

# **A DESCRIPTION OF THE BIOGRAPHICAL CHARACTERISTICS OF PROCESS TECHNICIANS AT BOYNE SMELTERS LTD FOR THE DEVELOPMENT OF BETTER RECRUITMENT STRATEGIES**

by

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This paper was selected for publication because it provides an interesting, detailed and novel approach to developing better recruitment strategies in a case study situation. The paper was a requirement for the unit 51376 Human Resource Practice and Research, the capstone unit in the HRM major at undergraduate level. While it is based on observations within a particular organisation, the arguments do not necessarily reflect or represent the views of that organisation.

## **ABSTRACT**

Historically, high levels of turnover have been experienced at Boyne Smelters Ltd (BSL) in recent years. Turnover needs to be reduced to capture savings in direct recruitment costs. One of a number of approaches considered to address the problem is the commencement of some preliminary examination of the biographical background of employees.

The objective of this study was to gain a fundamental understanding of the background biographical characteristics of longer-term high performing process technicians who work the 12 hour *Roster 12* shift roster. The project involved basic, descriptive, quantitative research to understand the biographical background of the employees selected. The number of high performing staff with above-average tenure determined the employees involved.

Key biographical characteristics were identified from the research literature that are known to be influential on turnover and job performance. These include tenure in previous employment, local ties, above-average tenure in current employment and being older when hired. Others recognise educational level and success, age, type of previous occupation and sports, leisure and community group activities. These keys were presented to 101 process technicians in the population of interest in the form of a questionnaire to which 40 percent responded.

Significant results were obtained for the formulation of recommendations that support the continuation of existing recruitment strategies and the development of approaches for the future recruitment of process technicians. Specifically, the interest is in the number of previous full-time roles and work with technical/process experience, people who have team participation outside of work and who are locally established. The majority of respondents have levels of education at or beyond the completion of high school. Conditions of work and the level of financial reward are important factors

influencing respondents' inclination to leave the organisation. Recruitment outside the area should have more emphasis on the quality of life available in the region.

## INTRODUCTION

Boyne Smelters Ltd (BSL) is in business to produce primary aluminum products for world and domestic markets. The plant was established in the early 1980s and underwent expansion in 1997 to almost double its output — to make it one of the largest aluminum smelters in the world. Comalco holds 51 percent ownership in BSL and has the operational management accountabilities. Comalco is itself a company within the Rio Tinto Group. Boyne Smelters employs around 1200 people at its Boyne Island site near the beach-side 'twin-towns' of Boyne Island and Tannum Sands which has a population of about 7,000 people. The community and plant are about 22 kilometres by road from the industrial port city of Gladstone, which has a population of approximately 30,000 people.

Recent history at Boyne Smelters indicates significant reductions need to be made in employee turnover to decrease direct recruitment costs. Voluntary turnover stood at 10-14 percent in 1999 across site. In recent years, overall turnover has been in excess of 20 percent (see Table 1 below). The Process Enhancement Program (PEP) conducted at BSL during 1998 revealed the need to reduce the level of employee turnover and capture considerable savings in direct recruitment costs. During PEP, team members identified a pathway and outlined an implementation plan for achieving the recruitment savings.

The PEP program identified annual savings of \$420,000 in direct recruitment costs for every two percent reduction in overall turnover. This includes advertising, interviews, removal, accommodation, induction, initial training and relocation allowances. In the 1998 cost base year, it amounted to 26 roles annually from all levels in the organisation, or \$16000 per role. Gaining a better understanding of the biographical background of longer-term employees at BSL has been suggested by the PEP process as one among a number of strategies to improve the process of attracting and retaining staff.

This project will focus on an initial examination of the biographical characteristics of longer-term staff in process technician roles that work the 12-hour (*Roster 12*) shift roster to provide information to assist the development of better recruitment processes. This group of employees was chosen because it is the largest group on site and is made up of roles that perform process and production work of similar type and complexity. It is also the group that demands the largest recruitment by volume on an annual basis and has an unusually high level of turnover. Also, because of its size, it produced the largest number of long term and higher performing employees for the purpose of obtaining a population of sufficient size for the research requirements.

## BACKGROUND

In May 1996 the company moved to an all-staff workforce and individual contracts based on the approval of an enterprise flexibility agreement for the site. This appears to have made an impact on voluntary turnover as shown in Figure. 1, but turnover has remained high. At the same time, Boyne Smelters introduced a system of performance based salaries by adopting the Comalco system of Work Performance Review (WPR) and Work Performance Assessment (WPA) conducted annually. Each staff member is assessed by their immediate manager based on their work performance in the relative *people, programming* and *technical*

aspects of their role during the previous calendar year. During the same year at least one WPR must be conducted with each staff member. The purpose of this review is to discuss the employee's performance and that of his or her leader. Currently, WPA scores range in value from 0–100, where 30 is considered a performance level that meets the *minimum* requirements of the role. A score above 85 indicates a performance that *continually exceeds the full requirements* of the role. A new rate of salary commences in April each year calculated from the performance score. A score above 65 is considered indicative of a high-performing employee. It then follows that the company is likely to be interested in retaining these staff.

## LITERATURE REVIEW

During the research process, theoretical principles drawn from human resource management, organisational behaviour and management and the social sciences were applied as necessary to the issues. In addition, any literature in research journals that addressed the issue of employee turnover and biographical data was examined.

### Definition

One influential review of the topic proposed that a universally accepted definition of biodata cannot be found. In this review, biodata is described essentially as information about the personal life-history and experience that an individual provides through resumes, interviews, and applications for employment. When applied to the selection process they are presumed to be related to success in occupational endeavours and are predictors of certain work-related behaviours (Gunter, Furnham & Blakeley 1993).

The literature refers to 'hard' and 'soft' biodata. The former relates to the more factual demographic and background information found on most application blanks and is historical and verifiable (Nickels 1990). The latter refers to more abstract and subjective data which include items of a more private nature such as judgments, motivations and expectations (Gunter et al. 1993). Many argue that only the individual's verifiable life-history events and experiences from work and private life should be considered as legitimate biodata. This contention supports the information found on application blanks, rather than on an extensive biographical questionnaire that tend to focus more on the 'soft' data (Gunter et al. 1993). It is the 'hard' data that are more applicable in this study because of the nature of the information sought by the client and the introductory nature of the research.

### History

The concept of biographical data (biodata) has a long history and these data have been used as selection tools for most of this century. However, it has only been in the past ten to fifteen years that it has been developed and considered a significant tool in employee selection and performance prediction (Stokes 1990). It is considered a commonsense approach to future behaviour at work based on personal (biographical) history. Goldsmith, in 1922 (Furnham 1997), was one of the earliest to use biographical data and he developed a Weighted Application Blank (WAB) for the insurance industry. He maintained that the easiest way to measure past behaviour is from what appears on an application form.

The simplest source of biodata is the curriculum vitae (CV) or the application form (Hammer & Kleiman 1988). The CV is considered much more informative because it allows the

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applicant the opportunity to present the material in the way they want (Statt 1994). The developments in recent years have centred on acquiring the data via specially designed surveys and questionnaires, rather than relying only on the usual information provided by the job applicant. Generally the use of biodata in this structured way is under-utilised by most private sector organizations, even though it has high levels of prediction of employee behaviour and adds to the validity and accuracy of the selection process (Mitchell 1990).

### **Effectiveness**

The reliability of biodata as a predictor of future performance is no longer in doubt. It is considered more reliable and more acceptable to applicants than personality tests (Furnham 1997) and should be more widely accepted as an integral and reliable part of employee selection processes (Hammer & Kleiman 1988). Studies to confirm truthfulness of responses have correlations in excess of 0.9 (Drakeley 1989).

Biodata usage has been consistent in its ability to predict such workplace issues as employee turnover and performance. The usefulness of biographical data has always been based on the premise that generally humans will behave in the future as they have in the past, even though the causal influences are unknown (Mael 1991; Kuhnert & Russell 1990; Pannone 1990). It appears from the literature that the reasons why biodata are predictive is less important than the fact that it is (Furnham 1991).

The events that occur in a person's life can predict vocational choice through an individual's personality development and can, therefore, be useful in assessing the type of people who enter a particular vocation (Nickels 1990; Schneider & Schneider 1990). An important aspect in this study is that material in a job application and employee demographics can predict turnover and tenure in most organisations and that biodata keys indicate consistency over time for a similar employment role (Schneider & Schneider 1990; Rothstein, Erwin, Schmidt & Owens 1990). When used correctly biodata are among the best recruitment devices (Gunter et al. 1993).

### **Application**

The literature identifies the biographical characteristics of employees that have demonstrated influence on the issues of interest to BSL, namely, turnover and job performance. These characteristics include tenure in previous employment (Robbins 1998), local ties, above-average tenure in current employment and being older when hired (Healy 1995). Others recognise educational level and success, age, type of previous occupation and sports, leisure and community group activities (Schneider & Schneider 1990; Sharf 1990; Gunter et al. 1993). Although the literature offers guidance as to the characteristics of value, the purpose of this project is to meet the client's requirements in discovering a general profile of common characteristics of the population of interest. Examining the background of current employees is considered a sound starting point from which to develop better selection tools (Hammer & Kleiman 1988; Drakeley 1989; Gunter et al. 1993; Statt 1994).

It is the simplest sources and forms of basic 'hard' objective biographical data, such as that normally found on an application blank or CV, that interests the client in this study. Therefore, rather than risk the potentially unpopular option of the researcher examining personal written records, a questionnaire was designed to obtain data usually found on

applications and to a lesser degree, more recent biographical information and views on tenure with the company. The latter represents what may be defined as ‘soft’ data, as it is asking for opinions and motivations considered important in determining the reasons an employee would stay or leave.

## RESEARCH OBJECTIVES

Obtaining information from existing employees is often ignored in seeking to address turnover issues (Drakeley 1989; Schneider & Schneider 1990). Therefore, following consultation with the Manager of Human Health and Resources and the Specialist Staff Systems, the decision was made to conduct basic, descriptive, quantitative research focusing on staff in process technician roles as a first step in exploring the value of basic biographical data that may be common among long-term high performing employees. Based on the biographical keys identified above that are important in turnover and job success, the research objectives of this study were to determine:

- From the group of 492 process technicians working the *Roster 12* shift roster —
  - those who have obtained a WPA score of 65 or greater in the last assessment period; and
  - from these, the following specific data that the company currently does not have, namely, those who have worked continuously at BSL for more than the mean number of years for the entire group of 492.
- Using a suitably designed questionnaire determine:
  - confirmation of tenure
  - tenure in previous employment
  - age at commencement at BSL
  - level of education
  - principal type of work prior to joining BSL
  - nature of any non-work team involvement prior to employment
  - place of residence when role accepted at BSL
  - main reason for remaining at BSL
  - main reason they might leave BSL
- Any significant patterns or features that may be revealed in the data.

## RESEARCH METHOD

### Research Design

The project involved basic descriptive quantitative research to formulate the biographical profiles of employees supported by some quantitative evaluation. This is appropriate given the depth of the client’s interest at this point of time.

- Basic — because it is introductory research “... conducted primarily to improve our understanding of general issues ...” (Hussey & Hussey 1997, p. 13)
  - Descriptive — to obtain information on characteristics of a particular problem or issue (Hussey & Hussey 1997)
  - Quantitative — as it involved collecting and analysing numerical data (Hussey & Hussey 1997)
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This involved examination of the relevant published literature referred to and the analysis of secondary data from company personnel records and the results of a questionnaire.

As the outcome of the project will be of benefit to the company, the use of company resources and time was negotiated between the researcher, his immediate manager and the Manager, Human Health and Resources. Considerable cooperation and assistance was provided.

As all staff have access to electronic mail, a questionnaire comprised of eleven questions aligned with the research objectives (Appendix 1) was sent confidentially with a covering letter (Appendix 2) to each of the potential respondents. Both documents received prior approval at an appropriate level in the organisation (Edwards & Thomas 1993) and were pre-tested with several employees outside the target group, but who perform similar roles (Bourque & Fielder 1995).

### **Employees Involved**

The number of employees involved was selected from the 492 process technicians mentioned above. The names, with respective Work Performance Scores and commencement date at BSL, were supplied from the electronic database.

### **Sampling**

After selecting those who have attained a score of 65 or greater, the respondents were again filtered according to tenure greater than the mean for the entire population. This group numbered 101 employees. A response of at least 50 percent was considered desirable and would represent a statistically meaningful proportion of the population (Schmidt & Klimoski 1991)

### **Secondary Data**

Secondary data were available in the organisation from the integrated SAP business computer system that contains limited employee details, including work performance scores and commencement date in the organisation. This system did not contain the biographical data important for turnover or for determining a profile of employees. This is contained in the personal written files in the Human Resources Department. For reasons indicated above, an appropriately designed questionnaire was circulated to obtain further data from employees and to ask specific questions regarding tenure in the organisation.

### **Ethical Issues**

This research involved access to personnel records normally reserved for people in particular roles in the organisation. Special permission was obtained from those with the relevant authorities to have the necessary access, with restrictions on any data not relevant to the project. The researcher signed a confidentiality agreement. Documentation did not include names or identification details, either in the final report or during the research process. The nature and purpose of the research was made clear to all respondents and managers were notified that some of their people may choose to participate.

## Limitations

The project relied mostly on basic descriptive research based on secondary data found in company records and primary data from an employee survey. Research was limited to profiling only current long-term employees in the population of interest. This aligned with the client's request to explore only this issue at this point in time. The study did not attempt to address the whole issue of turnover at the site. Analysis of numerous other possible influences on turnover identified during the PEP process will be left to others. It is beyond the scope of this study to attempt comparative or inferential analysis against others in the larger group of employees.

## Information Processing

Information obtained from the questionnaire was compiled for each respondent using a matrix table method in *Microsoft Excel* to allow sorting, filtering and grouping of information. The majority of the categories had a numerical value and other descriptive data were sorted by key categories. Quantitative analysis was also performed using *Microsoft Excel* to produce graphs, tables and statistical data.

The Boyne Smelters Business Information System provided the total number of process technicians across site that received a Work Performance Assessment Score during the 1998 calendar year. It also provided the date each employee commenced with the organisation. Firstly, the data were examined to determine the mean tenure of all 492 employees. This figure was used to filter employees who had tenure greater than the mean and who had a performance score of at least 65 during 1998. This produced a population of 101 employees.

Initially, within the first 4–5 days, the response to the questionnaire was very encouraging, with over twenty responses returned. However, this was not sustained and dropped off rapidly in the following week. A follow-up letter was sent, again by e-mail, with the questionnaire attached and an extension of the return date provided (Appendix 3). This produced a further nineteen responses making the final response of 40 percent, below the 50 percent anticipated.

The reasons for this low response are not immediately apparent, but one likely explanation is that a smaller number of employees than originally thought use e-mail regularly, and the period required (approximately ten days) for all crews to attend the plant was also a possible influence. The total period for response was four weeks.

However, the homogeneous nature of the group and the similarity of the work they perform lends support to the argument that a 40 percent response is statistically adequate. There was no noticeable difference in the quality of responses after the follow-up letter. Non-responses are, therefore, not considered a major impediment (Hussey & Hussey 1997). The results obtained will now be examined and discussed.

## RESULTS

The results are displayed in relation to the project objectives. Firstly, it is appropriate to consider data on turnover at BSL to provide the context that has driven the need for the research.

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## Voluntary Turnover

Figure 1 and Table 1 below display the site data for voluntary turnover since 1994. In Figure 1, the columns represent the percentage turnover for the calendar years since 1994 when the level was in excess of 20 percent. It stabilised considerably in 1996, following the introduction of staff systems and has remained in the 10–14 percent range. The remainder of Figure 1 is the current 1999 year with the monthly-annualised result shown numerically and the line indicating the monthly variation in the 12-monthly rolling average. Table 1 displays the data from which the graph is generated. The middle of 1999 has seen a pronounced upturn across site drawn from data on all roles and levels in the organisation.

**Figure 1**  
**Voluntary turnover at BSL site 1994 to present (%)**



Source: Boyne Smelters Ltd.

**Table 1: Voluntary turnover at BSL site 1994 to present (%)**

Site	94	95	96	97	98	Oct	Nov	Dec	Jan	Feb	Mar	April	May	June	July	Aug	Sept
Actual	23	21	10	12	9.7	13	14	7	9	6	7	7	7	17	12	14	14
Rolling Ave						11.2	12.1	10.8	10.7	9.7	9.3	8.9	8.7	9.6	9.9	10.2	10.6

Source: Boyne Smelters Ltd.

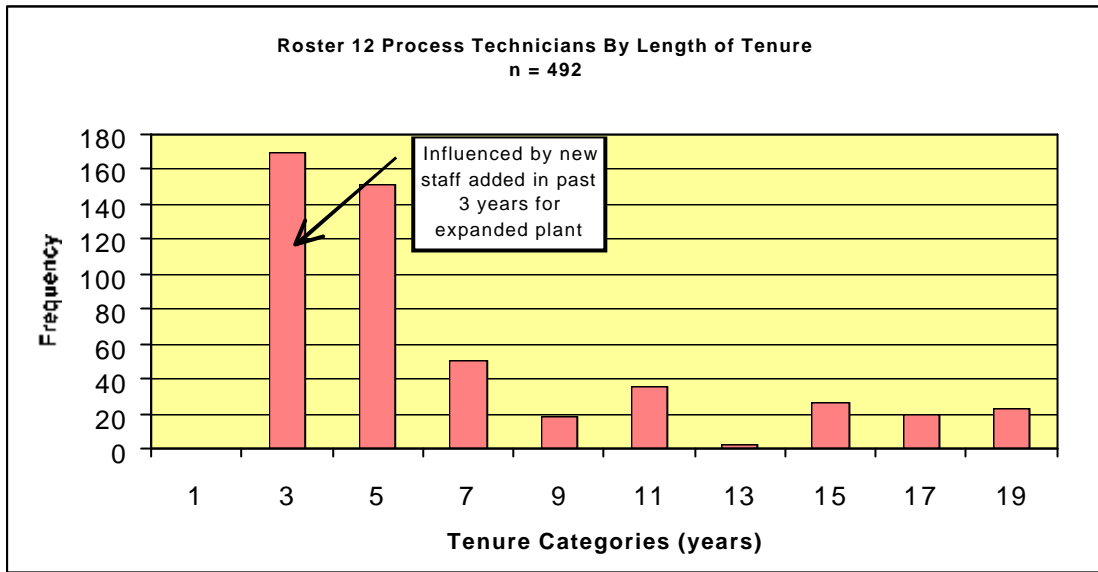
## Population of Interest

From the group of 492 process technicians who received a WPA score during 1998, the population of interest was determined by selecting employees who had received a WPA score of 65 or greater and who had been with the organisation longer than the mean period for the entire group. This reflects the company's interest in the particular characteristics of high-performing, longer-term employees.

Figure 2, below, is a histogram of the tenure of this group of 492. Apart from the newer employees indicated, over 20 percent of the employees have been with the organisation less than five years.



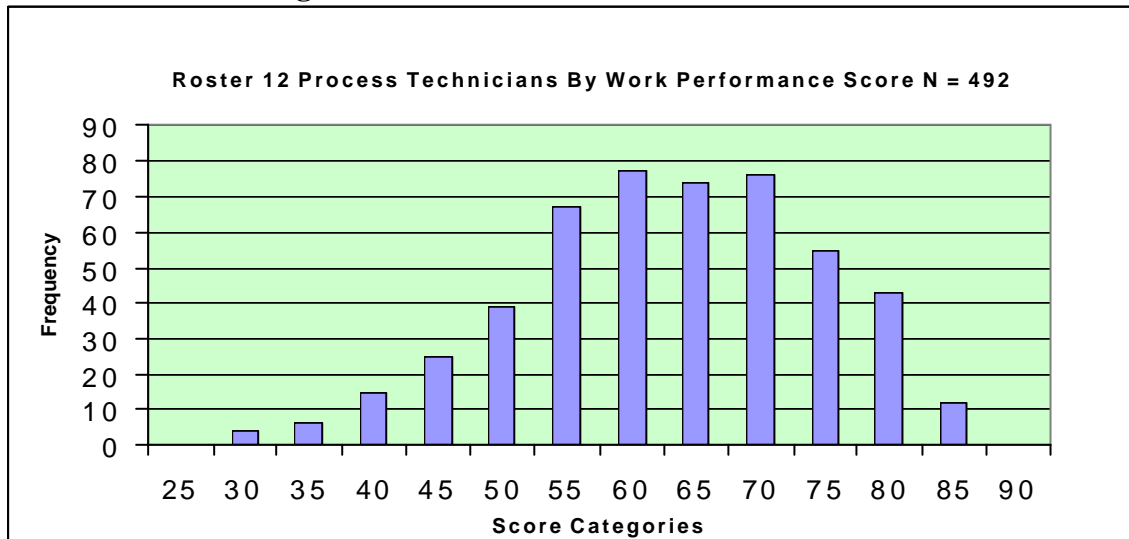
**Figure 2: Tenure of all 492 Process Technicians**



Source: Boyne Smelters Ltd.

In addition, Figure 3 shows the distribution of WPA scores and Table 2 provides the basic statistical data for both the WPA scores and tenure for the entire group.

**Figure 3: WPA score for 492 Process Technicians**



Source: Boyne Smelters Ltd.

Source

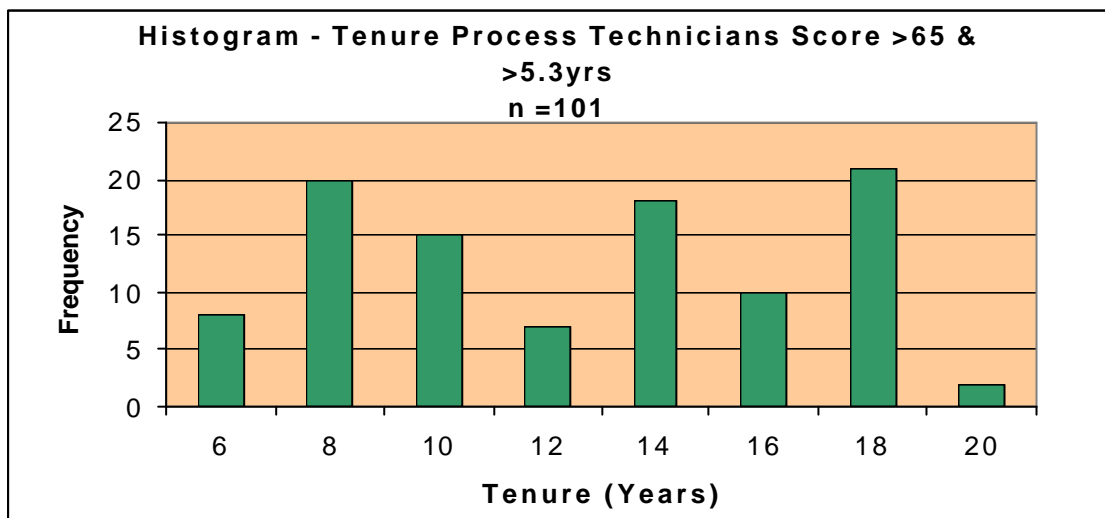
**Table 2: WPA Scores and Tenure of 492 Process Technicians**

	Number	Median	Mean	Std Dev.
<b>Perf Score</b>	492	62	61	11.5
<b>Tenure</b>	492	3.2	5.4	4.60

Source: Boyne Smelters Ltd.

When the mean tenure of 5.4 years and the WPA score of 65 was applied, the final population of interest for the research was determined at 101 employees. The histograms for both tenure (Figure 4) and the WPA scores (Figure 5) below are accompanied by Table 3 to provide the basic data.

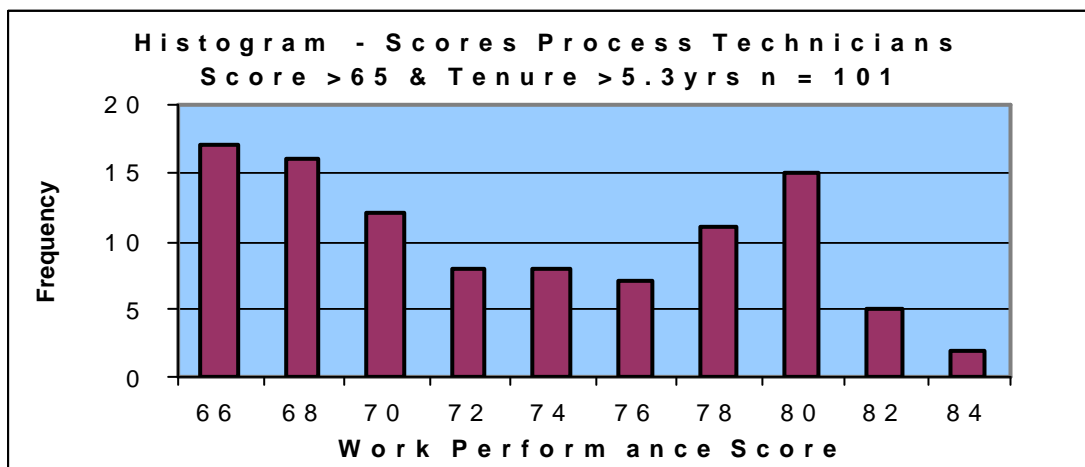
**Figure 4: Tenure of 101 Process Technicians in Population of Interest**



: Boyne Smelters Ltd.

Source

**Figure 5: WPA Scores of 101 Process Technicians in Population of Interest**



Boyne Smelters Ltd.

Source:

**Table 3: WPA Scores and Tenure of 101 Process Technicians in Population of Interest**

	Number	Median	Mean	Std Deviation
<b>Perf Score</b>	101	72	73	5.5
<b>Tenure</b>	101	12.6	11.6	4.10

Source: Boyne Smelters Ltd.

With this background, the results of the questionnaire distributed to the whole population of 101 employees are presented in accordance with the research objectives. The results are presented as percentages for clarity. The following tables are calculated from the original counts as provided in Appendix 4.

### QUANTITATIVE DATA

Although not essential to an understanding of employee background **Question 1** asks the respondent to provide the number of years they have worked at BSL and was included to provide a comparison of the distribution of years of service for the respondents against the population. The results confirmed what was found in company records as displayed in Figure 4. As all respondents were to remain anonymous, it also provided a form of check to confirm that the person who responded was a member of the population of interest to avoid the inclusion of questionnaires copied and distributed to others who may fall outside the group, but want to contribute.

The length of service in previous employment of those who responded has a wide range of 1–14 years. Over 70 percent had employment in their role prior to commencement at BSL of six years or less, whereas 21 percent had ten years or more. In the job prior to that, 26 percent had only one job prior to BSL and 62 percent spent between one and ten years in that role. BSL was first full-time employment for only 3 percent of those in the long-term high performing group of employees.

Over 30 percent of the respondents had only one full-time job prior to joining BSL. Table 7 reveals that only one of the respondents had no previous full-time employment.

**Table 4: Tenure of Respondents in Last Job**

Question 2	A														Total
Years	1	2	3	4	5	6	7	8	9	10	11	12	13	14	Total
Percent	13	16	8	11	13	13	0	5	0	13	3	0	0	5	100%

**Table 5: Tenure of Respondents in Second Last Job**

Question 2	B														Total
Years	0	1	2	3	4	5	6	7	8	9	10	11	13	14	Total
Percent	26	5	13	13	8	10	8	5	5	0	2	5	0	0	100%

**Table 6: No Previous Full-time Employment Prior to BSL**

Question 2	C	
Yes	3	Total
No	97	100%

Traditionally, process technician roles at BSL have been dominated by male employees and the percentage of female staff in these roles has grown in recent years and overall is higher than indicated in the responses to **Question 3**.

**Table 7: Gender of Respondents**

Question 3		
Female	3	Total
Male	97	100%

Responses to **Question 4** indicate clearly that the majority of recruits were between the ages of 18 and 35 years at commencement and 50 percent were under 30 years of age.

**Table 8: Commencement Age of Respondents**

Question 4										Total
Age	U25	25-30	31-35	36-40	41-45	46-50	51-55	56-60	Total	
Percent	26	29	26	13	3	3	0	0	100%	

**Question 5** aimed at determining the nature of prior employment, and provided data that may indicate commonality in the type of work experience prior to commencement. Most respondents (80 percent) had performed work that involved trade, driving, industrial, agricultural and construction work.

**Table 9: Type of Prior Work of Respondents**

Question 5															Total
Type	Ag	Off	M/Trd	E/Trd	B/Trd	Opr	Ret	Wsle	Def	HS	Dri	Cons	Other	Total	
Percent	15	0	10	0	10	18	8	0	3	0	13	13	10	100%	

**Questions 6 and 7** were aimed at identification of sports, leisure and community activities and participation that could be influential in contributing to success in work teams and organisational commitment. The following tables show a strong indication of team sports as the main form of participation.

**Table 10 & 11: Non-work Team/Group Activities**

Question 6						
Type	Ser	Com	Spt	None	Otr	Total
Percent	5	13	54	26	2	100%

Question 7				
Type	Team	Solo	None	Total
Percent	51	21	28	100%

The responses to **Question 8**, displayed in Table 12, revealed that the overwhelming number of employees who responded (72 percent) were living in the local Gladstone area at the time they accepted a role at BSL.

**Table 12: Place of Residence at Commencement**

Question 8							
Location	Local	CQ	Bris	Reg.Q	Inter	OS	Total
Percent	72	8	5	13	2	0	100%

## QUALITATIVE DATA

In **Questions 9 and 10**, respondents were asked to write in the space provided the main reason they would give for staying as long as they have at BSL and the one reason they might leave the organisation. These responses have been categorised as shown in Tables 13 and 14 below.

**Table 13: Reasons for Tenure at BSL**

Question 9	
Reason	Percent
External Prospects	21
Family	13
Money	21
Job Satisfaction	8
Location	15
Roster 12	5
Staff Conditions	2
Job Security	13
Superannuation	2
Total	100

**Table 14: Potential Reasons for Leaving Employment at BSL**

Question 10	
Reason	Percent
Advancement	15
More Money	38
Conditions	15
Management Practices	18
Removal	8
Under Utilisation	2
Lifestyle	2
Total	100

The opportunity to earn more money elsewhere is the main reason given to leave employment at BSL (38 percent). Dissatisfaction with management and the lack of opportunity for advancement in employment are also important, comprising a further 33 percent.

The final question revealed the respondents' educational level as shown in Table 15. The responses indicate that none of the respondents has less than a Junior High School education and the majority have higher levels of education.

**Table 15: Level of Education Attained**

Question 11							
Level	Pri	Jun	Sen	TAFE	Ter	Otr	Total
Percent	0	36	26	33	5	0	100%

## DISCUSSION

### Quantitative Data

The data in Table 4 confirm that the average tenure in the respondent group is the same as that of the population of 101. This is an encouraging indication that the 40 percent who responded are representative of the population.

The degree of prior employment before commencing in a process technician role is significant among the respondent group. The majority of the respondents, as indicated in Table 4, had a solid work history with an average of 4-5 years in each of two jobs prior to joining BSL. As noted previously, the literature recognises a clear link between tenure in previous and current employment (Healy 1995; Robbins 1998). This may be one of the most significant statistics from this group of data and prior employment in at least two roles may be an indicator of organisational commitment and job performance.

In Table 10, the responses — related to type of previous work — provide some support for certain work experiences being conducive to success in process technician roles. Almost 80 percent of those who responded have worked in previous employment that has practical and technical skills similar to those required for process technician roles. These include mechanical and building trades, agriculture, driving, process operation and construction experience. This is a positive indication that selection processes should look for this experience in applicants for these roles.

Over 50 percent of respondents had participated in team sports activities prior to commencing at BSL. As indicated in the review of the literature (Schneider & Schneider 1990; Sharf 1990; Gunter et al. 1993) this has shown connections to successful team participation in the workplace. This should be an important consideration for BSL since team membership and leadership principles are pursued as core requirements in output teams.

Another significant characteristic of the respondent group is that 72 percent were resident in the Gladstone area at the time they accepted a role at BSL. This is strong support for the continuation of the current policy of placing a preference on applicants in the local region. This element of local ties was noted in the literature as significant for turnover (Healy 1995).

### **Qualitative Data**

Information was obtained on the respondents' motivation for staying in the organisation or what may cause them to leave. The lack of external prospects for other employment and money or financial requirements accounted for 42 percent of motivation to stay. Family commitments, job security and the geographical location of the workplace and community accounted for another 41 percent of the reasons for remaining. Conversely, 38 percent would leave if they could obtain more financial compensation. A further 30 percent would go if they could improve their opportunities for job advancement and conditions of work. Dissatisfaction with the practices of management accounted for another 18 percent of responses. Given that these issues are important to the higher performers in the organisation with presumably high levels of experience, knowledge and skills, these responses are significant.

The final important factor for high performing process technicians is that 64 percent have educational attainment at senior high school, technical college or tertiary level. A further 36 percent have attained Junior Certificate level at high school. These educational levels are important factors not to be overlooked in selection for these roles, considering the technical demands of the smelter in most areas are certain to increase.

### **CONCLUSIONS AND RECOMMENDATIONS**

A study such as this is useful in providing confirmation of existing recruitment practices or identifying information not previously available. The following address both of these contingencies.

The respondents represent a healthy proportion of the 101 employees who are considered as longer-term, high-performing process technicians whom the company would be keen to retain and continue to attract to the organisation. The data provide some interesting and significant

results that will be valuable when considering how to recruit the right people for process technician roles.

The research was successful in providing the following from the respondent group in the population of interest:

- An average tenure equivalent to the population.
- Evidence of solid organisational commitment through the length and number of previous roles prior to BSL.
- A clear picture of the age of applicants when they commenced at BSL.
- Higher attainment in education than the researcher and others in the organisation considered to be likely.
- A clear understanding of prior work experience and skills.
- A high level of participation in community and sporting activity.
- Clear evidence that most high performers commenced work at BSL as a local resident.
- A variety of significant potential reasons why these high performing longer-term process technicians might leave the organisation or their motivation for staying.

The following are presented as the key issues to be considered for application in the process of recruitment.

Applicants with the following key characteristics should be carefully considered:

- At least two previous roles in full-time work for a period of at least 2-3 years.
- Experience in previous roles should favour technical, trade, or process operating roles that could involve mobile equipment operation including those with experience in agricultural contexts.
- Participation in team activities in the community through sport or other community groups.
- Assuming that the technical requirements of the role will increase, applicants with post Junior levels of educational achievement should be preferred when all other attributes are equal.

In addition the following would appear fruitful in retaining a higher number of staff:

- Continued preference for recruiting people who are established in the local area.
- Ensure that the level of financial compensation for the role keeps pace with that provided for similar roles, particularly in other local industries.
- When the need arises to attract suitable applicants from outside the local area, place a greater emphasis on the quality of life the region offers, particularly for families.



- Obtain information on what process technicians believe about the conditions under which they work so that appropriate improvements can be pursued.

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### Appendix 1: Background Questionnaire

<p>1. How long have you been employed at BSL?</p> <p style="text-align: center;"><input style="width: 40px; height: 20px;" type="text"/> Years</p>	<p>6. What MAIN community participation have you had (please tick one box only)</p> <p><input type="checkbox"/> Service club (Apex, Lions)</p> <p><input type="checkbox"/> Community group (Lifeline, SES)</p> <p><input type="checkbox"/> Sporting Club</p> <p><input type="checkbox"/> None</p> <p><input type="checkbox"/> Other (please specify)</p> <p>_____</p>
<p>2. How long did you stay in your last <u>TWO</u> full-time jobs before joining BSL?</p> <ul style="list-style-type: none"> <li>• Last job <input style="width: 30px;" type="text"/> Years</li> <li>• Job before that <input style="width: 30px;" type="text"/> Years</li> <li>• BSL was first full-time job <input style="width: 30px;" type="text"/></li> </ul>	<p>7. When you started at BSL, what sport were you actively involved in?</p> <p><input type="checkbox"/> Team sport (football, cricket)</p> <p><input type="checkbox"/> Solo sport (tennis, golf)</p> <p><input type="checkbox"/> None</p>
<p>3. Please indicate your gender</p> <p style="text-align: right;">Female <input style="width: 20px;" type="checkbox"/></p> <p style="text-align: right;">Male <input style="width: 20px;" type="checkbox"/></p>	<p>8. Where were you living at the time you accepted a role at BSL (please tick one box only)</p> <p><input type="checkbox"/> Local Gladstone area</p> <p><input type="checkbox"/> Central Qld</p> <p><input type="checkbox"/> Brisbane region</p> <p><input type="checkbox"/> Regional Qld</p> <p><input type="checkbox"/> Interstate</p> <p><input type="checkbox"/> Overseas</p>
<p>4. What was your age when you started at BSL?</p> <p><input type="checkbox"/> Under 25</p> <p><input type="checkbox"/> 25 – 30</p> <p><input type="checkbox"/> 31 – 35</p> <p><input type="checkbox"/> 36 – 40</p> <p><input type="checkbox"/> 41 – 45</p> <p><input type="checkbox"/> 46 – 50</p> <p><input type="checkbox"/> 51 – 55</p> <p><input type="checkbox"/> 56 – 60</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/></p>	<p>9. What would you give as the <i>main</i> reason you have remained at BSL?</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>5. What was the MAIN type of work you did Before coming to BSL (please tick one box only)</p> <p><input type="checkbox"/> Agriculture, forestry, fishing</p> <p><input type="checkbox"/> Clerical/Office</p> <p><input type="checkbox"/> Mechanical Tradesperson</p> <p><input type="checkbox"/> Electrical Tradesperson</p> <p><input type="checkbox"/> Building Tradesperson</p> <p><input type="checkbox"/> Process Operator – industrial</p>	<p>10. If you decided to leave BSL what would be the <i>most likely</i> reason?</p> <p>_____</p> <p>_____</p> <p>_____</p>
<p>11. What is the <u>highest</u> level of education you have completed?</p> <p><input type="checkbox"/> Primary School    <input type="checkbox"/> Junior Secondary</p> <p><input type="checkbox"/> Senior Secondary    <input type="checkbox"/> Trade/TAFE</p> <p><input type="checkbox"/> Tertiary (Uni, College)</p> <p><input type="checkbox"/> Other (please specify)</p> <p>_____</p>	

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<p>Retail trade Wholesale trade Defence force Health services Driving/plant operation Construction Other (please specify)</p> <hr/>	<p>Thank you for taking the time to participate.</p> <p>Please forward this form by internal mail to Tony Egan at "Red 3"</p>
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