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THE ORIGINS OF AUSTRALIAN PERSONNEL MANAGEMENT:
DEVELOPMENTS IN EMPLOYMENT, SELECTION AND TRAINING
PROCEDURES IN MANUFACTURING INDUSTRY, 1940-1960

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THE ORIGINS OF AUSTRALIAN PERSONNEL MANAGEMENT: DEVELOPMENTS IN EMPLOYMENT, SELECTION AND TRAINING PROCEDURES IN MANUFACTURING INDUSTRY, 1940-1960

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INTRODUCTION

Despite growing interest amongst Australian industrial relations academics into the role of management, relatively little work has been conducted into the historical development of workplace labour management. In particular, the role of the personnel manager remains largely unexamined. While several personnel and industrial relations texts have devoted some space to the origins of the personnel function, much of this work has been brief and impressionistic.\(^1\) Despite more recent contributions from writers such as Cochrane and Dunphy, which have highlighted historical changes in Australian management ideology and philosophy, our understanding of workplace developments in personnel practice remains sketchy.\(^2\) Not only does this mean the historical record is incomplete, but it also poses problems for our understanding of contemporary management developments. Hence, the lack of such work may lead not only to false assumptions about the past, but also illusions of the uniqueness of present day phenomena.

The lack of Australian research contrasts markedly with the situation overseas. In the United States, labour historians and industrial relations academics have undertaken extensive historical research into the development of the personnel function. For example, writers such as Harris, Kochan & Capelli, Jacoby, and Baron et. al. have examined the rise of personnel and industrial relations management, and emphasised changes in labour and product markets, union response and the role of the state as factors affecting the growth of these management functions.\(^3\) In Britain, similar work has been carried out by Gospel and Purcell & Sisson.\(^4\)

This paper attempts to remedy some of the deficiencies in our understanding of the origins of personnel management in Australian industry. The first half of the paper analyses the rapid growth in the significance of the personnel function during the period from the Second World War to the beginning of the 1960s, highlighting a number of reasons for such growth. The second part of the paper examines what such personnel work actually involved, focussing in particular on developments in employment, selection and training techniques and the extent to which these techniques were used by employers. The paper concludes that while employment relations became increasingly formalised during this period, the form and extent of change was both diverse and varied.

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THE ORIGINS OF THE PERSONNEL FUNCTION: WARTIME WELFARE WORK

The origins of modern personnel practice in Australian industry date back to the Second World War. It was during this period that the Commonwealth Government established and promoted factory welfare work in order to limit absenteeism and improve morale amongst an industrially inexperienced and largely female munitions workforce. These early government initiatives provided a starting point for the development of a personnel management profession in Australian industry.

Systematic industrial welfare work was begun by the Commonwealth Department of Labour and National Service (DLNS) in 1941, under what was termed the Industrial Welfare Division (IWD). Amongst a wide variety of functions, the Division oversaw the administration of welfare work in government and essential private factories, trained welfare officers for industry, and carried out research into personnel problems such as absenteeism, supervision and employment procedures.5

The IWD established an "Emergency Training Scheme for Industrial Welfare Officers" in September 1941 in Sydney and Melbourne. This course based upon a similar British scheme, consisted of six months full-time study. Prospective welfare officers received training in a wide variety of fields including: industrial psychology, industrial health, hours of work, lighting and fatigue. Broader community issues, such as housing, health and education were also covered in the course. By the end of the war, over 150 persons had been trained in industrial welfare work by the IWD.6

Having completed their training course, welfare officers were transferred to positions in industry. Initially, welfare officers were appointed to government munitions factories. These factories had expanded enormously both in size and number, and were geographically decentralised. Small arms, explosives, ammunition and ordnance factories existed in all States. Older factories, like the Footscray and Maribyrnong ammunition factories and the Lithgow Small Arms Factory, had grown from pre-war strengths of six to eight hundred employees to war-time levels of many thousands. Such dramatic increases in size caused administrative and organisational problems for production management, and welfare officers were soon employed to look after labour problems in these major munitions plants.7

5. Commonwealth Department of Labour (1973) Departmental Handbook: An Outline of History, Functions, and Organisation, Commonwealth of Australia, 5.2.1; Australian Archives (hereafter AA) Series SP 113/1, items 560/2/11, & 561/2/2; the IWD published a number of reports into amenities and working conditions during the war including, Industrial Lighting, Amenities in Wartime Factories, Planning Hours of Work, Factory Planning [all DLNS (1945)].


Welfare officers were also employed in the private sector, most notably in the textiles, paper, metal trades, clothing and food processing industries. The DLNS promoted welfare work to employers as a means of controlling absenteeism and industrial conflict, as well as improving morale and output. Private firms which employed welfare officers included: Bradford Cotton Mills, National Motor Springs, Australian Paper Manufacturers (APM), Lever Bros., Philips Electrical Industries, David Jones, Telephone and Electrical Industries (TEI), Ford Motor Co., the Myer Emporium, and the ammunition factory of Imperial Chemical Industries of Australia and New Zealand (ICIANZ). By mid 1945, over 100 welfare officers were employed in industry, 70 per cent of these in government factories and 30 per cent in private industry.8

While much of the welfare officers’ duties concerned the improvement of working conditions, the provision of adequate amenities, and looking after the housing and transport of workers, in some instances welfare officers were able to expand their labour management role. The most important developments in this regard included attempts by welfare officers to introduce formalised procedures for employment, induction and training. This trend was most apparent in the larger munitions establishments. For example, at the St. Mary’s Explosives Factory, the position of personnel officer was established in 1943. His responsibilities included: the maintenance of detailed personnel records (including absentee, job history, and progress reports), the oversight of the employment procedures (including induction of new employees in factory conditions, rules and employee services), the supervision of the employment of women workers, and recommendations on promotions and transfers of employees.9

Welfare officers also expanded their role in private firms. At the textile manufacturers, Bradford Cotton Mills, the welfare officer instituted formalised employment, induction and training procedures in order to reduce the firm’s high rates of absenteeism and labour turnover. Similarly, at National Motor Springs, the welfare officer introduced formalised employment procedures, detailed personnel records and monthly absentee, labour turnover and safety reports.10

While the above initiatives represented exceptions to a more general emphasis on traditional welfare work, they did establish important precedents. In reviewing the work of DLNS trainees in munitions establishments by 1945, the IWD concluded that welfare and personnel officers in the majority of establishments had been able to gain some say over the manner of factory employment and selection. Further, while the end of the war led to the winding back of personnel and welfare initiatives in most government factories, many private firms, such as APM, Bradford Cotton Mills, David Jones and TEI, continued such work.11

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THE POST-WAR EXPANSION OF THE PERSONNEL FUNCTION

During the post-war years, formalised personnel work became increasingly common within Australian industry. For example, in a 1946 survey by the Institute of Industrial Management, 65 per cent of its Victorian members made use of an organised personnel department.\(^{12}\) Similarly, a more extensive 1949 DLNS survey found 47 per cent of firms employed an officer or officers engaged full-time on personnel duties, and 46 per cent of firms accepted personnel administration as a top management function.\(^{13}\) The rapid growth in personnel work occurred for a number of reasons. These included changes in the post-war labour market, developments in management education, the beginnings of professional personnel bodies, and the influence of multinational corporations.

First, changes in the post-war labour market acted as a powerful impetus to the dissemination of formal personnel practices. The rapid growth of industry during the war, and the post-war economic boom, led to an increasing demand for labour. As this demand outstripped supply, competition amongst employers for labour became intense. These changes presented problems for employers. Management could no longer rely on the threat of the "sack" and unemployment to enforce labour discipline and efficiency. Further, labour supply within the firm became problematic. Throughout the 1940s and 1950s, labour turnover remained high. Average annual labour turnover for the manufacturing sector was as high as 90 per cent, and in some firms it exceeded 150 per cent.\(^{14}\) In response to problems of labour supply, turnover and discipline, many companies reassessed their labour management practices. One answer lay in the appointment of special officers to attract, employ and hold adequate numbers of workers. As a result by the late 1940s, increasing numbers of personnel officers were being employed to solve management's labour problems.

A second factor behind the spread of personnel work were developments in management education. As Cochrane and Rowse have highlighted, the post-war years were marked by a new management ethos that stressed the central role of industrial management in Australia's economic development. New institutions arose to disseminate managerial philosophies and practices. One such body that played a leading role in the development of management education was the Institute of Industrial Management (IIM) [later renamed the Australian Institute of Management (AIM)]. A group of industrialists formed the Institute in 1941, to improve the standards of Australian management and to promote and advance modern management methods. The IIM provided a service of continuous short lecture courses, sponsored study groups, conducted tours of member factories, and organised top management conferences in the areas of finance, sales, production, personnel and industrial relations. In 1943, a separate Personnel Management Committee and Personnel Advisory Service were created within the Institute, to advise employers on personnel problems. The Institute served to disseminate a variety of

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personnel techniques amongst member firms, including methods of selection and training, as well as conducting surveys into labour turnover, safety practices and wage incentive schemes.\textsuperscript{15}

Beyond advances in broader executive management training, developments also occurred in specific training for personnel managers. At Sydney Technical College, a four year full-time course in personnel management was introduced in the late 1940s. Particular emphasis was placed on personnel techniques, industrial psychology and management studies. The University of Melbourne also offered a diploma course in personnel practice within its Social Studies Department.\textsuperscript{16}

The dissemination of modern personnel practices was also developed through professional organisations. DLNS welfare officers in Sydney and Melbourne had formed Personnel and Industrial Welfare Officers' Associations during the war. These Associations sought to highlight the professional nature of personnel work and argued for the extension of specialist tertiary education in personnel management. In the immediate post-war period, while the Associations remained small in size, they provided an informal network for pioneering personnel officers and a means of comparing techniques and experiences. As the numbers of personnel officers in industry increased, so the Associations grew. In 1949, the two state associations agreed to combine. Following the creation of further state associations, a new federal constitution was adopted in 1954, and the title changed to the Institute of Personnel Management (Australia) (IPMA).\textsuperscript{17}

The post-war influx of multinational corporations was a third factor which also aided the development of more sophisticated personnel practices. Local subsidiaries of foreign companies acted as a direct means of importing overseas personnel techniques and provided examples to local industry of more advanced labour management practices. For example, an early forerunner in personnel practice was Standard Telephones and Cables (STC), a subsidiary of the large American electrical firm, International Telephone and Telegraph (formerly the Western Electric Co.). Western Electric had been a pioneer in the development of the "human relations" approach to labour management. By the early 1940s STC had imported the parent company's philosophy and the personnel function was accorded high status within the management hierarchy. The Works Manager, Stuart McPhee, had worked in both American and European plants of Western Electric during the 1920s. During the war, McPhee lectured DLNS welfare trainees on personnel management, and later employed several welfare officers in the personnel


\textsuperscript{16} "Facilities for Personnel Training", AA Series SP 146, item 572/7/6; "Technical Education Branch, Supervision and Industrial Management Courses", Personnel Dept. Records, Tubemakers Ltd.; interview Kath Holmes, op. cit.

department of the firm. A similar approach occurred at ICANZ, a subsidiary of the British chemical giant ICI, which inherited many of the parent company's practices, including works councils and other forms of employee representation, a functional management organisation, company training programmes and, later, job evaluation techniques. Foreign companies also precipitated the expansion of overseas management training, sending local executives to university or internal company training programmes. Examples of such firms included the large automotive manufacturers, such as GM-H, Ford and Chrysler.

THE IMPACT OF PERSONNEL WORK ON THE SHOPFLOOR

While the incidence of personnel work increased during the post-war period, the actual nature of such work varied widely within industry. Despite developments in management education and the formation of professional personnel bodies, the large majority of the early personnel officers lacked training or experience, and as a result much of their work was of an ad hoc nature. Beyond the need to obtain and hold labour, managers had little understanding of personnel work, nor the type of background and experience a personnel officer should have. Personnel positions were commonly filled by returned servicemen, pay clerks, or older managers who were blocking the promotion of others, but who were considered "good chaps and showed an interest in people". As one former personnel officer recalled:

"It was a bit of a dogsbody's role. People were appointed personnel officer and then told: 'Off you go, try and get staff for us!'".

The dominance of the industrial relations function in many firms also limited personnel work. For example, in an unpublished DLNS survey of personnel practice in 144 manufacturing enterprises, while 38 per cent of firms had an established personnel function, nearly half of these positions were predominantly concerned with industrial issues, particularly union negotiation and award maintenance. This was pronounced in the basic steel and heavy engineering industries, where industrial relations were traditionally combative and management adhered strictly to the provisions of the arbitration award. This preoccupation with the legalistic areas of labour management, in particular the interpretation of awards and legislation, retarded the influence of personnel practice in the workplace. The peak employer body in the metal industries, the Metal

22. Interview Alan Ife, op. cit.
23. The unpublished reports are contained in AA, Series SP 146, 113/1 and MP 67/1, various items.
Trades Employers' Association (MTEA), actively supported the industrial approach and criticised those firms which adopted broader or more consultative personnel practices.24 As one former personnel manager recalled:

"In the Australian scene, the industrial relations aspect took much longer to weld into the personnel set-up...The metal industry people as a group were the most conservative and reluctant supporters of personnel management that incorporated IR work. They as an industry felt they were fighting a battle with the unions."25

The rapid expansion of post-war immigration also had a retarding effect on the development of personnel practice in some large firms. In particular, employers in heavy industries such as steel, automobile and glass manufacture tended to rely on continuous influxes of migrant workers as a means of overcoming high levels of labour turnover. As a result, in firms such as BHP, GM-H and Ford, the availability of large numbers of migrant workers relieved management of the need to develop more advanced personnel techniques.26

Firm size was another factor that affected the implementation of personnel practices. As a general rule, small firms were less likely to introduce formalised personnel practices, relying instead upon the simple, personal control of the owner-manager or foremen. As the 1949 DLNS survey revealed, it was unusual to find firms with less than 250 employees employing full-time personnel officers. A later survey in 1958, highlighted a similar trend, with only ten per cent of such firms having a personnel department.27

As a result, the nature and extent of personnel work varied widely between industries and between large and small firms. While some firms were personnel innovators and experimented with a wide range of practices, many others paid little attention to the formalisation of labour management. This diversity was particularly apparent in the areas of employment, selection and training of operative and supervisory employees.

Developments in Employment Practice

One of the primary roles of the early personnel managers was to attract and retain adequate numbers of workers in a period of labour scarcity. This involved a number of duties, including recruitment, selection and induction.

25. Interview, Harold Kaye, op. cit.
Recruitment in the pre-war period had presented few problems for employers. Jobs were in demand and employers relied on informal methods to maintain their workforce numbers. Workers commonly recommended friends and relatives for job vacancies. The high levels of unemployment meant that in many large factories, it was not uncommon for numbers of prospective workers to congregate outside the factory gates at the beginning of the shift, looking for work. In the steel towns of Newcastle and Wollongong, this had been a common method of employing new workers.28

The acute labour shortage of the post-war period necessitated new methods of recruitment. Firms now went to extreme lengths to secure adequate numbers of employees, the techniques employed depending on the location of the factory and the type of labour required. Firms which required skilled tradesmen commonly relied on union contacts. However, in the burgeoning process industries, more direct techniques were used to attract semi-skilled and unskilled workers. Advertisements were placed in suburban newspapers, on radio and picture theatres. Notice boards advertising vacancies were erected outside factories. Recruitment bonuses were offered to employees. At David Jones, management advertised Saturday morning lectures and tours of its factory to attract junior female employees. Personnel officers even made recruitment drives at schools, and sometimes used door-to-door canvassing and handbills to promote job vacancies in suburban areas.29

State institutions were another important source through which personnel managers recruited labour. Anticipating the problems of a full employment economy, the federal government established the Commonwealth Employment Service (CES) in 1945, to act as a national employment exchange, organising the labour market and reducing sectoral imbalances. Despite early management suspicion, the CES soon became one of the most common avenues through which personnel officers recruited labour. Personnel managers also supplied public vocational guidance authorities with information about their firm and industry, and the type of employment opportunities it provided.30

Having attracted job applicants, actual employment methods varied widely between firms. In small firms, where the works manager carried out personnel work along with his other responsibilities, employment was typically informal. For example, at the engineering works of James Budge Pty. Ltd., the manager told DLNS investigators that in employing new workers, "he runs the tape over them and if he thinks they are suitable sends them to the foreman who runs the tape over them more closely".31

In larger firms, applicants were commonly referred to a paymaster or timekeeper, who then sent those suitable to a supervisor or foreman for final selection. In these cases, the

31. "Record of Contact - James Budge P/L", AA Series SP 146, item 575/3/35.
employment "interview" was informal and commonly took place in a hall or corridor, while the foreman assessed the suitability of the applicant. As one factory manager recalled:

"When I first went there, the guys'd come to the gate and they'd say, 'Yes, we want ten or fifteen blokes, go down to the pay office'. They'd go down to the pay office, and the pay office would say, 'I know they want sixteen in the moulding department', and he'd get the foreman of the moulding department to come over and look at them, and if he put them on, then the paymaster'd sign them up and gave them the bundy-card and they were on."

Even in the larger firms which had a recognised industrial or employment officer, selection of prospective employees commonly relied solely upon personal judgements and "gut-reactions". As the industrial officer at the General Motors-Holden Pagewood plant stated to DLNS investigators, "he could sum people up quite effectively by their appearance".

In other firms more formalised employment practices were introduced. While the interview remained the main form of selecting new employees, some firms introduced application forms to supplement the selection. For example, metal industry employers commonly made use of a standard application form issued by the MTEA. In some cases, completion of such forms was used as an informal test, with the employing officer assessing the applicant's attitude, interpretation of questions, accuracy of information and even handwriting.

The degree of detail required in application forms varied. One of the most elaborate forms was used at the Sydney clothing factory of David Jones. Details recorded included: name, age, address, particulars of next of kin, physical characteristics, health, marital status, educational record and employment history (including names and addresses of employers, positions held, length of service and reasons for leaving).

Formalised employment records provided the basis for more general personnel record-keeping. At the clothing firm of Kayser Ltd., the employment application form was used as a permanent record of the suitability of the worker for various jobs and recorded later promotions, transfers and wage adjustments. Production department heads submitted labour requisition forms to the personnel department, which showed the number, sex, age, and training of workers required. Other records included departmental absence reports, wage adjustment forms and labour turnover reports.

As an aid in selecting workers, some firms developed records which set out the requirements of each job within the factory, with supervisors providing brief details of the job on labour requisition forms. At the steel tubing manufacturers Stewarts & Lloyds, a

32. Butler, op. cit., p.36; "Review of Firms - Hadfields Steel Works Ltd.", AA Series SP 146, item 575/6/7.
34. "Review of Firms - General Motors Holdens Ltd.", AA Series SP 146, item 575/6/7.
36. "Application for Employment with David Jones Ltd.", AA Series SP 146/1, item 597/4/2; "Preparing an Application Form", AA Series SP 146, item 575/1/7.
system of job analysis was introduced which set out the necessary experience and physical capacity for particular jobs. Details of working conditions, nature of the work duties, responsibilities, tools, hours of work, wage and bonus rates were noted on job analysis forms for each job. A similar system was adopted at Australian Consolidated Industries Ltd. (ACI), with a points rating system used to distinguish the minimum requirements for each job.38

Procedures for inducting the new employee within the firm also varied widely. At its most basic, a new employee relied on contact with fellow workers and supervisors for information about the job, the firm, work rules and amenities. However, in some large firms, the induction procedures were more formalised. Induction was viewed as a useful way of fostering good manager-worker relations and, it was thought, helped the employee to adjust quickly to the new environment of the factory and develop an interest in his or her work. For example, at National Motor Springs, a detailed group induction procedure was developed. New recruits assembled in the staff room, where a member of the personnel department explained the policy, history and products of the company. Sample products, photographs, charts and books were used to illustrate the explanation, and each recruit received an employee manual explaining factory rules. Following morning tea, employees were issued with a badge, pass and locker key, and then conducted on a tour of the plant, where the time clocks, first aid room, canteen and amenities were pointed out. New employees were then introduced to their supervisors, who explained the lay-out of the department or shop, staff facilities, and introduced fellow workers. The new employee was then left in the hands of an experienced worker for an initial period.39

Available survey data suggests that changes in employment practices were indeed significant throughout industry. Compilation of unpublished DLNS reports of personnel practice suggests that about 45 per cent of firms used formalised employment practices, including a standard interviewing procedure administered by a recognised employment officer.40 This figure corresponds with a later 1954 DLNS survey, which found that about 50 per cent of firms had employment interviews conducted by a special officer variously designated personnel, industrial or employment officer. Further, over 60 per cent of firms surveyed used formal application forms in employing new labour.41

However, much fewer firms introduced standardised induction procedures for new employees. One DLNS survey found that such procedures were used in about one-third of firms surveyed, and only one-fifth made use of follow-up interviews of new employees. Unpublished DLNS reports found that as few as 17 per cent of firms had a systematic and centralised approach to the induction of new employees.42

40. The unpublished DLNS reports are contained in AA, Series SP 146, 113/1 & MP 67/1.
41. Butler, op. cit., p. 38
42. Caine, op. cit.; AA Series SP 146, 113/1 & MP 67/1 (various items).
Selection Testing and Industrial Psychology

Beyond basic employment procedures, some firms also adopted formalised methods of psychological and aptitude testing. Based upon developments in overseas industry, the aim of such techniques was to provide a more systematic and accurate method of selecting and placing new employees.43

Unlike American and British industry, Australian management was much slower in using the services of industrial psychologists. Despite some notable developments during the pre-war period, employer interest in industrial psychology was limited. As early as 1917, Bernard Muscio had published a series of lectures on industrial psychology. In 1927, A.H. Martin, a lecturer in psychology at the University of Sydney, formed the Australian Institute of Industrial Psychology (AIIP), modelling it on the British National Institute of Industrial Psychology. However, despite receiving financial backing from the NSW Chamber of Manufactures, prior to the war relatively few industrialists took advantage of the Institute's services, and the majority of its activities were devoted to vocational guidance for school students.44

During the war, the use of industrial psychology expanded rapidly. In 1940, the Commonwealth Controller of Munitions Training used psychologists from the Australian Council for Educational Research (ACER) to conduct formalised selection testing of semi-skilled workers for upgrading to dilutee tradesmen in munitions factories. The ACER was an independent research organisation which had developed and adapted a variety of psychological and intelligence tests for school children. Psychological selection testing was also applied in the armed services, particularly in the air force and the army.45

One of the earliest uses of psychological and aptitude testing at the workplace occurred in the early 1940s at the Beaufort Division of the Department of Aircraft Production. Following an overseas visit by the Director of the Division to the Burbank factory of the Lockheed Aircraft Corporation in California, vocational and welfare officers were appointed to aid in the selection and training of aircraft workers. The vocational officer, Ronald Taft, a Masters graduate in psychology from Columbia University, introduced a battery of psychological and aptitude tests to aid in the placement of new employees. Particular emphasis was given to female workers, who were regarded as physically and mentally more suited to light, repetition work. By the end of 1943, more than 4,000


persons had been tested for both clerical and factory work. After the war, Taft was employed by the IIM's Personnel Advisory Committee as a consultant to advise firms on selection and placement techniques.46

However, by far the greatest impetus to the use of psychological testing in industry occurred through the Industrial Welfare Division of the DLNS. During the war, IWD psychologists applied a variety of testing procedures to women workers in munitions establishments. At the Footscray, Rutherford, Rocklea and St. Marys munitions factories, general intelligence, manual dexterity, mechanical aptitude and personality tests were introduced during 1943. Personnel departments at each of these establishments continued the application of testing procedures up to 1945.47

In the post-war period, DLNS psychologists were the major means through which psychological and aptitude testing were disseminated within industry. One of the most extensive uses of selection testing occurred at the textile manufacturers Bradford Cotton Mills. The personnel officer of the company, Mrs. Daphne Hendy, had been one of the first wartime welfare officers to be employed in private industry. In 1946, she approached the IWD for assistance in the use of systematic selection techniques in order to reduce high levels of labour turnover within the company's mills. Major emphasis was placed on the manual dexterity of applicants, and aptitude tests were constructed to assess manual ability, visual acuity, accuracy and fineness of movement. In later years, psychological and aptitude testing (including intelligence and personality tests) were extended to the selection of a variety of occupations including cloth examiners, loom tuners, training instructors and supervisors. DLNS psychologists also developed extensive selection testing procedures at David Jones, STC, Myers Emporium, Parke Davis & Co., Johnson & Johnson and Holeproof Ltd.48

Despite these developments, however, the extent of application of selection testing techniques in Australian industry was limited. A 1954 DLNS survey found that less than one-quarter of factories used medical examinations for the selection and placement of

new employees. Further, the use of psychological and aptitude testing was rare. Only four firms were found to be using these techniques, all of them textile firms attempting to assess the manual dexterity of applicants.49

There were a number of reasons for the limited impact of selection testing. First, general labour scarcity meant that in many factories managers took on what labour was available, regardless of suitability. Second, many managers maintained a healthy scepticism of costly psychological testing, in some cases having tried such techniques and found they had little beneficial effect. Third, management consultancies that established industrial psychology services targeted most of their efforts towards selection of executive and middle management, and rarely introduced costly testing procedures for factory operatives.50

Employee Training Techniques

Labour shortages also led some employers to reassess the methods by which employees were trained. Systematic training procedures were introduced in a number of firms to improve the efficiency of the existing workforce and also to reduce labour turnover.

The supply of skilled tradesmen was determined by apprenticeship regulations. Shortages in the metal trades prompted several of the larger companies in the steel, heavy engineering, paper and automobile industries to establish in-plant apprentice training schemes, to supplement technical college courses. At BHP and GM-H, separate apprentice training shops were set up, and apprentices followed a designated plan of practical and theoretical training under special training instructors. Some companies also applied various selection techniques in training apprentices. At Kelvinator (Aust.) Ltd. and McPhersons Ltd., prospective apprentices underwent intelligence and aptitude tests before being accepted in the company’s training scheme. During the period of training, apprentices were rated and received bonus pay on their attitude to authority, job interest, consistency of effort, speed and workmanship.51

Some companies also began to experiment with formalised schemes for training semi-skilled factory operatives. The traditional method of training had typically consisted of informal instruction or demonstration of the job by the supervisor, after which the recruit was left to learn the job by practice, perhaps with help from an experienced worker nearby. As a former personnel officer recalled:

49. Butler, op. cit.; AA Series SP 146, 113/1 & MP 67/1 (various items).
"You know the expression 'learning from Nellie', well that's how training had mostly been done - go and work with Nellie, and look over her shoulder and see what she does. That was the typical way to train a new operative on a factory line. Go and watch somebody else until you know how to do it." 52

Such an ad hoc approach to employee training was largely inefficient. The experienced worker who acted as part-time teacher was typically more concerned with production than teaching, particularly where payment by results applied. Further, there was little check on teaching methods. New employees had to quickly adapt to unfamiliar operations and the pace of more experienced workers.

One technique that emphasised a more formalised approach to employee training was the Training Within Industry (TWI) programme. TWI had developed in American wartime industry in response to problems of labour supply and the need to train large numbers of inexperienced munitions workers. The TWI programme was constructed by a number of America's leading industrial engineers, and was aimed specifically at teaching supervisors methods of job instruction, work simplification and basic human relations. The success of the TWI scheme in American industry led to its adoption by the Canadian Department of Labour in 1943 and by the British Ministry of Labour in 1944. 53

The TWI scheme involved the training of designated "instructors" who were then employed teaching new recruits the correct method of doing a job. Instructors were typically selected experienced workers, or in smaller firms supervisors or foremen, trained in a discussion group method by a TWI "trainer". The instructor was taught how to break a job down into its important steps, how to introduce the worker to the job, how to demonstrate the operation, and observe and correct the trainee. 54

A number of firms adopted the TWI approach. In some cases, companies introduced TWI following overseas trips by executive managers. At Jantzen Ltd., the TWI method of training was introduced to the company by the Managing Director, following a tour of American industry. Similarly, at APM, TWI was introduced after one of the company's senior executives visited paper mills in the United States and England. Some firms also employed personnel with overseas experience of the TWI technique. At the textile firm, Bonds Industries, an American training officer was appointed who had been involved in the original team that developed TWI during the war. 55

TWI methods were also disseminated by the IIM and the DLNS. For example, during the late 1940s, the IIM employed an American instructor to conduct courses in the Job Instruction component of the TWI programme. By 1951, the IIM claimed to have trained over 200 key personnel in the TWI technique. Companies involved in the course included

52. Interview Kath Holmes, op. cit.
the British Australian Tobacco Co., David Jones, BHP, Philips Electrical Industries, Fletcher Jones, British Tube Mills, and Stewarts and Lloyds. Similarly, during the early 1950s, the Industrial Training Division of the DLNS introduced TWI into a variety of government departments and agencies. By 1954, the Division had trained over 3,000 supervisors in public enterprises. Staff at the larger technical colleges were also trained in TWI techniques by the Division, and they provided another source for the spread of TWI throughout private industry.

Beyond the TWI technique, some firms also developed specialised "off-the-job" training schemes. In these cases, training was carried out in separate training rooms, or at benches or "vestibules" away from the main production areas. Typically, these methods were found in process industries where emphasis was placed on the worker's speed and output. For example, the electrical appliance manufacturers, STC, established a separate training school in 1947 to train new employees in particular process operations. The scheme was introduced to overcome the difficulties of employing new workers on production lines operating under group bonus schemes. New workers, unused to the methods and pace of the line, commonly became sources of resentment when they impeded the output of the group and limited bonus earnings. It was the responsibility of the training school instructor to bring the trainees up to a predetermined standard of efficiency before transferring them to the factory. Similar techniques were introduced at the Adelaide automobile factory of Chrysler (Aust.) Ltd, and also in the clothing industry, at David Jones and the pharmaceutical company Dowd & Associates Ltd.

In some firms, new training techniques also extended to the supervisory ranks. Supervisory training schemes were emphasised as one way through which foremen could be taught the human relations approach to labour management. For example, the "job relations" component of the TWI method, stressed the need for foremen to "work with people" and "treat people as individuals". In public sector enterprises, the DLNS introduced a number of TWI courses specifically aimed at replacing "dictatorial" supervision with a human relations approach. During the early 1940s, educational authorities in the various states also introduced foremanship training courses. In NSW, technical colleges in Sydney, Newcastle and Wollongong offered courses in foremanship and industrial management, which included substantial sections on personnel and welfare administration. A variety of firms participated in the courses, and by 1945 close to 2,000

supervisors and foremen were enrolled. A DLNS survey of supervisory practices found that 68 per cent of firms used such technical college courses as a means of supplementing more informal "understudy" training.60

However, despite these initiatives, formalised training schemes within the firm were generally limited in their application. While many firms took advantage of external technical college training for their supervisors, operative training remained ad hoc in the majority of enterprises. For example, a DLNS survey of training techniques, found that only 14 per cent of firms used either TWI or vestibule training, the majority relying on casual on-the-job training. Systematic job training programmes were generally limited to light, process working industries, such as clothing, textiles and electrical appliance manufacture, where the aim was to train workers in simple assembly operations and have them reach the required levels of performance at a rapid rate.61

CONCLUSION

Australian labour management practice underwent substantial change during the 1940s and 1950s. As has been highlighted by much of the overseas literature, various environmental factors such as changes in labour and product markets, forced employers to adopt a more formalised approach to their management of employment relations. However, these developments were far from uniform across manufacturing industry. While a tight post-war labour market resulted in the rapid growth of personnel specialists, their impact on shopfloor practice varied widely. In a number of firms managers adopted a proactive and innovative approach to the employment, selection and training of their workers. These "leading edge" firms were strongly influenced by the example of state-sponsored welfare work, developments in management education, the professionalisation of personnel management and the influence of multinational corporations. In many instances, firms which accorded a high status to personnel work, did so as the result of a broader corporate policy which emphasised the importance of formalised labour management. Examples of such personnel pioneers included Bradford Cotton Mills, STC, ICIANZ, David Jones and APM. However, to a large extent these firms represented exceptions to the rule. In many other enterprises personnel practices were rarely sophisticated. Important limitations on personnel innovation included the lack of experience of early personnel practitioners, opposition from established industrial relations specialists, the reliance on influxes of migrant labour in some large firms, and the continued use of simple, personal control in most small firms.

Overall, this paper makes a strong argument for the need to avoid generalisations about management practice. While Australian industrial relations has tended to neglect the role of management, this paper has demonstrated the wide variety of policies and practices adopted by managers at the workplace level. While this paper sheds some light on the nature of employment, selection and training techniques, clearly much work remains to be done.

61. Caine, op. cit.; DLNS (1953) op. cit., p. 18.
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