

Skilled labour in the Footwear Industry of KwaZulu-Natal.

BY

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EXECUTIVE SUMMARY

This dissertation was compiled to place into context and to address the problem of skills shortages in the footwear industry of KwaZulu-Natal. It is often said that the voice that shouts the loudest, and the one that has the most media coverage usually acquires the most buy-in and belief, however this is not the most reliable source. The current demise of the local footwear industry has been attributed to the lack of Government protection and the lack of productivity of the local workforce, in the wake of globalisation.

This dissertation presents to the reader a review of recent literature on the topic of skills shortages and also encompasses and endeavours to address the issue of the shortage of skills in the footwear industry. The reader is also provided with an insight into the background of the South African footwear industry, which has been highlighted to give the reader an understanding of the problems facing the footwear industry. Due attention and consideration has also been placed on the effects of globalisation on competitiveness in the footwear industry of KwaZulu-Natal, and how the lack of skilled labour and higher labour costs due to more labour being required, accentuates the apparent problem.

A quantitative study of the skills shortage in the footwear industry of KwaZulu-Natal was also conducted and incorporated to provide more conclusive feedback and results. This process entailed conducting telephonic interviews with thirty-four Production managers of the total number of manufacturers, to assess the following:

1. The extent to which the KwaZulu-Natal footwear industry lacks skilled labour.
2. Whether the lack of skilled labour leads to the production of inferior quality footwear.
3. Whether or not manufacturing techniques require more labour as a result of individuals not being adequately skilled.

4. If the overall cost of the production of a shoe is rendered as being higher as a result of more labour being required to execute the production.
5. To determine if footwear manufactured in KwaZulu-Natal can compete with international standards with respect to the footwear industry.

The research study considers and tests nine different hypotheses. The instruments used in the questionnaire were tested for reliability with the use of the Cronbach's Alpha Coefficient, which is regarded as the most common way of measuring reliability. The study of the findings includes a descriptive statistical analysis and a correlation analysis of the variables. An interesting finding is the correlation between hypotheses two (The lack of skilled labour leads to inferior quality footwear) and four (As a result of more labour being required the overall cost of the shoe is higher) which produced an exceptionally high correlation, i.e. $r = 0.58$ and significance < 0.01 . This implies that there is a strong correlation between inferior quality footwear produced by labour short of skill and the overall cost of the footwear. Bearing in mind that correlations simply show the degree of the relationship and do not show causality, the results appear to indicate that skilled labour produce higher quality footwear than unskilled labour, and that fewer skilled operators are required to do the same job. Findings of this nature are discussed in the study, which assist in the conclusion of the research conducted.

The following recommendations have been formulated from a close study of the findings of this research study.

1. As a recommendation, employer-based surveys or interviews which gather information from individual employers on workers' specific skills in the footwear industry will help **measure skills available** (Barker, 1999:212).
2. To improve the return on their investment, to encourage employers to provide opportunities for their employees to acquire new skills, to encourage employees to participate in training programs, and to improve the employment prospects of those not currently employed. More emphasis

needs to be placed on labour intensive manufacturing processes by **government**, as it is the view of the industry that nothing significant was being done (Stryker *et al.*, 2001:6).

3. It is important that the industry has the correct **apprenticeship programs** in place to secure the existence of these skills. Barker (1999:233) states that new patterns of work often also require flexible and highly skilled workers. With restructuring of management it is common place where workers are required to function without direct supervision and to be able to correct small hiccups in the production process on their own initiative.
4. **Job rotation** will have the following benefits to the industry. The worker becomes more versatile thus learning new skills. With these new skills he can move to a higher paid position when a vacancy occurs. The company benefits in that they have a more highly skilled labour force that are able to step into a position when the need arises unlike the situation today where certain skilled positions have no 'back-up' (Human Sciences Research Council, 1999:33).
5. New market areas, new products, new ways of producing and providing services are reshaping the skills required. The industry has to keep abreast of the latest skills and technology available by having product fares inviting international companies to introduce modern technology locally. And in essence becoming more involved with the international industry from an **innovation** point of view (Bhorat *et al.*, 2003:46).

The writer has put forth an action plan to make implementation of these recommendations practical in the workplace.

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I would like to thank the following people for their valuable contributions:

1. Dr. Clive Hunter, my supervisor whose guidance has encouraged me to complete my dissertation.
2. My wife Shainum, my parents, my sister Mohini and my children Sayug and Shraya for their patience and undying love and support.

DECLARATION

Except where otherwise specified in the text, this dissertation is my own work.

A handwritten signature in cursive script, appearing to read 'Dashenthren Moodley'.

Dashenthren Moodley, November 2005.

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(analyzing job skills in the KwaZulu-Natal Footwear Industry)

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12.1 SAFLIA

Southern African Footwear & Leather Industries Association.

12.2 SACU

Southern African Customs Union.

CHAPTER ONE

INTRODUCTION TO THE RESEARCH PROBLEM

1.1 Introduction

The main aim of this study is to investigate the apparent shortage of skills and its impact on productivity in the footwear industry of KwaZulu-Natal. This chapter provides a brief background to the KwaZulu-Natal footwear industry under investigation and highlights the research problem. The overall purpose of this investigation and expected outcome is covered under the heading objectives and hypotheses. The elements on time parameters and limitations of the research relevant to the topic are discussed under the heading limitations of the research. Definitions of key terms regularly used in this investigation and key assumptions made follow. In the last paragraphs of this chapter the importance of this investigation and the chapter summary provides the concluding remarks.

1.2 Background and the apparent problem

The shoe industry faces somber times, some of which it has brought on itself. The Footwear Manufacturers Federation admits certain shortcomings exist in the quality of products and pricing structures, which it is attempting to resolve. Lack of quality is a direct consequence of poor workmanship. Poor workmanship is a result of inadequate skilled labour (SAFLIA, 2003:3).

The writer's motivation in addressing this topic is to expose the apparent problem of unskilled labour in the South African Footwear Industry. The manufacture of footwear is an exciting and fulfilling skill, it can be looked upon as an art and in many countries it is. Many young enthusiasts from many countries look at the manufacture of footwear as a lucrative career option, but not so in South Africa.

Before the 1960s, the footwear industry was more like the British footwear industry; it had a highly skilled European workforce. The apartheid era, with its apartheid education and racist job reservation brought about a significant change in the Footwear Industry. Cheaper unskilled labour replaced the skilled workforce of yesteryear, workforces increased in number and quality started declining (Harrison *et al*, 1997:18).

Sanctions protected the industry from outside competition. This meant that fashion from the fashion capitals, namely Italy, England and America, could now be copied for the South African market. As a result South African Footwear fashion is two years behind the rest of the world. Trendy footwear fashion like the 'Square-toe shoe' only hit South African markets in 1999 although it had been out on European markets in 1997. There was no need for highly skilled, highly paid innovative designers; instead, cheap copycats replaced them (Harrison *et al*, 1997:18).

Globalization has brought tough competition to our doorstep. Previously, the footwear industry was a protected industry with very little or no competition, as a result training in the form of apprenticeships was almost non-existent. Meanwhile, with our overseas counterparts competition was prompting innovative ways to improve quality and productivity. Hence a huge gap exists between the local manufacturers and their global competitors.

The labour intensity of imports had been steadily rising. Footwear imports have soared to levels last experienced in the mid nineties when imports accounted for 52% of the footwear market and in volume terms reached 63.34 million pairs. In 2001 a new record was set with imports as a percentage of the footwear market as high as 67%, which was repeated in 2002. In absolute terms the imports of 58.93 million pairs in 2002 is the second highest ever and 12.40% up on that of 2001 (SAFLIA, 2003:12).

TABLE 1:**SACU FOOTWEAR SECTOR MARKET: '000 PAIRS**

YEAR	FOOTWEAR PROD. SACU	FOOTWEAR IMPORTS	TOTAL FOOTWEAR MARKET	IMPORTS AS % OF MARKET
1990	81722	12043	93765	13
1991	84585	17021	101606	17
1992	63508	18250	81758	22
1993	65846	33037	98883	33
1994	63558	35870	99428	36
1995	58301	63378	121679	52
1996	48437	48811	97248	50
1997	48334	35286	83620	62
1998	39282	36315	75597	48
1999	32823	32047	64870	49
2000	29692	49155	78847	62
2001	25767	52789	78556	67
2002	29400	58930	88330	67

(Source: SAFLIA Annual Report, 2003:12)

According to Borat *et al.* (2001:4), initially imports did not appear to have a significant labour displacing effect, with the two most labour intensive sectors – footwear and wearing apparel – showing import declines between 1984 and 1993. But import penetration then steadily rose, with the strongest growth recorded in the labour and ultra-labour intensive sectors where imports rose at an annual average rate of 9.02 percent and 18.48 percent respectively. Growth was strongest in furniture, footwear and wearing apparel, all ultra-labour intensive sectors (Bhorat *et al.*, 2001:5).

As imports increased, there was a disturbing shift in the demand for skills with the unskilled labour sectors losing out to increased competition from labour intensive producers such as China and India. The result was a shift towards more technology intensive skilled labour, with a

worrying trend away from Black labour intensive industries towards relatively white labour-intensive industries. This would exacerbate wage inequalities in South Africa (Bhorat *et al.*, 2001:7).

The South African economy suffers from a chronic shortage of skilled labour (Mdladla, 2000:3). This has negative consequences in terms of economic growth and may have hindered the development of more labour intensive sectors. It is the lack of skilled labour that prevents us from moving up the value chain to compete at the more profitable middle and higher levels of the market. It is the lack of skilled labour that holds back productivity advances at an enterprise level. Africa can no longer be confined to unskilled and cheap labour. They need skilled workers and the lack of skilled workers is one of the biggest obstacles to employment growth in South Africa at present (Mdladla, 2000:5).

1.3 Objectives and hypotheses

The overall aim of this investigation is to determine whether the apparent problem of a shortage of skilled labour actually exists. Harter (2001:10) said, "Unless the work force is committed and fully engaged in the vision and operation of the organization, its leadership and management cannot hope to achieve the measure of success they anticipate".

Linde (in Harrison *et al.*, 1997:22) stated that the Footwear Manufacturer's Federation has made numerous deputations and proposals to the Government pleading for measures to halt the collapse of the industry but to no avail. The industry now needs to employ measures to help themselves and herein the worker plays a pivotal role.

1.3.1 The specific objectives therefore are:

- a) To investigate the extent of skills available in the footwear industry.
- b) To investigate the impact of a shortage of skills on the quality of the footwear.
- c) To investigate whether a shortage of skills impacts on the quantity of labour required.
- d) To investigate the impact of a shortage of skills on the cost of the footwear produced.
- e) To investigate the impact of a shortage of skills on the competitiveness of the footwear industry in KwaZulu-Natal.

1.3.2 Hypotheses to be tested by this research

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear.

Hypothesis 6: The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.

Hypothesis 7: The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing overall cost of the shoe.

Hypothesis 8: The difficulty to source skills providers leads to a lack of skilled labour which in turn leads to inferior quality footwear.

Hypothesis 9: The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

1.4 Research design

According to Saunders *et al.* (2000:97) in quantitative research one is looking for data, which can be analysed statistically to produce quantified results, which can be applied more widely.

In this study, the population size was sixty seven footwear manufacturers (SAFLIA, 2003:10). The informal section was difficult to quantify and qualify. The same questions were posed to each of the thirty four manufacturers that made up the sample. The aim was also to conclude directly without further inference that if the majority of the respondents responded in a certain manner, a similar response would have been received from the majority of the population sample.

1.5 Limitations of the research

The following sub paragraphs highlight the major constraints in performing this investigation.

1.5.1 Time constraints

Due to the degree being undertaken on a part-time basis, the writer was constrained in the availability of time. The writer rationalized that a telephonic survey would save time.

1.5.2 Other limitations

The footwear industry is characterised by high labour turnover and high rate of factory closures. The method of telephonically answering the structured questionnaire was expected to be limited by non-responses and a reluctance to answer simple questions. Management was expected to be fearful of disclosing confidential information.

1.6 Assumptions

It was assumed that the respondents to the questionnaire would be able to interpret them correctly and to seek clarity from the writer should they have any doubt.

1.7 Definitions

1.7.1 Stuck-on / cemented construction

This is a method of constructing footwear by attaching of the sole with adhesive to the bottom of the shoe (Miller, 1976: 206).

1.7.2 Stitch down / Veldtschoen

This is a method of constructing footwear by attaching of the sole, by stitching the sole onto the bottom of the shoe (Miller, 1976: 207).

1.7.3 Direct Injection

This method of construction involves the direct injection of molten P.V.C. onto the bottom of the shoe (Miller, 1976: 207).

1.7.4 Welted

The traditional method of shoemaking. A special insole having a rib or wall is used. The upper is in-lasted to this rib by means of wires and staples or more recently by adhesion (Miller, 1976: 208).

1.8 The importance of the study

Should this research not be undertaken, the South African footwear industry would mirror their British counterparts and South Africa will eventually be a net importer of footwear. This will be a sorry state of affairs as not only will South Africa lose valuable foreign exchange when they pay for these products but domestic unemployment will also rise. The South African manufacturers continually blame the importation of cheap footwear and low productivity levels as being the cause of their ailing local footwear industry. This study highlights that there are other important factors which also need to be taken into consideration before assessing the merits or otherwise of low productivity and cheap imports. South Africa has numerous advantages, which should enable them to be a global player in the world footwear market.

1.9 Outline of the research report

Chapter two reviews the literature both current and past on the apparent problem. Chapter three provides a detailed background into the industry under investigation covering various aspects and providing the most recently obtainable statistical data.

Chapter four provides a detailed description of the research methodology that was employed to undertake the investigation. This lends credibility to the techniques used and assesses reliability on the information so gleaned. Chapter five provides the framework for the analysis of the results and findings from the questionnaire. Chapter six provides a conclusion to the respondents' responses and a discussion of the literature findings with the research findings. Chapter seven recommends an action plan that can be adopted to remedy the identified problem.

1.10 Summary

The identified research problem was discussed briefly in this chapter. The aim and objective of the investigation was brought to the attention of the reader. Thereafter issues such as expected limitations, time constraints, assumptions and definitions were highlighted to present the conditions under which this investigation was carried out. The merits of this study as discussed under 1.8 which will bring to the attention of the major role players in the industry, the importance of having a skilled workforce.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews important surveys, theories and writings on the subject of skills shortages from the early nineteenth century to the present day. It provides the theoretical background to the research problem. A funnel approach of the topic is adopted in first looking at the importance of a skilled workforce and then defining the broad problem of skills shortages in general. Pertinent literature on skills shortages is reviewed; this focuses on factors affecting skills shortages and identifies when such a problem occurs and the measurement thereof.

Thereafter, a look at the background to skills shortages in South Africa is reviewed. A commentary of literature on the shortage of skills in South Africa then highlights the broad problem the country is experiencing and provides an overview of South Africa's plans to deal with the skills deficit. This is followed by a discussion of wages and productivity in the South African context. A review of literature on total quality management, the individual employees' contribution to quality and the role skills play in improving productivity, highlights the road ahead. Finally, the chapter is summarised with concluding remarks.

2.2 The importance of a skilled workforce

Barker (1999:9), states that the workforce is one of the most effective resources that an organisation possesses and it is essential to make effective and efficient utilization of these productive resources to be competitive. He emphasizes that competitiveness is not and should not simply be determined on cost. A highly skilled workforce can do much to increase the flexibility and competitiveness of an organisation. Competitiveness is also enhanced by quality, good design, on-time delivery and quick adjustments to consumers' requirements. To achieve all of these

elements workers who are skilled, provide quality work and can rapidly adjust to changing conditions are required. This can only be achieved by proper training and development.

Barker (1999:233) also states that new patterns of work often also require flexible and highly skilled workers. With restructuring of management it is common place where workers are required to function without direct supervision and to be able to correct small hiccups in the production process on their own initiative. These new patterns, as well as job descriptions that have become much broader and with less strict demarcation between occupations, necessitate the multi-skilling of workers. He points out that trade unions organised strictly on a craft basis often resist the trend towards multi-skilling. They regard multi-skilling as a threat to the existence of the union itself.

2.3 Skills shortages

2.3.1 Definition of skills shortages

The interpretation of skills shortages is a controversial topic, discussed in a number of papers. Skills shortages could reflect either difficulties in hiring new workers or perceived as deficiencies in the existing workforce (Green, 1992:76; Green *et al*, 1998:92). There are many interpretations of what is meant by “skills shortages.” To some it is a general, insufficient supply of skilled or educated labour. To others it means an insufficient supply of technical skills and occupational knowledge resulting in an occupational shortage (Human Sciences Research Council, 1999:24).

According to the Department of Employment in the United Kingdom (1999:5), skills shortages occur when there is a lack of adequately skilled individuals at current levels of pay, conditions of employment and geographic location. In other words, when employers cannot find workers with the necessary skills in their geographic area to do a particular job, there may be skills shortages. There are two kinds of skills shortages: quantitative and qualitative. Quantitative shortages occur when there is a shortage of people who have the necessary skills described in the occupation.

Qualitative shortages occur when there is a deficiency in the skill-set of the people who are working, or want to work, in the occupation.

Brenton *et al* (2000:12) who carried out a study of the footwear industry in Europe, available data does not clearly define skilled and unskilled workers in the shoe industry. This report states that there are manual (skilled) and non-manual (less skilled) workers. For footwear it is clear that the group of production or unskilled workers is far from homogeneous. The process of making footwear can be broken down into distinct stages of production. Accordingly, this division of production stages has brought about a division of labour, which requires a variety of skills from within the unskilled labour force. For example, the cutting of the leather, in which the varying texture of the material must be taken into consideration, is the most highly skilled and best paid job within the group of production workers in the factory. It would appear that wage levels reflect the skill intensity of manual workers in the leather footwear industry. Cutters, vampers, Goodyear stitchers, and so on, are of the highest order of skill and receive the highest hourly wages. This reflects not only that the nature of the job is quite complex, but also that it takes years of experience to work up to full competency.

In a survey conducted by the Human Sciences Research Council (1999:31), it is stated that skills shortages, if extensive and sustained, can limit investment and growth opportunities, give rise to upward pressure on earnings and, thereby, dampen the pace of economic and jobs growth and make it more difficult to reduce unemployment. Trade skills are evident and have been regarded by industry organisations as presenting potential impediments.

2.3.2 Factors contributing to skills shortages

An analysis of skills shortage issues requires an understanding of the factors that influence their development. The impact of many of these has increased in the past decade, particularly global competition, technological change and the sources of supply of skilled labour. At a macro level global competition is a key driver in reshaping industry and influencing the skills it requires. To compete in global manufacturing, industry must focus on making its products and services

competitive not only domestically, but also internationally. New market areas, new products, new ways of producing and providing services are reshaping the skills required of the manufacturing workforce.

In economic terms, a labour shortage occurs when the demand for workers exceeds the supply of those qualified, available and willing to do the job at existing market conditions, including prevailing wages and locations. Labour shortages generally occur because of changes related to economic cycles or structural factors. Structural factors include an aging population, changes in consumer tastes, technology changes, innovations, or institutional changes (i.e. wage contracts, unions or labour market regulations, and government programs). The aging population and the beginning of baby boomers retiring this decade and in increasing numbers next decade are often cited as key structural evidence of future labour shortages (Human Sciences Research Council, 1999:33).

Periods of strong economic activity, and particularly the top of the business cycle, are more likely to have general and skilled labour tightness or shortages. Typically such imbalances will resolve themselves. By contrast, structural factors tend to result in skill shortages in particular occupations, sectors or regions and likely require government and industry responses. These include education and training programs, labour market information, immigration policy, and mobility or industrial incentives (Human Sciences Research Council, 1999:34).

Changing technology is a major factor which contributes to shortages in various trades. The passing out of use of older skills and increasing use of contract labour, the passing out of use of some trade skills partly accounts for unemployment and skills shortages coexisting in individual trades. To put the above statements into context the following examples illustrate the effects of changes in skills requirements, changing technology and the increasing use of sub-contracting.

- Changes in skills requirements have been especially evident in the printing industry where increased use of computing is becoming widespread;
- changing technology is impacting on the work of Motor Mechanics;

- and the fragmented nature of the building industry and the increasing use of sub-contracting have limited training opportunities (Human Sciences Research Council, 1999:35).

According to Breton *et al.*, (2000:15), an important element in the extent to which the decline in employment opportunities for skilled workers in the footwear sector translates into social exclusion is the adjustment costs that such workers face in obtaining employment elsewhere in the economy. If workers released by the footwear sector spend long periods without work, due perhaps to the sector specificity of the skills that they possess or locational factors, then the social costs of the decline in the footwear industry will rise due to these workers being quickly re-employed in other sectors.

2.3.3 Measuring skills shortages

According to Barker (1999:212) one approach to measuring labour shortages is through economic indicators such as general and occupational employment growth, unemployment rates, and wage growth. Employment outcomes of recent graduates also provide good indicators. Another approach is employer-based surveys or interviews on recruitment experience and future expectations. This approach tends to result in opinion-based information.

According to a report by the Youth & Labour Market Services Ministry of Advanced Education in the United Kingdom (2001:5), there are two key detection or measurement approaches:

- Economic or market indicators such as employment growth, unemployment rates, wage growth, new hires and vacancy rates for particular occupations. This provides indicators from which statements of market imbalances are inferred.
- Employer-based surveys or interviews which gather information from individual employers on recruitment and retention of workers in given occupational groups or with specific skills (Youth & Labour Market Services Ministry of Advanced Education, 2001:7).

According to a study by the Brunel University (2004:6), economic indicators provide an objective view of labour market imbalances over time, but they may not work well for some regulated labour markets (e.g. nurses or teachers). Although employer-based surveys provide more subjective information they do directly reflect the employer's current situation with respect to availability of skilled labour. However, employer responses may also reflect shortages of skills. In addition, employer surveys or interviews do not necessarily distinguish between recruitment for actual job vacancies and potential new positions that are part of expansion plans.

The report by the Human Sciences Research Council (1999:17) further states that skill shortages are an indicator of structural imbalances and a guide to where attention can best be directed to focus reform and provide skills that will overcome these impediments, support employment growth and reduce structural unemployment. While many skills shortages do not provide direct job opportunities for unemployed people, addressing such shortages in sectors such as Intellectual Technology and hospitality can open up associated less skilled jobs that will provide job opportunities for the unemployed.

Skill shortages typically relate to higher skilled occupations and specialised experience for which most unemployed people are not suitable; measures to encourage qualified workers to move readily into areas of skill shortages can open up vacancies for the unemployed; and for some occupations, including the Trades, factors such as outmoded skills can limit the competitiveness of formally qualified job seekers (Human Sciences Research Council, 1999:19).

2.4 The skills shortage in South Africa

2.4.1 Background

According to Stryker *et al* (2001:3), some of the problems of poverty and unemployment in South Africa are inherited from the earlier era of apartheid. Racial segregation resulted in a highly segmented labour market, with marked discrimination based on race and gender. Blacks in rural

areas were heavily penalised by restrictions on their movements outside the homelands, and inadequate infrastructure and social services. Blacks everywhere suffered from insufficient and poor education, which denied them access to the best jobs even after these jobs were made available to them. The result was widespread and increasing poverty and unemployment.

Bhorat *et al* (1999:10), state that once restrictions on the rights of Africans to unionise were lifted in 1979, resulting in rapid growth in union membership. Real wages of African workers in manufacturing rose approximately 50%, while the wages of the White workers remained relatively constant. This resulted in some catching up of Africans to Whites. But it also occurred at a time when the demand for lower skill levels, in which Africans were heavily represented, was falling, while that for higher skill levels, dominated by Whites, and was rising. With no demand and an African labour force that was growing at about 2.8% per year, the rising wages for African workers contributed to growing unemployment. Indeed, by 1995, roughly half of all Black workers, the vast majority of them Africans, were without formal sector employment.

Stryker *et al.*, (2001:6) also state that very early on the new ANC government renewed the commitment that South Africa had already initiated to reopen itself to the global economy and to join the newly created World Trade Organisation. This had a number of important implications. First, it implied that tariff rates, which were at very high levels, would be reduced; that the structure of tariff rates would be simplified; that quantitative restrictions on trade would be eliminated; and that the General Exports Incentive Scheme (GEIS) would be replaced by supply-side incentives consistent with WTO membership.

They also point out that the result of these reforms was a “cold bath of competition” from imports pouring into the South African economy. Especially hard hit was the clothing and textile industry, which had been highly protected before, and, even though it had a transition period somewhat longer than the rest of the economy, nevertheless underwent a very painful adjustment. Throughout the entire economy firms were faced with the necessity of cutting costs and becoming competitive. This resulted in the laying off of workers and the rehabilitation or renewal of equipment. On top of this was a continuation of the long-term decline in sectors that had

traditionally employed a considerable amount of low and semi-skilled labour – sectors such as agriculture, mining, and construction.

2.4.2 The current situation

Mdladla (2000:7) reports that it has become common knowledge that one of the factors constraining our economy from growing to optimal levels, attracting foreign direct investment and increasing job opportunities is the skills deficit our country inherited from our apartheid past. Economists have a habit of telling us that the demand for labour is a derived demand and that the work that people do is a reflection of the goods and services that society produces. This certainly appears to be correct when we look at how the sectoral distribution of jobs in our economy has changed over time.

Furthermore, our economy has been going through a process of structural change during the last few decades. This has seen the GDP share of agriculture and mining decline compared to the increasing share of services. Employment in mining and agriculture has declined significantly; in manufacturing the fall was less rapid, whilst the share of employment in services has actually increased.

According to Mdladla (2000:7), globalisation and the associated increases in investment and capital flows are known to contribute to the changing nature of employment. He states that technological progress and changes make it possible to replace humans with machines and reshape production through new forms of industrial organization. Changes will affect where employment is located, the nature of the employment relationship, skill requirements and their distribution.

After 1994, in the face of globalisation South Africa was gripped in a crisis of not having sufficiently skilled managers and workforce. The Human Sciences Research Council (HSRC) (1999:2), states that at the time there was a shortage of more versatile and experienced managers and professionals across all sectors of the South African economy. The vast majority (76%) of the 273 organisations involved in the study reported that they did not have adequate skilled human

resources. More than half (52%) of these organisations experienced shortages in the professional category. Fifty-four per cent of the 113 organisations that employ engineers indicated having problems in recruiting professional engineers – especially mechanical, civil, electrical and industrial engineers. Shortages of engineering technicians were experienced by 25% of the 65 organisations in the sample employing these skills. Half (50%) of the 116 organisations that employ IT professionals reported a need of them. Shortages of computer programmers, as well as systems analysts and software engineers were often mentioned.

The report states that, nearly a fifth (17%) of organisations that employ accountants and related professionals experienced a lack of these skills. Shortages were also reported in the following subcategories: economics (economists, financial analysts, investment specialists); medicine (practitioners, as well as trauma, intensive care and theatre nursing staff) and mathematics (actuarial occupations).

According to the HSRC (1999:2) report, shortages put upward pressure on the remuneration of certain categories of highly skilled people – to the extent that some employers can no longer afford those skills. Some organisations also reported that they were compelled to employ under qualified staff in positions that actually require highly skilled managers, professionals and artisans. The study states that in some instances employees were developed and trained to increase the supply of scarce skills while other organisations selectively downsized in other areas to employ more needed skills. The report notes that the international competitiveness of manufacturing suffers from a lack of skilled labour. It goes on to say that this sector was protected mainly by tariffs (The Human Sciences Research Council, 1999:2).

In a more recent research report by Stryker *et al.*, (2001:4), the small and medium-sized firms are seen as the major employment generators in the South African economy. In addition, the inability of the formal economy to absorb new entrants into the labour market implies that many workers must fall back on the informal sector, including self-employment, as an available option. The report goes on to say that this is partly because the absence of specialised training of most school-leavers, combined with the poor skill base of much of the potential workforce, results in a pool of

mainly unskilled or semi-skilled labour, whereas formal sector jobs increasingly require higher skill levels. The implication is that the rising demand for higher skills is a definite problem. Today's skills shortage presents an enormous challenge, especially for the 42% of the unemployed who are young people with more than nine years of schooling. To date, opportunities for technical and vocational education and training are inadequate.

2.4.3 Training

According to Becker (1964:282) the human-capital theory developed in the early 1960s suggests that education and training are an investment of current time and money for future pay. Becker, one of the founders of this theory, suggests that only general training is transferable from one job to another. Specific training can only be applied in the agency in which the skills are acquired. Therefore, underinvestment in on-the-job training, the most important source in an economy for acquiring skills, is likely to exist.

Becker (1964:284) further states that the Human capital theory assumes that education develops skills that make workers more productive in their jobs. In recent decades, training has become a significant strategy for enhancing the workforce in both developed and developing countries. The driving force behind training is for employers to increase the skills of their employees. Increasing employability is the key factor behind training for employees; they want training to increase job security, increase job mobility, and keep their skills up-to-date.

Aligned to what was impressed upon by Becker (1964:286), Bowen *et al.* (1997:165) state that the government's economic policies are designed to maximise sustainable economic growth and job creation, creating an environment conducive to increased and sustained commitment by employers to training apprentices. The government recognises that enhanced labour market flexibility and greater responsiveness to industry needs are crucial to encourage innovative and internationally competitive enterprises. They go on to state that, enhanced flexibility can help to address skills shortages in two important areas. First, enterprise agreements provide a mechanism for more flexible remuneration arrangements for skills in shortage, and for training arrangements to train

existing workers. Secondly, reformed workplace relations arrangements for new apprentices pave the way for more flexible options for apprentices training, including part-time apprenticeships (in part for school students).

2.4.4 Efforts of education and skills creation by the South African government

2.4.4.1 Introduction

According to Stryker *et al.* (2001:6) when the ANC government came into power in 1994, South African poverty was heavily concentrated in the Black population, especially among Africans, and was seriously aggravated by poor infrastructure and social services in Black communities. Furthermore, the demand for lower skill levels, in which Africans were heavily represented, was decreasing, while that for higher skill levels, dominated by Whites, and was rising.

In South Africa it was very difficult to gauge the extent of in-service training as a result of there not being a data bank register of training present. A crisis was developing in South Africa with respect to education and the shortage of skills. South Africa was losing skilled people through emigration at an alarming rate. The authors of the ILO Review (1996) state that South Africa had performed poorly in all forms of training. They refer to a report of the International Management Development Organisation of Switzerland in 1994, according to which South Africa was ranked last of 14 comparable developing countries in the development of its human resources.

The Skills Development Act and the Skills Development Levy Act came into being to arrest the existing problem. The following two sub-sections deals with these two Acts.

2.4.4.2 Skills Development Act

Bhorat *et al.* (2003:46), state that the purpose of the Skills Development Act is to develop the skills of the South African workforce. This is to increase the levels of investment in education and training in the labour market, to improve the return on that investment, to encourage employers to provide opportunities for their employees to acquire new skills. Also to encourage employees to participate in training programs and to improve the employment prospects of those not currently employed. This is to be accomplished through the establishment of a National Skills Authority and a number of Sector Education and Training Authorities (SETA).

According to Barker (1999:224), the SETAs, which were established within each sector, are developing sector skills plans within the framework of the national skills development strategy and are implementing these plans by establishing practical learnerships. The SETAs are also involved in approving workplace skills plans, collecting and disbursing the skills development levies in each sector to employers, education and training providers, and workers, and monitoring education and training in each sector. The members of the SETAs are representing organised labour, organised employers including small business, relevant government departments, and other interested professional bodies and bargaining councils.

An alliance of the Skills Development Act and the South African Qualification Authority Act was required to promote the quality of learning in and for the labour market. Skills programs that qualify for funding under these Acts must be occupationally based and, when completed, constitute a credit towards qualification in terms of the National Qualifications Framework as defined by the South African Qualifications Authority Act. Anyone who has developed a skills program may apply to the appropriate SETA for a grant or to the Director General of the department of Labour for a subsidy (Barker, 1999:225).

Under the Skills development Act, the Director General has developed a Skills Development Planning Unit within the Department of Labour, which

- Researches and analyses the labour market in order to determine skills development needs;
- To assist in the formulation of the national skills development strategy and the sector skills development plans; and
- To provide information on skills to the Minister, the National Skills Authority, the SETAs, education and training providers, and organs of the state.

Employment services are provided by the Department to workers, employers, and training providers in order to improve the functioning of the labour market (Bhorat *et al.*, 2003:47).

Funding of these programs is provided by the National Skills Fund, which is credited with:

- 20% of the skills development levies contemplated in the Skills Development Levies Act in sectors where there are SETAs;
- all the skills development levies in sectors in where there are no SETAs;
- money appropriated by parliament;
- interest, donations, and other sources.

2.4.4.3 The Skills Development Levy Act

The Skills Development Levy Act calls for every employer to pay a skills development levy at a rate equal to 1.0% of this amount as of 1 April 2001. The levy is not payable where the total amount of remuneration will not exceed R250000 and the employer is not required to register under the Income tax Act. The levies, interest, and penalties collected by the Commissioner are paid to the National Revenue Fund, from which 20% of the amount collected in respect of a SETA is allocated to the National Skills Fund (100% where there is no SETA) and 80% of the amount collected in respect of a SETA is allocated to that SETA (Bhorat *et al.*, 2001:48).

2.4.4.4 Learnerships

According to Barker (1999:261), apprenticeship training declined in the 1980's. This resulted in a decline in the number of people acquiring artisan status. He further states that this decline is partly linked to poor economic circumstances but it also means that South Africa is not gearing itself for the future demand for skilled labour. In addition, the system was inflexible because it tied employers into contractual relationships with apprenticeships for two to four years. The learnership system proposed in the Skills Development Act is intended to address some of these shortcomings.

A recent report by the Department of Labour (2003:31) states that at that time, i.e. 2003, 21000 learners had been registered on 503 learnership programs with the Department of Labour. The National Economic Development and Labour Council (NEDLAC) were urging all employers to take on at least one youth to help drop unemployment and improve the country's skills base. At the time of writing the number of learnerships had increased to 796 with over 80000 learners.

2.5 Total Quality Management (TQM)

There is an international move towards TQM, and this is further driven by the desire of many companies to achieve ISO 9000 standards. Weaver (1997:2) states that millions of dollars are spent on continuous improvement programs, yet some organisations are not seeing progress in quality, productivity, or profits. Unfortunately, it often takes a failed attempt at quality improvement before an organisation realises that its workforce does not have the prerequisite skills to support such an effort.

To some extent, most total quality management (TQM) programs require participants to be skilled in data gathering and analysis, problem solving, communication, and working in teams. Such requirements are not common throughout the workforce; so many workers may fall short of TQM expectations. To top it off, a significant number of employees expected to participate in these activities cannot read, write, or compute adequately.

According to Weaver (1997:2), instead of letting skills deficiencies lead to blame and cripple quality efforts, discovery of the problem can be a wake-up call for an organisation to undergo extensive skill assessment, training, and development at all levels. Weaver outlines a process for building quality and success into a TQM development program by identifying the gap between existing workforce skills and those required for TQM implementation.

Weaver's program is called basic skills for total quality (BSTQ); the training's primary motivation is to empower employees to improve quality and, ultimately, profitability. Empowerment means more than delegating new responsibilities; this only frustrates people if they don't have what it takes to perform their new tasks. According to Weaver, a well-planned BSTQ program should identify the skill requirements of the TQM program, address existing skill levels of an organisation's entire workforce, and provide training for employees to be successful in a TQM environment.

Weaver (1997:3), states that this approach differs from most others because it is not separate from the organisation's quality program. Rather, it is an integral part of the implementation. Weaver ensures that when BSTQ is partnered with TQM, quality terminology is demystified and becomes part of the worker's vocabulary. She points out that participants are encouraged to ask questions that they may be embarrassed to ask in a regular classroom setting; BSTQ students can work at their own pace and develop their skills in a safe environment. Each class is a learning team that gains knowledge in team membership while improving reading and writing skills.

To help avoid some of the stigma that might occur from participating in basic skills training, organisations should announce that everyone, including frontline workers, supervisors, and managers will receive training in appropriate areas and skill levels as part of TQM implementation.

Thus, TQM according to Breton *et al* (2000:23) is one response to intense international competition from low-wage countries. Differentiation of the product in terms of higher quality and in terms of design and fashion would increase competitiveness. They go on to state that a recent

survey of global buyers of footwear products highlights the importance of innovative design in the ability of Italy to compete with other countries who exhibit superiority in terms of price, such as China, India and Brazil. This study also shows the importance of flexibility in meeting orders in influencing buyers' decisions. Italy's leading position in the industry is maintained by "first, its innovative design capability, and second, its strong component industry" (Breton *et al.*, 2000:13) this is enhanced by fast response and high quality in supplying relatively small orders. China on the other hand is considered as a place of cheap shoes of reliable quality. China is also seen to be strong in responding to massive standardised orders.

2.6 Wages and productivity

2.6.1 Defining productivity

Van Ark *et al.*, (2000:1) state that, "labour productivity is defined as the gross domestic product or value added per person employed or, when data on working hours were available, per hour worked".

According to Davis *et al.* (1999:108), productivity is the efficiency with which inputs are transformed into outputs. They also maintain that, ideally, the total productivity of a process should be measured. This is the total outputs divided by the total inputs. Unfortunately, the inputs come in various forms. For example, labour is measured in hours, a building is measured in square feet, and raw material is measured in pounds, units, and so forth. It would therefore be impossible to obtain a measure for the total inputs into a process unless we converted all of the inputs to a common denominator like money.

2.6.2 Implications of skills on wages and productivity

Increasing international competition following South Africa's integration into the global economy from 1994 appears to have prompted firms to become more capital-intensive, adopt more

advanced technologies, hire more skilled workers, and retrench unskilled workers. The well-documented shift in skill composition of production would naturally be accompanied by rising average real wage rates.

According to Barker (1999:123), trade liberalisation and increased openness have induced a structural change in production towards capital-intensive sectors. The unskilled labour component of manufacturing exports is very low compared with certain other labour-abundant countries, and this share has been declining in recent years. Furthermore, the high wage level in South Africa makes us uncompetitive relative to certain other developing countries, which could be another reason why SA firms have continued to invest in capital and technology while decreasing their use of unskilled labour in particular. A key question, then, is whether real wages have grown more rapidly than labour productivity, and hence may be viewed as driving the restructuring, or whether the opposite is the case, in which case rising real wages would seem not to be the primary factor causing employment losses.

On the flipside of the coin, industries that have not had significant technological advancement are still dependant on labour-intensive manufacturing. The footwear and textile industries are very labour-intensive and increased labour costs definitely diminishes competitiveness in these industries. The authors of the ILO Review (1996) state that wage levels are a significant component of overall cost structures across the full range of these labour-intensive activities. Unless producers are simply able to pass wage increases on to their customers a practice limited by trade reform and increased domestic competition there will be a persistent pressure to limit rising wage costs in labour-intensive activities. In fact, as the South African economy becomes more open to international competition, firms will only be able to survive if their costs and productivity are comparable to those of their major international competitors. This has implications for trade and industrial policy as well as for labour market policy. At the very least, South African producers must be able to obtain key intermediate inputs at internationally competitive rates.

The report states that, firms must also ensure that the relationship between wages and productivity is comparable with that of their major international competitors. They are, of course, sensitive to exchange rate movements. The report states that using composite wage and salary figures, South African wages (especially unskilled wages) are high relative to productivity by international standards, accounting then for high unit labour costs.

Industries like the footwear industry determine their wages by collective bargaining. Collective bargaining, according to Barker (1999:143), is when unions and employers or groups of employers bargain collectively on wages and other conditions of employment. Barker (1999:144) affirms that most researchers accept that Unions cause an increased wage differential between unionised and non-unionised sectors. Hamermesh *et al.* (1988:105) have concluded that, at first glance, it seems that unions have caused wages to peak between 10 to 30% higher than in non-unionised situations. Barker (1999:144) further states that, unions might have a positive or negative effect on productivity, and overseas empirical studies in this regard are inconclusive.

Wages in the footwear industry are structured according to the type of function performed and the difficulty thereof. According to Harvey (1985:90), the Hilferding approach conceives of the extra value-creating capacity of skilled labour as entirely dependent upon the amount of labour required for the production of skilled labour-power, while the value-creating capacity of simple labour is conceived as entirely independent of the amount of labour required to produce simple labour-power. He develops the theme that this approach contradicts reality. After saying that there is no reason to assume that the value-creating capacity of labour-power is equivalent to its value, he comments:

“Is not the same thing true of a special skill? Is there any reason to suppose that the augmented physical productivity attributable to an acquired skill will tend to equal that of the training labour spent producing the skill?” (Harvey, 1985:90).

According to Harvey (1985:98), using Hilferding’s method, the training inputs will determine the wage paid to skilled labour, but the additional productivity of the skilled labourer – the use-value

of the education imparted- is independent of the cost of education, and the “value-creating power” of education can only be determined in practice. Skilled labour can therefore add much more value than the education cost.

2.7 Summary

This chapter has reviewed important surveys, theories and writings. The literature states that data does not clearly define skilled and unskilled workers in the shoe industry. It would appear that wage levels reflect the skill intensity of manual workers in the leather footwear industry. Cutters, vampers, Goodyear stitchers, and so on, are of the highest order of skill and receive the highest hourly wages. This reflects not only that the nature of the job is quite complex, but also that it takes years of experience to work up to full efficiency. In England there are learnerships and apprenticeship programs that help develop the skill of new operators.

South Africa is a country that has undergone extensive change and of particular importance is the fact that at a macro level global competition is a key driver in reshaping industry and influencing the skills it requires. To compete in global manufacturing, industry must focus on making its products and services competitive not only domestically, but also internationally. New market areas, new products, new ways of producing and providing services are reshaping the skills required of the manufacturing workforce.

The flooding of our local markets with shoes from Asia has put severe strain on employment and as a result several footwear manufacturers have closed shop. If workers released by the footwear sector spend long periods without work, due perhaps to the sector specificity of the skills that they possess or locational factors, then the social costs of the decline in the footwear industry will rise due to these workers being quickly re-employed in other sectors. The writer went on to discuss the effect of skills shortages to industry in general showing through various reviews the extent of the apparent problem in a global sense.

The writer then honed in on the skills shortages in South Africa; a glimpse of the past was reviewed to give the reader a holistic view of the apparent problem that was inherited from the apartheid past. Statistics were provided by the writer to illustrate the extent of the shortage of skills in the country on the whole.

The writer reviewed literature on training and highlighted the importance of continuous learning. Literature affirmed that education develops skills and make workers more productive in their jobs. Increasing employability is the key factor behind training for employees; they want training to increase job security, increase job mobility, and keep their skills up-to-date.

A review of the Skills Development Act and the Skills Development Levy Act was made to show the present attempts of the country to arrest the problem of skills shortages. Total Quality Management looked at how skills can be improved and how less price competitive countries can differentiate their product in terms of higher quality and in terms of design and fashion.

A look at productivity highlighted the point that South Africa has a high wage level and this makes South Africa uncompetitive relative to certain other developing countries. Wage levels are a significant component of overall cost structures across the full range of labour-intensive activities as performed in the footwear industry. Unless producers are simply able to pass wage increases on to their customers a practice limited by trade reform and increased domestic competition there will be a persistent pressure to limit rising wage costs in labour-intensive activities. In fact, as the South African economy becomes more open to international competition, firms will only be able to survive if their costs and productivity are comparable to those of their major international competitors.

CHAPTER THREE

INDUSTRY BACKGROUND

3.1 Introduction

The aim of this chapter was to give the reader a fair understanding of the South African footwear industry by reviewing pertinent literature on industry statistics. In so doing the reader will have a good idea of the KwaZulu-Natal footwear industry, as it is a homogeneous segment of the greater South African industry.

Halse (in Harrison *et al.*, 1997:21) summarise the views of the Conshu financial director, Charles Rapp who felt that once the competition board had thrown out Conshu's application to merge with Bolton Footwear, South Africa had lost a golden opportunity to create a world-class shoe manufacturer. It is a common perception amongst local manufacturers that their biggest competition is imports and they need a strong domestic market leader to give the industry some direction.

The shoe industry faces somber times, some of which it has brought on itself. The Footwear Manufacturers Federation admits certain shortcomings exist in the quality of products and pricing structures, which it is attempting to resolve.

The Southern African Footwear & Leather Industries Association (SAFLIA) president Mr. R .W. Oltmanns states, "The huge gyrations of the Rand have wreaked havoc on the industry. No economy can sustain such large fluctuations of the currency, in particular not South Africa, where we are fighting an endless battle against huge unemployment and yet continue to lose more jobs. Retail has all but abandoned the industry in favour of imports" (SAFLIA report, 2003: 2).

In this chapter the past reports of the South African Footwear industry are reviewed in an attempt to give the reader a good idea of where the industry is at present. Areas of importance to the research are discussed in this chapter viz. Production, Employment, Foreign Trade and Productivity.

3.2 Footwear production

According to the SAFLIA report (2003:9), Table 2 illustrates that KwaZulu-Natal remains the main footwear producing area in volume terms with a 61.15% share of the total South African market, with the Western and Eastern Cape regions producing 21.84% and 12.57% respectively. The Northern area (mainly Gauteng) produces 4.34% of total footwear manufactured in the RSA. (SAFLIA Annual Report, 2003:9)

TABLE 2:

2002 PRODUCTION PER REGION BY VOLUME

%	Western Cape Area	Eastern Cape Area	KwaZulu-Natal	Northern Area
Total Footwear	21.84	12.57	61.25	4.34
Mens	35.86	52.02	46.47	99.51
Womens	35.79	21.38	42.21	0.49
Children	28.35	26.60	11.32	0

(Source: SAFLIA Annual Report, 2003:9)

Table 3 below, shows the percentage share per branch area of footwear production for the decades 1940 to 2000 and the years 2001 and 2002. KwaZulu-Natal has developed over the years to becoming the largest footwear producing area in South Africa.

TABLE 3:**FOOTWEAR PRODUCTION - % SHARE PER BRANCH AREA**

Year	Western Cape	Eastern Cape area	KwaZulu -Natal	Northern Area	Total
1940	16.8	46.9	11.8	24.5	100
1950	17.6	39.5	19.4	23.5	100
1960	15.2	31.8	37.5	15.5	100
1970	15.8	22.3	52.8	9.1	100
1980	14.9	16.6	64.8	3.7	100
1990	19.2	8.9	69	2.9	100
2000	23.5	10.8	63.7	2	100
2001	23.3	10.9	63.6	2.2	100
2002	22.6	12	63.1	2.3	100

(Source: SAFLIA Annual Report, 2003:10)

3.3 Employment

The SAFLIA (2003:10) report states that the 15 largest footwear producers manufacture two thirds of the total production, or 14.64 million pairs. They employ 64% of the total workforce who each produce on average 2282 pairs of shoes per annum. These figures contrast with the bottom 50 footwear factories producing 6.46%, or 1.42m pairs. They employ 7.86% of the workforce, each making an average of 1811 pairs per year.

The distribution of footwear factories by volume of output is illustrated in Table 4 below.

TABLE 4:**DISTRIBUTION OF FOOTWEAR FACTORIES BY VOLUME OF OUTPUT**

Annual Output (Thousand Pairs)	1992		2002	
	Number of Factories	Total Production (pairs)	Number of Factories	Total Production (pairs)
Over 1000	10	19470.7	5	7536.4
750-999	4	4583.9	4	3308.9
500-749	11	6258.9	6	3625
300-499	9	3498.1	10	2983
200-299	11	2538.7	7	1635
100-199	22	3624.2	14	1424.1
50-99	16	1260.7	15	861.5
Below 50	40	725.6	35	558.2
Total	123	41960.8	96	21962.1

(Source: SAFLIA Annual Report, 2003:10)

TABLE 5:**EMPLOYMENT & PRODUCTION PER REGION**

	Western Cape Area	Eastern Cape Area	KwaZulu- Natal Natal	Northern Area	Total
No. of Employee 1992	5611	3041	13387	766	22806
No. of Employee 2002	3251	1272	4789	675	9987
% Change	-42.06	-58.17	-64.23	-11.88	-56.21
Pairs Million 1992	8.09	3.12	24.63	1.23	37.07
Pairs Million 2002	4.8	2.76	13.45	0.95	21.96
% Change	-40.67	-11.54	-45.39	-22.76	-40.76
Employers per Region					
March 2004	18	5	67	6	96
Employees: % share '02	32.6	12.74	47.9	6.76	100
Pairs Million: % share '02	21.84	12.57	61.25	4.34	100
Employees: % share '92	24.6	13.34	58.7	3.36	100
Pairs Million: % share '92	21.82	8.42	66.44	3.32	100

(Source: SAFLIA Annual Report, 2003:10)

Table 5 above illustrates employment and production figures per region. The total number of employees has declined from a total of 22806 in 1992 to 9987 in 2002. The total production has declined from 37.07 million in 1992 to 21.96 million in 2002. The KwaZulu-Natal region has experienced the largest percentage change in employment, i.e. -64.23% from 1992 to 2002.

The Table 6 below represents an attempt to account for all the production units in the area of SACU that is the Southern African Customs Union. The information is a combination of accurate statistics from the SAFLIA data bank and allowances for areas where very little accurate information exists. In the latter case one relies on information from various sources that is then processed to arrive at what is hoped is a fair reflection of the real situation.

TABLE 6:

FOOTWEAR MANUFACTURING WITHIN SACU

DESCRIPTION	EMPLOYMENT	PRODUCTION (pairs million)	EMPLOYERS	AVERAGE NUMBER OF EMPLOYEES
FORMAL SECTOR:	9987	22.0	96	104
SAFLIA Non-	7885	17.5	46	171
members Other	1711	3.8	31	55
ASMAP	391	0.7	19	21
INFORMAL	6500	13.60	90	72
SECTOR:	2000	3.4	80	25
N.B.C.Area(KZN)	4500	10.00	10	450
OTHER(13 states)				
GRAND TOTAL	16487	35.40	186	89
ESTIMATE				

(Source: SAFLIA Annual Report, 2003:11)

3.4 Foreign trade

According to figures from the annual SAFLIA report footwear imports have soared to levels last experienced in the mid nineties when imports accounted for 52% of the footwear market and in volume terms reached 63.34 million pairs.

The report states that of the top ten countries of origin, China and Hong Kong remain in the lead and account for 51.53 million pairs of all footwear imports or 87.44%. Since 2000, when the value

of imported footwear reached the R1 billion mark for the first time, imports have escalated to R1.90 billion in 2003 (SAFLIA, 2003:12).

Table 7 provides a view of how imports have escalated over the last thirteen years. In 1990 imports represented 13% of the market as at 2002 imports represented 67% of the South African market.

TABLE 7:

SACU FOOTWEAR SECTOR MARKET: '000 PAIRS

YEAR	FOOTWEAR PRODUCTION SACU	FOOTWEAR IMPORTS	TOTAL FOOTWEAR MARKET	IMPORTS AS % OF MARKET
1990	81722	12043	93765	13
1991	84585	17021	101606	17
1992	63508	18250	81758	22
1993	65846	33037	98883	33
1994	63558	35870	99428	36
1995	58301	63378	121679	52
1996	48437	48811	97248	50
1997	48334	35286	83620	62
1998	39282	36315	75597	48
1999	32823	32047	64870	49
2000	29692	49155	78847	62
2001	25767	52789	78556	67
2002	29400	58930	88330	67

(source: SAFLIA Annual Report, 2003:12)

3.5 Productivity

The data shown in Table 8 are taken from the Data Bank Survey and the Realst Analysis conducted on behalf of the Industry by the National Productivity Institute takes place every two years. At the time of doing the research the writer was unable to obtain the 2003 survey results. The Table 8 below shows results from the previous period and presents an indication of productivity in the footwear industry of South Africa. The Table 8 shows that the production per capita has declined from 2352 in 1987 to 2203 in 2002.

TABLE 8:

ANNUAL PER CAPITA PRODUCTION

YEAR	RSA PRODUCTION (pairs million)	EMPLOYEES	PAIRS PER CAPITA
2002	22.0	9987	2203
2001	20.5	8806	2328
2000	23.2	10988	2111
1999	25.8	12576	2052
1998	29.9	14984	1995
1997	36.5	16992	2146
1996	36.4	18255	1994
1995	42.7	21899	1948
1994	43.3	21304	2032
1993	45.3	21523	2105
1992	43.7	22806	1916
1991	52.6	25985	2024
1990	54.3	26332	2062
1989	61.7	27535	2241
1988	62.5	25459	2455
1987	61.0	25931	2352

(source: SAFLIA Annual Report, 2003:24)

3.6 Summary

The aim of this chapter was to review literature on the industry to give the reader a fair understanding of the South African footwear industry. In so doing the reader will have a good idea of the KwaZulu-Natal footwear industry, as it is a homogeneous segment of the greater South African industry.

Statistics defining footwear production, employment, foreign trade, and productivity were presented. Table 3 shows that KwaZulu-Natal is the largest producer of footwear in South Africa.

Table 5 illustrates that in the ten years 1992 to 2002 the KwaZulu-Natal footwear industry's production has dropped from 24.63 million pairs to 13.45 million pairs. The number of employees had changed by -64.23 percent, from 13387 to 4789. This ominous decline in production and employment experienced by the industry clearly highlights the problems of this ailing industry.

Imports have flooded the South African footwear market; Table 7 illustrates the extent of the problem. China and Hong Kong remain in the lead and account for 51,53 million pairs of all footwear imports or 87,44%. Since 2000, when the value of imported footwear reached the R1 billion mark for the first time, imports have escalated to R1, 90 billion in 2003.

Why has South African production been displaced by foreign imports? Is South African footwear not competitive? There are many factors that are responsible for this decline. This study looked at the shortage of skills as being a major underlying problem.

CHAPTER FOUR

FIELD STUDY

4.1 Introduction

This chapter highlights the different research methods that were considered in this investigation and the reasons for the choice of a particular method. Saunders *et al* (2000:52) talk of a research strategy, which they identify as a general plan of how the research question is answered. The chapter format conforms to that view in that it contains the sources of data, the methods of collecting data and the possible constraints in collecting data. Mention is also made of the ethical issues involved in the investigation and the pilot test was used to refine any potential errors in the questionnaire.

4.2 Objectives and hypotheses

The overall aim of this investigation was to determine whether the apparent problem of a shortage of skilled labour actually exists. Harter (2001:10) said, “unless the work force is committed and fully engaged in the vision and operation of the organization, its leadership and management cannot hope to achieve the measure of success they anticipate”.

Linde (in Harrison *et al.*, 1997:22) stated that the Footwear Manufacturer’s Federation has made numerous deputations and proposals to the Government pleading for measures to halt the collapse of the industry but to no avail. The industry now needs to employ measures to help themselves and herein the worker plays a pivotal role.

4.2.1 The specific objectives:

- a) To investigate the extent of skills available in the footwear industry.

- b) To investigate the impact of a shortage of skills on the quality of the footwear.
- c) To investigate whether a shortage of skills impacts on the quantity of labour required.
- d) To investigate the impact of a shortage of skills on the cost of the footwear produced.
- e) To investigate the impact of a shortage of skills on the competitiveness of the footwear industry in KwaZulu-Natal.

4.2.2 Hypotheses to be tested by this research

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear.

Hypothesis 6: The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.

Hypothesis 7: The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing overall cost of the shoe.

Hypothesis 8: The difficulty to source skills providers leads to a lack of skilled labour which in turn leads to inferior quality footwear.

Hypothesis 9: The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

4.3 Research methodology

4.3.1 Differences between qualitative and quantitative approaches

According to Miles and Huberman (1994:180) qualitative and quantitative approaches have the following features:

4.3.1.1 Qualitative approach:

- Involves the search for significant themes running through the sources.
- Seeks to discover how people understand the issues you are investigating.
- Involves holistic understanding of the situation, of the factors involved and how they interrelate.

4.3.1.2 Quantitative approach:

- It is an attempt to understand the ways in which selected factors in a situation are structured or interrelated.
- A search for the significance of relative proportions, to identify, which is more important or less.

As Jones (1998:76) in Jankowicz (1991:102) has stated, one can combine the qualitative with the quantitative taking the view that the two approaches are

mutually complimentary rather than exclusive. In this investigation the qualitative method was used as it involved the search for themes running through the sources. Data was attained from the structured questionnaire (appendix A).

4.3.2 Different approaches to research

4.3.2.1 Deduction

A deductive research method entails the development of a conceptual and theoretical structure prior to its testing through empirical observation. The approach of this investigation favoured the deductive method for the following reason as stated by Saunders *et al.*, (2000:109):

The deductive approach dictated that the researcher be independent of what was being investigated. This was feasible as the investigation involved the collection of data from the questionnaire. Given the circumstances of time and the writer's previous involvement in the industry this approach seemed the most appropriate.

4.3.2.2 Induction

Saunders *et al.* (2000:111) have described the inductive approach to research as involving moving from the 'plane' of observation of the empirical world to the construction of explanations and theories about what has been observed. This is learning by reflection upon past experiences. This is in sharp contrast to the deductive tradition, in which a conceptual and theoretical structure is developed prior to empirical research; hence theory is the outcome of induction.

4.3.3 Research methods

There are several different methods that are commonly used in business and the choice will vary according to the nature and scope of the topic, sources of data and assumptions made in analysing the data. The main methods that were considered for this investigation were in terms of the Symons *et al.* (1998:40) analysis, which are:

- Life Theory Approach
- Analytic Induction
- Critical Incident Technique
- Quantitative Research Diaries
- Survey

Symons *et al.* (1998:48) summarised the diversity of qualitative methods as follows:

4.3.3.1 Life theory approach

In the Life Theory Approach, the data used to process useful information is the conversations that people have when they relate their life histories. It is primarily through semi-structured or unstructured interviewing that life history data are commonly collected. This approach was considered inappropriate to the investigation for the following reasons:

- Time constraints in meeting the deadlines of this dissertation.
- The testing of the hypotheses required a more structured approach.
- Reliance on memories of respondents, which could be inaccurate or fabricated.

4.3.3.2 Analytic induction

Symons *et al.* (1998:32) define analytic induction as examining pertinent number of case studies and inferring from them the causes of a specific phenomenon.

4.3.3.3 Critical incident technique

Symons *et al.* (1998:58) define this as a process, which largely uses the unstructured interview to gather thought processes and feelings about an incident, which has meaning for the interviewee.

4.3.3.4 Qualitative research diaries

According to Symons *et al.* (1998:74) in the 1950's and 1960's diaries were the favoured research tools of the work activity school of researchers who were interested in the detailed study of managerial jobs. The disadvantages are the design of the recording and the commitment to recording on a regular basis. Due to the time constraints and the unavailability of respondents on a daily basis this method was not considered.

4.3.3.5 Survey

Surveys allow for the accumulation of a large amount of data from a sizeable population. They are flexible and versatile and are not confined to a single mode of enquiry. Alreck *et al.* (1995:70) have advanced the following limitations in the use of surveys as a method of data collection.

- Costly.
- Prone to error.
- Could have threatening and sensitive questions.

Kerlinger (1992:410) has stated that the survey method has the advantage of wide scope and a great deal of information can be attained from the respondents. The limitations raised by Alreck *et al.* (1995:72) were considered and countered in the following ways by the writer:

- Threatening and sensitive questions were removed when highlighted during the pilot process.
- Information was collected on almost half of the population thus reducing the error margin. This solution was advanced by Ader *et al.* (1999:328).
- As stated by Jankowicz (1991:152) the survey method draws most of its data from the present in contrast to the historical review.

4.4 Sampling

According to Saunders *et al.* (2000:97) in quantitative research one is looking for data, which can be analysed statistically to produce quantified results, which can be applied more widely. Therefore a quantitative approach is used.

According to Saunders *et al.* (2000:106) probability sampling can be defined as the deliberate choice of a number of people, the sample, who are to provide you with data from which you draw conclusions on the population, which the sample represents. In this study, the population size was sixty seven footwear manufacturers (SAFLIA, 2003:10). The informal section was difficult to quantify and qualify.

4.4.1 Choice of most appropriate sampling technique

Alreck *et al.* (1995:45) define sample design options as follows:

- Random: Every sample unit in the population has an equal chance of being selected.
- Stratified: The proportion of various types of sample units in the sample is controlled by selecting a series of sub samples of specified sizes.

- Clustered: Series of geographic areas selected, their specific number of sample units are selected proportionally from each 'cluster'.
- Unstratified: Proportion of various types of sample units will be approximately the same in the sample as they are in the entire population.

The preferred method was probability sampling and the sampling technique that was employed was simple random sampling. The same questions were posed to each of the manufacturers that made up the sample. The aim was also to conclude directly without further inference that if the majority of the respondents responded in a certain manner, a similar response would have been received from the majority of the population sample.

According to Saunders et al. (2000:104) simple sampling is a method of drawing a sample of a population, so that all possible samples of fixed size have a same probability of being selected. This method does not allow our own biases or any other systematic selection factors to operate. In this study every manufacturer of the chosen sample had an equal chance of being selected. Manufacturers of certain characteristics were offset in the long run by the selection of other members with counterbalancing quantities or qualities of characteristics. The sample selected can therefore be said to be representative of the whole population. This technique was useful as we had an accurate and easily accessible sampling frame that lists the entire population.

4.4.2 Sample

4.4.2.1 Sample frame

This was a list that identified all the sample units in the population. A complete list of all sixty seven of the footwear manufacturers in KwaZulu-Natal was compiled. This represented the population. The choice of the sample as advocated by Kerlinger (1992:118) was done as follows:

All production management from thirty four factories was in the sample frame.

The method used in selecting thirty four random managers was as follows:

1. Each factory was allocated a unique number.
2. The factory was tabulated randomly on a worksheet.
3. The sampler then blindly picked a random number. This constituted the sample.
4. Once chosen, the number was confirmed against a database to ensure that there were thirty four manufacturers.

4.4.2.2 Sample size

Saunders *et al.* (2000:98) have stated that the larger the sample size, the lower the likely error in generalising to the population. The population consists of sixty seven manufacturers in KwaZulu-Natal.

According to Saunders *et al.* (2000:91), generalisation about population from data collected using any sample size is based on probability. The larger the sample size, the lower the likely error in generalising to the population. However due to time constraints and limitation in financial resources it was decided that a sample size of thirty four was more manageable and appropriate given the circumstances. This was representative of 50% of the population.

4.4.2.3 Selection of sample

All footwear manufacturers' names were randomly tabulated on a page with each factory having a unique reference number. The numbers were thereafter randomly written on small pieces of paper. Thereafter the writer closed his eyes and randomly picked thirty four pieces of paper. This sample was representative of 50% of the KwaZulu-Natal footwear industry.

4.5 Measuring instruments

Saunders *et al.* (2000:163) point out that it depends to a large degree on the type of circumstances, the amount of information required, the speed thereof and the accuracy as to which of the many measuring instruments the researcher wishes to utilise to quantify his variables.

The three measuring instruments that were considered for this investigation were:

- Telephonic survey.
- Structured interviews.
- Questionnaires.

Telephonic surveys have the advantage of speed and low cost. They are, as stated by Kerlinger (1992:423) limited by non-responses and reluctance to answer simple questions. Interviews have the advantage in there being fewer limitations or types on the length of questioning and are quite direct, which is a strength as a great deal of information can be attained. Silverman (1997:162) states that as a result of social distances, interviewees may not trust us, may not understand our questions, or may mislead us in their responses.

Questionnaires are one of the most widely used survey data collection techniques. As each person is asked to respond to the same set of questions, it provides an efficient way of collecting responses from a sample. Oishi *et al.* (1995:93), state that the standard questionnaires are designed to reduce the error that could be attributed to the interviewer. This is accomplished by scripting the question format and order, defining in detail how the interviewer is to move through the questionnaire. The writer preferred to self administer, as a greater role was played in enhancing respondents' questions and clarifying responses. This has further advantage over mailed questionnaires, which may be filled in by someone else or may never be returned. Due to time constraints and to save on costs the writer elected to telephonically contact respondents to answer questionnaires.

4.6 Data collection methodology

According to Huysamen (1994:236), the research design is the plan according to which data is to be collected to investigate the research hypothesis. As it is practically impossible to collect and analyse all available data due to constraints in time, access and the cost thereof, a sampling technique can be used to reduce the amount of data required.

The principal method of investigation used in this study was the survey. In this investigation the probability sampling method was used, as the same question was posed to each sample member. As a result one can conclude directly, without further inference that the industry would have replied identically had they been asked the similar questions.

Data was collected using a structured telephonic interview. All respondents were contacted and the interview was conducted at their convenience, which was mainly after 15h00. The research was conducted in the month of October 2004. The interview required quick responses and time was not wasted on irrelevant issues. The average duration for an interview was 10 minutes.

4.7 Designing the questionnaire

The following issues raised by Alreck *et al.* (1995:138) were taken into consideration when designing the questionnaire:

- Use of closed questions, as they were easier and quicker to respond to. This also allows for ease of comparison when analyzing results.
- To maintain neutrality, there was an avoidance of leading and loaded questions.
- Questions took into account the respondent's literacy levels.
- Questions were not offensive or ambiguous.
- Questions were applicable to all respondents.
- Respondents were not asked questions, which require the 'jogging of memory' over incidents, incurred in the past.

- Questions were structured to reduce fatigue effect with easy to answer questions at the end.
- The Likert Scale was used in this investigation. (see Fig. 1)

Figure 1:

FIVE POINT LIKERT SCALE

1	2	3	4	5
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly Agree

4.8 Questionnaire design used in this study

It was felt that the quantitative method was the most appropriate method for this study because it is an investigation that assesses the overall view of the industry. Closed response statements using a five-point Likert scale were used, resulting in more user-friendly questionnaires. This had a favourable impact on the willingness of respondents to submit to the process.

The questionnaire consisted of three sections: (Appendix A)

- Section A: Description of the company.
- Section B: Statements 1-12.
- Section C: General questions on training.

Section B consisted of twelve statements; each statement testing one of the first five hypotheses. Statements as presented to participants were simply numbered and did not indicate the hypothesis being tested. Information relating to the research hypotheses was collected as follows:

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour- Statements 1 to 4.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear- Statements 5 to 7.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled- Statement 8.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher- Statements 9 to 11.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear- Statement 12.

As stated, a 5-point Likert Scale was used. A Likert scale is a five-point scale in which the interval between each point on the scale is assumed to be equal. It is actually called an equal-appearing interval scale. This scale is used to register the extent of agreement or disagreement with a particular statement of an attitude, belief, or judgment (Tuckman, 1968:157).

4.9 Piloting the questionnaire

William Belson (Belson, 1986:27) mentions that there is one checking procedure that good survey researchers undertake as a matter of course viz. the piloting of the questionnaire. The pilot questionnaire was conducted on four companies in the Pietermaritzburg area. The companies questioned in the pilot were Dick Whittington Shoes (Pty) Ltd, Ballucci Footwear cc, Crouch Footwear and Sirilli Footwear. The questionnaire was then modified to reduce the length of the questions. This was done to afford lengthy questions and confusion arising when conducting the telephonic interview. A copy of the final questionnaire appears in Appendix A.

4.10 Limitations of the questionnaire

- Although the writer was prepared to clarify questions, respondents declined the offer. To counter this potential problem the writer ensured that the respondents understood the questions and created an environment where clarifying of questions is not frowned upon.
- Respondents were aware of writer's previous role in the industry and doubted the validity of the investigation.
- Closed questions were used.

4.11 Data analysis

A spreadsheet was designed to analyse completed questionnaires. The hypotheses were analysed individually, all statements pertaining to the respective hypotheses were analysed and tabulated. A statistical analysis was done to calculate the mean and standard deviation of each statement. Correlation analyses were conducted to test hypotheses six to nine. Tuckman, (1968:199), states that a correlation is an indication of the predictability of one variable given the other. In contrast to tests of statistical significance like t and f, coefficients of correlation are relatively direct measures of relations.

The purpose of testing a hypothesis was to determine the probability that it is supported by fact. However, because a hypothesis is a general expectation about the relationship between variables, there are an extremely large number of instances under which it can be tested, and it would be impractical to attempt to gain support in all of these instances (Tuckman, 1968:31).

4.12 Data analysis –Reliability and Validity

Oishi *et al.* (1995:94) emphasize the need for data quality to have the following characteristics in order for the research methodology to have any integrity.

- Reliability – Consistency of measurements.

- Validity – Accuracy, which survey measures.
- Generalisation – external validity.

4.12.1 Reliability

Saunders *et al.* (2000:205) stated that reliability could be assessed by considering:

- On different occasions will the measures yield the same results?
- Will different researchers at different times yield similar observations?
- The Cronbach's Alpha coefficient measures the internal reliability of each scale and is the most common way of measuring reliability.

The Cronbach Alphas obtained are presented in table 9 on page 57. They indicate that the data was reliable.

4.12.2 Validity

Saunders *et al.* (2000:219) says validity is concerned with whether the findings are really what they appear to be about.

The threats to validity using Robson's analysis (in Saunders *et al.* 2000:221) were perceived to be the following:

History

The footwear industry is notorious for closures. This investigation could produce different results should the abovementioned problem occur.

Testing

The managers could perceive this investigation as being disadvantageous to them and hence this could affect the results of the questionnaire.

The respondents were assured that the research would be used to benefit the industry and that their responses should be as accurate as possible to ensure that the data obtained is valid.

4.13 Ethical issues

Saunders *et al.* (2000:128) have forewarned potential researchers of the importance of ethical issues when conducting their research. A confidential clause was displayed on all questionnaires promising that the confidentiality of the questions and issues raised would be respected at all times. The companies answering the questionnaire were also kept anonymous.

4.14 Limitations of the research

The following sub paragraphs highlight the major constraints in performing this investigation.

4.14.1 Time constraints

Due to the degree being undertaken on a part-time basis, the writer was constrained in the availability of time. The writer rationalized that a telephonic survey would save time.

4.14.2 Limitations of the research

The footwear industry is characterised by high labour turnover and high rate of factory closures. The method of telephonically answering the structured questionnaire, which was used, was expected to be limited by non-responses and a reluctance to answer simple questions. Management was expected to be fearful of disclosing confidential information. To overcome these limitations the writer called the respondents at their convenience. The writer also reassured the respondents that information obtained would be held in the strictest of confidence.

4.15 Summary

The merits of the various measuring instruments and methods of data collection were discussed in this chapter and reasons given for the final choice. These instruments lend credibility to the investigation as the results so obtained were free from bias, improper data collection and were valid and reliable given the circumstances.

The choice of the sample was discussed in depth. The formation of the questionnaire and the limitations thereof were brought to the attention of the reader.

The following chapter provides the results, analysis and interpretation of the questionnaire.

CHAPTER FIVE

RESULTS OF THE FIELD STUDY

5.1 Introduction

This chapter depicts and reviews current information gathered by data collection instruments as described in chapter four. The main aim of this study was to investigate the apparent shortage of skills and its impact on productivity in the footwear industry of KwaZulu-Natal.

The following hypotheses were developed and the production managers from a sample of thirty four manufacturers were telephonically interviewed. This sample of thirty four manufacturers represented fifty percent of the population of manufacturers in KwaZulu-Natal.

The hypotheses tested were:

- **Hypothesis 1:** The KwaZulu-Natal footwear industry lacks skilled labour.
- **Hypothesis 2:** The lack of skilled labour leads to an inferior quality footwear.
- **Hypothesis 3:** The manufacturing techniques require more labour as a consequence of individuals not being skilled.
- **Hypothesis 4:** As a result of more labour being required the overall cost of the footwear is higher.

- **Hypothesis 5:** The footwear manufactured in KwaZulu-Natal cannot compete against international footwear.

Hypotheses 6, 7, 8 and 9 were tested using the correlation analysis (Page 74).

- **Hypothesis 6:** The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.
- **Hypothesis 7:** The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing the overall cost of the shoe.
- **Hypothesis 8:** The difficulty to source skills providers leads to a lack of skilled labour which in turn leads to inferior quality footwear.
- **Hypothesis 9:** The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

The purpose of these hypotheses was to determine whether:

- The Footwear Industry lacks skilled labour.
- The shortage of skilled labour impacts on the quality of footwear produced.
- The shortage of skilled labour has increased the number of operators required.
- The shortage of skilled labour has increased the cost of manufacturing because more labour was required.
- The footwear manufactured in KwaZulu-Natal is competitive in the global market.

Due to the nature of the research and the direct approach of the short telephonic questionnaire a 100% response was achieved. All thirty four of the respondents completed the entire questionnaire. Each respondent took approximately 20 minutes to answer all the questions. Strict attention was given to maintaining professionalism, particularly as all correspondence was directed at management. Respondents who were unavailable due to meetings, illness, and other engagements were contacted at a more convenient time.

5.2. Reliability of the instruments

Cronbach's Coefficient Alpha was calculated to determine the reliability of the questionnaire. The Cronbach's Coefficient Alpha measures the internal reliability of each scale and is the most common way of measuring reliability. The Cronbach's Coefficient Alpha reliabilities for the main instruments used in this study are illustrated in table 9 (Hunter, 2003:127).

TABLE 9:

RELIABILITY OF INSTRUMENTS

Variables	Cronbach Alpha
Lack of skilled operators (Statements 1,2,3 and 4)	0.1894
Lack of skilled operators (Statements 1,2, and 4)	0.7037
Lack of skilled operators (Statements 1 and 2)	0.7176
Leads to inferior quality (Statements 5,6,7)	0.7907
More labour is required (Statement 8)	0.6637
Cost of the shoe is higher (Statements 9, 10, 11)	0.8064
Uncompetitive with international footwear. (Statement 12)	0.6783

Bausell, (1986:183) in Hunter (2003:127) maintains that Cronbach's coefficient alpha is, "Conceptually appealing because it can be viewed as an average of all the split-half reliabilities that can be computed for a given measure". Bausell also recommends that, "unless extremely large

samples are being employed, researchers should not employ measures whose reliabilities are much below .60" (Bausell, 1986: 206).

The reliability figure for the first set of instruments used in this study is very low. As Table 9 illustrates, the first instrument consisting of four items (statements 1,2,3&4) produced an Alpha coefficient of 0.1894 which indicates a very low level of reliability and these four statements together therefore do not make up a reliable instrument. To find out whether the level of reliability could be improved, individual items were left out of the analysis. By leaving out statement 3, it was found that statements 1,2 and 4 together produced a Cronbach's Alpha coefficient of 0.7037 (see the second row in Table 9), showing that this modified instrument was reliable and that it can be used in the analysis of the results.

The next set of 3 items produced a Cronbach's Alpha coefficient of 0.7907. This indicates to the reader that the statements used to test hypothesis two are reliable.

The third instrument of one item, produced an Alpha = 0.6637. This shows acceptable reliability. The statement used is therefore reliable.

Testing the combination of statements 9, 10 and 11 for reliability produced an Alpha of 0.8067. The reliability for this instrument is quite good, as can be seen by the high Cronbach's Alpha coefficient obtained.

Testing the reliability of Statement 12 produced an alpha of 0.6783. The reliability is low but acceptable.

5.3 Sample profile

In section A of the questionnaire (Appendix A: 101) a brief description of each company was requested in response to six structured questions. A sample profile was thus created as follows:

5.3.1 Question 1:

What type of footwear does your company manufacture?

TABLE 10:

PROFILE OF SAMPLE PER TYPE OF FOOTWEAR

Type of footwear	Number of manufacturers
Men	7
Women	10
Children	0
Men & women	1
Men & children	1
Woman & children	5
Men , Women & children	10

5.3.2 Question 2:

What type of construction is used to manufacture the footwear?

TABLE 11:

PROFILE OF SAMPLE PER TYPE OF CONSTRUCTION

Type of construction	Number of manufacturers
Stuck-on	22
Stitch down/ veldschoen	1
Wetted	1
Direct injection	1
Moccasins	1
Direct injection, stitch down, stuck-on	1
Stuck-on, moccasins	1
Stuck-on, wetted	2
Moccasins, side stitched, stitch down	1
Moccasins, stitch down	1
Direct injection, stuck-on	1
Moccasins, stitch down, stuck-on	1

5.3.3 Question 3:

How many pairs of shoes do you manufacture per day?

TABLE 12:

PAIRS MANUFACTURED PER DAY

Number of shoes manufactured per day	Number of manufacturers
0-150	6
151-300	8
301-450	7
451-600	4
601-750	1
751-900	1
901-1050	3
1051-1200	1
1200-1800	2
>1800	1

5.3.4 Question 4:

What is the total number of employees employed by your company?

TABLE 13:**TOTAL NUMBER OF EMPLOYEES**

Number of employees	Number of manufacturers
1-25	11
26-50	7
51-75	7
76-100	5
101-150	1
151-200	1
201-250	-
251-300	-
301-400	1
401-500	-
501-600	1

5.3.5 Question 5:*Does your company have a skills development program?***TABLE 14:****SKILLS PROGRAMS**

Skills development programs	Number of manufacturers
Yes	12
No	22

5.3.6 Question 6:

Do you produce for the local or export market?

TABLE 15:

LOCAL OR EXPORT

	Number of manufacturers
Local	25
Export	0
Both	9

5.4 Data from Section C (not used in the analysis)

The data collected in this section gives the reader an indication of the manufacturers' future plans with regards to training and skills development.

5.4.1 Question 1:

Will the training on these learner-ships be done in-house or using external providers?

TABLE 16:

LEARNER-SHIP PROGRAMS

In house	12
External	22
Both	0

5.4.2 Question 2:

Do you have a training department in your company?

TABLE 17:

TRAINING DEPARTMENT

	Number of manufacturers
Yes	12
No	22

5.4.3 Question 3:

Does your factory have a Rink system or not?

TABLE 18:

RINK SYSTEM OR NOT

	Number of manufacturers
Yes	5
no	29

5.5 Analysis

The results are presented according to each hypothesis. Each of the hypotheses, one to five, was measured using a set of statements. Each set of statements is referred to as a variable as indicated below:

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour- Statements 1 to 4.
Variable; Lack of skilled operators.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear- Statements 5 to 7.
Variable; Leads to inferior quality.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled- Statement 8. Variable; More labour is required.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher- Statements 9 to 11. Variable; Cost of the shoe is higher.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear- Statement 12. Variable; Uncompetitive with international footwear.

5.5.1 Analysis of the responses to statements 1, 2 and 4 **relating to hypothesis one (variable name: lack of skilled operators)**

The first hypothesis stated that there is a shortage of skilled labour in the footwear industry of KwaZulu-Natal. In testing this hypothesis, respondents were given four statements and responded as follows:

5.5.1.1 Statement 1

There is a lack of skilled operators in the footwear Industry of KwaZulu-Natal.

TABLE 19:

ANALYSIS OF THE RESPONSES TO STATEMENT 1

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	1	2.94
Disagree	1	2.94
Neither	1	2.94
Agree	20	32.35
Strongly agree	11	58.82

58.82% of the respondents strongly agreed and 32.35% agreed that the footwear industry of KwaZulu-Natal lacks skilled labour. Only 5.88% disagreed. 2.94 % of the respondents neither agreed nor disagreed. This response indicates that the respondents felt the industry lacks skilled labour.

5.5.1.2 Statement 2

The skills shortage in our country is a threat to the future of the footwear industry.

TABLE 20:

ANALYSIS OF THE RESPONSES TO STATEMENT 2

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	3	8.82
Neither	0	0
Agree	16	47.06
Strongly agree	15	44.12

44.12% of the respondents strongly agreed and 47.06% agreed that the skills shortage in South Africa is a threat to the future of the footwear industry. Only 8.82 % of the respondents disagreed with the statement.

5.5.1.3 Statement 3

Your company is making efforts to improve the skills of its employees.

The analysis of this statement was not done as it was obviously unclear to the respondents and the results cannot be relied upon.

5.5.1.4 Statement 4

It is difficult to source providers for specific training needs.

TABLE 21:**ANALYSIS OF THE RESPONSES TO STATEMENT 4**

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	3	8.82
Neither	1	2.94
Agree	25	73.53
Strongly agree	5	14.71

14.71% strongly agree and 73.53% agree that it was difficult to source providers for specific training needs. 8.82% of the respondents disagreed with the statement. 2.94% neither agreed nor disagreed with the statement.

5.5.1.5 Conclusions relating to hypothesis one
(statements 1, 2 & 4)

The profile of respondents' replies, support hypothesis one, indicating that hypothesis was therefore accepted.

5.5.2 Analysis of the responses to statements 5, 6 and 7 relating to hypothesis two (Leads to inferior quality)

The second hypothesis states that the lack of skilled labour leads to an inferior quality footwear. In testing this hypothesis respondents were given three statements, and responded as follows:

5.5.2.1 Statement 5

The level of rejects is of concern in our company.

TABLE 22:**ANALYSIS OF THE RESPONSES TO STATEMENT 5**

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	1	2.94
Disagree	11	32.35
Neither	1	2.94
Agree	18	52.94
Strongly agree	3	8.82

A large percentage of the respondents, i.e. 2.94% strongly disagreed and 32.35% disagreed, indicated that the level of rejects was not severe enough to be of concern. 8.82% strongly agree and 52.94% of the respondents agreed. 2.94 neither agreed nor disagreed. This is an indication that rejects are a concern.

5.5.2.2 Statement 6

Rejects are attributed to poor workmanship.

TABLE 23:**ANALYSIS OF THE RESPONSES TO STATEMENT 6**

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	1	2.94
Neither	3	8.82
Agree	22	64.71
Strongly agree	8	23.53

23.53% of the respondents strongly agreed and 64.71% of the respondents agreed that the rejects are attributed to poor workmanship. 2.94% disagreed, stating that

poor quality material was also a factor influencing rejects. 8.82% neither agreed nor disagreed.

5.5.2.3 Statement 7

The poor workmanship is a result of a lack of skill.

TABLE 24:

ANALYSIS OF THE RESPONSES TO STATEMENT 7

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	4	11.76
Neither	3	8.82
Agree	18	52.94
Strongly agree	9	26.47

While 11.76% of the production managers feel that poor workmanship is not a result of a lack of skill. 26.47% strongly agreed and 52.94% agreed with the statement that poor workmanship is a result of a lack of skill. 8.82% neither agreed nor disagreed.

5.5.2.4 Conclusions relating to hypothesis two (statements 5,6,7)

The majority of the respondents supported the hypothesis therefore, hypothesis two was accepted.

5.5.3 Analysis of the responses to statement 8 relating to hypothesis three (More labour is required)

The third hypothesis stated that manufacturing techniques require more labour as a consequence of individuals not being skilled. In testing this hypothesis a statement was posed to all of the respondents and they responded as follows:

5.5.3.1 Statement 8

Multi-skilled operators reduce the number of operators needed.

TABLE 25:

ANALYSIS OF THE RESPONSES TO STATEMENT 8

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	2	5.88
Neither	0	0
Agree	29	85.29
Strongly agree	3	8.82

94.11% agreed (8.82% strongly agree and 85.29% agree) that the level of an operators skills is important. The production managers questioned agreed that multi-skilled operators reduce the total number of operators needed. This means that a multi-skilled operator can perform various functions in a production line thus reducing the total number of operators needed. 5.88% of the respondents disagreed.

5.5.3.2 Conclusions relating to hypothesis three (statement 8)

Analysing the responses received to this statement it is clear that the majority of the respondents therefore accept the hypothesis.

5.5.4 Analysis of the responses to statements 9, 10, 11 relating to hypothesis four (Cost of the shoe is higher)

Hypothesis four is testing whether labour unions and bargaining councils have contributed to operators wages being too structured, as a result relatively unskilled operators are earning almost as much as highly skilled operators. Also whether the labour cost of footwear is high in South Africa compared to the rest of the world due to the higher number of operators needed.

5.5.4.1 Statement 9

Labour Unions and the National Bargaining Council have structured operators wages hence there is not much room for negotiation.

TABLE 26:

ANALYSIS OF THE RESPONSES TO STATEMENT 9

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	0	0
Neither	2	5.88
Agree	26	76.47
Strongly agree	6	17.65

17.65% of the respondents strongly agreed and 76.47% agreed that the Labour Unions and the National Bargaining Council have structured operators' wages. 5.88% neither agreed nor disagreed with the statement.

5.5.4.2 Statement 10

An unskilled operator earns as much as a skilled operator.

TABLE 27:**ANALYSIS OF THE RESPONSES TO STATEMENT 10**

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	13	38.24
Neither	5	14.71
Agree	13	38.24
Strongly agree	3	8.82

38.24% of the production managers questioned indicated that an unskilled operator did not earn as much as a skilled operator. 14.71% neither agreed nor disagreed with the statement. 38.24% agreed with the statement and 8.82 strongly agreed.

5.5.4.3 Statement 11

The labour cost of footwear is higher in South Africa compared to the rest of the world due to the higher number of operators needed.

TABLE 28:**ANALYSIS OF THE RESPONSES TO STATEMENT 11**

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	0	0
Disagree	3	8.82
Neither	4	11.76
Agree	18	52.94
Strongly agree	9	26.47

26.47 strongly agreed and 52.94% agreed that the labour cost is high compared to the rest of the world. 11.76% did not agree nor disagree. 8.82% of the respondents disagreed.

5.5.4.4 Conclusions relating to hypothesis four
(statements 9, 10, 11)

Analysing the replies it can be concluded that the hypothesis is accepted.

5.5.5 Analysis of the responses to statement 12 relating to hypothesis five
(Uncompetitive with international footwear)

5.5.5.1 Statement 12:

Footwear manufactured in KwaZulu-Natal is competitive in the Global market.

TABLE 29:

ANALYSIS OF THE RESPONSES TO STATEMENT 12

Likert Scale	No. of respondents	% of the total no. of respondents
Strongly disagree	4	11.76
Disagree	24	70.59
Neither	2	5.88
Agree	4	11.76
Strongly agree	0	0

11.76% of the respondents strongly disagreed and 70.59% disagreed with the statement that footwear manufactured in KwaZulu-Natal is competitive in the global market. 5.88% neither agreed nor disagreed and 11.76% agreed with the statement.

5.5.5.2 Conclusions relating to hypothesis five **(statement 12)**

While the majority of the managers felt that the footwear industry of KwaZulu-Natal is not competitive in the Global market a small percentage has the view that footwear manufactured in KwaZulu-Natal is competitive. Therefore, we can conclude that the hypothesis is accepted.

5.6 Descriptive statistics

Statistical tests are a major aid for data interpretation. By statistical testing, a researcher can compare groups of data to determine the probability that differences between them are based on chance, thereby providing evidence for judging the validity of a hypothesis (Tuckman, 1968).

5.6.1 Calculation of the mean and standard deviation

An analysis of the means and the standard deviations thereof, for the various statements relating to the hypotheses follows. The mean is one of the main measures of responsiveness. The standard deviation is a calculation of the distribution around the mean. The mean in Table 21 on page 74 was calculated by adding the scores of the responses and then dividing by the number of scores.

As is illustrated in Table 21 on p70, for the first statement the mean is 4.14 this indicates that there was a positive response from the respondents and the standard deviation is 0.8402, which indicates that the respondents' responses were tightly distributed. Similarly, the next three statements have means of 4.26, 3.44 and 3.94 respectively; this again indicates a positive response (Figure 1). The standard deviations for the three statements are 0.8506, 0.9759 and 0.7252, this implies that there was a fairly high level of agreement by respondents with the statements and thus hypothesis one is acceptable.

According to the five point Likert scale used, the means of 3.32, 4.09 and 3.94 for statements 5 to 7 indicate a positive response. However, looking at their standard deviations it was clear that respondents did not have a high level of agreement to statement 5, as it was more widely distributed about the five point Likert scale than those of the other two, i.e. statements 6 and 7, which indicate a high level of agreement.

The mean for statement 8 is 3.97, this indicates a positive response and the standard deviation of 0.5680 indicates a very high level of agreement by the respondents to this statement, that multi-skilled operators reduce the number of operators needed.

Statement 9, with a mean of 4.12 also had a positive response and the standard deviation of 0.4706 indicates a very tight distribution (Table 30). Statement 10 like statement 5, although having a positive response with a mean of 3.18 has a standard deviation of 1.0420 indicating a widely distribution and not a high level of agreement between the respondents' responses. Statement 11 has a mean of 3.97 and a standard deviation of 0.8569, this indicates a positive response with a high level of agreement. Statement 12 has a mean of 2.18 this indicates that the respondents were in disagreement to the statement. The standard deviation of 0.7848 indicates that there was a fairly tight distribution of the respondents' responses.

The standard deviations for all statements except statements 5 and 10; indicate a fairly tight distribution around the means. Thus, it can be concluded that the responses to the statements were not widely distributed around the five point Likert scale (Figure 1), and indicates a fairly high level of agreement on the part of the respondents. Thus, this could be interpreted that the majority of the respondents had similar views on the statements.

TABLE 30:**DESCRIPTIVE STATISTICS: MEAN AND STANDARD DEVIATION**

Footwear Industry of KwaZulu-Natal		
HYPOTHESIS	MEAN	STD. DEVIATION
Hypothesis 1		
Statement 1	4.14	0.8402
Statement 2	4.26	0.8506
Statement 3	3.44	0.9759
Statement 4	3.94	0.7252
Hypothesis 2		
Statement 5	3.32	1.1040
Statement 6	4.09	0.6583
Statement 7	3.94	0.9056
Hypothesis 3		
Statement 8	3.97	0.5680
Hypothesis 4		
Statement 9	4.12	0.4706
Statement 10	3.18	1.0420
Statement 11	3.97	0.8569
Hypothesis 5		
Statement 12	2.18	0.7848

5.7 Correlation analyses

Tuckman, (1968:199), states that a correlation is an indication of the predictability of one variable given the other. In contrast to tests of statistical significance like t and f, coefficients of correlation are relatively direct measures of relations. In this section the relation between hypotheses is tested,

and the relation between statements and hypotheses is tested. The statistical data for these analyses was obtained from SPSS (Tuckman, 1968:266).

Hypotheses tested:

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour- Statements 1 to 4.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear- Statements 5 to 7.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled- Statement 8.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher- Statements 9 to 11.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear- Statement 12.

Instruments to be tested were formed as follows:

- The scores from statements 1 to 4 for each company was averaged (H1)
 - Statement 1: Lack of skilled operators.
 - Statement 2: Skill shortage is a threat.
 - Statement 3: Effort is being made to improve skills.
 - Statement 4: Difficult to source skills providers
- Also averaged were scores for statements 5,6 and 7 (H2)
 - Statement 5: Level of rejects is of concern.
 - Statement 6: Rejects attributed to poor workmanship.

Statement 7: Poor workmanship is a result of skills shortage.

- Statement 8: Multi-skilled operators results in less operators being required. (H3)
- Also averaged were the scores for statements 9,10 and 11 (H4)
 - Statement 9: Unions structure operators' wages.
 - Statement 10: Unskilled and skilled earn equally.
 - Statement 11: Labour costs are high in S.A.
- Statement 12: KwaZulu-Natal is competitive in the global market. (H5)

The following significant correlations were obtained using the **Pearson Correlation Coefficient**.

TABLE 31:

CORRELATION

VARIABLES	r	Significance
Lack of skilled operators (Statements 1,2,3,4 (H1)) and Leads to inferior quality (Statements 5,6,7 (H2))	0.38	<0.05
Lack of skilled operators (Statements 1,2,3,4 (H1)) and Cost of the shoe is higher (statements 9,10 and 11 (H4))	0.36	<0.05
Leads to inferior quality (Statements 5,6,7 (H2)) and Difficult to source skills providers (statement 4)	0.35	<0.05
Cost of the shoe is higher (Statements 9,10 and 11 (H4)) and Uncompetitive with international footwear (statement 12 (H5))	-0.36	<0.05
Leads to inferior quality Statements 5,6,7 (H2) and Cost of the shoe is higher Statements 9,10 and 11 (H4)	0.58	<0.01

The above Table 31 can be further depicted as in Table 23 below.

TABLE 32:**CORRELATION**

Variables	H1	H2	H4
H1	1.0	r = 0.38 sign.< 0.05	r = 0.36 sign.<0.05
H2	r = 0.38 sign.<0.05	1.0	r = 0.58 sign.<0.01
H4	r = 0.36 sign.<0.05	r = 0.58 sign.<0.01	1.0
H5			r = -0.36 sign.<0.05

The average of statements 1 to 4 (H1) correlated with the average of statements 5, 6 and 7, (H2) $r = 0.38$ with a significance of $< .05$. This is not strong but is significant at 95% level of probability. This finding indicates that there is a mutual relation between hypothesis one and hypothesis two. Thus, indicating that a shortage of skilled labour has an impact on the quality of footwear produced.

Similarly, H1 and H4 $r = 0.36$, significance $< .05$. This finding indicates mutual dependence between hypothesis one and hypothesis four therefore it can be said that the cost of the footwear has a relation to the lack of skilled labour.

H2 and statement 8 (H3) $r = 0.35$, significance $< .05$. Although the correlation is not very strong it nevertheless indicates that hypothesis two and statement 8 have a mutual relation. This could imply that the lack of skilled labour leads to poor quality workmanship as a result of more operators being required.

H4 and statement 12 (H5) $r = -0.36$, significance < 0.05 . This has a negative correlation. H4 states that as a result of more labour being required the overall cost of the shoe is higher. And statement 12 states that, "Footwear manufactured in KwaZulu-Natal is competitive in the Global market."

11.76% of the respondents strongly disagreed and 70.59% disagreed with the statement that footwear manufactured in KwaZulu-Natal is competitive in the global market. 5.88% neither agreed nor disagreed and 11.76% agreed with the statement. A negative relation between these two exists, because as we know, higher cost will lead to lower competition, assuming quality to be the same.

H2 and H4; $r = 0.58$, significance < 0.01 . This is a strong and very significant correlation. There is a strong correlation between inferior quality and the need for more skilled labour. Keeping in mind, that correlations simply show the degree of the relationship and do not show causality, the results do appear to indicate that skilled labour produce higher quality footwear than unskilled labour and fewer skilled operators are required to do the job. This is what this study is trying to prove. The research shows strong correlation between the two variables (Hunter, 2003:127).

In summary, this section shows that there is significant internal relation between the instruments used and that further hypotheses six to nine can be accepted from the relationships that have been tested.

Hypothesis 6: The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.

Hypothesis 7: The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing the overall cost of the shoe.

Hypothesis 8: The difficulty to source skills providers leads to a lack of skilled labour which in turn leads to inferior quality footwear.

Hypothesis 9: The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

5.8 Summary

In this chapter the results to the field study are assessed. This was done to test the hypotheses validity. The respondent's responses to the questionnaire was analysed and tabulated to give a summary of the various findings. A statistical analysis was conducted using SPSS to ascertain the correlation and reliability. The correlation between hypotheses and statements was calculated to prove interdependence. The reliability coefficient of combinations of statements was calculated to show the reliability of the statements. The ensuing chapter will discuss the results and conclusions to this study.

CHAPTER SIX

CONCLUSION

7.2 Objectives

As discussed in chapter one, the overall aim of this investigation was to determine whether the apparent problem of a shortage of skilled labour actually existed. Harter (2001:10) said, “Unless the work force is committed and fully engaged in the vision and operation of the organization, its leadership and management cannot hope to achieve the measure of success they anticipate”.

Linde (in Harrison *et al.*, 1997:22) stated that the Footwear Manufacturer’s Federation has made numerous deputations and proposals to the Government pleading for measures to halt the collapse of the industry but to no avail. The industry now needs to employ measures to help themselves and herein the worker plays a pivotal role.

6.1.1 The specific objectives therefore were:

1. To investigate the extent of skills available in the footwear industry.
2. To investigate the impact of a shortage of skills on the quality of the footwear.
3. To investigate whether a shortage of skills impacts on the quantity of labour required.
4. To investigate the impact of a shortage of skills on the cost of the footwear produced.
5. To investigate the impact of a shortage of skills on the competitiveness of the footwear industry in KwaZulu-Natal.

6.1.2 Hypotheses tested by this research

Hypothesis 1: The KwaZulu-Natal footwear industry lacks skilled labour.

Hypothesis 2: The lack of skilled labour leads to an inferior quality footwear.

Hypothesis 3: The manufacturing techniques require more labour as a consequence of individuals not being skilled.

Hypothesis 4: As a result of more labour being required the overall cost of the shoe is higher.

Hypothesis 5: The footwear manufactured in KwaZulu-Natal cannot compete with international footwear.

Hypothesis 6: The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.

Hypothesis 7: The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing overall cost of the shoe.

Hypothesis 8: The difficulty to source skills providers leads to a lack of skilled labour which in turn leads to inferior quality footwear.

Hypothesis 9: The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

6.2 Research design

The preferred method was probability sampling and the sampling technique that was employed was simple random sampling. The same questions were posed to each of the manufacturers that made up the sample. The aim was also to conclude directly without further inference that if the majority of the respondents responded in a certain manner, a similar response would have been received from the majority of the population sample.

According to Saunders et al. (2000:104) simple sampling is a method of drawing a sample of a population, so that all possible samples of fixed size have a same probability of being selected. This method does not allow our own biases or any other systematic selection factors to operate. In this study every manufacturer of the chosen sample had an equal chance of being selected. Manufacturers of certain characteristics were offset in the long run by the selection of other members with counterbalancing quantities or qualities of characteristics. The sample selected can therefore be said to be representative of the whole population. This technique was useful as we had an accurate and easily accessible sampling frame that lists the entire population. The choice of the sample as advocated by Kerlinger (1992:118) was done as follows:

All production management from thirty four factories was in the sample frame.

The method used in selecting thirty four random managers was as follows:

1. Each factory was allocated a unique number.
2. The factory was tabulated randomly on a worksheet.
3. The sampler then blindly picked a random number. This constituted the sample.
4. Once chosen, the number was confirmed against a database to ensure that there were thirty four manufacturers.

All thirty four respondents were contacted telephonically and a short structured interview (appendix A) was conducted. The results were tabulated and statistical analyses conducted.

6.8 Findings

In chapter four the merits of the various measuring instruments and methods of data collection were discussed and reasons given for the final choice. The research incorporated the formulation and testing of hypotheses. Nine hypotheses were tested in this study and they were:

- **Hypothesis 1:** The KwaZulu-Natal footwear industry lacks skilled Labour.
- **Hypothesis 2:** The lack of skilled labour leads to an inferior quality footwear.
- **Hypothesis 3:** The manufacturing techniques require more labour as a consequence of individuals not being skilled.
- **Hypothesis 4:** As a result of more labour being required the overall cost of the Footwear is higher.
- **Hypothesis 5:** The footwear manufactured in KwaZulu-Natal cannot compete Against international footwear.
- **Hypothesis 6:** The KwaZulu-Natal footwear industry lacks skilled labour and this leads to inferior quality footwear.
- **Hypothesis 7:** The KwaZulu-Natal footwear industry lacks skilled labour and as a result more labour is required thus increasing the overall cost of the shoe.
- **Hypothesis 8:** The difficulty to source skills providers, leads to a lack of skilled labour which in turn leads to inferior quality footwear.

- **Hypothesis 9:** The lack of skilled workers leads to more workers being required, inferior quality footwear and thus more costly shoes.

In chapter five, firstly, the reliability of the instruments used in the study was tested using Cronbach's Alpha coefficient. All the instruments, except for those combinations with statement three, gave reasonably high levels of reliability. This implies that the results of the study can be interpreted with a degree of confidence. Secondly, the responses of the thirty four respondents were statistically analysed and the following conclusions were made for each of the first five hypotheses respectively.

6.3.1 Discussion of findings in relation to specific objectives

The specific objectives were:

1. To investigate the extent of skills available in the footwear industry.
2. To investigate the impact of a shortage of skills on the quality of the footwear.
3. To investigate whether a shortage of skills impacts on the quantity of labour required.
4. To investigate the impact of a shortage of skills on the cost of the footwear produced.
5. To investigate the impact of a shortage of skills on the competitiveness of the footwear industry in KwaZulu-Natal.

The hypotheses 1 to 5 addressed these objectives. In testing the hypotheses here follows a detailed discussion of the key findings which relate to each specific objective.

The profile of respondents' replies, support hypothesis one, indicating that there is a shortage of skilled labour in the footwear industry of KwaZulu-Natal. It can also be gleaned that there is a shortage of providers for specific training needs and the respondents fear that the shortage of skilled labour will be a threat to the survival of the footwear industry.

There was a general consensus that although the production managers did not see their factory reject levels as being dire, they did feel that poor workmanship is a major contributor to the reject level, and that the poor workmanship is a consequence of there being a lack of properly skilled labour.

The majority of the respondents felt that multi-skilled operators reduced the total number of operators required. Multi-skilled operators by definition have a better understanding of the product and are able to perform various tasks in the manufacturing process. An unskilled operator can only perform a single task and generally does not have a well defined understanding of the entire manufacturing process.

The responses indicate that the Labour Unions and National Bargaining Council have a huge influence on the wages of operators in the footwear industry. Although a large percentage of the respondents indicated that their unskilled labour did not earn as much as the skilled labour, the majority (47.06%) indicated that unskilled labour was being paid as much as the skilled labour. As a result of more operators being required and the operator's wages being structured with skilled and unskilled labour earning almost the same rates, 79.41% of the production managers indicated that the labour cost in South Africa was too high compared to the rest of the world.

While the majority of the managers felt that the footwear industry of KwaZulu-Natal is not competitive in the global market a small percentage has the view that footwear manufactured in KwaZulu-Natal is competitive. This small percentage of manufacturers produce specialised footwear like golf shoes and sportswear and in these specialised niche markets they are probably competitive. But, the general opinion is that the footwear manufactured in KwaZulu-Natal cannot compete.

Thirdly, a descriptive analysis using the means and standard deviations was produced on all twelve of the statements. The means indicated a central tendency in keeping with the results obtained from the analysis of the responses. The standard deviations indicated a fairly tight

distribution around the means. Thus it was concluded that the responses to the statements were not widely distributed around the five point Likert scale (Figure 1:49).

And lastly, the correlation analyses provided results that indicated interdependence between the instruments tested. Thus, from these correlations the hypotheses six to nine were accepted.

6.5 Discussion of findings in relation to literature

6.5.1 The importance of a skilled workforce

This research study found that the footwear industry in KwaZulu-Natal has a shortage of skilled labour. This shortage of skilled labour, in the view of the industry, is having a negative effect on the cost and quality of the footwear produced. As a result footwear manufactured in KwaZulu-Natal cannot compete against footwear manufactured in other parts of the world, especially Asia. Because of the footwear not being competitive there has been an influx of imports in the last decade and this is crippling the local industry.

This study has reviewed literature that emphasizes the importance of a skilled workforce in achieving greater competitiveness. Firstly, literature defining skills shortages highlighted the complexity of skills in the workplace and proved to the reader that skill shortage is indeed a controversial topic. Barker (1999:9), states that the workforce is one of the most effective resources that an organisation possesses and it is essential to make effective and efficient utilization of these productive resources to be competitive. The data in chapter three indicates that a large number of factories have closed as a result of not being able to compete with foreign imports. Workers have left the industry and moved to other sectors in the hope of finding more stable employment.

6.5.2 Factors contributing to skills shortages

Skills shortages occur in many varied circumstances and the factors that influence their development were of particular importance in this study. As stated in chapter two, an analysis of skills shortage issues requires an understanding of the factors that influence their development. The impact of many of these has increased in the past decade, particularly global competition, technological change and the sources of supply of skilled labour. At a macro level global competition is a key driver in reshaping industry and influencing the skills it requires. To compete in global manufacturing, industry must focus on making its products and services competitive not only domestically, but also internationally. New market areas, new products, new ways of producing and providing services are reshaping the skills required of the manufacturing workforce.

Barker (1999:233) states that new patterns of work often also require flexible and highly skilled workers. With restructuring of management it is common place where workers are required to function without direct supervision and to be able to correct small hiccups in the production process on their own initiative.

6.5.3 Measuring skills shortages

The findings to a large extent indicate that there is no system in place to monitor skills shortages. Literature on indicators of skills shortages and methods of measuring skills shortages were reviewed in an attempt to bring an objective view to the problem at hand. This was of particular importance as it provided the material needed to formulate and structure achievable recommendations.

According to Barker (1999:212) one approach to measuring labour shortages is through economic indicators such as general and occupational employment growth, unemployment rates, and wage growth. Employment outcomes of recent graduates also provide good indicators. Another

approach is employer-based surveys or interviews on recruitment experience and future expectations.

As a recommendation, employer-based surveys or interviews which gather information from individual employers on workers' specific skills in the footwear industry will help measure skills available (Youth & Labour Market Services Ministry of Advanced Education, 2001:8). This is useful in assessing the current skills levels.

6.5.4 Training and Total Quality Management

The findings show that there is a need for training. The literature review provides a background of how the past has impacted on the present and how the present can improve the future is provided. Issues reviewed included South Africa's apartheid past, the current skills deficits, the government's current training initiatives, and Total Quality Management was reviewed as a means to an end.

As some of the tasks to be performed in the shoe industry require a high level of skill, which is only attainable after years of experience, it is important that the industry has the correct apprenticeship programs in place to secure the existence of these skills. Freeman (1986:364) states that the human-capital theory developed in the early 1960s suggest that education and training are an investment of current time and money for future pay.

In Harrison *et al.*, (1997: 55) the lack of adequate training for workers was cited as possibly the most serious concern the Pietermaritzburg industry faces. Bhorat *et al.* (2003:46), state that the purpose of the Skills Development Act is to develop the skills of the South African workforce, to increase the levels of investment in education and training in the labour market, to improve the return on that investment, to encourage employers to provide opportunities for their employees to acquire new skills, to encourage employees to participate in training programs, and to improve the employment prospects of those not currently employed. It was also stressed that more emphasis be

placed on labour intensive manufacturing processes as it is the view of the industry that nothing significant was being done.

6.5.5 Productivity

The responses indicate that the Labour Unions and National Bargaining Council have a huge influence on the wages of operators in the footwear industry. Although a large percentage of the respondents indicated that their unskilled labour did not earn as much as the skilled labour, the majority (47.06%) indicated that unskilled labour was being paid as much as the skilled labour. As a result of more operators being required and the operator's wages being structured with skilled and unskilled labour earning almost the same rates, 79.41% of the production managers indicated that the labour cost in South Africa was too high compared to the rest of the world.

The final segment of the literature review included chapter three, in which the writer dedicated to understanding the industry. Current statistics on the industry production, employment, foreign trade and productivity were analysed. This coupled with the information already reviewed provided a platform that the writer used to substantiate the study.

As stated in chapter two, according to Barker (1999:123), trade liberalisation and increased openness have induced a structural change in production towards capital-intensive sectors. The unskilled labour component of manufacturing exports is very low compared with certain other labour-abundant countries, and this share has been declining in recent years. Furthermore, the high wage level in South Africa makes us uncompetitive relative to certain other developing countries. A key question then, is whether real wages have grown more rapidly than labour productivity and hence may be viewed as driving the restructuring, or whether the opposite is the case, in which case rising real wages would seem not to be the primary factor causing employment losses.

If productivity is perceived to be the problem, then why not look at ways to improve productivity? For a worker to perform an efficient job he has to have the necessary tools and skills. Should

either be lacking, the task cannot be performed efficiently. The findings show that management felt that their staff was not productive, because they lack the necessary skills to perform the tasks efficiently.

6.6 Conclusion

In conclusion, this study finds that it is not uncommon for a country undergoing extreme metamorphosis to experience skills shortages. The testing of the nine hypotheses proved that the industry of KwaZulu-Natal does indeed lack skilled labour.

CHAPTER SEVEN

RECOMMENDATIONS

7.1 Introduction

This chapter based on the research methodology used in chapter four and the analysis of the results in chapter five seeks to make recommendations to help prevent the demise of the local footwear manufacturing industry. Mention is made of literature already covered in chapter two to support the recommendations.

7.2 Addressing skills shortages

It is quite clear from this study that the overall view of the respondents is that the footwear industry in KwaZulu-Natal lacks adequately skilled operators. During the Mbeki Presidency, skill has come to be a central theme of government concerns with improving social and economic performance and explaining weaknesses in implementation. It is taken for granted that the development of skill programs in South Africa is critical to economic and social growth (Barker (1999:78).

The buzzword today is competitive advantage, and to gain a competitive advantage, the company needs to capitalise on knowledge, skills and ideas. The footwear industry is characterised by tasks that are repetitive, boring and confined to designate individuals only. This incorrect perception owes its conformance to our best-forgotten past where the higher paid machinist positions were only confined to the 'white worker'.

7.3 Recommendations

The following recommendations have been formulated from a close study of the findings of this research study. These recommendations flow from the findings and the conclusions made in the previous chapter.

1. As a recommendation, employer-based surveys or interviews which gather information from individual employers on workers' specific skills in the footwear industry will help **measure skills available** (Barker (1999:212).
2. To improve the return on their investment, to encourage employers to provide opportunities for their employees to acquire new skills, to encourage employees to participate in training programs and to improve the employment prospects of those not currently employed. More emphasis needs to be placed on labour intensive manufacturing processes by **government**, as it is the view of the industry that nothing significant was being done (Stryker *et al.* (2001:6).
3. It is important that the industry has the correct **apprenticeship programs** in place to secure the existence of these skills. Barker (1999:233) states that new patterns of work often also require flexible and highly skilled workers. With restructuring of management it is common place where workers are required to function without direct supervision and to be able to correct small hiccups in the production process on their own initiative.
4. **Job rotation** will have the following benefits to the industry. The worker becomes more versatile thus learning new skills. With these new skills he can move to a higher paid position when a vacancy occurs. The company benefits in that they have a more highly skilled labour force that are able to step into a position when the need arises unlike the situation today where certain skilled positions have no 'back-up'((Human Sciences Research Council, 1999:33).

5. New market areas, new products, new ways of producing and providing services are reshaping the skills required. The industry has to keep abreast of the latest skills and technology available by having product fares inviting international companies to introduce modern technology locally. And in essence becoming more involved with the international industry from an **innovation** point of view (Bhorat *et al.* (2003:46).

7.4 Action plan

There are no short-term fixes to solve the present plight of the shoe industry. It is extremely difficult to establish clearly defined time parameters due to the volatility of the market in their preferences for certain styles of shoes. The action plan should be on going.

Stage 1

Appoint an Action Plan Committee comprising of senior management, middle management, worker representatives and a union official. The sole function of this committee will be to oversee the Action Plan.

Stage 2

Management is to undergo training and education in leadership, supervisory and factory management skills. The objective is to equip the modern manager to relate to the present requirements of the task at hand and not to manage as was done in the past. Managers of today not only have to be technically proficient but also well versed in legal, financial and human skills.

Stage 3

Establish a program to ensure workers are more versatile and well trained to perform various functions. Promote the concept of further studying in courses allied to the industry and facilitate extensive in-house training and development of staff. Identify key personnel for further training to

assume future management positions. A Total Quality Management approach must be adopted to improve skill.

The writer has reviewed the BSTQ program and recommends its implementation into the action plan (Weaver (1997:2).

Globalisation has provided an opportunity for the footwear industry to do overseas sales. TQM will help the industry to differentiate their product and target more lucrative markets.

Stage 4

Continuously monitor and adjust actual performances against the action plan.

7.5 Unrelated companies that could benefit from the research

Many of the labour intensive industries would benefit from the research conducted. A good example of such an industry is the besieged textile industry. The action plan formulated to implement the recommendations proposed would help other industries which are experiencing shortages in skilled labour.

7.6 Areas for further research

To date no meaningful formal study has been done on the shortage of skilled labour in the KwaZulu-Natal footwear industry. This is an important area for further research. The only research available identifies that the industry is in distress and further study looks at resolving this distress by forming a manufacturing Cluster in the Pietermaritzburg area.

Measuring accurately the extent of skills shortages in the KwaZulu-Natal footwear industry would provide valuable new insights. Such research would also provide a proper platform from which to implement a meaningful training program.

Having done the ground breaking research of establishing that there is indeed a shortage of skilled labour, further research is necessary in finding the most appropriate methods in remedying the problem and also possibly assessing the skills shortages that the entire footwear industry in South Africa faces. Research is necessary to identify these issues and to show the importance of the industry to the economy on the whole.

7.7 Summary

The skills of the employees determine the quality of the product. They determine the speed and quality of the product development, the ability to meet changing market needs, and the strength of the bottom line.

In this chapter the writer outlines an action plan to assist managers with the question where do I begin, when faced with the task of managing skills. The answer can be found in a familiar adage, “what gets measured gets managed, and what gets managed gets better”.

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APPENDIX A

Questionnaire

(analyzing job skills in the KwaZulu-Natal Footwear Industry)

The aim of this questionnaire is to ascertain the state of skills and qualifications in the KwaZulu-Natal Footwear Industry. Thereafter the findings will be made available to the employers and skills developers in the industry. It is hoped from this investigation that the skills shortage is brought to light and attempts will be made to save an ailing Industry. The investigation was independently funded and researched by myself towards the attainment of my Master of Business Administration Degree.

Your participation in this investigation is highly appreciated and the following issues need to be taken into consideration.

1. This investigation will not be successful without your valuable assistance.
2. Information provided in this questionnaire will be treated in the utmost confidence and neither your factory name nor your name will be disclosed.
3. It will take you about 15 minutes to complete the questionnaire.
4. Space has been provided at the end of the questionnaire for any comments or issues you may want to raise on the subject of the investigation.

Section A: Description of the Company

1. What type of footwear does your company manufacture?

2. What type of construction is used to manufacture the footwear?

3. How many pairs of shoes do you manufacture per day?

4. What is the total number of employees employed by your Company?

5. Does your company have a skills development program? YES/NO

6. Do you produce for the local or export market?

Section B:

For each of the following questions please **TICK** the appropriate box.

1 Strongly disagree	2 Disagree	3 Neither agree nor disagree	4 Agree	5 Strongly Agree
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1. There is a lack of skilled operators in the footwear Industry of KwaZulu-Natal.

1	2	3	4	5
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2. The skills shortage in our country is a threat to the future of the Footwear Industry.

1	2	3	4	5
---	---	---	---	---

3. Your company is making efforts to improve the skills of its employees.

1	2	3	4	5
---	---	---	---	---

4. It is difficult to source providers for specific training needs.

1	2	3	4	5
---	---	---	---	---

5. The level of rejects is of concern in our company.

1	2	3	4	5
---	---	---	---	---

6. Rejects are attributed to poor workmanship.

1	2	3	4	5
---	---	---	---	---

7. The poor workmanship is a result of lack of skill.

1	2	3	4	5
---	---	---	---	---

8. Multi-skilled operators reduce the number of operators needed.

1	2	3	4	5
---	---	---	---	---

9. Labour Unions and the National Bargaining Council have structured operators wages hence there is not much room for negotiation.

1	2	3	4	5
---	---	---	---	---

10. An unskilled operator earns almost as much as a skilled operator.

1	2	3	4	5
---	---	---	---	---

11. The labour cost of footwear is high in South Africa compared to the rest of the world due to the higher number of operators needed.

1	2	3	4	5
---	---	---	---	---

12. Footwear manufactured in KwaZulu-Natal is competitive in the Global market.

1	2	3	4	5
---	---	---	---	---

Section C: General

1. Will the training on these learner ships be done in-house or using external providers?

	YES	NO
In-house		
External provide		
Using both in-house and External Providers		

2. Do you have a training department in your company?

YES

NO

3. Does your factory have a Rink System or not?

YES

NO
