided into four groups: *executive*, which includes all top managers; *managerial*, which consists of all managerial personnel except executives; *professional and technical employees*, a group comprised of exempt non-managerial jobs; and *support staff*, which includes all non-exempt employees.

Servico conducted an environmental scan, and scenarios were prepared for six external environments: (1) Globalization; (2) the Business & Economic Climate; (3) Technology; (4) Demographics; (5) Social Values; and (6) the Legal & Regulatory Climate. Panelists were asked to rate the consistency between what their ideas were for the year 2000 and what was written in the scenarios. The average consistency rating across the six scenarios was 4.1 (range was 3.8 to 4.4), with 1 = not at all consistent, 3 = somewhat consistent, and 5 = very consistent. There was little change across rounds.

Experts were given space to write in any major inconsistencies that they found in the scenarios. These inconsistencies were provided back to the panel in subsequent rounds, as additional (or replacement) information to consider. The comments provided by the panel are in Appendix II.

Part II of the questionnaire consisted of specific questions dealing with human resource issues in the workplace. Predictions were generated by providing experts with information about current practices at Servico and asking them to predict what the workplace would look like in the year 2000. Questions were formatted to elicit responses that were either percentages (for example, percent of professional/technical employees who will be African-Americans) or numbers from a scale (Likert-type scales, ranging from 1 to 5).

There were 10 broad areas covered in the questionnaire: (1) Workforce Composition, (2) Organizational and Work Design, (3) Staffing, (4) Employee Training and Development, (5) Compensation, (6) Culture and Performance Management, (7) Communications and Technology, (8) Employee Relations, (9) Labor Relations, (10) Challenges. After each of these areas, panelists were asked their "confidence level" on a scale of 0% to 100%. (0% = *Absolutely no confidence that my estimates will be close to reality, except by chance.* 50% = *A 50-50 chance*

that my estimates will be close to reality. 100% = Completely certain that my estimates will be very close to reality.)

Confidence levels changed only slightly (+1%) over the three rounds. On average, confidence levels were 61.4%. The range of averages for the 10 different human resource areas was 58.7% (compensation) to 66.4% (workforce composition).

Finally, each page had space for comments from the panelists, which were encouraged both in the instructions and in the accompanying letters to them. Comments were often given that clarified the reason for the response, often by providing underlying assumptions.

Sample

Several weeks before the questionnaire was finalized, 81 individuals were asked to participate in the study. Sixty-six agreed and were mailed the Round One questionnaire. Subsequent to the mailing, 5 individuals contacted the researchers to express their inability to participate. Of the 61 remaining in the sample, 57 (93%) responded to at least one round, 49 (80%) responded to all three rounds.

The majority of the respondents were corporate executives (56% or 32 individuals). Eighteen percent of the experts were academics, 12 percent were from consulting organizations, 7 percent were from government agencies, 5 percent were from labor unions, and 2 percent came from a non-profit organization. The panel had a mean of 20 years of experience in the field. Eighty percent of the panel had between 10 and 30 years experience.

Response Patterns

Almost without exception, there was little change in responses over the three rounds. The majority of panelists made incremental changes in some questions, bringing their responses closer to the mean. However, there were some who, for certain questions, had responses quite different from the average and kept firm in their opinions.

Appendix II

WORKPLACE 2000

Previous Comments

1. Globalization:

- * Disparity between haves and have nots will decline.
- * Eastern Europe will not achieve industrial advances of any consequence in next 9 years.
- * Recent events in Soviet Union make for an uncertain future.

2. Business and Economic Climate

- * Inflation = 4%, not 6%.
- * Manufacturing more important than scenario suggests - especially in job creation. Services will be restructuring in the 90s.
- * Growth less than 2%.
- * Pressures arise from increased competition and necessity of meeting need of increasingly segmented markets.

3. Technology

- * Robotics will not be a major factor.
- * Mainframe usage will decline; PCs, Micros, and related software applications will dominate.
- * Information will not be a commodity per se; rather, the use of information will be an important source of differentiation among companies.

4. Demographics

- * Immigration patterns unclear.
- * Dual career couples and single parents will not increase in a relative sense.
- * Women will not significantly increase their labor force participation rates.
- * Majority of employees available for professional and managerial jobs will be white, anglo-saxons.

5. Social Values

- * Strong "me" orientation.
- * Concern about employment security will become occupational or career security.
- * Individual's sense of rights and environmental protection will clash with the increasing pressure for U.S. firms to compete globally.
- * Work will decline as a dominant value; family and personal time will outweigh loyalty to work.
- * Competitive realities may make just getting a paycheck very important.

6. Legislative and Regulatory Climate

- * State and local governments will become more involved than the federal government - e.g., by mandating benefits.
- * Less emphasis on minority issues (as demographics continue to change).
- * Health care debate will be resolved by mid-nineties.

