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Personnel/Human Resources Management Issues Between 1927-1981: A Replication

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This study represents a historical analysis of personnel/human resource topics/issues of the last 55 years. The contents of 6,412 articles published in two journals are categorized and examined. Issues that have either dominated the journals or have been neglected are identified, and the importance and origination of these issues are clarified by placing them in a historical context. Methodological issues of this analysis are discussed.

Introduction

Personnel has evolved from what once was primarily a record-keeping function into a profession responsible for minimizing labor costs, insuring the availability of a trained and motivated labor force, protecting employee rights, and contending with the massive governmental intervention in the work place that has characterized the last 50 years. These and numerous other changes have resulted in an increasingly specialized personnel typified by managers who have advanced degrees in personnel administration/human resource management (PA/HRM); who read professional journals (e.g. *Personnel*, *Personnel Journal*, *Personnel Administrator*, *Training and Development Journal*, etc.); and who have laid the ground work for further professionalization of the field through such practices as uniform testing procedures for individual accreditation.

Many recent articles pertaining to the future of the personnel/human resource function refer to the vast number of changes and new demands that are being placed on PA/HRM professionals (Rogers 1979; Holmes 1980; Toedtman 1980; Meehan 1981; Lunda 1981). Yet, concentrating solely on the future can narrow one's perspective and limit one's understanding of the profession. After all, the history of a discipline is often as indicative of its future as are speculations about recent developments. Unfortunately, examinations of the past are often limited to literature reviews of specific topics, and therefore provide little insight into the overall development of a field.

It is this point of view that a content analysis of 6,412 articles published in two leading practitioner journals during the last 55 years was undertaken. This analysis has been previously presented at a professional meeting and published (citation deleted for review). However, based on comments and questions from discussants

and reviewers, a replication of this study was deemed necessary. Although the same two journals were analyzed, the articles were reexamined and recoded, the classification topics were significantly refined, the 5-year time blocks were altered, and more sophisticated statistical techniques were used. These alterations of our previous study enabled us to perform a more detailed analysis of the articles published, to utilize a data classification system that more accurately represented the issues dealt with the personnel/human resources profession, and to test the reliability and validity of our previous findings. The resultant analysis identifies major and minor areas of interest, reveals trends in the personnel/human resources literature, and puts forth a challenge for academicians/-practitioners to write on certain PA/HRM topics.

Methodology

Our basic approach to this historical analysis involved categorizing each article published in two prominent PA/HRM journals: *Personnel* and *Personnel Journal*. These journals were selected because of their relatively long history and practitioner orientation. An underlying assumption is the belief that the editors select manuscripts which reflect the major issues/problems of the time because practitioners will not long subscribe to journals not perceived as relevant to their needs. As such, we believe this approach will provide substantial insight into the important issues that have and will continue to dominate the profession of PA/HRM.

Personnel is published by the American Management Association and is one of the earliest journals devoted solely to the field of human resource management. It was first published in 1919 as a newsletter but was discontinued in 1921. Publication resumed in 1927, and continues today with 6 publications per year and a readership of more than 10,000. *Personnel Journal*, another early publication, began in 1922 and is now published by A.C. Croft, Inc. This journal is published 12 times a year and has over 17,000 subscribers. Although publication began in 1922, only the years of 1927-81 were analyzed in order to coincide with the publication years of *Personnel*.

The 41 topics listed in Table 1 represent the categories into which all articles were classified; this is approximately twice as many topic areas as were used in the initial analysis. By expanding the number of categories, 94.1% of all articles written during this 55-year time period were placed into readily identifiable categories, with the remainder being placed into the "Miscellaneous" category. This reduction of articles in the "Miscellaneous" category, from 11% in the previous analysis to 5.9%, reflects the refinement of our topic areas to more accurately reflect which topics were being written about in *Personnel* and *Personnel Journal*.

Data were analyzed by developing frequency tables and calculating total scores (i.e. total number of articles published on a particular topic) for the articles based on both content (classification method) and time periods (5-year segments). A two-way analysis of variance test for repeated measures was conducted, which indicated that significant differences existed between both time periods and subjects ($F = 3.72$; $p < .0001$). Next, the Tukey-Kramer test (herein referred to as the "Tukey test") for multiple comparisons was made on the overall mean scores for each topic. The use of these two procedures represent a significant improvement on the statistical methodology used in our previous study, in which only a traditional two-way analysis of variance test was done.

Results and Discussion

Major and Minor Issues

In terms of sheer number of articles published, the dominant issues during the 55-year period of analysis were:

1. Training and Management Development (1,005 articles-15.7%)
2. Employee Selection (528 articles-8.2%)
3. HRM/General Function (449 articles-7.0%)
4. Industrial Relations (428 articles-6.7%)
5. Compensation (372 articles-5.8%)
6. Communications (334 articles-5.2%)

Not only were these the most dominant issues in terms of number of publications, but in a statistical sense these were also the dominant topics of interest. When the Tukey test was applied to this data, these six topics were found to be written about significantly more often than the other 41 topics ($p < .01$).

As noted, training and management development was clearly the most significant issue found in this 55-year period. This is not a surprising finding, especially when the costs of training are considered. For instance, a 1983 survey by Xerox Corporation found that the average annual cost per student for classroom training was \$486, a figure which does not include the cost of the student's time. When it is noted that the average size of the corporations responding to Xerox's survey was 62,000 employees, and that the average time spent in training per student per program for classroom training was 20 hours, the size of total training costs becomes almost staggering (Guilmette and Reinhart, 1984). Although our previous study also found this subject to be the most often written about, by refining our topic classification scheme and resorting the data, training was found to make up a substantially larger proportion of the published articles than was indicated by our original research: 5.6% more.

It should be noted that interest in the area of industrial/union relations as evidenced by this study is somewhat less than was found in our previous analysis. As in the case of women's issues (see below), it is hypothesized that this difference in findings is due to the restructuring of the 5-year segments that was done in this reanalysis. However, even though there are 1.5% fewer articles on industrial/union relations in our second analysis, this is still one of the most written about topics.

One major difference between the initial and subsequent analyses was the ranking of job satisfaction. Previously, job satisfaction was found to be a major area of interest, with 605 articles (9.7%) being devoted to this subject. Our reexamination of the data indicates that this topic represents only 0.7% of all articles written between 1927 and 1981. This seemingly contradictory finding is due to our refinement of the classification scheme. In this latter analysis, job satisfaction has been sub-divided into specific, narrow topics--e.g. job enrichment, motivation, productivity, quality of work life, and job analysis--thus making this topic less of a catch-all category.

A further examination of Table 1 also reveals areas which appear to have been neglected by those in the discipline. Due to increasing legislative mandate, managerial enlightenment and movements toward Theory Y and Z management, a substantial concern about employee welfare and work-place justice would be expected. Yet, our analysis suggests that this is one of the most neglected areas of personnel/human resource management. In fact, only ten articles pertaining to

employee rights appeared during the entire 55-year period: Three of these articles were written during the Second World War, with the remaining seven surfacing between 1962 and 1976. Furthermore, the issues of layoffs, job security, outplacement, relocation, quality of work life, job satisfaction, job enrichment, and grievance handling, when combined, constitute less than 2.5% of the total articles published. Based on our analysis, it would seem that Ewing (1977) was correct in his assertion that the "employee sector of our civil liberties universe is more like a black hole, with rights so compacted. . . that, like the giant black stars in the physical universe, light can scarcely escape."

Finally, in terms of major and minor issues, it should be noted that even though training and compensation make up a large portion of the articles examined here, this number is probably under estimated. After all, during the last 55 years a number of new journals have originated which focus exclusively on these topics, e.g. *Training*, *The Training and Development Journal* and *The Compensation Review*.

Historical Trends

In addition to being able to identify dominant topics, this data also indicates the presence of certain trends in the PA/HRM profession. First, there has been a substantial increase in the total number of articles published in *Personnel* and *Personnel Journal*. As can be seen in Table 1, the 301 articles published in the 1932-1936 period have increased over 250% to the 796 articles which appeared during the last 5-year segment. Moreover, this increase is greatly understated because a number of personnel/human resource-type journals have since been started, e.g. *Personnel Administrator*, *Human Resource Planning*, *Personnel Psychology*, and *Compensation Review*.

In addition to this general increase, certain time periods witnessed tremendous growth in the number of published articles. The greatest increase in published works occurred from the 1937-41 period to the 1941-46 period. For instance, while 403 articles were printed during the former time period, 599 published works appeared between 1941-1946. It seems likely that the demands placed on civilian industry by the war effort was largely responsible for the publication of these 196 additional articles. For instance, increases in the number of articles pertaining to absenteeism, manpower planning, and training and development accounted for 99 of these 196 articles. It seems that personnel executives became more interested in keeping people at work and insuring that sufficient workers would be available due to the shortage of civilian labourers caused by the war. The increased interest in training workers may be seen as a product of the changed demographic make-up of the civilian labour, as more minorities and women entered the work force.

One of the more notable trends is that of industrial relations and collective bargaining. As mentioned previously, industrial relations represents one of the major issues throughout the last 55 years. However, interest in this topic peaked at 13.4% (percent of total articles published during that period) during the 1937-41 time period and has not approached such a significant position since. Recall, though, that 1937 was somewhat of a watershed year in the history of the American labour movement, for in that year the U.S. Supreme Court upheld the constitutionality of the National Labor Relations (Wagner) Act, thus making collective bargaining a matter of public policy. Given this total reversal of the government's stance toward organized labour, personnel managers suddenly found themselves facing a strong adversary (the union) now armed with legal weapons. Hence, the increase in the number of articles pertaining to labour relations was not unexpected.

Note, though that the percentage of articles in this area has almost consistently declined since the late 1930's, reaching a low point of 37 articles, or 4.1% of the total articles published between 1972-1976. This same trend is consistent with the decline in the percentage of workers in the labor force represented by unions. Both the upswing and decline of industrial relations precede a similar trend in collective bargaining, with the peak interest years coinciding with the passage of the National Labor Relations Act and World War II. This finding is consistent with those of our earlier study.

Selection, an issue crucial to the discipline, also shows a definite cycle. For instance, this topic was by far the dominant issue in the 1927-1931 time period. The 79 (22.3%) articles published on this topic during the late 1920's represent almost twice the number of articles published on training and management development during the same time period. However, as in the area of industrial relations, interest in the topic of selection seems to have declined: the percentage of these articles fell to a low of 4.3% in the 1952-1956 period. There was a resurgence of interest in the 1962-1971 decade, during which time a total of 111 (8.2%) articles dealing with selection were published. Here, too, this increase in interest in this topic is understandable when the legal context is considered. The decade of 1962-1971 was marked by a tremendous effort by the government to eradicate racial discrimination in the work place. Since the most basic form of employment discrimination would be to deny jobs to those members of the "unfavoured" classes and races, personnel administrators again found themselves forced to abandon, or at least alter, established selection procedures and techniques. Thus, the new interest in this area is expressed in the increased number of articles published on selection.

A number of topics were found to be relatively new concerns in PA/HRM profession. For instance, little was written about affirmative action/equal employment opportunity prior to World War II. With the sudden influx of women into the labor force, however, interest in this area increased. This interest remained slight, but constant, until the 1960's and the passage by Congress of several pieces of social legislation, e.g. the Equal Pay and the Civil Rights Acts. Since the enactment of these measures, concern with this topic has increased substantially, with 3.6% of the articles published in these journals currently being written on this topic.

Conversely, interest in women's issues has remained relatively stable over the last 55 years despite social legislation and a tremendous increase in the number of women in the labor force. This apparent neglect somewhat contradicts our previous study. The surge of interest in women's issues during World War II, found in the original study was not evident in our analysis here. Thus, it would appear that the shift in the 5 year blocks had a significant effect on our findings.

Performance appraisal also shows a distinct pattern of interest. As can be seen, the "popularity" of this area climbed from 1927 to 1941 reaching a high of 21 articles (5.2%), at which time interest in the subject declined. A resurgence of interest occurred during 1947-51 and was followed by a period of decline extending from 1952 to 1976. The late 1970's, however, reflect renewed interest in this subject, as performance appraisal now represents 6.2% of the articles published. It seems likely that this "rediscovery" of performance appraisal in the latter years of the past decade is due at least partially to the quite unfavourable economic environment encountered by business. Indeed, with double digit inflation and ever-increasing wage bills, few businesses could afford the luxury of retaining non-productive workers. Since ideally performance appraisals enable employers to identify those employees who are either

unable or unwilling to produce, it should not be surprising to find new interest in this topic.

Unlike the quite cyclical pattern of interest shown in performance appraisal, interest in the topic of communications seems to have "come and gone." That is, interest in this subject peaked between 1947-1956 and since then has shown a relatively consistent decline. Other highlights include: 1) a major interest in absenteeism and human resource/manpower planning during World War II; and 2) a major interest in retirement expressed in the 1977-1981 period.

Discussion

This reexamination of practitioner-oriented articles published in *Personnel* and *Personnel Journal* has provided an opportunity to refine the topic/issue categories reported in the first examination of this data. We feel that our refinements have significantly improved the quality of the analysis. The re-working of topics has also allowed us to shift the 5-year periods into which the articles were categorized; this enabled us to determine if the designation of certain time periods, rather than issue relevance, greatly influenced our findings.

For the most part, this replication reaffirmed the findings of our earlier study: Training and management development and employee selection have dominated and continue to dominate these journals. Moreover, recoding the data into different 5-year spans did not substantially influence the findings except in the case of women's rights. Thus, it would appear that the reliability of our analysis has been substantiated, and that both the original and subsequent findings are not solely the products of the manner in which the data were organized. Furthermore, the data indicate that external conditions have significant impact on the amount of interest in a topic. As can be noted from our previous analysis, such things as legislative reform and labor shortages seem to coincide with the number of articles written about a specific topic/issue. Finally, based on the cyclical interest shown in certain topics, one might criticize the profession for being reactive. However, one can not condemn personnel practitioners for being more interested in those issues that seem most critical.

By replicating the study, we were able to overcome some of the criticisms of this type of historical analysis. However, several limitations do exist. First of all, the relevance of this research is dependent upon the assumed relationship between the frequency with which something is written about and published, and the importance/concern placed on the issue by PA/HRM practitioners. This assumption omits such factors as the biases of editors and the influence of a few writers/contributors. Second, the identification of trends in the journals was far easier and more exact than determining why the articles were written in the first place. It is often difficult to extract from complex flows of events the causes of a particular trend.

Thus, this research is basically exploratory in nature. In one sense, this effort provides only an overview of what has been published in two practitioner journals. But on the other hand, our study has also shown what is not being written about, and by extension, what areas may be neglected by the practicing personnel administrator/human resource manager. Specifically, the apparent lack of concern for such topics as employee justice, employee rights and the overall welfare of the worker presents more than just a "gap" in the literature. Neglect of this area means not only that the worker *qua* individual has been neglected but also that possible ways to improve the overall work situation have been neglected as well. From this perspective, the

foregoing analysis is far more than just an academic exercise; rather, it poses a challenge to researchers and personnel/human resource practitioners not only to react but also to understand recurring trends in the field and take the opportunity to fill in some of the "black holes" in the field of employee relations.

NOTES

An earlier version of this paper was presented at the National Academy of Management Meetings; August, 1983.

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TABLE 1
Frequency of Personnel/Human Resources Articles

	1927-31	1932-1936	1937-1941	1941-1946	1947-1951	1952-1956	1957-1961	1962-1966	1967-1971	1972-1976	1977-1981	TOTAL
Absenteeism	3 (0.9%)	0 (-)	0 (-)	13 (2.2%)	5 (0.9%)	5 (0.9%)	5 (0.9%)	3 (0.5%)	6 (0.8%)	6 (0.7%)	5 (0.6%)	51 (0.8%)
Affirmative Action/Equal Employment Opportunity	2 (0.5%)	4 (1.3%)	0 (-)	9 (1.5%)	1 (0.2%)	1 (0.2%)	2 (0.4%)	7 (1.2%)	14 (1.8%)	30 (3.3%)	29 (3.6%)	99 (1.5%)
Alternative Work Schedules	0 (-)	0 (-)	1 (0.2%)	4 (0.7%)	0 (-)	1 (0.2%)	2 (0.4%)	3 (0.5%)	1 (0.1%)	8 (0.9%)	6 (0.8%)	26 (0.4%)
Arbitration	0 (-)	0 (-)	4 (1.0%)	2 (0.3%)	11 (1.9%)	6 (1.1%)	9 (1.6%)	8 (1.4%)	11 (1.4%)	10 (1.1%)	7 (0.9%)	68 (1.1%)
Benefits	7 (1.9%)	23 (7.6%)	9 (2.2%)	5 (0.8%)	9 (1.6%)	15 (2.7%)	9 (1.6%)	19 (3.2%)	11 (1.4%)	20 (2.2%)	29 (3.6%)	156 (2.4%)
Career Planning and Development	9 (2.3%)	4 (1.3%)	1 (0.2%)	0 (-)	2 (0.3%)	1 (0.2%)	6 (1.1%)	12 (2.0%)	8 (1.0%)	14 (1.6%)	24 (3.0%)	81 (1.3%)
Collective Bargaining	0 (-)	3 (1.0%)	15 (3.7%)	16 (2.7%)	28 (4.9%)	20 (3.6%)	24 (4.2%)	22 (3.7%)	14 (1.8%)	18 (2.0%)	10 (1.3%)	170 (2.7%)
Communications	2 (0.5%)	2 (0.7%)	23 (5.7%)	12 (2.0%)	61 (10.6%)	46 (8.2%)	31 (5.5%)	27 (4.6%)	44 (5.7%)	43 (4.7%)	43 (5.4%)	334 (5.2%)
Compensation	11 (3.1%)	20 (6.6%)	36 (8.9%)	36 (6.0%)	33 (6.1%)	39 (7.0%)	26 (4.6%)	26 (4.4%)	36 (4.7%)	64 (7.0%)	43 (5.4%)	372 (5.8%)
Employer Assistance Centers	1 (0.3%)	0 (-)	2 (0.5%)	7 (1.2%)	1 (0.2%)	2 (0.4%)	1 (0.2%)	1 (0.2%)	5 (0.7%)	11 (1.2%)	16 (2.0%)	47 (0.7%)
Employee Records	0 (-)	1 (0.3%)	2 (0.5%)	5 (0.8%)	6 (1.0%)	9 (1.7%)	3 (0.5%)	14 (2.4%)	16 (2.1%)	8 (0.9%)	12 (1.5%)	76 (1.2%)
Employee Rights	0 (-)	0 (-)	0 (-)	3 (0.5%)	0 (-)	0 (-)	0 (-)	2 (0.3%)	1 (0.1%)	4 (0.4%)	0 (-)	10 (0.2%)
Grievance Handling	1 (0.3%)	0 (-)	2 (0.5%)	2 (0.3%)	5 (0.9%)	2 (0.4%)	3 (0.5%)	7 (1.2%)	6 (0.8%)	6 (0.7%)	4 (0.9%)	38 (0.6%)
Human Resource/Manpower Planning	5 (1.4%)	16 (5.3%)	14 (3.5%)	33 (5.5%)	11 (1.9%)	7 (1.3%)	11 (1.9%)	24 (4.1%)	28 (3.7%)	43 (4.7%)	29 (3.6%)	221 (3.1%)
Human Resource Management/Research	10 (2.8%)	7 (2.3%)	6 (1.5%)	7 (1.2%)	11 (1.9%)	3 (0.5%)	6 (1.1%)	5 (0.8%)	2 (0.2%)	2 (0.2%)	1 (0.1%)	71 (1.1%)
Human Resource Management/General	1 (0.3%)	28 (9.3%)	36 (8.9%)	41 (6.8%)	53 (9.5%)	51 (9.1%)	44 (7.8%)	26 (4.4%)	49 (6.4%)	52 (5.7%)	60 (7.5%)	449 (7.0%)
Impact of Technology	1 (0.3%)	4 (1.3%)	2 (0.5%)	2 (0.3%)	0 (-)	2 (0.4%)	5 (0.9%)	21 (3.6%)	12 (1.6%)	9 (1.0%)	2 (0.3%)	60 (0.9%)
Impactive Pay	1 (0.3%)	3 (1.0%)	3 (0.7%)	5 (0.8%)	2 (0.3%)	4 (0.7%)	6 (1.1%)	5 (0.8%)	4 (0.5%)	9 (1.0%)	1 (0.1%)	43 (0.7%)
Industrial Psychology	9 (2.3%)	3 (1.0%)	6 (1.5%)	6 (1.0%)	2 (0.3%)	2 (0.4%)	7 (1.2%)	7 (1.2%)	3 (0.4%)	4 (0.4%)	2 (0.2%)	51 (0.8%)

TABLE 1 (cont'd)
Frequency of Personnel/Human Resources Articles

	1927-31	1932-1936	1937-1941	1941-1946	1947-1951	1952-1956	1957-1961	1962-1966	1967-1971	1972-1976	1977-1981	TOTAL
Industrial Relations	26 (7.3%)	22 (7.3%)	54 (45.4%)	63 (10.5%)	42 (7.3%)	44 (7.1%)	40 (7.1%)	25 (4.2%)	38 (5.0%)	32 (9.1%)	37 (4.6%)	428 (6.7%)
International Issues	6 (1.7%)	1 (0.3%)	4 (1.0%)	6 (1.0%)	8 (1.4%)	1 (0.2%)	2 (0.4%)	13 (2.2%)	5 (0.7%)	13 (1.4%)	10 (1.3%)	69 (1.0%)
Intervening	13 (3.7%)	3 (1.0%)	2 (0.5%)	10 (1.7%)	12 (2.1%)	7 (1.3%)	8 (1.4%)	12 (2.0%)	13 (1.7%)	8 (0.9%)	7 (0.9%)	95 (1.5%)
Job Analysis	2 (0.5%)	6 (2.0%)	3 (0.7%)	6 (1.0%)	1 (0.2%)	5 (0.9%)	3 (0.5%)	7 (1.2%)	3 (0.4%)	0 (-)	3 (0.4%)	39 (0.6%)
Job Enrichment	0 (-)	0 (-)	0 (-)	0 (-)	0 (-)	1 (0.2%)	2 (0.4%)	1 (0.2%)	4 (0.5%)	19 (2.1%)	2 (0.2%)	29 (0.5%)
Job Satisfaction	2 (0.5%)	1 (0.3%)	0 (-)	0 (-)	5 (0.9%)	6 (1.1%)	4 (0.7%)	3 (0.5%)	8 (1.0%)	13 (1.4%)	1 (0.1%)	43 (0.7%)
Laws	0 (-)	0 (-)	0 (-)	0 (-)	1 (0.2%)	0 (-)	2 (0.4%)	1 (0.2%)	0 (-)	0 (-)	0 (-)	4 (0.06%)
Legislation	1 (0.3%)	2 (0.7%)	2 (0.5%)	7 (1.2%)	6 (1.0%)	4 (0.7%)	4 (0.7%)	7 (1.2%)	6 (0.8%)	16 (1.8%)	39 (4.9%)	94 (1.5%)
Miscellaneous	44 (12.4%)	28 (9.3%)	21 (5.2%)	43 (7.2%)	33 (5.7%)	24 (4.3%)	51 (9.0%)	20 (3.4%)	78 (10.2%)	32 (3.6%)	5 (0.6%)	379 (5.9%)
Motivation	3 (0.8%)	0 (-)	4 (1.0%)	10 (1.7%)	11 (1.9%)	7 (1.4%)	11 (1.9%)	25 (4.2%)	28 (3.7%)	24 (2.6%)	16 (2.0%)	139 (2.2%)
Occupational Safety and Health	15 (4.2%)	13 (4.3%)	17 (4.2%)	25 (4.2%)	10 (1.7%)	11 (2.0%)	13 (2.3%)	12 (2.1%)	6 (0.8%)	11 (1.2%)	6 (0.8%)	142 (2.2%)
Occupational Development	0 (-)	1 (0.3%)	3 (0.7%)	2 (0.3%)	3 (0.9%)	6 (1.1%)	3 (0.5%)	8 (1.4%)	18 (2.4%)	36 (4.2%)	29 (3.6%)	111 (1.7%)
Orientation	0 (-)	0 (-)	1 (0.2%)	10 (1.7%)	2 (0.3%)	4 (0.7%)	1 (0.2%)	4 (0.7%)	3 (0.4%)	18 (2.0%)	10 (1.3%)	53 (0.8%)
Out Placement	0 (-)	0 (-)	0 (-)	0 (-)	0 (-)	0 (-)	1 (0.2%)	1 (0.2%)	0 (-)	7 (0.8%)	3 (0.4%)	15 (0.2%)
Performance Appraisal	11 (3.1%)	7 (2.3%)	21 (5.2%)	13 (2.2%)	37 (6.4%)	28 (5.0%)	27 (4.8%)	22 (3.7%)	25 (3.5%)	29 (3.2%)	49 (6.2%)	269 (4.2%)
Productivity	11 (3.1%)	10 (3.3%)	11 (2.7%)	20 (3.3%)	3 (0.5%)	3 (0.9%)	10 (1.8%)	6 (1.0%)	8 (1.0%)	13 (1.4%)	3 (0.4%)	116 (1.8%)
Promotion	2 (0.5%)	0 (-)	4 (1.0%)	4 (0.7%)	3 (0.5%)	5 (0.9%)	2 (0.4%)	4 (0.7%)	5 (0.7%)	9 (1.0%)	2 (0.2%)	37 (0.6%)
Quality of Work	1 (0.3%)	0 (-)	2 (0.5%)	3 (0.5%)	0 (-)	0 (-)	0 (-)	2 (0.3%)	4 (0.5%)	4 (0.4%)	7 (0.9%)	28 (0.4%)
Recruitment	1 (0.3%)	3 (1.0%)	0 (-)	4 (0.7%)	3 (0.9%)	15 (2.7%)	17 (3.0%)	24 (4.0%)	29 (3.8%)	17 (1.9%)	19 (2.4%)	131 (2.0%)
Retraction	0 (-)	0 (-)	0 (-)	2 (0.3%)	0 (-)	0 (-)	0 (-)	0 (-)	0 (-)	0 (-)	4 (0.5%)	22 (0.3%)
Retirement	4 (1.1%)	5 (1.2%)	0 (-)	0 (-)	4 (0.7%)	9 (1.6%)	3 (0.5%)	5 (0.8%)	6 (0.8%)	8 (0.9%)	7 (0.9%)	67 (1.0%)
Selection	79 (22.3%)	43 (14.3%)	42 (10.4%)	40 (6.7%)	45 (7.8%)	24 (4.3%)	33 (5.8%)	48 (8.1%)	63 (8.3%)	56 (6.2%)	55 (6.9%)	528 (8.2%)
Training and Management Development	45 (12.7%)	32 (10.6%)	41 (10.2%)	108 (18.0%)	93 (16.3%)	129 (23.1%)	110 (19.5%)	91 (15.4%)	106 (13.9%)	142 (15.6%)	106 (13.3%)	1005 (15.7%)
Turnover	12 (3.4%)	2 (0.7%)	1 (0.2%)	13 (2.2%)	3 (0.5%)	3 (0.9%)	14 (2.5%)	2 (0.3%)	11 (1.4%)	14 (1.5%)	8 (1.0%)	85 (1.3%)
Women's Issues	6 (1.7%)	4 (1.3%)	3 (0.7%)	6 (1.0%)	5 (0.9%)	6 (1.1%)	3 (0.5%)	2 (0.3%)	6 (0.8%)	10 (1.1%)	3 (0.4%)	52 (0.8%)
TOTAL	354	301	403	599	577	558	565	589	762	908	796	6412