JOB EVALUATION

UNDERSTANDING THE GRADING AND REMUNERATION STRATEGIES OF ARCHITECTURAL FIRMS IN CAPE TOWN

by

Shaun Michael Adendorff

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ABSTRACT

JOB EVALUATION

UNDERSTANDING THE GRADING AND REMUNERATION STRATEGIES OF ARCHITECTURAL FIRMS IN CAPE TOWN

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Job Evaluation is the process of determining, as systematically and objectively as possible, the worth of one job relative to another without regard for personalities or existing structures. (Paterson, 1975) The purpose is to achieve and maintain an equitable distribution of basic wages and/or salaries according to level of position.

The establishment of internal equity with a graded hierarchy of jobs within the organisation and of external equity with the external market rate for equivalent jobs (Paterson, 1975) is important and has lead to the overall analysis of the following problem statement:

An Analysis of the Grading and Remuneration Structures of Architectural Practices in the Western Cape, Cape Town Metropole with specific reference to establishing what methods are used in arriving at cost to company packages.

The nature of the architectural profession is unfortunately governed by economic "boom and bust" cycles and therefore workload fluctuates with

the economy. Given this and that the architectural profession in Cape Town currently has no formal grading and remuneration structures, the research hopes to answer if there is a need to formulate a grading system. Understanding how and why the nature of the profession is changing, if the way a practice is organized / graded enhances or undermines its decision-making ability and if the informality of the grading and remuneration structures currently in practice are adequate, is studied.

This research investigates how architectural practices in Cape Town establish their salary structures, which include benefits and incentives, thereby arriving at a total cost to company package. Specifically, the study will examine whether there is a direct relationship between those practices that have adopted a modern, scientific job grading system, i.e. Paterson, Peromnes or Task and accordingly pay market-related salaries and cost to company packages based on salary survey data or some other scientific calculation, as opposed to those practices which adopt an ad hoc approach.

Many individuals choose architecture over other professions as they believe it can provide a work and family balance. The Royal Institute of Architects (RIBA) found that women's career paths generally slow after childbirth and with inflexible working arrangements, including long hours and a lack of transparency in relation to pay and promotion, are the main reasons why both women and men, generally with dependants are leaving the profession, (www.riba.org)

A need to balance the personal and professional demands placed on architects has long been recognized by the majority of literature. The study evaluates whether firms are addressing these issues or if there is a

need to implement changes to accommodate a better work / life balance and grading / remuneration imbalances.

The survey found that there were discrepancies in the grading and remuneration packages offered between various firms; however not to the extent that RIBA had warned was occuring internationally. There are more noticeable differences in job grades and remuneration in the higher grades, but there were also signs of disparity in the architects 1-5 years of experience in terms of gender towards pay within similar job descriptions. When pay was directly compared to years of experience, members received similar pay, however when compared to levels of responsibility and pay, there were major differences.

The current informal systems are not reflective or accurate in guiding employers on the correct levels of compensation for a particular level of responsibility and those architects practicing in the higher grades certainly need to evaluate their current levels of responsibility to their pay level and hours worked.

The key question was, can architects- be they male or female - balance a working career with family responsibility. The days of a part-time architect have vanished, and those that do work part time are confined to helping on other member's schemes with less responsibility.

The 'all-nighter' syndrome of the academic design studio is evident in some of the overtime hours recorded, but these marathon hours are few and far between and does not infringe on a regular home life for employees in the lower grades as the hours worked are in line with the normal 45 hour week. What is a concern is that in the upper grades, especially in senior member and owners, reported excessively long hours

which are not condusive to normal work-family interaction. Other than some of the contraventions to the basic conditions of employment act, most firms are trying to address options for a balanced work / life relationship

Salaries in particular are extremely low in relation to length of training when compared to similar professions. The research found that poor advancement prospects were a significant factor in members choosing to leave the profession. With lack of training opportunities leading to a lack of experience, lower levels of responsibility and poor career progression paths, combined with limited opportunities for creativity, were the main factors leading to architects expressing their dissatisfaction in the industry.

From the salient points made in the study, a list of recommendations are outlined for consideration. These included developing more expertise in business management, addressing the image of the profession, training needs, salaries and working hours

Architectural firms are seeing the demise of the old arena, dominated by tiered hierarchies, vertical career ladders, practices and processes that are confrontational and authoritarian. Workplaces are becoming more suited to negotiation, to collaborative management systems, horizontal career paths and a more democratic view of how individuals can develop within the company structure.

'It is no longer about what you can do for the company, but what the company can do for you.'

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Lastly, I wish to thank from the bottom of my heart, my wife Colette, for all the encouragement, tolerance and supporting me tirelessly as well as providing endless cups of coffee!

ABBREVIATIONS

DOL	Department of Labour
DP W	Department of Public Works
DCMS	Department of Culture, Media and Sport
DACST	Department of Arts, Culture, Science and Technology
SETA	Skills, Education and Training Authority
SEE	Survey of Employees and Earnings
CIDB	Construction Industry Development Board
CETA	Construction Education and Training Authority
SAIA	The South African Institute of Architects
SACAP	South African Council for the Architectural Profession
CIA	Cape Institute for Architects
RIBA	Royal Institute of British Architects
UCT	University of Cape Town
GDP	Gross Domestic Product
GEAR	Growth, Employment and Redistribution
MAPPP	Media, Advertising, Printing, Publishing, Packaging (SA)
RCS	Database Regional Council Services Levy Database (C.T)
SEE	Survey of Employees and Earnings (South Africa)
SIC	Standard Industry Codes
GDP	Gross Domestic Product
STATS SA	Statistics South Africa
CBE	Council for the Built Environment
RTOF	Recommended tariffs of fees
COIDA	Compensation for Occupational Injuries and Diseases Act
BCEAct	The Basic Conditions of Employment Act

DECLARATION

This research has not been previously accepted for any degree and is not being currently submitted in candidature for any degree.

I declare that this Dissertation contains my own work except where specifically acknowledged

Signed: 

Shaun Michael Adendorff

Date: 5th September 2006

Chapter 1

THE PROBLEM AND ITS SETTING

The first democratic elections in 1994 signalled the end of the apartheid era for South Africa and the beginning of a new era that would represent the aspirations of all its people. Equality and fair business practice in general was one of the first sectors in which drastic changes were instituted by the government. Those that affected the construction industry included the new Constitution of the Republic of South Africa, the Reconstruction and Development Programme (RDP); the Growth, Employment and Redistribution Policy (GEAR); Broad-based Black Economic Empowerment, The Labour Relations Act 66 of 1995, The Basic Conditions of Employment Act 75 of 1997, The Employment Equity Act 55 of 1998 as well as a suite of Acts governing the built environment professions.

The changes in the South African society had a profound impact on, and were important in reshaping the architectural profession. This thesis addresses the subject of job evaluation and remuneration strategies utilised by architectural firms in Cape Town. A starting point in the transformation of any profession is the development of internal and external equality amongst its members.

Job Evaluation is the process of determining, as systematically and objectively as possible, the worth of one job relative to another without regard for personalities or existing structures. (Paterson, 1975) The purpose is to achieve and maintain an equitable distribution of basic wages and/or salaries according to level of position.

1.1 Job Evaluation - An ILO Definition

"Establishing pay structures that are fair and equitable in the sense of ensuring equal pay for jobs demanding what are considered to be broadly similar sacrifices and of rewarding appropriately greater efforts and hardships involved in some jobs as compared with others. In this way it seeks to minimize the dissatisfaction associated with pay differentials and thus to contribute to more harmonious human relations in the workplace." (PE Corporate Services, 2005)

As a company grows it becomes more structured with various sections/ departments/divisions in order for the owner/management team to control it more easily. Top management becomes remote from the detailed tasks of each job and section/departmental/divisional managers become responsible for hiring, firing and remuneration levels. There are varied priorities according to the changing perception of management, and this leads to "leap-frogging" of pay rates between divisions or even between jobs with similar skills. Many arbitrary and ad hoc decisions are made and there comes a time when: (PE Corporate Services, 2005)

- Similar jobs are being rewarded differently;
- There is little co-ordination of pay rates;
- There is no logical basis for the pay structure; and
- There are constant demands for parity and general dissatisfaction

Job evaluation is a part of an ongoing integrated process which includes: (BIM,1970)

- People Budgeting (Establishment Levels)
- Job Analysis
- Job Descriptions
- Job Evaluation
- Salary Structuring
- Succession Planning
- Career Path Planning

- Affirmative Action Planning
- Organisational Structure

The word 'hierarchy' is derived from the two Greek words, 'hieros' meaning sacred, and 'archein' meaning rule. (Paterson, 1975)

The very concept of a 'leader' is based upon the idea that a single person or set of persons can be authorized to act on behalf of others.

A hierarchy can produce a 'tall and thin' organisation, with multi management levels each supervising two or three individuals, or a 'flat' organisation, with few management levels supervising as many as 100 individuals. Whatever the shape, a hierarchical system requires one to know the nature of one's responsibilities and to whom they report within the organisation's chain of command.

The establishment of internal equity with a graded hierarchy of jobs within the organisation and of external equity with the external market rate for equivalent jobs (Paterson, 1975) is important and has lead to the overall analysis of the following problem statement:

An Analysis of the Grading and Remuneration Structures of Architectural Practices in the Western Cape, Cape Town Metropole with specific reference to establishing what methods are used in arriving at cost to company packages.

In industry this is generally solved through a job grading system where the level or value of the job is evaluated and graded generally on any one or some of the following factors: (PE Corporate Services, 2005)

- Job impact
- Job know-how
- Problem solving
- Decision making
- Accountability
- Educational qualifications
- Training or experience
- Pressure of work
- Consequence of error of judgment

1.2 Professional vs. Employee

Architects generally identify themselves firstly as members of their profession and secondly, as partners of their firm. When young professionals qualify, they gain social recognition and special status, and place considerable value on their independence, and in many respects are the "lone rangers" of the working community.

In professional situations there are added complications. Architects assume the responsibility of expert power when they are accepted into their profession. This power is independent of a specific role within a firm and is based upon the professional's training and ability. (O'Connor, 1994)

They gain recognition through membership of the various professional bodies: i.e. South African Institute of Architects and the various local professional memberships. This has an affect on architects' expectations of how they should be treated, as they want to be regarded as authorities in their own right, and then join a professional

practice to enhance their own career. As a result, relationships among colleagues are often laden with implicit agreements and unspoken rules.

1.3 Grading

The way in which a practice is organized/graded enhances or undermines its decision-making ability. Architects may have gained experience in managing a firm themselves, but are unlikely to be professionally trained managers and this has a subtle impact on the way that they manage their professional practices.

Some of the benefits to be gained by developing a logical graded hierarchy of jobs on which to base the wage and salary structure are as follows: (PE Corporate Services, 2005)

- management and employees will be able to see how different jobs relate to one another
- career paths can be systematically plotted through the hierarchy
- a detailed analysis of wage and skills gaps becomes possible
- negotiation and collective bargaining is made easier using a common language or defined point of reference.

In a partnership, there are usually several partners who have equal authority for both long and short-term management. Architectural firms are deemed small businesses, employing between 1-50 people. Conventional management solutions are actually designed for large industries and therefore most firms have developed their own unique management systems.

This multi-leader situation creates confusion among non-partners and staff as there is ambiguity in the chain of command. Even if there is an elected senior or managing partner, all of the partners remain equal-level leaders as they are also the firm's shareholders. (BIM, 1970)

If there is an added level of associates or senior architects then it is even more important that the chain of command is well defined. The following are a number of potential reasons for grading an architectural firm. (Rees,1979)

- There is a large difference in pay rates between similar jobs.
- There are complaints about inequality and demands for parity
- There is no defensible or logical basis for determining what rates of pay should be applied to jobs (or new jobs in organisations)
- There are possible salary gaps between race or sex groups that need to be eliminated
- the spans of supervisory control in an organisation could be out of hand, and there may be a need to rationalise the structure.

However there are also associated problems with grading professionals: (O'Connor, 1994)

- Motivation. The 'carrot and stick' approach to management is less effective within professional firms. This system depends too heavily on power being vested in only a few top positions. However professional practice includes many 'heads' as partners, who jointly own the carrot and the stick and share responsibility. Also, non-partner professionals hold expert power themselves.

- Completion of subtasks is most suited to lower grades within a professional firm. However, as these juniors become more skilled and the training cycle is complete, these skilled junior professionals have limited opportunity to progress as the firm becomes top heavy not being able to support their remuneration.

- Within the architectural industry, a ceiling on advancement is more readily accepted, although grudgingly, and therefore transferring from one company to another is often the only available option.

- Ambitious professionals who have invested years of their lives in education and training find that such limitation to career progress is very difficult to accept and look outside the profession for new challenges.

- Lastly a potential problem for hierarchy within a practice concerns the motivation of those who are at the top. Many Architects prefer the actual practice of drawing and design, and become less inspired when required to hand this role over to less experienced practice members and assume the management role of a trainer/educator, a quality controller, public relation figure and supervisor of the delivery of service. They become even more uncomfortable when a strategic forward-planning role is required of them

This study intends to examine which architectural practices in Cape Town have or have not implemented some form of a formal objective job evaluation grading structure and the reasons for, or for not having done so.

1.4 How grading affects remuneration

Each employee costs the firm money in terms of basic salary, benefits such as medical aid contributions, provident/pension fund contributions, annual bonuses, car allowances, other statutory costs such as unemployment insurance and workmen's compensation and a portion of the overhead costs for running the firm. The details of these costs provide partners with information for deciding which projects are most profitable, the potential costs of a project and which level of professional should be assigned the work. It also helps when negotiating fees, as it eases calculations and leads to a more informed discussion when clients ask for concessions or fee modification. Although this information is not necessarily the only guide for decision making, it is very important and contributes to overall financial success. (Stasiowski, 1993)

This study will, in addition, investigate how architectural practices in Cape Town establish their salary structures, including benefits and incentives, thereby arriving at a total cost to company package.

Specifically this study will examine whether there is a direct relationship between those practices that have adopted a modern, scientific job grading system, i.e. Paterson, Peromnes or Task and accordingly pay market-related salaries and cost to company packages based on salary survey data or some other scientific calculation as opposed to those practices which adopt an ad hoc approach.

1.5 The objectives of the research

The nature of the architectural profession is unfortunately governed by economic "boom and bust" cycles and therefore workload fluctuates with the economy. Given this and the high proportion of small practices, the profession lacks stability and has earned the reputation as the lowest paid profession.

The architectural profession in Cape Town currently has no formal grading and remuneration structures and this research will show if there is a need to formulate a grading system as well as understanding how and why the nature of the profession is changing and if it is due to the informality of the grading and remuneration structures currently in practice

Many individuals choose architecture over other professions as they believe it can provide a work and family balance. The Royal Institute of Architects (RIBA) found that women's career paths generally slow after childbirth and with inflexible working arrangements, including long hours and a lack of transparency in relation to pay and promotion, are the main reasons why both women and men, generally with dependants were leaving the profession, (www.riba.org) This study seeks to evaluate whether firms are addressing these issues or if there is a need to implement changes to accommodate a better work/life balance.

1.6 Brief overview of paper

Chapter Two begins with an examination on the different factors that influence people's career choice decision. An overview of the architectural industry at large and the factors influencing the profession is documented. The various factors that influence grading structures and the considerations needed to implement a system will be discussed. A review on compensation and the strategies used for retaining employees is examined, and lastly, a look at some of the problems currently facing architects.

Included are investigations of current literature of existing articles and research and outcomes combined with research on the World Wide Web, to assist in identifying material for inclusion. There is an examination of existing research relating to architectural education and career profiles and the construction professions as a whole with commentary on current research within the profession. There is also an examination of policies, codes of conduct etc. and the architectural profession is also reviewed in relation to other professions.

Chapter Three establishes the framework for the research. This study involves quantitative research and is very much a product of finding the most effective ways of achieving good quality responses within a very tight timescale and budget. Heavy reliance is made on existing networking.

An anonymous wide-ranging participation questionnaire in order to establish employee's reaction to grading and remuneration is discussed as well as the ethics, validity and advantages / disadvantages of this type of survey.

Chapter four is the collation and analysis of the results. No single reason emerged from the secondary research but rather a multiplicity of factors on why architects are leaving the profession. The data shows that low pay, poor promotion prospects, grading structures and overall satisfaction in the workplace may influence departure.

Chapter Five reports on the findings of this study making recommendations in terms of business management, salary structuring, grading and advancement strategies, marketing of the profession and the options for a balanced work / family relationship. The limits of the study are also discussed.

/. *7 Assumptions*

- A logical approach to grading and remuneration will facilitate change if required.
- It assumed that architectural firms with 10 or more employees have some form of formalised job evaluation systems and grade and remunerate their employees according to these.
- The way a practice grades and remunerates its members, influences its culture and indicates the kinds of problems it considers important in the built environment.
- The architectural profession in South Africa reflects the trends in the built environment of its society.
- Architectural firms in Cape Town are unique because of its location and environmental setting; however principles can be applied throughout the whole of South Africa.
- Members of the profession are diverse and hence current systems need to reflect and accommodate this.

Chapter 2

LITERATURE REVIEW

The competitiveness of the world's major economies is sustained by their ability to innovate new products and services. (Best, 2000, 2001). As South Africa has began to actively compete in the global economy, it is imperative that the country maximizes the construction industry as it plays a vital role in the South African economy and is responsible for the delivery of the infrastructure that is central to the continuing development not only of South Africa, but increasingly, of the region as a whole. (CSIR 2004)

Whilst the South African construction industry is capable of delivering the most innovative and complex projects at times, it is widely acknowledged, that as a whole, it is under-achieving and if the industry wishes to improve, the major construction corporates will need to radically address current practice methodologies and remuneration structures in order to retain skilled professionals not only within their employ but also within the country. (CSIR 2004)

To this end the whole sub-set of reward and remuneration as a part of the overall human resource management thrust has become a strategic imperative for business. Job descriptions, job grading, salary benchmarking and remuneration policies are all necessary and vital to ensure the ongoing viability of the modern company. This chapter will address the whole question of remuneration and the benefits for employees.

2.1 By adolescence, most people have a sense of their competence in a vast array of performance areas, along with convictions about the likely outcomes of a career. Through a number of factors, one's vocational interests, choices and performances are shaped. An examination of the different factors that influence peoples decisions about career choice plays a pivotal role in the expectations that are assumed to be available in the job, and forms a theoretical framework to assess the role of grading and remuneration / cost to company packages have on an individual.

2.2 A brief overview of the architectural industry at large and the factors influencing the profession is documented. A mapping study of the creative industries involved the sourcing of databases of various organisations to gather the necessary data. The number of employees, businesses and average monthly earnings of similar types of design professions are compared within the construction industry. The architectural sub sectors outlook is reviewed, allowing a clearer and more understandable reference base to answer the posed questions.

2.3 We look at some of the problems currently facing architects such as skills shortages, fee cutting and the lack of cost to company benefits that directly affect architects remuneration. There have also been a number of articles published on the reasons why architects are leaving the profession. The Royal Institute of British Architects (RIBA) commissioned the University of West England to produce a paper on "why woman leave architecture" (RIBA,2003) which has caused much discussion and debate on the state of the profession and its policies This has been the main motivating factor for this paper.

2.4 In order to establish whether formalized grading structures are vital in the industry, it is important to understand the macro concept of what "work" means to an individual and what motivates and informs an individual's decisions around their career.

2.5 Job evaluation is the process of analyzing and assessing the content of jobs in order to place them in an acceptable rank order. This contrasts with the practice in many organisations of making arbitrary judgments, with no reference to common criteria which affects pay decisions on other jobs within the organisation. We review sound job evaluation techniques setting the foundation for the implementation of a grading system.

2.6 An examination of the various factors that influence grading structures and the considerations needed to implement a system will be discussed. Paterson's grading method is focused on, as it only uses one factor - decision making responsibility - compared to similar systems that use multiple factors and become very complicated. This simple method will allow the building of a theoretical model in which to evaluate existing formal/informal grading and remuneration strategies in the architectural profession.

2.7 A review on compensation methods and management systems, looking at the following:

- Compensation theory
- Compensation objectives

Organisations can have varying pay levels depending on the size and complexity of the organisation, yet large pay differences between similar jobs in similar organisations are often observed (Seiler 1984; Leonard 1987; Chen 1992). The literature will examine what systems should be in place in order to reduce these discrepancies and lay the foundation for a quantitative study that will allow a comparison between existing systems found through the research and recommended theory.

2.8 How remuneration and grading structures can affect architects is examined. This sets the foundation for strategies that are used for retaining employees

such as intrinsic and extrinsic rewards, non financial and financial rewards, the growth in benefits, governmental enforced benefits, membership related rewards, leave and flexible compensation plans.

2.1 Overview of the Architectural Industry

In today's world, "fashioning a work identity" may well be translated into "fashioning ones identity," as we are what we do and are more frequently asked "What do you do?" rather than "Who are you?"

A career in architecture involves creative, technical, theoretical and managerial work to meet society's need for shelter and accommodation. Designers work with many other technical specialists, often in large multi-disciplinary teams, to turn conceptual ideas into reality. This process of design work takes many factors into account, including the needs of users, environmental sustainability, functional requirements, legal frameworks and financial constraints, (www.ebe.uct.ac.za)

The U.C.T Department for the Built Environment's website for prospective students (www.ebe.uct.ac.za) describes architect's thought processes often as subconscious and intuitive while designing, processing inputs against constraints, comparing outputs with requirements and deciding what is appropriate or not.

In order to become an architect at U.C.T, a candidate must complete the following:

3 years of study for first degree: B.A.S - (Part 1)

- 1 year in practice

2 years further post graduate study: B.Arch (Part 2)

- 18 months in practice (minimum)

Professional Practice Examination (Part 3)

The Bachelor of Architectural Studies under-graduate degree (BAS) is a foundation program (part 1) and provides the necessary ability to proceed to the graduate

professional programs (part 2) in Architecture (the design of buildings), Landscape Architecture (environmental planning and design), Urban Design (the design of whole city precincts), and City and Regional Planning (settlement planning at a large scale).

The Cape Technikon National Diploma in architectural technology follows a 3 year program similar to the B.A.S but is more technically orientated. The B.Tech degree is an optional 4th year in design targeting those students that wish to continue in to the Bachelor of Architecture (B.Arch) program.

All candidates have to complete a minimum of 18 months internship/mentoring program in order to write the professional practice examination (Part 3) and register with the South African Council for the Architectural Profession (SACAP). Although registration was not compulsory for Architects, Senior Architectural Technologists, Architectural Technologists, Draughts persons etc, it was gazetted that all members of the profession who wished to be able to submit building plans had to be registered as from 30 June 2006.

In order for strategic policy decisions that allow the leveraging of its intellectual capital and creativity to take place, Government has identified that a comprehensive study of its "Creative Industries" is needed. (Kristafor and Budhram 2003)

These "Creative industries" are defined as; " those activities which have their origin in individual creativity, skill and talent and which have a potential for wealth and job creation through the generation and exploitation of intellectual property." (Department of Culture, Media and Sport, DCMS, 1998) They include the following sub-sectors: Advertising, Architecture, Arts and Antiques, Crafts, Design, Fashion, Film, Interactive Leisure Software & New Media, Music, Performing Arts, Publishing, Software, Television and Radio.

Studies to date have produced estimates of work activity and business performance derived from national statistics based on Standard Industry Codes (SIC) and/or secondary sources, however these lack detailed and in-depth knowledge across the

sector. (Jeffcutt and Pratt 2002). As a contribution to the South African governments Growth, Employment and Redistribution (GEAR) strategy, the Department of Arts, Culture, Science and Technology (DACST) conducted an industry strategy analysis on the "Cultural Industries" in 1998. Their recommendations in the report "Creative South Africa: A Strategy for Realising the Potential of the Cultural Industries.
Cultural Strategy Group 1998" were to firstly establish a Cultural Industries Development Program in the short-term and secondly to establish a Cultural Industries Development Agency in the long-term.

According to Kristafor and Budhram (2003) architectural companies make up a portion of the Architectural Sub-sector and that an architectural practice can be defined as a business that performs the following functions.

Figure 2-1 Architectural Functions

Core Activities	Related Industries	Related Activities	Peripheral Activities
Building design Planning approval Production information	Construction Structural engineering Quantity surveying	Specialist design Urban planning Construction, planning & control Heritage building & conservation	Brief writing Feasibility studies Project management Appraisal offenders Construction monitoring

Kristafor and Budhram (2003) undertook a mapping exercise, which involved the sourcing of databases of various organisations to gather the necessary data that describes the number of employees, number of businesses and average monthly earnings in order to allow similar types of design professions to be compared within the construction industry, for the Cape Peninsula using the following data sources:

- The Labour Force Survey (LFS)
- Census South Africa 2001 (Census 2001)
- Survey of Employees and Earnings (SEE)
- Regional Services Council Levy (RSC) database (Western Cape)
- Media, Advertising, Publishing, Printing and Packaging (MAPPP) database

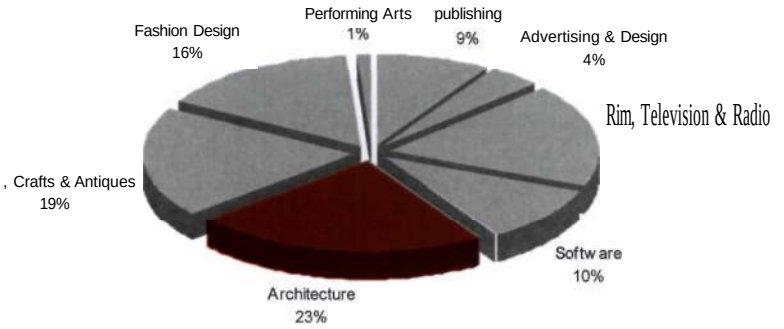
- Skills,Education and Training Authority (SETA)

The LFS, SEE, Census 2001 are all surveys conducted by the South African national statistics organisation and Statistics South Africa (Stats SA). The RSC Levy database is owned and maintained by the Cape Town Metropolitan Council and the MAPPP Seta database is owned and maintained by the Sector, Education and training Authority (SETA), a non-profit making organisation responsible for the facilitation of education and training in the MAPPP sector. Kristafor and Budhram (2003) findings of the composition of the Creative Industries in the Cape Peninsula and the architectural sub sector in relation to the other 12 sub-sector are discussed below.

2.1.1 Composition of the Creative Sub- Sectors and Geographical Distribution

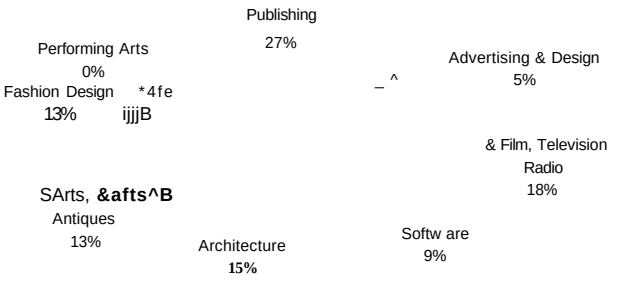
There is a total of 1 372 businesses operating within the Architecture sub-sector in the Cape Peninsula, with a workforce of 17 691. 42% of these businesses are located in Cape Town, with the second largest concentration of 17% located in Bellville in the northern peninsula.

Figure 2-2 Percentage of businesses



The composition of the Creative Industries in the Cape Peninsula as per percentage of businesses is shown in figure 2.3. Architecture at 23%) has the largest number of businesses operating within the Creative Industries. (Kristafor and Budhram 2003)

Figure 2-3 Size of Businesses



The biggest employer is the publishing sub-sector; employing 27% of the total workforce figure 2-3. Architecture ranks third with 15%. (Kristafor and Budhram 2003) This is due to the fact that although there are a lot of architectural firms (23%) some of these consist of smaller practices - sometimes with only one individual.

Small architectural firms are classified as those who employ 1-10 persons. 40% of firms nationally are single practioners and 20% are 2-3 person offices. Medium size practices of 10-20 people constitute approximately 18% and large practices over 20 people ± 5%. "The number of practices that employ over 50 people has all but vanished" states Su Linning, executive officer of the SAIA who attributes this to the use of CAD- technology in the workplace (SAIA 2001)

There are currently 2 600 Registered Professional Architects in SA of which 2 200 are members of South African Institute of Architects (SAIA) in several membership categories, including a category for retired architects. 92% of SAIA members are South African residents; the remaining 8% live outside the country. (3% in Africa; 3% in the UK, Ireland and Europe; 2% in America, Australia, New Zealand, and the East.) (SAIA 2001)

Most firms practice as Architectural Consultancies meaning that they only offer an architectural service, with 5%, being multi-disciplinary small practices, which have interdisciplinary professionals i.e. landscape or town planners etc in one practice. 2% provide specialist services, like arbitration, historic and conservation specialties etc. (SAIA 2001)

Currently, regulations require a registered professional presence for each office. There are currently 1 700 recorded offices or practices with the required architect presence in SA and approximately 1 200 of these are recognized by SAIA.

The distribution figures of Architects throughout South Africa correspond generally to the spread of Practices in the country: (www.capegateway.gov.za)

- 46% are resident in Gauteng and Pretoria (1256)
- 27% live in the Western Cape (745)
- 13% in KwaZulu-Natal (334)
- 6% in the Eastern Province and Border-Kei (combined) (145)
- 4% in the Free State (102)
- and only about 1% in each of the smaller regions of Mpumalanga, NWP & NP (less than 50 registered architects)
- There are 14 Architects in the Northern Cape

The Cape Institute of Architects and the SAIA indicate that there are 745 professional architects in the Western Cape, as well as 131 senior technologists, 35 technologists and 29 draughtsman totalling 940. Assuming support staff of at least one third of this figure results in approximately 1 300 people employed in architecture in the Western Cape. This is a more conservative estimate than that of Kristafor and Budhram (2003), as it focuses only on architectural firms rather than including related sectors such as quantity surveying or engineering. The Yellow Pages list in the Cape Metropole just over 200 architectural businesses.

2.1.2 Turnover

The average income of a large portion of practices remained almost static between 1990 and 2000, maintaining inflationary increase and although some firms have reported good turnover, these represent a small section of the respondents according to the SAIA survey.

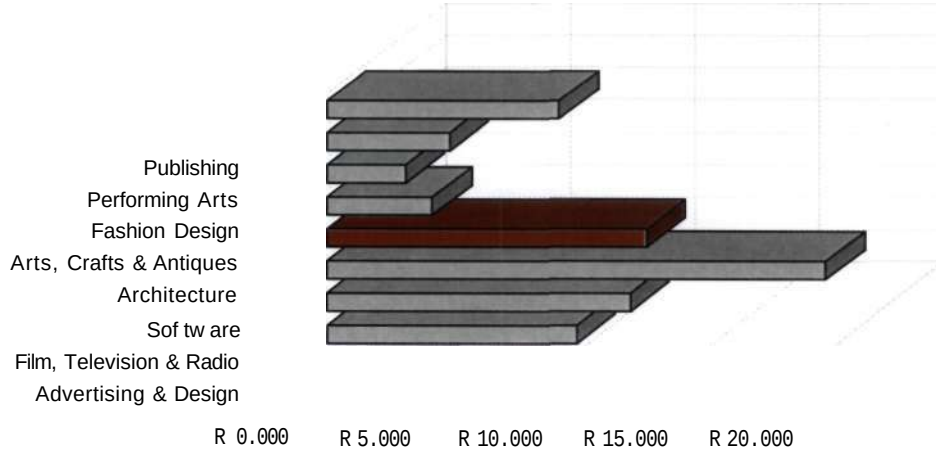
Figure 2-4 Turnover vs. size of practice

	1 PERSON	**2-3 PERSON**	**4-10 PERSON**	**11-20 PERSON**	**21-50 PERSON**	**50+ PERSON**
1990	R193 333	R607 500	R538 000	**Rl** 175 000	**R4** 211 000	**R7** 500 000
* .	R425 510	R701 562	**Rl** 569 000	**R3** 464 000	R13 500 000	R30 000 000

2.1.3 Salaries

According to the national Survey of Employees and Earnings (SEE), the Architecture sub-sector is second largest, with monthly average earnings of R12 778.96. (Kristafor and Budhram, 2003)

Figure 2-5 Sub Sector vs. Earnings



Fee income has decreased by 20 percent in real terms (adjusted for inflation) as documented by the South African Institute of Architects (SAIA). This report also confirmed that more architects are deriving their income from related/peripheral activities or non-architectural sources.

The CSIR attribute low incomes to regulatory changes, competing forces of targeted procurement and lowest price bidding. Although much of the legislation is now in place to curb feecutting and unethical project procurement, consistent implementation throughout all levels of government needs to take place to enforce businesses to comply with these laws.

Fee-cutting by clients (up to 50 percent in certain instances) has reduced margins and resulted in salaries lagging behind comparable industries by up to 40 percent. (CSIR 2004) Consequently, the industry is showing signs of capacity distress with large practices disintegrating into many smaller practices, shedding employees in the process. The Skills Sector Plan (SSP) of the Construction Education and Training Authority (CETA) indicated that the number of people employed within the architectural sector reduced by 50 percent between 1993 and 1999. Financial rewards are reducing whilst liability increases, in-house research and professional development have slowed, and innovation has been replaced by replication according to the CSIR (2004)

Figure 2-6 Summary of the Survey of Employees and Earnings for the Creative Industries 2003 (SEE)

Sub Sector	No. Employees	No. of Companies	Earnings per quarter	Average Earnings per employee per month
Advertising & Design	6828	45	204,249,224.00	9,971.16
Film	825	24	27,296,806.00	11,029.01
Television & Radio	3010	22	109,462,928.00	12,122.14
Software	8109	44	485,427,275.00	19,954.26
Architecture	12052	10S	462,036,172.00	12,778.96
Crafts	3951	24	49,864,382.00	4,206.90
Fashion Design	51801	31	484,014,956.00	3,114.58
Performing Arts	1350	7	19,768,494.00	4,881.11
Publishing	17255	62	481,355,643.00	9,298.86
Art and Antiques Market	7	2	62,712.00	2,986.29
TOTAL	105188	369	2323538592	90,343.27
Average Earnings per employee per month for the entire Creative Industries				7,363.13

2.1.4 Complying with legal requirements

The new Constitution of the Republic of South Africa, the Reconstruction and Development Programme (RDP); the Growth, Employment and Redistribution Policy (GEAR); Broad-based Black Economic Empowerment and the suite of Acts governing the built environment professions are some of the most significant changes which seek to get the construction industry to play a more strategic role in social development and economic growth in the future (White Paper- Department of Public Works, 1999)

Since 1994, over 789 laws or Amendment Acts have overhauled the entire labour legislative frame-work in alignment with the new constitution in support of the country's development ethos.

- Labour Relations Act 66 of 1995- promotes collective bargaining, establishes new procedures and institutions for resolution of disputes and provides for workplace forums.

- Basic Conditions of Employment Act 75 of 1997 which ensures fair labour practice

- Employment Equity Act 55 of 1998- to achieve equity in the workplace through equal opportunity, fair treatment and the elimination of unfair discrimination.

- Skills Development Act 97 of 1998 -The Construction Education and Training Act, 1988, the Council for the Built Environment Act, 2000 and the Construction Industry Development Board Act, 2000

- Skills Development Levies Act 9 of 1999- The Construction Industry Development Board, 2001 to provide the necessary leadership for an enabling regulatory and development framework that enhances the role of stakeholders in industry growth, delivery, performance and transformation

- The Construction Education and Training Authority, 2000 to give effect to skills development that is accessible, equitable and promotes the sustainable formation of the industry's skills base

- Unemployment Insurance Act 63 of 2001

- Income Tax Act 58 of 1962, as amended

- Six councils regulating the built environment professions and the overarching Council for the Built Environment, 2001 to promote greater coordination, development of the professions and their enhanced contribution to national development.

The CSIR (2004) reported that current legislation governing the professions in the construction industry is separating their roles into distinct and separate knowledge silos, which does not recognize specialization in any category of registration.

Construction projects rely upon a variety of disciplines and with the current fragmented processes creating enormous inefficiencies that result in substantial delays in delivery times and abortive costs.

The CS1R (2004) states that this regulatory approach is entrenching practices in an archaic system when most international competitors are moving into multifaceted and integrated serviced-based economies

This was reflected in a draft DPW Construction Industry Status Report (www.gov.za), that found "generally clients and contractors are of the opinion that the quality of work by the professions is deteriorating" and only 50 percent of the respondents were satisfied with the service received.

Kahler (2001) states the reason that 'it is this holistic approach to building culture that is lacking - particularly in the awareness of those involved in creating it' and suggests that work systems within a large number of professional firms are not up to best-practice standards.

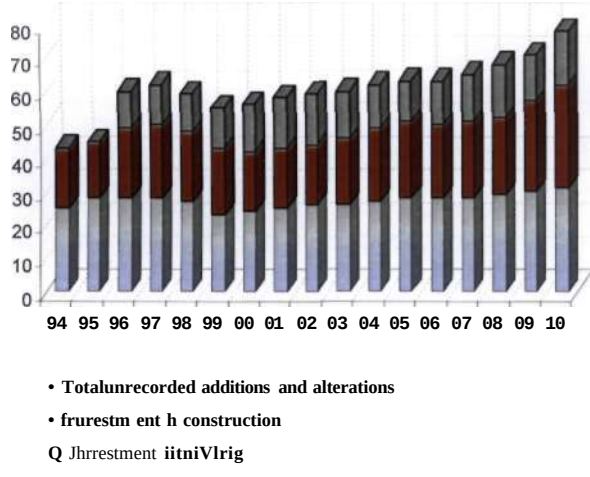
2.1.5 The Status of the Industry

The SA Construction Industry Status Report published by the Construction Industry Development Board (CIDB 2004) showed that the significant reduction in interest rates (down from 17.0 percent in January 2003 to 11 percent in December 2005) has stimulated property investment with the residential sector most likely to continue outperforming the non-residential sector in the short term.

According to the DPW, Construction Industry Status Report, Draft 4. CSIR, 31 March, 2002 the construction industry's share of national income in South Africa is below that of some developed countries. The outputs of the construction industry are predominantly capital investment goods, i.e. buildings, facilities and infrastructure that others use in the creation of goods and services. When the demand for goods and

services decreases, the demand for supporting facilities also decreases, with the obvious exception being the government sector. This affects the architectural profession as firms need to then be able to adapt to shifting market demands. Those firms that have specialized in specific markets, eg commercial and public projects, are mostly affected by these changes.

Figure 2.7 Scenario for Expenditure on Building and Construction; 1994 to 2010 (CIDB)



The building industry is cyclical and has continued to improve from 2000 and although construction flattened in 2005 and 2006 as public sector work showed a continuous decline. This is not due to demand, but rather to government's macroeconomic policy aimed at reducing public debt as a percentage of GDP.

There has also been a recent decline in private sector work following the reported oversupply of office, retail and commercial space in the market.(CSIR 2004). During 2002 a total of R57.5 billion was spent on construction works, which includes civil works (R24.542 billion) non-residential (R16.247 billion) and residential (R16.768 billion) 10. The construction sector has shown a continuous decline in its percentage contribution in GDP of 59,3 percent since 1980, reaching its lowest level in 20 years during 2001 and 2002. Significantly, government's contribution to GDP has declined 15,9 percent since 1992 whilst the private sector has increased its contribution.

Referring to the CIDB SA Construction Industry Status Report - 2004 report there is projected growth up to 2010 which is a positive sign for the architectural profession as this indicates good stability and job creation.

According to the CETA Sector Skill Plan, April 2000 - March 2005 report many experienced members were retiring or nearing retiring age and that a replacement void was developing. It suggested that steps be taken to ensure that high levels of competence and experience be retained through a succession planning programme CSRI (2004) The report argued that management development training was required in:

- **Managing a consulting practice** :

Continuing professional development is currently not compulsory, with the exception of the quantity surveyors, and thus, whilst most voluntary associations offer courses, attendance is not very high. A consequence of this is that the course content is very narrowly focused and many of the issues with which consultants should be engaging - such as employee development - are not being adequately addressed.

The report argued that management development training was required in:

- Managing joint ventures;
- Global competition;
- How to market consulting services;
- Risk management;
- Contract disputes;
- Changing contract conditions and standards;

In addition, it argues that mentoring and Small, Medium and Micro Enterprises (SMMEs) facilitation will also require additional training within the profession

- **Changing conditions and standards:**

The lower level of business activity has reduced the extent to which time and money can be spent on mentoring and in-house training. In-house training and mentoring as a means of knowledge transfer has been a strong tradition within built environment consultancies in South Africa: many of the current professionals still active in South Africa gained highly specialised skills through this practice. The loss of mentoring opportunities and in-house training is impacting particularly on young graduates, who find it difficult to obtain pre-registration employment. They are increasingly being forced to become self-employed and consequently gain their experience at the expense of their clients.

- **HR employee development and management:**

According to the CETA report, the professional consultancies sub-sector has indicated that many experienced members were retiring or nearing retiring age and that a replacement void was developing. It suggested that steps be taken to ensure that high levels of competence and experience be retained through a succession programme. Unfortunately, the limited number of construction projects and the scope thereof do not enable the retention of experienced people or allow inexperienced professionals to gain the necessary hands-on experience.

- **Training in international best practice and standards:**

The industry's delivery chain consists of many composite parts involving multiple participants resulting in systems have a never-ending set of variations and combinations. This multipartite structure results in unpredictable consequences, increasing risk to all participants without allocating liability to any. Developing the required skills to successfully manage these risks requires continuous learning.

Lawrence (2000) suggests that techniques of strategic management are necessary to ensure architectural firms' survival and competitiveness in a changing market. Saidi (2005) concurs, finding that forty-nine percent cent of architects in South Africa said

they had no management training at their architecture school and approximately seventy-four per cent said they had either poor or no training at all in office management.

Most architects learn about the running of a practice and the maximization of people in their employ through trial and error. In order to deal with this problem, U.C.T. in 2005, introduced a management course that deals with facets of people and reward management for the first time as an architectural subject.

2.2 Challenges facing architects in the profession

The first problem concerns the lack of entrants to the profession and why some leave, resulting in a skills shortage. RIBA's Director of Education, Leonie Milliner, said, that the issues are complex as to why both women and men are deciding to leave the profession, but a career in architecture still has the stigma of long hours, a "macho" work culture, low pay and an impossible work and family life balance, resulting in almost a third of architects considering a change of career (Blackler and Levitt, 2005).

2.2.1 Skills Shortage

South African Institute of Architects (SAIA) director Bryan Wallis says the skills shortage is due to local professionals being drawn to other markets and industries, and students being deterred from entering architecture. "The trend is a result of perceptions - which are well-founded - of lower levels of remuneration, as well as an apparent lack of 'glamour' associated with construction." (Hill, 2006)

In 2004 the Peninsula Technikon (Pentech) and the University of Port Elizabeth (UPE) conducted a survey which confirmed that careers in other industrial sectors were much more appealing than construction. The study looked at approximately 300 students at 20 high schools representing the full socio-economic profile of the region in the Western Cape and concluded that almost all of the students surveyed (95.2%) had thought about a future career and that only 4% reported that they had considered a career in construction or building. (Haupt and Smallwood, 2001).

The predominant factors influencing their career choice were salary (58.5%), working conditions (40.2%), opportunities for promotion (36.0%), and lifelong learning (30.4%) and that they viewed the construction industry as "demanding, cyclical - experiencing 'bad times', and require long working hours for little money." (Haupt and Smallwood, 2001)

At the University of Cape Town, approximately 40 students graduate with a Bachelor in Architecture (B.Arch) each year. Research conducted for the Architects Education and Registration Board in New Zealand showed that approximately two-thirds of graduates will practice architecture; while the remainder will leave their country, move into another occupation, or leave the workforce, (www.dol.govt.nz.) There are currently no statistics for South Africa, however if we use New Zealand's 2/3rds illustration then U.C.T. contributes about 27 architects each year to the industry with net migration contributing a small number.

The future demand for architects will largely be determined by activity in the building industry, but with the impending public infrastructure programme and other private sector projects, it may well get to the point where built-environment professionals will be able to "name their price", owing to the skills shortage. (Hill, 2006)

2.2.2 Professional fees effecting remuneration

The Architectural sector falls under the responsibility of the Council for the Built Environment (CBE), which publishes every year guideline fee scales, or recommended tariffs of fees (RTOFs). The practice of publishing and enforcing minimum scales of fees was disallowed by the competition authorities, to avoid price-fixing and anti-competitive practices. The fee scales are not statutory, which allow for discounting against the recommended tariffs by companies and self-employed professionals.

A brutal fact for architecture firms is that firstly the prevailing fee pricing and compensation methods, whether selling hours on a time basis or a sliding percentage scale on construction value, provides only minimal profits for most firms and secondly reinforces client perceptions that architectural and design services are simply commodities to be purchased on the basis of lowest cost. (Hill, 2006)
Legislation has provided for the introduction of competitive bidding for certain public-sector appointments and while the SAIA supports the principles underlying the policy, it discourages its members from engaging in discounting fees, as this draws attention to fee cost comparisons rather than carrying out a sound, qualitative evaluation of the competing bids, taking account of capacity, competence, expertise and quality, with the fee quantum being only one factor in the evaluation framework. However there are those that say that the guideline fee scales should be abolished and market conditions should prevail because clients use the guideline fee tariffs as a benchmark on which to charge a discount.

Wallis (SAIA) says that the tendency to succumb to pressure from clients to discount against recommended fees is not unique and that there has emerged a discernible trend for prospective clients to press for discounts against the guideline professional fees, but with no concomitant reduction of responsibility or scope of services (Hill, 2006).

Former president of the South African Institute of Civil Engineering (SAICE), Allyson Lawless, agrees that more emphasis is placed on fee negotiations than on actual deliverables (Hill, 2006). Owing to discounted fees this places excessive downward pressure onto the contract which, directly or indirectly, compromise service quality. This practice has the knock-on effect of depressing salaries and making the industry unattractive to those currently employed and to potential entrants.

2.2.3 Low pay

Lawless, (SAICE), expressed concerns that "it is clearly necessary to dramatically increase salaries," however with employee salaries making up over 50% percentage of professional fees in the built environment, salary increases are kept to a minimum, in an effort to make ends meet and reduce increased fees in order to be competitive. (Hill, 2006)

According to Salaries review.com an Architect working in Cape Town should earn an average annual salary of R274,619 with the majority of architects earning between Rl91,784 and R361,866 when benefits and bonuses are added to this salary.

When assessing this with the recommended salary guide line issued by the Cape Institute of Architects (2003), the average ranges from R8 444 to R17 938 which calculates to R 101 328 to R215 256 per annum.

Kristafor and Budhram (2003) calculated the average monthly earnings of the 17 691 people working within the Architecture sub-sector at R12 778.96 and according to the SAIA (2001), personal taxable income for architects themselves ranged from R40 000 per annum (R3 500 per month) to R800 000 per annum (R66 000 per month).

In the classified advertisements in the Sunday newspapers, positions for qualified architects were advertised for R90 000 per year. This is considered very low when compared with other professions that require the same length of training and also confirms Lawless's observation that these pay levels are lower than those of some office secretaries.

Anthony (2001) states that architects are paid notoriously low salaries, especially in light of the rigorous education and training required to become licensed, which raises another concern, that of student debt. At UCT with tuition fees at approximately R20 000 per annum, the total debt could be RlOO 000 excluding accommodation, study

materials etc, and questions whether high levels of debt and low earnings potential will deter some people from entering architecture.

*2.2.4 **Illegal employment** practice*

Perhaps one of the most worrying issues that arose was the extent to which illegal employment practice was taking place, whether with regard to respondents' reports of excessive working hours, unequal pay and the obstructions to career advancement (Rhys Jones, Dainty, Neale & Bagilhole, 1996; Greed, 1999; Fredman, 2002; Hunt, 2002). The RIBA research found that poor employment practice was predominantly in practices that had developed without the necessary human resource expertise to manage a growing staff structure. Examples of poor employment practice included;

- **inexperienced employers lacking knowledge of current employment legislation**
- **employers and employees unaware of their legal rights and obligations under employment legislation**

One significant point that emerged from the research interviews was that very few participants had any knowledge of what they should expect in relation to matters such as equal pay, maternity leave, contracts of employment and other matters. Few were aware of the existence of equal opportunities policies within their place of employment and few had even a basic understanding of their legal rights. This lack of knowledge rendered many people vulnerable to inappropriate or even illegal behaviour.

- **employment contracts lacking clarity or non-existent:**

Respondents were asked whether they had a written contract of employment. Although legally, a contract may be verbal or written, it is generally considered good practice to have a written contract which states terms and conditions of employment.

Whilst most respondents did have a written contract a number did not. This lead to concerns about lack of clarity around the agreed basis of employment.

- **bad employment practice and long working hours being excused as an inevitable result of being linked to a fluctuating economy.**

It was clear the hours worked significantly exceeded the EU Working Hours' Directive of a 48 hour maximum working week and in situations where no overtime was paid or other forms of compensation offered, was considered illegal.

- **job insecurity making individuals afraid to assert their rights**

The report stated that interviewees clearly did not want to 'make a fuss' as 'news travels fast in the architectural community' and could effect their careers.

2.2.5 ***Working*** *Hours*

Pandya (2003) writes about the myth that 'all-nighters' and late nights are a necessary rite of passage in the architectural profession which is fostered in the university studio culture and is then transferred into the workplace.

One significant factor that the RIBA report commented on was the long-hours culture and the associated stress. One-quarter of all architects reported working more than 50 hours a week and the rigidity of working hours for some professionals inhibited family life. 57% per cent of the participants wanted more flexible hours, 48 per cent wanted parental leave and nearly a third wanted extended leave at half pay.

Many architects found that there was no opportunity to work flexible hours or if there was, they were made to feel as though they were not serious or their contribution was of less value. Participants confirmed that it was not a gender-specific issue and that men were also affected to the detriment of their work/life balance. This was a critical factor in many architects decisions to remain in or leave the profession. (RIBA 2003)

2.2.6 Lack of gender diversity

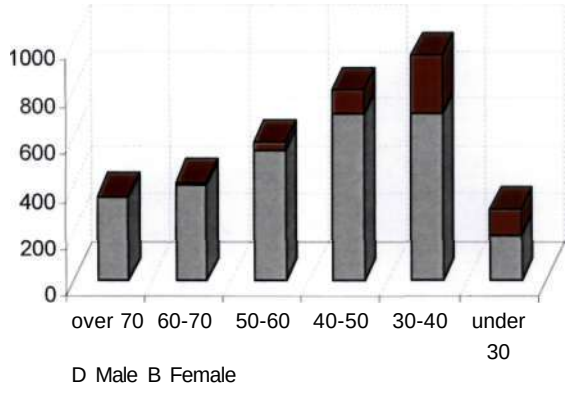
Nationally and internationally, pronounced disparity in gender diversity in the profession of architecture is increasingly recognized as a problem. Women are pursuing careers in architecture at greater rates than in previous years, but female practitioners still face an uphill battle in their efforts to find equal representation in the profession, according to the *2000-2002 AIA Firm Survey.*

However, Anthony (2001) writes in her book, *Designing for Diversity*, "although these figures represent a substantial increase over earlier ones, the number of students far exceeds the number of those individuals who actually make it into the profession."

Pratt (2004) suggests that women, who make up half of the student population at architecture schools, don't become licensed architects because the internship phase, career demands and long hours conflicting with their family priorities. The American Institute for Architects (AIA) research showed that although there is near-parity in gender among architectural student ranks - a demographic that has remained stable for nearly twenty years, women only represent twenty percent of all registered architects in the U.S. Statistics published by RIBA in 2001 revealed that although 37 per cent of students embarking on architectural courses in the UK were female, the overall percentage of women in the profession stood at only 13 per cent (Mirza and Nacey, 2001, 2002; ARB, 2004).

The SAIA (2001) shows that female architects have entered the profession in more significant numbers over the last two decades with women architects in the age groups 40-50 and 30-40, and younger than 30 have increased from under 5% of architects in an age group to 11%, 28% and 41% respectively.

Figure 2-8 Ratio of Males to Females in age groups (SAIA 2001)



Although this ratio is improving in South Africa, architecture lags behind almost all other professions. For example, this ratio is roughly fifty percent behind the professions of law and medicine where approximately a third of their practitioners are female. (Pratt 2004)

The Royal Institute of British Architects (RIBA) published the report "Why do women leave architecture?" which found that a combination of factors, including poor employment practice, difficulties in career breaks and paternalistic attitudes, sidelining, limited investment in training and low pay, led to reduced self-esteem and poor job satisfaction in architectural practice causing architects to leave the profession.

2.2.7 Poor Work/life balance

Kohn (1990) suggested that family and leisure have some influence on work and Kirchmeyer (1992) describes how family and other non-work domains affect attitudes and behaviors in the workplace. Cohen (1997) found that non-work domain variables were significantly related to withdrawal cognitions and affected organisational commitment, and Watkins and Subich (1995) noted the symbiosis between work and other aspects of life.

Considerable research has focused on work/non-work relations and literature suggests three basic models:

- The "spill-over" model states that the nature of one's work experiences will carry over into the non-work domain and affect attitudes and behaviors there (Wilensky, 1960).

- According to the compensation model, workers who experience a sense of deprivation at work will compensate in their choice of non-work activities (Wilensky, 1960).

- In contrast to these two models, Dubin's (1958, 1973) segmentation model claims that no relation exists between one's work and one's non-work domains; the two are lived out independently.

Champoux (1981) concluded that the evidence does not allow any conclusion as to which of the models is most valid, but recent studies by Tait, Padgett, and Baldwin (1989), suggest that the spillover model may be the most accurate means of characterizing the relationship between work and non-work satisfaction. However, a number of studies have found support for both the compensation model and the segmentation model (Rain, Lane, & Steiner, 1991). On the other hand, Kelly (1992) found no relationship between work and family responsibilities and supports Dubin's segmentation Model.

2.2.8 Lack of Maternity/Paternity Benefits

The argument that women still have in general, more intense family responsibilities than men and that this influences careers, has been frequently discussed in the literature. New laws such as the Employment Equity Act, the Labour Relations Act and the policy of affirmative action, mean that employers must introduce programmes, which ensure the representation of women in all professions and job grades, at equal pay and guarantee maternity rights and enforce the Employment

Equity Act prohibits discrimination on the basis of family responsibility. (www.etu.org.za)

However, women still take the major responsibility for childcare and an increasing number of people are also having to take responsibility for elder care. Having to take time out from work for these responsibilities, results in employees not being able to meet the demands of the long hours culture which affects their earning power and opportunities for promotion. (Snir, 2002)

Gutek and Larwood (1987) stated that women's careers are different and are likely to remain different in the near future. Two of these reasons relate to family responsibilities: wives are more willing to accommodate their husband's career needs and the role of the mother requires more time and effort than that of the father. Gutek and Larwood (1987) reinforced the importance of family responsibilities by arguing that an obvious difficulty existed with applying theories intended for men's career development to that of women. Family and work can simply not be considered as two separate realms for women and many are beginning to reconsider whether the rewards outweigh the sacrifices and often forego marriage in order to pursue a senior level management career (Gilson, 1987).

Anthony (2003) stated that in the architectural profession, the time period of transition from architectural internship to advancement in a firm, is from the ages of 25-37, but is also when women choose to take time off to care for young children. It is often very difficult for them to get back on track when they return.

RIBA (2003) reported that a number of women who had married or became pregnant noted a change of attitude by their employers and colleagues - they were seen as not committed to architecture. Of the 39 women who had taken maternity leave within the last ten years, 67 per cent stated that this had adversely affected their careers. These included paternalistic attitudes and difficulties in maintaining skills and professional networks during career breaks. These factors contribute to gradual erosion of confidence and de-skilling, leading to reduced self-esteem and poor job satisfaction. It

is clear in the statements made by those interviewed in the report, that architecture was their chosen career and those that chose to leave, left with regret.

The Women in the Professions Survey 2004 (www.apesma.asn.au) found that pharmacists are nearly twice as likely to have children than women in engineering and architecture and that the survey found that just 21 per cent of female architects had children.

In March 1992, on average, women were found to work 30 years over the course of their lifetimes, regardless of whether or not they married. Of those women who do leave to have children, more than half return to the labor force when the child is one year or younger. By the time the youngest child is three years old, at least six out of every 10 mothers have re-entered or returned to the labor force, (www.iseek.org)

Morin (1988) found that although the issue of children evoked a more dramatic response, marriage was viewed by more than one-third of the respondents to have a negative impact on women's career advancement, as women must prove that they are serious about their career to a culture who believe women will drop out of the labour market for marriage and family.

2.2.9 Gender discrimination and the "glass ceiling"

Barriers which hinder career advancement of women are complex and varied. They have become top agenda items for most corporations and the government. In 1986, the Wall Street Journal coined the phrase "glass ceiling" that has come to symbolize a variety of barriers faced by women and minorities as they seek to improve their employment status. (Hymowitz & Schellhardt, 1986). However the glass ceiling is not simply a barrier for an individual, based on the person's inability to handle a higher-level job, **but** rather, applies to women as a group who are kept from advancing higher because they are women. (Morrison, White & Van Velsor, 1987)

Anthony (2003) refers to an article entitled "the twenty-five hottest careers of 1986" where architecture was rated by working women as the one of ten worst careers due to insufficient salary, intense competition and the lack of advancement.

Ahrentzen, and Groat (1992) argues that women in architecture are:

- less likely than their male counterparts to complete their education
- more likely than male graduates to pursue marginal occupation like interior design, or landscape design upon graduation.
- They are less likely to pass the registration examination.

This sentiment was reflected in a statement posted on a UCT web review page that "women study so they can go to varsity and find an educated husband." (www.megweb.uct.ac.za) which suggests gender bias and perceptions still exist.

However, according to a survey by accounting and consulting firm Grant Thornton, 41% of the working population in South Africa is female and South Africa has globally the third highest proportion of companies (75%) employing women as senior managers and has the eighth highest proportion of women in senior management posts (26%), which beats the global average by 7%. Unfortunately the report showed that although in 2002 forty three percent of architecture students were women, only one percent of females go on to become directors of architectural practices. (www.itweb.co.za)

2.2.10 The "macho and queen bee" syndrome

George Ferguson, President of the RIBA, said that "we are losing some of our brightest graduates because of poor working conditions, the macho culture and low pay in the profession, and that architectural practices needs to take action if we want to be able attract and keep talented and committed architects in the industry."(R!BA 2003)

The lack of diversity in the field of Architecture is also seen in the membership of the various institutes. Figure 2.10 shows the membership of the SAIA as significantly male and the Cape Institute of Architects regular membership is predominantly male, hence the average male architect stereotype. Despite the changing demographic, organisation working methods and expectations of the profession, most firms are still geared to the needs of its traditionally male members. (Blackler and Livett, 2005)

Another problem was the "queen bee syndrome" cited by a number of the RIBA (2003) women. This syndrome is characterized by women who have achieved relatively important positions failing to support or in some cases actively obstructing other women from moving up the career ladder. (Blackler and Livett, 2005)

2.3 What work means to the individual

The understanding of "what work means to an individual" and what motivates them, is important to recognize, as it deals with job satisfaction and retention. The Meaning of Work project (MOW) - International Research Team (1987), defines work by the choices and experiences of individuals, and by the organisational and environmental context in which they work and live.

Work plays a central and fundamental role in the lives of individuals (Brief & Nord, 1990; England & Misumi, 1986; Mannheim, 1993) and is placed relatively high in importance when compared with other areas of life (Quintanilla-Ruiz & Wilpert, 1991). Research has shown that work is considered to be of more importance than leisure, community, and religion and was found in several studies to be ranked second only to family (Harding & Hikspoors, 1995; Harpaz, 1999; MOW - International Research Team, 1987).

Employing individuals involves a continuing personal relationship between employer and employee; however there are some initial factors that need to be considered before attempting to offer employment. According to Rees (1979) the following four components need to be considered:

- Labour force participation
- The number of hours people are willing to work.
- Effort put forth while at work
- Ski 11-based pay

2.3.1 Labour force participation

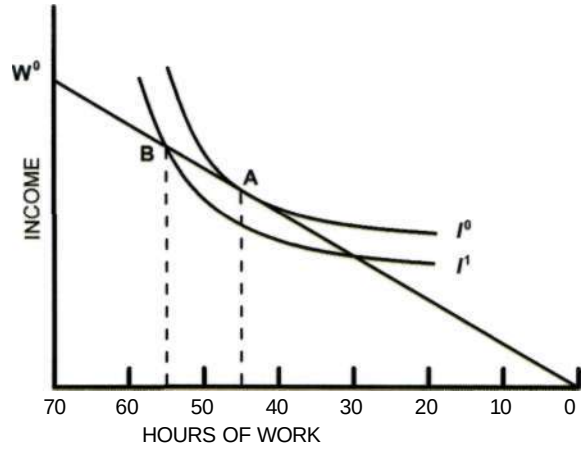
Labour force participation deals mainly with supply and demand. Until recently formal theory of labour supply concerned the choices made by individuals between work and leisure. It separated all other forms of work i.e. education, household work, with market work (Rees 1979) and current theory acknowledges that all members who make a particular category in the labour force - architectural students up to retired members, make up the eligible total labour force. However the participant rate may vary. For example, a rise in wage for market work may induce participation by members who are currently dormant or not practicing. Members, who have left architecture to pursue other avenue eg to care for families etc, are enticed to return to work. Skills/labour shortages generally result in employers increasing the wage level to entice these dormant members back into the work place, and the consequence is that wage rates are unrealistic compared to experience. These unequal levels of remuneration to grade cause dissatisfaction with those permanent employees as well as benchmarking a wage for new graduates that employers cannot maintain in market lows.

2.3.2 The number of hours people are willing to work.

It is assumed that people work mainly for, are motivated by, and enjoy obtaining rewards which satisfy various needs (Lawler, 1994) and that people perceive work as a main vehicle for providing this, (Dubin, Champoux, Porter, 1975; Kanungo & Mendonca, 1992). However the amount of labour supplied depends on the number of hours people are willing to work.

Figure 2.10 shows the employee's choice between work and leisure. The points along the indifference curve *1°* represent combinations of work and leisure and gives the worker satisfaction. The diagram assumes that the workers hours are at a constant wage rate and is represented in the lines $OtoW^{0}$. The scale has been cut off at 70 hours per week as few workers choose to work more than this. The individual whose indifference map where *0W°* is tangent to 7° at (A) shows the maximum satisfaction at 45 hours of work for that amount of pay.

Figure 2-9 Work and Leisure Satisfaction Indifference Curves (Rees, 1979)



Elements such as overtime and incentive pay raise the hours work to (B) and a new indifference curve I^{1} shows the new satisfaction level. This suggests that overtime / incentives pay is usually larger in order to call for the extra hours needed.

Just as there are people who work less hours there are those who work more. People who are multiple job holders or moonlighters, are mainly people with heavy family responsibilities and relatively low rates of pay or lack of overtime pay (Rees, 1979) and this practice is fairly common amongst architectural firms with employees working on private jobs.

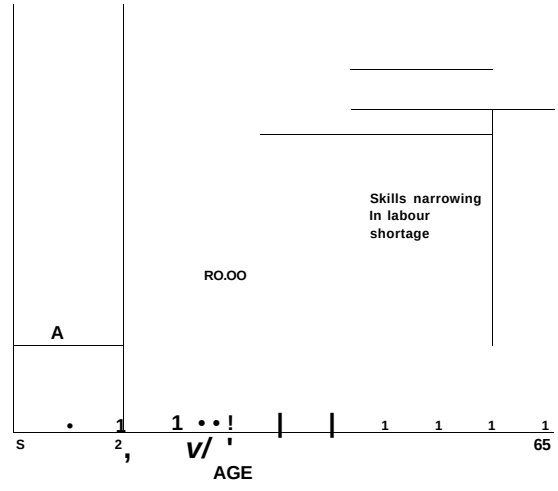
2.3.3 Effort put forth while at work

The theory of "effort put forth while at work" suggests that the pace of work should be faster for shorter hours, as a worker cannot sustain an intense pace for long periods (Rees, 1979). Pay is related to the process aspects of a job, that is, the behaviour required to convert inputs into outputs and outcomes (Armstrong & Murlis, 1998). Reasonable people expect employment compensation to be contingent upon work - it should compensate for the opportunity costs associated with work and serves as an incentive or inducement to perform work (Mahoney, 1989).

2.3.4 Skill-based pay

Skill-based pay is a payment method in which pay progression is linked to the number, kind and depth of skills that individuals develop and use. Pay is people, rather than job orientated (Armstrong & Murlis, 1998) and the figure below represents two individuals (A) and (B) where (A) has invested in increasing skills. The method for deciding the profiles is:

Figure 2-10 The Supply of Skill and Investment in Human Capital (Rees,1979)



V = present value of individual

i = designates age

Y = earnings in a particular year

r = the rate of return

$$\sum_{i=18}^{65} (1 + r)$$

Individual (A) earnings do not immediately equal (B) as (B) has been receiving on the job training. To the right of the point where they cross is the gross return on the educational investment and it is also more realistic to assume that (A) will retire later.

However an important argument put forward by Reder (1955) that during labour shortages of skilled people, there will be a narrowing of skill differentials, as other less skilled workers are promoted with "on the job training" to skilled positions.

Rees's (1979) concept of the labour force separates work from all the other uses of time. It is an over-simplification to illustrate the decision made between work and leisure. Decisions about the allocation of time will reflect how individuals view opportunities, such as studying versus entering the market immediately and the remuneration and grade level expectations.

The levels of satisfaction show the number of hours members are willing to work for a level of remuneration. The purpose of the theory is to show how a rational decision maker may respond to changes in the opportunities facing him. There are cases in which employers want large amounts of overtime where workers are reluctant to supply it which results in an investigation on incentives to compensate the member's satisfaction level to the new level of work hours.

In addition to an individual's willingness to work, almost all workers bring to their jobs some skill and experience. The analysis of the investment of human capital, provides one of the main explanations for wage differentials by age, experience, qualification etc and helps determine policy on how to grade and remunerate these individuals.

Finally, it should be kept in mind that when an investment in tertiary education is considered, investors are estimating from current employment conditions, the returns that will actually be received at some point in the future. This impacts the architectural profession directly, as a higher return attracts new entrants to the profession and an increased supply of graduates.

It is therefore in the interest of all parties, firms, professional institutes and educational institutions that the correct levels of remuneration and grading systems are in place to portray the correct public image of the profession.

2.4 Job Evaluation

Job evaluation is simply a means of comparing the relative values of different jobs in an organisation and a process of establishing the relative worth of jobs in order to create a balanced wage structure (Husband, 1976.)

According to Bim (1971), the foundation of any organisational structure is based on its employee hierarchy and since the 1930's management and academics have sought a means of measuring as scientifically and as objectively as possible, the relative worth of jobs. This "value" is founded in the process of analyzing and assessing the content of jobs, in order to place them in an acceptable rank order which can be used as a basis for a remuneration system (Bim, 1971). Without an evaluation system, Paterson (1975) warns that confusion of relative pay for one job, to pay for another can seldom be explained. Paterson (1975) states that many organisations make arbitrary judgments often based on short term expediency about payment of particular jobs, with no reference to common criteria and inadequate reference to the effect of pay decisions on other jobs within the organisation. These ad hoc changes bring about the phenomenon know as "wage-drift", seen by economists as the rate of increase in earnings which is not accompanied by extra effort.

In the architectural profession, the discrepancy between increased wages with no increase in effort or experience primarily occurs in labour shortages, with "pieceworkers" or contract staff demanding higher earnings for the lack in job security (Robinson, 1968), and it is common to see temporary contract staff having higher earnings than permanent employees with a higher level of skill. (Mackay, 1970). The economic theory of supply and demand for paying employees at "going labour rate" is impossible to justify as research has shown that there are wide discrepancies in pay for similar jobs at different firms within the same locality (Mackay, 1970). Unless there is some mutually agreed framework or set of principles

to which appeal can be made, the situation very soon degrades into power politics and horse-trading. Paterson (1975) states some of the other benefits gained are:

- management and employees will be able to see how different jobs relate to one another
- career paths can be systematically plotted through the hierarchy
- a detailed analysis of wage and skills gaps becomes possible
- negotiation and collective bargaining is made easier using a common language or defined point of reference.

Job evaluation is necessary in order to make decisions on rates of pay, and such decisions must be made on the basis of assumptions about the relative size or value of a job. (Armstrong & Murlis, 1994)

There are various methods at present commonly being used, some of which have been in operation for many years, whilst others are results of present research. However, the fundamental principles remain that the objective of any job evaluation system is to establish an acceptable rank order of jobs in a particular area (Bim, 1971). The five most commonly used grading systems are:

- Ranking - a job evaluation method that considers the relative importance of each job as a whole, directly against all other jobs in the area under review.
- Grading - a job evaluation method whereby the whole job is compared against predetermined criteria in order to identify their appropriate place in a previously defined grading / pay structure.
- Factor comparison - a job evaluation method whereby jobs are examined using a predetermined monetary scale for each factor
- Points rating - a job evaluation technique in which each factor used has a quantitative scale of points against which jobs are assessed.
- Profiling - this technique assesses jobs factor by factor in terms of four or five significant levels of difference. Weighting of factors is determined by

paired comparison of a number of benchmark jobs, quantification of the individual assessments of these and a matching of the two sets.

Some of the major job evaluation systems in use in South Africa are:

- Paterson Decision Band Method
- Peromnes system
- Hay Guide-chart Method

Although methods differ significantly, each system has the following common elements: job descriptions, assessment, grading and remuneration.

*2.4.1 **Job** Descriptions*

If any grading system is to be justified and is to ensure a sound remuneration system, it is necessary to analyze jobs on an assessment of their relative importance or responsibility (Bim, 1971).

Written job descriptions identify, define and describe the job as it is being performed (Milkovich & Newman, 2002) and according to Henderson (1982) and PE Corporate Services (2005), this would result an opportunity to study the organisational structure and to identify anomalies, allowing the job analyst to fully understand how each job is structured, noting:

- key performance areas
- duties and responsibilities
- levels of authority and accountability
- reporting relationships
- spans of control
- level of decision making

2.4.2 Assessment

Systematically and consistently assessing the job factors involved in each job, relative to the demands of other jobs is needed. Although there is a degree of flexibility in any job evaluation method, one must observe the grading rules of the selected system if the method is to retain its credibility (Bim, 1971). These generally involve an analysis of existing wage data, choice of system, communication of the system and the selection of a committee, as well as assessing the job description and bench marking jobs through the comparison of factors within the job or a paired comparison of similar jobs.

The method must be simple and easily understood by the majority of the members of the firm (one of the drawbacks to factor comparison and time span methods is their complexity), but still have flexibility built into the remuneration system.

Wage/salary structure in an organisation is often a source of bias, for consciously or unconsciously, employers tend to construct a hierarchy of jobs in their own minds based on what they know of the existing salary/wage structure (PE Corporate Services, 2005). Thus, a Grading Committee must continually be reminded that it is "the job and not the person" which is important and that current wage/salary levels are irrelevant to the grading process.

2.4.3 Grading

Based on the assessments and evaluation carried out in the job description and assessment stages, it is possible to produce a rank order/hierarchy of jobs in order to establish a grading structure where jobs of similar levels of decision making and responsibility are placed in the same grade.

However as pay structures become too hierarchical, organisational performance may be adversely influenced, because employees will become less co-operative and less inclined towards teamwork. (Adams, 1965; Bloom, 1999; Pfeffer & Langton, 1993;

Main, O'Reilly, & Wade, 1993.) On the other hand, equity theory suggests that an overly egalitarian pay structure will similarly be detrimental.

In all plans, although numerous assumptions are made, these assumptions should not be too far removed from the factual situation. Mahoney (1989) names four such assumptions:

- the jobs differ in terms of the required contributions of skills, effort and responsibility
- employees will accept the criteria used to assess job worth
- equity perceptions of individual employees will be similar to that of the collective
- equity criteria remain stable over time.

2.4.4 Remuneration

Once the system of job evaluation has been selected and the job analysed and graded in a hierarchical order, it is possible to assign a monetary value to the job. Bim (1979) lists 6 steps:

1. Group like jobs into the required number of grades
2. Draw a histogram/scattergram showing the job values against existing rates of pay
3. Compare levels of existing payments with existing surveys or market values
4. set a rate or range of payment for each grade
5. Identify over/under payment by comparing new rates with existing rates
6. Cost new structure with ways of dealing with under/over payment

Some of the factors that are considered as important, in determining how much money is to be paid for jobs are:

> ***Job*** *experience,* although based on perceptions and practice, is inherently tied **to** time, whose passage allows for the accumulation of the job-related

knowledge from action, practice, and perception of the tasks and duties associated with a specific job (Quinones, Ford & Teachout, 1995).

Organisational experience suggests an accumulation of work-related information that is conceptually distinct from job experience (Quinones, Ford & Teachout, 1995;Tesluk & Jacobs, 1998) as this is the process by which an individual comes to understand the social knowledge, values, and expected behaviors necessary to assume an organisational role (Chatman, 1991; Van Maanen &Schein, 1979).

Human Capital Theory suggests that employees make investments of experience in themselves, which enhance their ability, and thus influence job performance (Ehrenberg & Smith, 2000). Learning theory also predicts that job experience enhances job ability (Weiss, 1990). Some have argued that experience is linked to organisational commitment rather than job performance (Quinones, Ford & Teachout, 1995; Tesluk & Jacobs, 1998) and although may appear less directly related to job performance, it helps both the individual's and the organisation's performance (Nonaka, 1994) and should have unique effects on job performance beyond those attributable to experience gained through performing a specific set of tasks.

Both perspectives suggest that job performance changes over time because individuals accumulate 'on the job' experience and therefore it can be assumed that employees with longer tenure are paid more which is what the Cape Institutes of Architects salary guideline is based on.

The architectural profession, and most professional institutions in general, follow this assumption, as it is seen, that with years of service, the status of ones grading and remuneration is increased, and this is supported in the SAIA report (2001) which showed that the highest average income age group was for architects with 20 years experience and that the average income for those with 5 years experience is about half of the high earners.

Waldman & Avolio, (1993) support the theory that aging may play a role in how an individual changes over time, and subsequently may affect how job performance changes. However Rhodes (1983) and Salthouse (1979) suggest that increased age causes a deterioration in abilities, such as speed, dexterity, motor coordination as well as decreased memory, reasoning and spatial abilities. (Lindenberger & Bakes, 1994; Salthouse, 1991; Verhaeghen & Salthouse, 1997).

Aging may also affect performance through motivation and Wright and Hamilton (1978) suggest that older employees go through a "grinding down" stage where they accept what is available to them and lessen their expectations. This research is supported with evidence that has shown a negative relationship between age and ambition, aspirations, and overall motivation (Giblin, 1986; Judge & Hulin, 1993; Judge & Locke, 1993; Kuhlen, 1977; Rhodes, 1983). The research however does not refer to an optimal age when this occurs.

Despite this theory and empirical evidence showing aging effects on performance-related constructs, research on the age/performance relationship has shown mixed results with equal numbers of studies showing positive, negative, and no relationship (McEvoy and Cascio, 1989; Rhodes 1983). This is also supported in the SAIA (2001) survey where members with 20 years experience earned on average 20-25% more, than more experienced colleagues with 25 and more years postgraduate experience.

2.5 Selection of a Grading System

The above mentioned factors only enforce the need for a justifiable system in order to assess the value of an individual and their pay. Currently all systems popular in Southern Africa produce similar and workable hierarchies, meaning that which ever system is selected, it will produce a similar job grading hierarchy with very little difference between methods of evaluation. This results in the selection of the type of system being less important, but PE Corporate Services (2005) advise that the criteria for the choice of a system must be that:

- the system is simple and easily understood
- the system can be conveyed to all levels of management as well as lower-level employees;
- all jobs are evaluated against the same norm;
- the implementation of the system can be done quickly and easily;
- the system is practical and adaptable; and
- have numerous market surveys based on the system.

2.5.1 The Paterson Method

All jobs can be compared in terms of the kinds of the hierarchy of decisions made by members in the firm. All firms subconsciously rank jobs through the seniority of its members and the responsibility level they have in determining these individuals pay.

Professor TT Paterson developed a method of job evaluation based on decision making and responsibility arguing for its development as there was a need to overcome the following problems

1. The need to find a method which could be quickly installed and easily kept-up-to-date.
2. Top management was not prepared to become involved with the implementation and that ongoing management of the points factor systems as they required large amounts of effort and were difficult to maintain.

3. Most methods were time consuming and led to the Grading Committee operating at too low a level, signaling a lack of commitment and allowing line managers to deliberately "beat the system" through manipulating certain jobs' grades to specific levels even if they should not have been. (Paterson, 1975)

In order to overcome this, the Paterson system has been developed to:

- be based on the smallest number of factors which would produce a hierarchy similar to those produced by points factor systems and
- work effectively without points mentioned above.

The research found that when rating jobs against the decision-making factor, the resultant ranking or hierarchy is essentially similar to those obtained using full points factor systems. This method only relies on one factor, whereas the other methods use several factors, degrees of each factor and weighting, which are all very complex and subjective, tending to confuse and raise suspicion.

The Paterson grading method is focused on in this study as it is simple to implement and only relies on this single factor that can be easily measured. This will enable the building of a theoretical grading and remuneration framework in order to compare existing formal/informal systems currently used in the architectural profession.

All jobs, whatever the particular field or function, require people to make decisions, so decision-making is common to all jobs. For this reason, decision-making becomes an important factor, if not the only factor, by which jobs can be compared, making the Paterson Method currently one of the most frequently implemented system in Southern Africa. (PE Corporate Services, 2005). This can be attributed to the following factors:

- Job hierarchies produced by the method are essentially the same as those produced by other recognised methods of job evaluation.
- It is the quickest of all job evaluation systems to implement and update whilst producing a hierarchy of jobs essentially similar to any other

system. This makes it economical on management time, maintenance and overall costs.

- It is easily understood by employees at all levels in an organisation.
- It is the most commonly used system in Southern Africa and is supported by in-house consultancies, management consultancies, academics and several salary surveys.
- It is an international system, recognised by the International Labour Organisation (ILO) with increasing numbers of implementation systems around the world, particularly in the USA and Canada.
- It is a flexible system which can easily be modified to change the number of sub-grades to suit organisational requirements, e.g.: delayering, multi-skilling, skill based pay and "broad banding".
- It has been successfully implemented across a wide range of industry sectors and at all levels in the organisation.

Deci & Ryan (1985) emphasize individuals' needs for evaluation and recognition, and that people already know (sometimes sub-consciously) the difference between semi-skilled and skilled, between management and senior management. The next step is being able to be articulate these differences.

Paterson (PE Corporate Services, 2005) describes the characteristics of decisions taken at each level which allows people to read a job description and relate that job to a specific level of organisation without using points. Paterson defined the kinds of decision taken at each organisational level into six levels

Figure 2.11 Six levels of organisation and decision making

Policy Decisions	**BAND F**
Programming Decisions	**BAND E**
Interpretive Decisions	**BAND D**
Routine Decisions	**BAND C**
Automative Decisions	**BAND B**
Defined Decisions	**BAND A**

Taking this step further, Paterson divided each band, with the exception of Band A into a supervisory or co-ordinating part and a non-supervisory part. To be in the supervisory part of a Band employees must supervise and co-ordinate the work of other people in that Band. Supervisors of A Band workers are found to be incumbents of jobs at a higher level than A Band which is why A Band is not split into two parts. This is shown in the figure below:

Figure 2.12 Classical grades

BAND	**GRADE**	**TYPES OF DECISIONS**
F	Co-ordinating 11	Policy
	Non co-ordinating 10	
E	Co-ordinating 9	Programming
	Non co-ordinating 8	
D	Co-ordinating 7	Interpretive/probalistic
	Non co-ordinating 6	
C	Co-ordinating 5	Process/systems/routines
	Non co-ordinating 4	
B	Co-ordinating 3	Operative/sub-systems/automatic
	Non co-ordinating 2	
A	1	Defined

This produced the eleven classical grades. It is easy to grade jobs objectively into these eleven grades, which form the "backbone" of the grading system. Each job is

composed of tasks, and the decisions required to complete each task can be identified. A job is composed of tasks which are groups of relative processes and operations. The difficulty of a job is a relative term. What is difficult to one person may appear easy to another, but according to PE Corporate Services (2005) relative job difficulty can be expressed in terms of kinds of decisions. The higher the decision making in the job, the greater the difficulty. For example:

BAND F: top managers have tasks that involve policy decisions in all major areas of operation

BAND E: senior managers have tasks that involve programming decisions, i.e. planning the implementation of policy.

BAND D: middle managers have tasks that require interpretation of the plan and the choice of what is to be done within the limits of discretion set by the plan.

BAND C: specialist workers decide on the processes or systems necessary to complete the task

BAND B: skilled workers have decisions on the cycle of operations within a process or system.

BAND A: workers with basic skills can decide on the elements of the operation.

Using Paterson Decision Band Descriptions it is possible to place each job description in a Band A-F.

Since grading is based on the decision making factor, grades will be allotted mainly in terms of the degree of judgement each task/process/operation requires. Factors such as training, supervision required, consequence of errors and pressure of work are also important but are more qualifications of the judgment aspect.

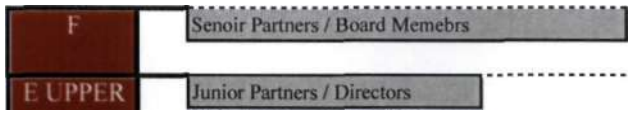
As previously discussed, a worker exercises judgement whenever he/she has some discretion to choose from several alternative ways of doing a task, e.g. at a higher level there are probably many ways of increasing production in the workplace, whilst at the lowest level, the person can probably only choose the speed at which he works.

Workers in Band A usually have a basic level of skills. Their equipment and tasks are fully and clearly laid down. Why they have to do the job, what they must do, how they carry out each task and when, have all been decided for them. This means that the process they carry out, the smaller operations in each of these processes, and the separate elements of work in each operation, have all been strictly laid down for them. The limits of discretion are extremely restricted.

In Band B the semi-skilled worker does not need to know why he/she performs his/her operations in a certain way. They only have to decide how to carry out the task given to them - the what, where, and when are laid down. The skilled worker in Band C has the choice of process.

Using the Paterson method we are able to grade the various jobs found in an architectural practice according to these guidelines and the decision making levels.

Figure 2-13 Comparison Between various grading systems (PE Corporate Services2005)



	Associates	
	Project Architect	
	Architect under lOyrs exp Chief Technologist over 10 yrs exp	Architect over 10 yrs exp
C I PPER	Chief Technologist up to 5yrs exp Sect Leader/Technologist under 10 yrs exp	Chief Technologist 5-10yrsexp Sect Leader/Technologist over 10 yrs exp
	Technologist over 5 yrs exp	
C LOWER I	Technologist under 5 yrs exp	
B UPPER 1	B Tech Technologist	
B LOWER |	B.A.S / ND tech graduate	
A	Trainee Technologist / intern	

Figure 2.14 shows how the various grading systems compare to each other.

Semantic Scale		**Paterson**	**Peronines**	Hay	Castellion
Top management	F	F	1++ 1 +		14
Senior management	E	E UPPER	1 2	1	13
		E LOWER	3	2	
Professionally qualified, experienced specialists and mid-management	D	D UPPER	4 5	3	12 11
		D LOWER	6	4	10
Skilled technical and academically qualified workers.junior - management, supervisors	C	C UPPER	7 8 9 10	5 6 6a 7	9 8
		C LOWER	11 12	8	
Semi-skilled and discretionary decision making	B	B UPPER	13 14	9 10	7 6
		BLOWER	15 16	11	5 4
Unskilled and defined decision making	A		17 18 19	12 13	3 2 1

Figure 2-14 Comparison Between various grading systems (PE Corporate Services2005)

2.6 Compensation

Employee earnings levels and the method of compensation are believed to have an influence on employee behaviour (ref) Employee compensation is a method of allocating resources to earnings from the interactions of supply and demand. Compensation also serves as a tool for social stratification and is seen as a prime determinant of standard of living.

Human resource management practices in general (Becker & Gerhart, 1996; Becker & Huselid,1998; Huselid & Becker, 2000), and compensation systems, level and distribution of pay and benefits in particular (Banker, Lee, Potter, & Srinivasan,1996; Becker & Gerhart, 1996; Becker & Huselid, 1998; Shaw, Gupta, & Delery, 2002), have a considerable effect on the efficiency of any organisation, and on the morale and productivity of the workforce.

The term "compensation" is often discussed in the context of a hierarchical conception of pay (Milkovich and Newman 1993), where the compensation system is disaggregated into its fundamental components, such as method, level, changes in earnings over increasing job tenure and similar factors. Employee compensation is understood as the overall employee earnings for a period of time, including direct compensation (e.g., wages) and deferred compensation (e.g., pension plans).

Pay is a key factor affecting relationships at work and according to MOW (1987), income for most individuals is regarded as one of the most important factors. (Harpaz,1999). It is therefore vital that organisations develop pay systems that are appropriate for them, that provide value for money, and that reward workers fairly for the work they perform.

2.6.1 Compensation Theory

The literature consistently shows that increases in relative wages are associated with increases in productivity, however there is less agreement on the scale of the effect and whether the increase in productivity is large enough to pay for the wage increases. (Levine 1992)

The wage-deferral theory argues that firms need to obtain long-term commitments from their workers (Lazear (1979). Employees earn below-market wages during the early years of employment but earn above market wage during later years. Lazear (1979) argues that this method dissuades workers from leaving by enticing workers to make long-term commitments to the firm in return for promised rewards. In the architectural profession these are normally associateships or partnerships and builds on transaction cost theory, also known as the New Institutional Economics (NIE), which assumes that exchange is costly; there is no third party to enforce the bargain thus it pays to minimize transactions cost. In addition people do not necessarily make economically rational choices and is based on the premise that people act in their own self interest. These assumptions lead theory in a very different direction, one fundamentally more cautious about market transactions and more supportive of institutions and contracts (Williamson 1975; Milgrom and Roberts 1992).

Theorists of efficiency wages argue that employers who offer above market-clearing wages induce employees to be more efficient. It is reasonable to expect, and empirical research has shown, that high compensation levels attract more qualified and productive workers than do lower compensation levels (Groshen and Krueger 1990; Chen 1992). Increases in tenure are also explained by higher wage levels (Holzer 1990) as the consequences for employees with a higher compensation have difficulty in finding alternative employment with similar levels (Groshen and Krueger 1990). However in some firms, "fair wage/effort hypothesis applies where high wages paid to one group, must also be paid to another or tensions may arise due to the perceived inequity (Akerlof and Yellen 1990; Rice, McFarlin & Bennett ,1990; Milkovich and Newman 1993).

Incentive theory is closely related to efficiency-wage-based theories for motivating higher employee effort and the two most popular incentive theories, Maslow's hierarchy of needs (Maslow, 1954) and Herzberg's hygiene theory (Herzberg 1966), include pay as an important factor in employee motivation. (Milkovich and Newman 1993) In the former, pay supplies a series of basic needs: e.g. the need to acquire food and shelter and can also be associated with other higher needs, such as recognition and satisfaction at the workplace.

2.6.2 Compensation objectives

Whichever theory is applied, in any compensation system, the objectives are generally the same for all organisations, (PE Corporate) and look at the following:

- Attracting the right quality of applicants
- Maintaining equity among employees
- Pay Systems
- Salary structure

2.6.2.1 Attracting the right quality of applicants

Greater levels of knowledge, skills, and abilities should be associated with greater pay, and in the past, architecture was one of the high-income professions. This situation has changed over the last two decades, and the SAIA (2001) study shows that some of the respondents reported personal taxable income as low as R40 000 per year.

In general, built environment courses are lengthy and expensive and the salaries for graduates far lower than the professionals involved in commerce, information technology and law (Hill, 2006). According to CIDB (2004), the low image of the industry together with deteriorating profitability is discouraging bright young people from entering the built environment professions, who are tending to gravitate towards the "lifestyle" careers in the IT and financial services sectors.

Salary adjustments are also far slower and far less, as they are experienced-linked, however Milkovich & Newman, (2002) reported that organisations, mainly abroad, are progressing toward linking pay more strongly to performance rather than to experience.

2.6.2.2 Maintaining equity among employees

Compensation is often discussed as a hierarchical conception of pay (Milkovich and Newman 1993), where the compensation system is divided into its components, such as method, level, changes in earnings over job tenure and similar factors and is understood as the direct compensation (e.g., wages) and deferred compensation (e.g. benefits). The following factors determine pay equity:

- **Market rate policy**

To maintain competitiveness, companies must decide on their policy for reviewing their pay practices and whether to lead or lag behind the market. Companies typically review employees' pay and performance once a year, but market pay-levels move continuously. Pay levels typically increase as competing employers deliver salary raises, reward performance and maintain the competitiveness of their pay levels (ACAS, 2005)

A problem faced by firms is that good employees are resigning for more money from the competition and that new hires must be paid "market value" which at times is greater than the compensation given to seasoned veterans, (www.wbcnet.org)

Supply and demand theory tries to explain these differentials in wages in companies. The relative scarcity of supply is due to the required education, skills and experience needed to practice as an architect, and that certain firms can afford to pay more for labour. More importantly interactional factors play an important role in wages as the profession has institutionalized customs, traditions and rules for behaviour which determines employment compensation

Currently the Cape Institute of Architects issues a recommended salary guideline to employers. This salary survey is conducted between members where information on employee pay is volunteered. The disadvantages of this survey is its sample size, in that, in certain instances only two firms contributed to pay information for a certain grade and the mean is recommended. Secondly, it is not reflective of the market pay or the grade but rather subjective to the individual firm. Thirdly the pay grades are based on education as the single factor and not on contribution to a firm. Lastly, although the survey is supposed to be administered yearly, the last survey took place in 2003 and currently there is no current formal grading or recommended pay schedule in Cape Town.

2.6.2.3 ***Pay*** *Systems*

Many studies of compensation have typically emphasized only one component of pay- either pay level or pay structure (Bloom, 1999; Bloom & Michel, 2002; Klaas & McClendon, 1996) yet, because pay level and pay structure are both essential characteristics of a compensation system, it is important to consider them simultaneously in order to relate pay policy to employee satisfaction.

Pay level represents a firm's average compensation relative to that of other competing organisations (Gerhart & Milkovich, 1992), and is often labeled as leading, matching, or "lagging" the market. Efficiency wage theory predicts that higher pay improves attraction, retention, and motivation and organisations that are leading the market in remuneration should experience increases in both individual-level and organisation-level efficiency (Akerlof & Yellen,1986). Higher pay levels generate larger applicant pools, which allow organisations to be more selective when hiring and are more able to attract, retain, and motivate the best performers (Williams & Dreher,1992, Akerlof & Yellen, 1986; Campbell, 1993).

Sturman, Trevor, Boudreau, Gerhart (2003) investigated the close relationship between pay level and pay structure and found limits to this theory, as the increased

costs associated with paying higher compensation will outweigh the efficiency and performance benefits at some point. In various discussions with architects this is becoming more of a reality as less experienced staff members are requiring /demanding higher salaries and as firms are downsizing and not able to pay these rates, and with the shortage of skilled employees, employers in the profession have entered into a bidding war for staff, resulting in employee poaching and general disparity between pay and job descriptions.

Pay structures are used to determine specific pay rates for particular jobs, usually based on the nature of the job, its content and requirements, and are often used in conjunction with pay systems to develop flexibility and an increased knowledge in the workforce of the organisation's business needs. A pay structure provides the framework within which the organisation places the pay rates for its various jobs or groups of jobs. (England & Harpaz, 1990; MOW, 1987)

Most organisations, whether formally or informally, group jobs into pay grades or bands. Jobs in the same band or grade are then treated as being of equal value, either because they have been evaluated with similar scores under a job evaluation scheme, or because the organisation sees them as broadly equivalent.

Various factors are important when designing a compensation system for an organisation. Lawler (1981) names some of the key factors to consider when designing a compensation structure as:

- deciding on the goals of a compensation system
- developing a policy on how to communicate the system to the employees
- deciding on the decision-making process of compensation
- deciding on a desired market position regarding compensation
- deciding on the mix between benefits and cash
- the role of performance-based pay
- and deciding on a performance appraisal method

An acceptable and effective pay design, which maximizes levels of service, productivity and quality, while providing fair and reliable pay, is essential to harmony and efficiency in the workplace. Goodwill and motivation will be undermined if pay systems are not 'felt fair' by the workforce (www.businessday.co.za). Information obtained from the job evaluation exercise is combined with pay surveys in order to assist in a design that addresses the following:

- Pay slope or pay ratio between grades - By looking at the intended ratio of top to bottom pay across the structure it is possible to estimate the level of pay appropriate to each grade. This can be done for example, by making a constant percentage pay increment between grades

- Number of pay grades- The number of grades in a payment structure is the number of grades in the job grade structure (assuming the same population of jobs is covered by both). The number of grades and the pay increment between them relates to the ratio of top to bottom pay in the structure.

- Pay ranges - A simple structure is obtained by devising a single set of pay levels covering the whole set of jobs and for a particular job grade to be covered by for example four to six of these pay levels. Such a structure is called a pay spine. A pay spine is developed by considering the ratio of top to bottom salaries, the number of grades and the pay increments within and between grades.

- Grade overlap - An incremental pay structure is likely to have four to six levels of pay within the grade. The top point of a grade may be lower than, equal to or higher than the bottom point of the next higher grade which recognises the value of experience in a job, so an experienced person in a grade could be earning more than a person with less experience in a higher grade.

The grade structure provides a framework for managing a pay system, either as a series of grades with pay ranges attached to each one, or a single pay spine divided into grades at specified incremental points on the spine. Used properly, a grading structure should ensure that jobs of equal value are paid equally. An organisational pay plan is characterized by its pay structure, which includes the number of levels in the structure, the size of the pay differentials between each level and the rate at which employees can progress through each grade in the structure (Gerhart & Milkovich, 1992).

Pay systems provide the basis on which an organisation rewards workers for their individual contribution, skill and performance and fall into two main categories:

- *those where pay does not vary in relation to achievements or performance,*

  Basic rate systems are where a worker receives a fixed rate per hour/week/month with no additional payment. These are popular in architectural firms that employ temporary/ piece workers for certain projects or a period of time, (www.acas.org.uk)

- *those where pay, or part pay, does vary in relation to results/profits /performance.*

The area of pay is important as it is naturally of major interest to workers what they are to be paid and how they may increase their earnings. Trevor, Gerhart, Boudreau (1997) found that pay policies providing greater pay growth for high performers (and less for low performers) substantially increased retention among high performers and thus, increased the value of the work force.

In designing a competitive pay system, a company considers the relative emphasis of offering employees base salaries, incentive payments and benefits. Emphasis on one element versus another is a strategic decision based on company requirements to

recruit needed employees. In the right combination, these elements can be used to implement a pay system that helps accomplish the company's strategic objectives (www.salary.com/hr). Employers have the choice of the following systems to base their design on.

Basic rate system

Basic rate systems are straightforward but may not provide incentives to individual workers. Under basic rate systems a worker is paid in relation to a given period of time - an hourly rate, weekly wage or annual salary. Generally this rate is the established rate for all workers in one category, but there are often incremental scales which allow for progression, perhaps as additional experience and skills are obtained.

Basic rate pay systems have the advantages that:

- they are relatively simple and cheap to administer and allow labour costs to be forecast with accuracy
- they lead to stability in pay and are easily understood by the workforce, who will be able to more readily predict and check their pay
- there may be fewer disputes and individual grievances than under systems linking pay to performance or results.

However:

- basic rate systems do not by definition provide direct incentives to improve productivity or performance. Nevertheless employers may prefer to operate simple basic rate systems and improve the design of jobs, so that the job provides the necessary interest, motivation and satisfaction
- basic systems may be criticized by individual workers, who wish to see their own abilities specifically rewarded
- " basic rate systems can also lead to a rigid, hierarchical system of spot-rates or pay ranges.

Basic rate pay systems are likely to be particularly appropriate in circumstances where:

- all workers do identical or similar work
- the volume or quality of work is difficult to measure, or where the workflow is uneven
- where the volume and/or pace of work is outside the workers' control
- where high output is not as important as other considerations (eg quality, stable production levels).

The traditional argument for other systems is that basic rate schemes provide only sufficient motivation to workers to achieve a certain level of performance and may not offer incentives for increased or improved performance or quality, nor for recruitment and retention of workers.

A grading structure may be developed through a job evaluation scheme which puts jobs into an appropriate grade or band in the organisation and pay increases may then depend on moving up a scale, skill development, promotion to another grade, or a general increases of pay levels. (ACAS, 2005)

Incentive schemes

Many employers use pay systems that contain direct links to individual performance and results. These may be via:

- ***Payment by results (PBR) e.g. bonus, piecework, commission***

The aim of any PBR scheme is to provide a direct link between pay and output; the more efficient, the higher their pay. This direct relationship means that incentives are stronger than in other schemes. Piecework is the simplest method of PBR - workers are paid at a specific rate for each 'piece' of output. This means the system is straightforward to operate and understand, although many bonus schemes incorporate quality measurements in the assessment to avoid the likelihood of workers "cutting corners" in order to increase output reference all this

However, traditional bonus, piecework and work-measured schemes have declined in recent years, as many employers have moved to all-round performance rather than simple results/output based pay.

The advantages of this system are:

- It is a simple system that is easily understood
- Employees drive the quality and output
- Bottom driven rather than top down, increasing lower grades participation in decision making.
- Potential to earn larger bonuses
- Beneficial to both employer and employee

However the disadvantages are:

- Earnings may fluctuate through no fault of the individual.
- Targets may not be accurate enough resulting in members concentrating on easy turnover jobs.
- Individual skills are not rewarded
- No overtime or bonuses are paid above the incentive

- ***Work-measured schemes***

Work measurement is often used to determine target performances. A 'standard output level' is set by a work study, for particular tasks and a basic time for a task is then calculated by using laid down methods, observing workers performing the operation and taking into account their rate of working. Incentive payments are then linked to output achieved relative to the standard

- ***Measured day work (MDW)***

Measured day work (MDW) is a hybrid between individual PBR and a basic wage rate scheme. Pay is fixed and does not fluctuate in the short term providing that the agreed level of performance is maintained. MDW systems require performance

standards to be set through some form of work measurement and undergo revisions as necessary where pay is regulated to performance. Motivation comes from good supervision, goal setting and fair monitoring.

The disadvantages are:

- MDW is difficult and costly to set up and maintain
- Requires total commitment of management, workers
- There must be effective work measurement and efficient planning

- ***Appraisal/performance related pay***

Appraisal/performance related pay is generally used to link progression through a pay band to an assessment of an individual's work performance during a particular reference period, often a year, and usually relate to an individual's achievements against agreed objectives relating to output and quality of work. There may also be an element of evaluation of personal characteristics, such as adaptability, initiative and so on. The reward may be an additional sum of money paid in the form of a bonus. This differs from PBR systems as it begins to recognize individual performance were as PBR systems relay on the result rather than the individuals contribution.

Advantages of appraisal-related pay: (ACAS, 2005)

- It may provide a 'felt fair' system of rewarding people according to their contribution
- Higher performance within the organisation may result
- It provides a tangible means of recognising achievements
- People understand the performance imperatives of the organisation
- The link between extra pay and extra performance is clear.

Disadvantages: (ACAS, 2005)

- Performance evaluation is subjective.
- Such schemes usually involve only an annual assessment and payout, which may weaken any incentive effect
- Many appraisal-related or performance pay schemes pay quite small sums in terms of performance pay progression or annual 'bonus'.

- ***Market-based pay***

Market-based pay links salary levels and progression to those available in the market. It is often used in conjunction with a performance pay matrix, which allows faster progression from the bottom of the scale to the market rate, which will be the mid-point. Progression then slows, regardless of the performance of the worker, as they are deemed to be earning above the market rate for their job. This system is rarely used as a scheme in isolation, but may be part of a reward strategy incorporating several performance elements.

- ***Competency and skills based pay***

Competency and skills-based pay schemes have increased in popularity in recent years (ACAS, 2005). A direct link is created between the acquisition, improvement and effective use of skills and competencies and the individual's pay.

Unlike traditional performance based schemes which measure outputs, competency-related pay measures inputs, i.e. knowledge, leadership skill, team-working ability, skills and the behaviors necessary to perform the job. Many organisations already use competencies in recruitment and in performance appraisal for non-pay purposes and goes along with the increasing tendency for pay to be linked to the abilities of the individual rather than a single set rate for the job.

Competency-based pay is often used in conjunction with an existing individual performance related pay scheme and will reward on the basis of not only what the individual has done, but how they have achieved their targets.

Both competency-based and skills-based pay have similar attributes:

Advantages:

- Increased skill and flexibility in the workforce
- Reduction in traditional demarcations
- Increased efficiency
- Tangible benefits for workers in return for changes in working practice.

Disadvantages:

- Defining the competencies valued by the organisation.
- There are differences between behaviors that are in-built and those that can be developed.
- The complex nature of what is being measured and the relevance of the results to the organisation.
- Judgments about people's behavior may be less than objective.
- Payroll costs will increase as workers gain higher rewards for increased skills.
- Employers may be paying for skills/competencies rarely used.
- Can de-motivate once the full range of skills/competencies is gained - when workers reach a ceiling of their training opportunities or there are no higher grade positions available when they have completed their training.
- Highly trained workers will be more marketable and may be 'poached' or tempted to leave.

Compensation comparisons can take the form of external evaluations, comparing the compensation with other employers and internal comparisons, with other jobs in the same organisation (Mahoney , 1989). Depending on the feasibility of implementing a strategy, employers will emphasize either the one or the other, but even if internal comparison is chosen, some link to the external market must always be maintained. (Mahoney, 1989) Compensation comparisons influence employees' choices among various work alternatives such as occupation, job, employer, training and effort (Lawler 1981).

According to equity theory, employees evaluate "exchange relationships" on the basis of comparisons of their perceived ratios of inputs and outputs to the perceived ratios of others' inputs and outputs (Adams, 1965). When there is perceived inequity e.g. having to work harder, but receiving less pay than co-workers, employees may respond with a multitude of negative reactions in order to restore equity. Frank (1985) suggests that workers may be more likely to accept perceived inequality when they are paid above their "marginal products," and that pay systems that provide insufficient differences for human capital could yield feelings of inequality on the parts of those with greater levels of knowledge, skills, and abilities.

To address this, newer pay structures are moving towards a flatter, less hierarchical shape, where pay rates may be incorporated in fewer, broader bands. This flattens the structure of the pay and grade hierarchy and may increase flexibility, dispensing with the need for constant regarding. The adoption of a broad banded structure shifts the emphasis to evaluating the individual, focusing on lateral career development and on competency growth, rather than upward progression through a hierarchy (Armstrong &Murlis, 1994).

2.6.2.4 Salary Structure

The Paterson method is a single-factor job evaluation method based on decision making. Paterson(1975) establish a logarithmic relationship among wage rates paid to the different decision grades. Husband (1976) and Roberts (1976) research confirmed Paterson's findings of this relationship in the following formula..

n = number of grades

F_0 = minimum pay i.e. for grade o

Y_n = Pay for grade n and

r = the gradient of the curve i.e. the rate of increase of pay between grades

Then $r = \tan\theta = PM/Y_0M$

$$= (\log r_B - \log Y_0)/n$$

$$= (1/n)\log(r_B/y_0)$$

$$r = \{YJYj''$$

Similarly $Y_n = Y_a r''$

Let A; be any number of Grade between w and 10. (as per classical grades within broad bands ref figure 2.14

Then: $Y_k = Y_n r^{k \sim n}$

Therefore referring to the PE Corporate Services salary survey (2006) of architects and the Cape Institute's recommended salary guideline we are able to establish the pay gradient between the various bands.

Therefore let

n = 10 (total number of grades)

7_0 = R3500 (2nd year student in practical training as per CIA guideline)

Y_n = Rl 7 000 Y_6 (Architect D Lower based on PE survey 2004)

$$r = \{YJYj''$$

$$= (16000/3500)^{1/6}$$

$$= 1\text{-}28$$

Hence there is a constant 28% increase between grades. Given the gradient (r) and the minimum pay (Y_0) it is possible to calculate the mean pay for any other grade. If the minimum pay is R3 500 and the gradient is 1-28 then pay for a technologist $(F_4)$is obtained thus:

$$Y_{'n} = Y_{'Q^r} r''$$

$$Y_4 = 3500X(1\text{-}28)^4$$

$$= \text{R } 9\ 395$$

However, given the gradient 1-28 and a technologists mean pay (7_4) as R 9 395, the mean pay for a Senior partner (K_{10}) can be calculated as:

$$Y_k = Y/\text{-}^n$$

$$Y_w = Y_4 r^{10\text{-}4}$$

$$9395X(1\text{-}28)^6$$

$$R41319$$

However, most executive pay packages in Grades E and F are generally made up of a base salary, a bonus tied to practice performance, stock options, and long-term incentive plans and in addition, executives participate in "broad-based" employee benefit plans and also receive special benefits i.e. company cars etc.

Figure 2-15 Mean Pay in relation to grade level at 1:28 ratio (PE Corporate Services salary survey, 2006)

F	R41 319	Senoir Partners
E UPPER	R 32 281	Junior Partners / Directors
E LOWER	R25 220	Associates
DUPPER	R19 705	Project Architect
D LOWER	R16 000	Architect over 10 yrs exp
		Architect under lOyrs exp
		Chief Technologist over 10 yrs exp
C UPPER	R12 025	Chief Technologist 5-10yrsexp
		Chief Technologist up to 5yrs exp
		Sect Leader/Technologist under 10 yrs exp
		Sect Leader/Technologist over 10 yrs exp
		Technologist over 5 yrs exp
C LOWER	R9 395	Technologist under 5 yrs exp
B UPPER	R7 340	B Tech Technologist
B LOWER	R5 734	BA.S / ND tech graduate
A	R3 500	Trainee Technologist / intern

2.7Retaining suitable employees

According to local Hay Group senior consultant Malcolm Pannell, "Compensation is one of the most critical tools because of the magnitude of its financial and emotional value." (www.businessday.co.za) In a recent study by the Hay Group and World at Work on determining the prevalence and effectiveness of compensation practices, the following was found amongst the 1200 businesses that participated. (www.businessday.co.za)

- Ninety percent of organisations have a written compensation policy, but in most cases, employees do not understand it.
- Seventy-three percent admitted they did not effectively communicate information about their pay system to employees.
- Only slightly more than half of managerial and professional employees and less than 25% of other employees know their own salary range.
- Sixty-one percent said they were not effective or even marginally effective at using their pay programs to motivate employees. This is good and should come earlier on.

According to Latter (2006) and there are three reasons why traditional pay systems fail to support today's business strategies.

Firstly, traditional pay, although professing to reward performance, is actually based on tenure, entitlement and internal equity and in most instances, these amount to across the board salary adjustments for inflation or shifts in the labour market.

Secondly, although a well-structured reward system is a powerful motivator and communicates what is important to the business, traditional compensation systems fail to harness this power. They do not communicate business priorities, nor do they reinforce the behaviours that are important to business success.

Thirdly, under traditional reward systems, employees are paid a consistent salary irrespective of personal performance or business profitability and fail to take into account the organisation's good and bad times.

Lester (1952) says "it is naive to talk of the "competitive wage," the "equilibrium wage," or the "wage that clears the market" and that information about people's reactions to pay has little practical importance to employers unless employees have discretion in setting pay and developing pay policies. It is therefore important to look at other factors that affect people's attitudes and behaviors to job satisfaction and commitment.

2.7.1 Job satisfaction and commitment

Job satisfaction is a function of the discrepancy between what is desired in a job and what is actually experienced, as a standard of comparison (Rice, McFarlin, & Bennett, 1989).

A great deal of research has been done on what determines whether or not individuals are satisfied with the rewards they receive. (Lawler, 1981) The most important aspects with regard to satisfaction are:

- People's feelings of satisfaction are influenced by comparisons with what happens to others
- Satisfaction with a reward is a function of how much is received and how much the individual feels should be received
- People often misperceive the rewards of others
- Overall job satisfaction is influenced by how satisfied employees are with both the intrinsic and extrinsic rewards they receive from their jobs (Lawler, 1981)

It has been found that individuals who rank work highly in importance seem to be more committed to their organisations, have greater job satisfaction, participation in decision making (Kanungo, 1982), longer job tenure (Dubin, Hedley & Taveggia 1975) and derive a purpose and contentment from their jobs. Hertzburg's hygiene

factors support this model and it is therefore conceivable that an increase in money would not prompt these individuals to relinquish their jobs and it therefore important to consider other factors, rather increases in pay, for employee retention strategies.

Paterson says that a man will sell his labour if the net advantages are on the positive side, meaning that there are intangibles which can not be expressed in money, which retain someone in a job (Paterson, 1975).

It has long been recognized that pay is not the only factor that might produce enhanced performance and job commitment. As well as the job-related factors mentioned earlier, additional payments, non-contributory pension schemes, and non-cash benefits such as cars, life insurance, and assistance towards child care (e.g. workplace nurseries/creches) may all play a part, nevertheless, the prospect of higher pay for increased output/quality often provides an incentive and many schemes are introduced in the clear expectation that performance will thereby be improved.

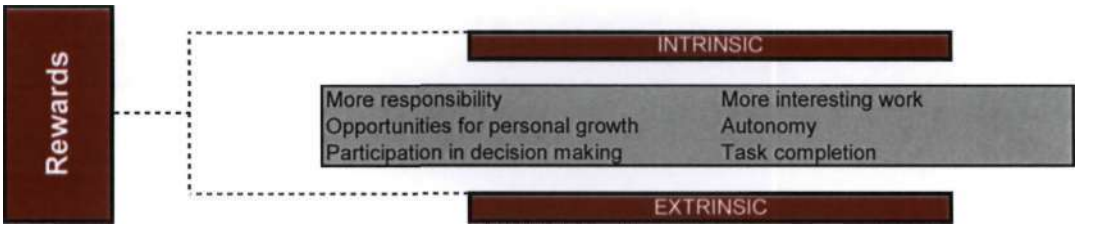
Studies have shown that employees place a high value on benefits, but their demands differ understandably in the types of benefits they demand. (Nealey, 1963) Young employees desire fewer benefits compared with wages and time off, employees with dependents value medical benefits greatly, and the desire for a good retirement plan.

However, Herzberg (1966) argues that employee attitudes toward benefits are ambivalent and appear to be a classic case of what he calls a hygiene factor or dissatisfier. "When the benefit is absent, the person wants it. When it is present, it has no positive motivational force."

Another concern is that as the benefits cost percentage of total compensation increases, the direct pay cost percentage decreases and the compensation differential between the mediocre employee and the outstanding achiever narrows. Managers cannot recognize outstanding achievement with direct pay increases because funds for direct pay are diminishing as benefits spending gets bigger (www.parkerhr.com).

Benefits have a very definite place in the motivational scheme of the organisation. Underlying membership rewards is the assumption that the organisation desires long-term employment and will provide it, however this commitment can reduce the ability of the organisation to adapt to changing circumstances and with the trend toward using part-time and temporary employees, it is therefore essential that small business managers recognize the advantages, limitations, and cost impact of providing employee benefits. Factors like length of employment, job category, wage levels, and many more can affect how a benefit is applied to a particular employee enforcing that company benefits should clearly not be static, but instead have the ability to respond to employee demands, the external environment, to internal corporate needs, and to labor market pressures.

Figure 2-16 Types and structure of rewards (HRMSA www.uwc.ac.za)



Financial		Non Financial	
Performance related	**Membership related**	**Status Rewards**	**Social Rewardss**
Commission	Basic salary	Location of office	Praise
Performance bonuses	Retirement benefits	Office furnishings	Compliments
Merit pay	Car allowances	Assigned parking	Friendly Greetings
Incentive schemes	Medical aid	Own secretary	Dinner invitation
Achievement awards	Thirteenth cheque	Public recognition	Pat on the back
Stockownership	Vacation	Commendations	Social gatherings
Share options	Profit sharing	Convenience services	
	Work life programmes		

2.7.2 Intrinsic Rewards

In considering rewards it should be borne in mind that pay and financial benefits are not the only motivator for worker performance. Other important motivators for individuals may include job security, the intrinsic satisfaction in the job itself, recognition of a job well done, and suitable training to enable members to develop potential.

Hay Group has identified six motivational drivers that help create an engaged workplace and influence results, including: inspiration and values; future growth/ opportunity; quality of work; enabling environment; work/life balance and; tangible rewards (www.realbusiness.co.za).

Job satisfaction is basically an individual matter where aspects of jobs are related to members own value systems, some placing greater value on different variables and these values are subject to change upon economic, social and other influences. Of these values the following intrinsic orientation (satisfying work; variety; interesting work; job- abilities match; autonomy) and entitlement norm (retraining responsibility; ask for suggestions; meaningful work) need to be considered (Tiffin and McCormick, 1970).

However, although employers around the world know how much intrinsic job satisfaction matters, Hay Group research consistently finds that not enough of them actually deliver it. A Hay Employee Attitudes survey found that 75% of managers felt they had interesting and challenging work. But only 56%) of professional and technical employees and fewer than 40%> of clerical and hourly employees felt the same way (www.realbusiness.co.za).

2.7.3 Extrinsic Rewards

The retention of qualified employees can often be accomplished by increasing wages, rewarding good work with bonuses, and/or introducing new benefit packages (AAGroup Insight Archives.htm).

- Quarterly bonuses,
- Greater contribution to family health,
- Care premiums,
- Generous salary increases,
- More vacation days relaxed dress policy, and
- Increased incentives (i.e. dinner gift certificates, event tickets, catered lunches, etc.).

2.7.3.1 Non Financial Rewards

Non-monetary rewards can often be as effective (if not more effective) than cash based incentives. Firms are focusing on quality of life and working to increase their "fun factor". Employee social events and learning opportunities help build on existing loyalties, (www.wbcnet.org)

Many people in organisations see titles as a form of compensation that represents no cost to the organisation. (Marshall 1978) This should however also be handled cautiously as job titles should be nothing more than short job descriptions. (Marshall 1978)

Tiffin and McCormick (1970) place emphasis on interpersonal relations (contacts, type of people, good interpersonal relations) which create a sense of belonging, internal happiness and job environment satisfaction to employees which costs the firm very little, but is an effective tool for employee retention.

2.7.3.2 Financial Rewards

Total compensation consists partly of the pay and partly of a set of other rewards that are loosely called benefits and because there is a certain amount of money generally available for wages and benefits, there is generally a compensation "tradeoff between one type of compensation (benefits) replacing another (wages). (Gordon and LeBleu, 1970)

Fringe benefits is the most common name given, but indirect compensation, wage supplements, non-wage benefits, social wages, supplementary employee remuneration, supplementary compensation, and indirect payments have also been used. (Sargent, 1963). In this paper the term 'benefits' will be used.

2.7.3.3 The growth in benefits

Originally called fringe benefits, as these rewards formed only a small portion of the total compensation package, the growth of benefits today has far exceeded that of wages by almost three times. (Gordon and LeBleu, 1970) These benefits play an increasingly important role in the lives of employees and their families and have a significant financial and administrative impact on a business.

Most companies operate in an environment in which an educated work force has come to expect a comprehensive benefits program. Indeed, the absence of a program or an inadequate program can seriously hinder a company's ability to attract and keep good personnel.

Choosing what benefits to offer is generally dictated to by cost, but company size, industry, location, and types of employees also play a big part.

Relatively few benefits are required by law. Many of the usual employee benefits, like health insurance, extra holiday pay, pensions and company "perks" aren't required at all, but have become business necessities, offered voluntarily by employers in order to remain competitive in the hiring market. However, if an

employer chooses to provide these discretionary benefits, there are often additional regulations governing how the particular benefit must be administered. (www.parkerhr.com)

Superficially, benefit decisions are similar to wage level decisions. In both instances, the basic issue to the employer is that of labor cost. The employer decision involves expenditures resulting from the employment exchange, and from a cost standpoint the organisation is indifferent as to whether these costs are in the form of wages or benefits. However, decisions on benefits involve a number of choices different from other wage decisions. Benefits are not unitary, as are wages, employees value benefits differently and the requirements vary with individual circumstances.

2.7.3.4 Governmental enforced benefits

The contract of employment and the employment relationship are regulated by the provisions of the Basic Conditions of Employment Act of 1997 and the provisions of the Labour Relations Act of 1995. The purpose of these Acts is to enforce section 23(1) of the South African Constitution (the right to fair labour practices) and South Africa's obligations as a member of ILO.

- **Unemployment Insurance (UIF)**

The Unemployment Insurance Fund is a compulsory payment by the employer and a contribution from the employee and provides benefits for unemployed people and for the dependants of deceased contributors (provided certain criteria are met). Illness and maternity benefits are also paid. Revenues are obtained from the contributions of employees, their employers and the Government.

- **Workmen's Compensation:**

The Compensation for Occupational Injuries and Diseases Act (COIDA) now compels employers to insure their employees against industrial accidents or illness that could result in death or disability. The Act provides for the compulsory insurance cover of employees. The Compensation for Occupational Injuries and Diseases Act

provides a system of "no fault" compensation for employees who are injured in accidents that arise out of and in the course of their employment or who contract occupational diseases. Payment from the fund is from income via employer contributions based on accident rating and employee wage roll.

2.7.3.5 Membership related rewards

The fact that over half of all benefits are intended to reduce economic insecurity suggests that both employers and employees are aware that life in an industrial society requires these protections and offering a combination of benefit programs is the most effective and efficient means of meeting economic security needs.

To the employee, two of the most prevalent advantages of benefits are the tax advantages and the lower cost of receiving the benefit by belonging to a group. These rewards are given to employees on the basis of being members of the organisation, not on the basis of the job held or performance on that job. Thus they are called membership rewards and consist of the following:

- **Medical Aid**

These benefits protect employees and their families from economic hardship brought about by sickness, disability, death or unemployment. South Africa does not have a national medical insurance scheme and if offered, contributions are usually made by both employer and employee in equal shares.

- **Retirement/ Pension Schemes**

These benefits provide retirement income to employees and their families. In a defined contribution pension, the covered employee often has a choice as to how much to contribute to his own retirement saving account and his employer generally matches the contributions.

It has been found that pension provisions influence worker and firm behavior (Gustman and Mitchell, 1992) as they can deter mobility for younger employees, and

they can also induce workers to remain on the job longer if the plan offers substantial rewards for continued work (Fields and Mitchell 1984).

2.7.3.6 Leave

The old concept of "two weeks with pay" has given way to a wide variety of paid and unpaid leave plans for all businesses. Some leave options are enforced by government and others optional benefits. Among the typical options are: (www.sbaonline.sba.gov)

Annual leave.
Holidays (religious and state).
Sick leave.
Personal leave (birthday, other reason of choice).
Emergency leave.
Compassionate leave (funeral, family illness).
Religious observance.
Education/training.
Leave without pay.
Leave of absence (paid or unpaid).
Parental (formerly maternity) leave.

As per The Government Gazette, 25 July 2002 the Act provides for:

- A maximum working week of forty-five hours (Section 9-2.2)
- A minimum annual leave entitlement of 21 consecutive days on full remuneration per every annual leave cycle. (Section 20-3.2.1)
- Paid public holidays should they fall during a working week (Section 18-2.10.1)
- Paid sick leave of 6 weeks in a period of 36 months (Section 22- 3.3.2)
- Three days paid family responsibility leave (Section 27-3.5.1

The Basic Conditions of Employment Act provides for minimum terms on which employees must be employed in relation to, inter alia, annual leave, sick leave,

overtime and daily and weekly maximum working hours. However employers do sometimes provide extra paid vacation time other than the three weeks as a benefit as an incentive or reward for service. Employers are also offering paid leave instead of money for overtime or performance.

Many organisations are finding that almost any position lends itself to some degree of flexibility and work programs can often be modified to meet the needs of both employer and employee. The concept of "leave banks" allows employees to schedule days off giving the employee choices for using their time off. They may use it for vacation, personal time or sick days, or they can just accumulate it like a savings account.

Tied to leave, and time off work, is the fact that employees want to know how employers are going to enhance their work experience and help balance their work and personal lives. According to Aon Consulting's America@Work 2000 study, respondents across the U.S. said the top factor in their commitment and loyalty to their employer was whether they believed that management recognized the importance of their personal and family lives. The survey also revealed that stress played a major role in reduced commitment, which directly related to achieving a work/life balance.

To address this employers are offering benefits that accommodate time away from work:

- Part-time schedules, including job share arrangements in which a full-time position is split between two or more individuals;
- "Flextime" that requires employees to work certain "core" hours each day - usually a four-to-six hour span - but gives them freedom with respect to the remaining hours;
- Compressed workweeks in which employees continue full-time employment, but do so by working three or four "long" days instead of a traditional five-day schedule;
- Full or partial telecommuting.

2.7.3.7 Flexible compensation plans

To accommodate today's many variations in family relationships, life-styles and values, flexible compensation or "cafeteria" benefit plans have emerged. In addition to helping meet employee needs, cafeteria plans also help employers control overall benefit costs.

The employee is assigned a "Rand value" amount of compensation based on total compensation that he or she can divide among a variety of benefit options; cash is sometimes included as an option (Fragner, 1975). Cafeteria plans offer employees a minimum level or "core" of basic benefits. Employees are then able to choose from several levels of supplemental coverage or different benefit packages. All packages are of relatively equal value, but flexible benefits permit employees to pick and choose the types of coverage that they believe to be essential.

The cost advantage to employers (large and small) is that they can offer benefits in which the employees express interest in assuming a part, if not all, of the cost. Under this plan, the employees have a basic core of benefit coverage and the option to add those items that will best suit their needs (medical, life insurance, vacation, retirement, disability, etc.).

There are a number of reasons for the slow acceptance of this concept. (Fragner, 1975)

1. Is an accounting problem. The payroll is made much more complex with each person having different deductions.
2. Insurance carriers develop their programs on the assumption that all employees will be covered. When all employees do not choose the option, the cost goes up for those who do choose it.
3. The trend towards using part-time employees rather than full-time employees is based partly on the cost of benefits. Using part-time employees, the employer can reduce the legally required benefits somewhat and other benefits entirely if the organisation so wishes. Although this causes different status for

different employee groups, many organisations feel that the cost savings are worth the price.

4. The paternal philosophy that provides an endless number of employer-paid benefits is becoming difficult for management to justify and this approach is often the cause for employees' diminished interest in this area of compensation and hence less satisfaction with offered benefits. (Fragner, 1975)

Chapter 3

RESEARCH DESIGN AND METHODOLOGY

There is very little documented literature on grading structures used or the effects of remuneration packages on architects in the profession, but the information that has been found or discussions with fellow architects and peers, is exciting much debate.

By investigating the relationship between pay level, pay structure and, various organisational benefit packages, this study hopes to examined how companies' pay structures and pay levels relate to employee satisfaction and retention.

The research objectives are quite complex and therefore the approach and methodology is therefore critical in ensuring that the core task is achieved. Babbie and Mouton's (2001) "ProDEC framework, problem, design, evidence and conclusions", forms the elements for the research proposal.

3.1 Research philosophy

3.1.1 Motivation

Internationally it has been recognized that there are major problems in retaining architects, especially women, in the profession. Some of the main reasons cited were discrimination in remuneration, inconsistency in grades and cost to company packages that didn't cater for work/life relationships. (RIBA, 2003).

As a practicing architect, owner of an architectural firm and a lecturer at the University of Cape Town, all of the above-mentioned concerns are close to home. Firstly it has been recorded that although the numbers of females studying architecture is increasing with classes consisting of approx 70% woman, the concern in the school of architecture is that there is a high drop off rate of students, especially females. This has been attributed to:

- a lack of understanding of the professional working environment
- misconceptions about what architects do
- dissatisfaction on expected earnings and work load
- socially acceptable choice of study with no intention of practicing

Secondly, the construction industry is unfortunately governed by economic "boom and bust" cycles and therefore workload fluctuates with the economy. Given this, and the high proportion of small practices, remuneration packages lack stability and there is reluctance for firms to commit to benefit/cost to company packages or long term employment contracts. This is seen throughout the related professions and many owners of firms are seeking ways to try and regulate salaries and reduce the impact of the large fluctuations in the demand cycle. Troughs result in either retrenchment or decreased salaries and in peak cycles, very high salary demands, non-uniformity in equal pay for equal work, disproportionate salaries to grades and loss of skilled staff to poaching by other firms.

Thirdly, construction related professions, i.e. architecture, structural engineers, quantity surveyors etc. all subscribe to recommended salary guidelines through their various institutes and professional bodies. The salary guidelines are survey based taking the mean of those recorded salaries, but take no account of economic cycles, nor are they grounded in a structured system, but rather the individual preference of each owner and thereby causing salary inconsistencies in the overall professions.

As an owner of a practice, I have had to address the following

- large difference in pay rates between similar jobs.
- complaints about inequality and demands for parity
- no defensible or logical basis for determining what rates of pay should be applied to employees
- possible salary gaps between race or sex groups

Fourthly, although there are numerous general texts on grading, remuneration and management of people, there is currently very little literature dealing with the running of an architectural practice. Most professionals learn management skills either through apprenticeship or "trial and error" and only recently in 2005, on the recommendations of RIBA, UCT introduced a course, which I lecture, in Management Practice for third year architectural students. This aims to help students understand and answer some of the "gaps" in their training and tries to prepare them for the working world. The response from this course by students, fellow practicing architects and lecturers in the built environment has been very positive. They have identified a need for addressing the lack of understanding and potentially offering solutions to grading and pay problems in the industry. This has been the foundation for this study.

3.1.2 ***Problem***

In order to answer the posed hypotheses, the following research needs to be undertaken: **"an Analysis of the Grading and Remuneration Structures of Architectural Practices in the Western Cape, Cape Town Metropole with specific reference to establishing what methods are used in arriving at cost to company packages."**

By establishing the various job grading techniques, "cost to company packages" and employee satisfaction levels, it is possible to determine what factors influence architects remuneration and grading positions. Included in this chapter will be a

discussion of the population and sample, research design, location and setting, data gathering and data analysis techniques.

From this, various deductions and recommendations can be posed on levels of remuneration, grading, retention, satisfaction and cost to company benefits. Strategies for change can be proposed to try and assist the profession in its diversity agenda as well as reversing the trend of departure. It is hoped that by proposing actions for change, both men and women, will benefit and the profession will be better equipped to respond to the changing nature and requirements of society.

Saunders, Lewis and Thornhill (2003) state that although the philosophy of realism shares some philosophical aspects with positivism, it recognises that people themselves are not objects to be studied, but rather places the importance of understanding people's socially constructed interpretations and meanings within their context. The survey tries to address this but is limited in that it:

- places emphasis on employees or principals in practices <10 rather than sole practitioners
- is not a longitudinal study and is only reflective at this point in time.
- limited by nature to the research sample, and therefore only representative of those firms surveyed
- did not include people who want to study architecture, and was limited to those currently studying.
- has not surveyed those people who have left firms or are no longer practicing.

3.1.3 Preliminary Literature Review

The topic is not new, however much of the existing data looks at trying to increase the number of registered architects and women entering the profession, but has not considered specifically how remuneration, cost to company packages and grading systems can retain these professionals.

The scope of the research not only looks at practices within the profession but also considers educational aspects and the effect of outside influences. Consequently, a broad base of literature was chosen for the investigation, starting from the commencement of training through to working professionals, addressing the following areas:

- *educational profile and culture within architectural education institutions;*
- *office culture and practice employment factors such as status, salary and career advancement opportunities*
- *theory of remuneration and grading structures*
- *creative industries mapping studies*
- *professional bodies and related codes of practice conduct*
- *opportunities, quality of support and flexibility available for employees*
- *equal opportunities policies within professional practice*
- *attitudes expressed by professional bodies, peers and publications.*
- *local surveys on professionals and architects*

Given the limited time in which to undertake the research (just under 6 months) it was important to use existing research and surveys, expertise of other parties with an interest in promoting equality of opportunity and expertise within the Faculty of the Built Environment at UCT.

The research has been split, firstly into an assessment and analysis of the architecture industry using existing research and secondly, a quantitative survey to gather information from members of the profession and architectural students at UCT.

Preliminary research has been undertaken using secondary data obtained from various sources all of which have provided information on:

- Grading Structures

Looking at uniformity in grading structures in the profession and allowing comparison and evaluation against Patterson's grading system.

- Pay structures

International literature reports on sharp salary differences for full-time architectural employees occur, mainly along gender lines. The questionnaire will test if there is unequal pay for similar work or employees of a similar grade in Cape Town.

- Cost to company Packages

Which benefits are granted to employees above remuneration packages.

- Working hours

The perception that architecture has inflexible/ non-family friendly working hours, resulting in stressful working conditions, job dissatisfaction and an imbalance between work and family commitments.

- Sexism

Architecture is still viewed as a macho culture with a career glass ceiling for woman. Limited areas of work or sidelining for advancement (again mainly women with family commitments)

- Job related matters

Articles on job expectations and perceptions of cost to company packages and how these affect employees over time as well as how job satisfaction varies between grades and benefits offered.

Both theory and empirical research suggest that pay level and grade structure are each important for understanding the organisation. Furthermore, as any pay system is characterized by both elements, it is agreed that the two systems operate

simultaneously to affect organisational outcomes. Most of the current literature is internationally based, but all raise concerns over:

- the inequality of pay and glass ceilings, especially for women in the profession
- the lack of graduates registering with professional bodies, and thereby weakening the control of good professional practice
- the poor management of firms in addressing work/life issues and the lack of cost to company and employee packages that deal with this.

3.2 Research Design or Methodology

Gill and Johnson (1997) emphasise a highly structured methodology to facilitate replication and on quantifiable observations that lend themselves to statistical analysis. The end product of such research should be law like generalisations similar to those produced by the physical and natural scientists (Remenyi, Williams, Money and Swartz, 1998). However Creswell (1994) suggests that the nature of the research problem defines the research approach.

Data is a convenient summary term for the documented results of conducting research (Marshall and Rossman 1989). The methodology selected is very much a product of finding the most effective ways of achieving good quality responses within a very tight timescale and budget. As Raimond (1993) recognises "provided that people reply to the questionnaire, the problem of access is solved." Buchanan, Boddy and McCalman (1998), Easterby-Smith, Thorpe and Lowe (2002) and Johnson (1975) all agree that the use of existing contacts is more likely to allow the researcher to gain access. The use of existing networks and contacts have been employed to gain access to organisations and the use of opportunistic sampling such as purposeful random sampling and snowball or chain sampling which takes advantage of whatever unfolds as it unfolds are to be employed. Heavy reliance will be made on existing networking, word of mouth and publicity by the Cape institute of Architects for firms and architects to participate.

The empirical part of this study employs the survey strategy which is a popular and common strategy associated with the deductive approach. Aiming to collect data from firstly employees and principles employed in firms that have <10 members and secondly students studying at UCT in first, third and sixth year, a survey allows the collection of a large amount of data from a sizeable population in a highly economical way. By using a questionnaire, it is perceived as authoritive, the data can be standardised, allows easy comparison and its validity can be tested. (Saunders, Lewis and Thornhill, 2003)

3.2.1 The Data Collection Method

The survey strategy makes the greatest use of questionnaires. Oppenhiem (2000) suggests there are various definitions to the term "questionnaire." Bell (1999) uses the term generally for data collection, where as Kervin (1999) uses it exclusively for cases recording their own answers. DeVaus (2002) states that in a questionnaire each respondent must be asked the same set of questions in a predetermined order, and that the questions be interpreted in the same way (Robson 2002)

The SAIA survey 2000 showed that very few architectural firms offered Internet access to all employees and therefore the choice to do a paper survey ensured that all the sample group had access to the questionnaire.

Dillman (1991) says the use of personally delivered mail-back questionnaires offers substantial benefit to survey researchers for several reasons.

- interview costs can be lowered by interviewers not having to wait while a subject completes the self-administered questionnaire or return later to pick it up.
- such a procedure may be more convenient for some respondents and therefore enhance their co-operation.
- it may help avoid social desirability bias on sensitive questions caused by the presence of an interviewer.
- this procedure offers potential for overcoming one of the most serious current drawbacks to the use of mail surveys, i.e., not being able to survey individuals whose names and addresses are unknown and who therefore can only be reached through a personal contact procedure.

Babbie and Mouton (2001) add to this:

- Surveys are flexible in the sense that many questions can be asked on a given topic, giving the researcher considerable flexibility in the analyses.
- The development of operational definitions based on actual observations is allowed.
- Standardized questionnaires have an important strength in regard to measurement.

Using mail surveys, response rates of 70% for the general population are attainable (Dillman,1972, 1978; Hippler and Seidel, 1985). And if companies allow employees to complete the questionnaire during office hours, Saunders, Lewis and Thornhill (2003) states that 98% response rates are achievable.

The potentially high response rates in mail surveys, together with their low costs, make this an attractive and popular survey method (Houston and Ford, 1976; Kanuk and Berenson, 1975). Mail surveys have no interviewer bias (Hippler 1988) and are geographically flexible, i.e., they reach a widely dispersed or inaccessible sample (Kanuk and Berenson, 1975).

However Babbie and Mouton (2001) also point out the following weaknesses:

- standardization often results in the fitting of "round pegs into square holes" and often represent the least common denominator in assessing people's attitudes, orientations, circumstances and experiences.
- often appear superficial in their coverage of complex topics
- survey research can seldom deal with the context of social life.
- Inflexible, as they do not allow the researcher to observe field conditions and would probably be unaware of new variables that became apparent and if so can do nothing about modifying the survey.
- subject to artificiality as it can not measure social action, but only collect self reports of recalled past action or of prospective or hypothetical action.

Other disadvantages by various authors mentioned are:

- List may be outdated / inaccurate, resulting in high sample error
- Addressee may not be the one who actually responds, so cannot control who is interviewed.
- Slowest method of all, taking up to 3 months
- Only those interested may reply, thus causing response bias
- Lastly, Bias due to non-response difficult to measure

Figure 3-1 A summary of the various survey techniques

CRITERIA	TELEPHONE	FN-PERSON	MAIL	EMAIL	INTERNET
Ability to handle complex questions	Good	Excellent	Poor	Poor	Poor
Ability to collect large amounts of data per respondent	Good	Excellent	Fair	Fair	Fair
Accuracy on sensitive questions	Fair	Fair	Good	Good	Good
Control of interviewer effects	Good	Poor	Good	Good	Good
Degree of sample control	Good	Excellent	Poor	Good	Fair
Time required	Excellent	Fair	Poor	Excellent	Good
Probable response rate	Good	Fair	Fair	Fair	Fair
Cost	Good	Poor	Good	Excellent	(iood
Ability to ensure accurate questionnaire completion	Poor	Excellent	Excellent	Good	Good

This strategy gives the researcher more control over the research process and more time to spend in designing and piloting the questionnaire, however, the survey

strategy may not be as wide ranging as other data collection methods, as there is a limit to the number of questions that can be asked. The selection of a mail survey was chosen as it enabled anonymous response to some quite sensitive areas of questioning as well as facilitating a cascade approach whereby news of the research could be passed on.

With the exception of the experimental variations, all of Dillman's (1991) recommendations concerning the questionnaire, the cover letters, and the implementation of the survey were followed closely. All potential respondents received a cover letter, a questionnaire, and a postage-paid reply envelope. A drop in box was also left at their place of work.

A target sample of 100 responses was set for the questionnaire as a whole with the questionnaire posted initially to a convenience sample of 10 firms, but relied on snowball techniques to increase the population sample in order to achieve a good response rate. All employees that fell into categories A-F as per Patterson's or an equivalent grading system formed part of the unit of analysis. Those employees with no decision making responsibilities were be excluded from the survey.

3.2.2 Survey Credibility

Underpinning the survey is the credibility of the findings. **Reliability** can be assessed by posing the following three questions (Easterby-Smith, Thorpe and Lowe 2002)

- will the measures yield the same results?
- will similar observations be reached by other researchers?
- is there transparency in how the raw data was analysed?

Robson (2002) states there are four threats to reliability:

- **Subject or participant error-** Mitchell (1996) outlines three approaches, in addition to comparing data from other sources.
    - o test / re-test- administering the test twice results in difficulties in respondents answering the question twice, however the pilot test group

will form part of the sample group and their answers can be easily compared between their initial test answers.

- o internal consistency -There are two types of questions, firstly descriptive questions identifying the variability in different phenomena and secondly, analytical questions to examine and explain the relationships between variables. The correlating of responses between questions can be tested for consistency.
- o alternative form- The questionnaire has check questions of a similar nature in order to test consistency; however these have been used sparsely as recommended by Saunders, Lewis and Thornhill (2003).

- **subject or participant bias** - there have been a number of observations recorded by members of the profession and teaching staff at U.C.T on the state of the industry. Most architects complain that architecture is the lowest paid profession, with the worst working hours and little consideration to life out-side of the office. The literature survey reflects some of these viewpoints and participants may be biased when any remuneration study is conducted. However Dillman (1991) states that respondents to self administered questionnaires are unlikely to answer to please or give socially acceptable responses.

- **researcher error**- the nature of the questionnaire is very structured, based on identical sets of questions, either closed-ended (Dillman, 1991) or forced choice questions (deVaus, 2002), which allow the response to be pre-coded and entered in to the data sheet. The questionnaire has adopted and adapted certain questions from other surveys in order to compare existing date (Bourque and Clark, 1994) which also removes the researcher's error.

- **researcher bias**- The researcher has a degree of bias, as he is involved in the profession, as a partner in an architectural practice and as lecturer at U.C.T. He tried to limit his interaction with the participants as much possible but the architectural profession in Cape Town is of such a small size that it is difficult

to not engage at all in social interaction and "shun" involvement in the environment being studied.

Validity is concerned whether the relationships between the findings are accurate. Robson (2002) has also stated the threats to validity as:

- History-As mentioned in chapter two, the building industry in Cape Town is presently viewed as stable. R57.5 billion was spent on construction works during 2002. The recent construction boom is currently plateauing as public sector work shows a continuous decline, not due to demand, but rather government's macroeconomic policy aimed at reducing public debt as a percentage of GDP. There has also been a recent decline in private sector work following the reported oversupply of office, retail and commercial space in the market. (CSIR). However with no major events predicted to alter this state this should not effect the participant's views.

- **Testing-** the questionnaire has attempted to reduce the participants belief that the results may disadvantage them in anyway. The basis of the questionnaire is on overall structure of their firm, if there is any grading system and how the participants view their level of responsibility.
- **Mortality-** There is no mortality in this survey
- **Maturation-** the time horizon does not allow for changes in the conditions
- **Ambiguity about casual direction** - The cross referencing of questions should reduce ambiguity over relationships between remuneration, grading and the participant. The researcher has chosen to use SPSS as an appropriate computer package to analysis the data and test for this.

*3.3 **Hypotheses***

Robson (1993) lists five sequential stages which deductive research will progress.

- deducing hypotheses to test the relationship between two or more events from the theory
- expressing the hypotheses in operational terms and indicating exactly how these variables are to be measured.
- testing the operational hypotheses which involves an experiment or other form of empirical inquiry
- examining the specific outcomes of the inquiry which will either tend to confirm the theory or indicate the need for modification.
- if necessary modifying the theory.

Pay level represents a firm's average compensation relative to that of other competing organisations (Gerhart & Milkovich, 1992), and is often labelled as leading, matching, or "lagging" the market (Milkovich & Newman, 2002). An organisation with a policy of leading the market offers higher than average wages to the relevant labour market; a policy of lagging the market signifies lower-than market wages and average wages, and a policy of matching the market indicates wages at the relevant labour market average.

However as stated, the cyclical nature of the construction industry and professional salaries based on informal and unstructured systems results in the following hypotheses:

HI- the lack of a grading system for architects, produces remuneration differences in similar job descriptions that are unrelated to a quantifiable measure i.e. length of service, qualification or decision making responsibility.

Although the efficiency wage theory predicts that higher pay improves attraction, retention, and motivation, at some point, paying higher compensation will be

outweighed by the need for a balanced working and family life. The following hypothesis aims to test if:

H2- there is a perception by architectural students and architects that there is a lack of measures to accommodate work-family interaction in the profession.

3.4 Population and Sample

Although the primary population focus was on architects and the culture in which they worked, students from the University of Cape Town were also questioned.

*3.4.1 A suitable **sampling fame***

A complete list of practicing architects in Cape Town is impossible to obtain. Once an architect has graduated he/she has the option to register with the South African Institute of Architects (SAIA) and membership to the Cape Institute of Architects (CIA) is voluntary. Numbers have been compiled form records using the SAIA, CIA and SETA (Sectorial Education Training Authority) databases, however not all firms subscribe to SETA registration although they make contributions.

The sample frame for the Architectural profession in Cape Town according to the SAIA data base is 940 individuals in the architectural profession

The sample frame for the Architectural students at U.C.T consists of 141 architectural students

3.4.2 Sampling technique

Probability sampling is commonly used with survey-based research (Saunders, Lewis and Thornhill 2003) however Patton (1980) argues that the sample size depends on the purpose of the inquiry, how the findings will be used and what can be done with available time and resources. Due to the nature of available data and access to the population etc, non- probability sampling techniques will be used.

Quota sampling although non random and not requiring a sample frame, can be used on smaller populations where a sample frame can be obtained (Saunders, Lewis and Thornhill 2003) and has a number of advantages. In this case as it less costly and easy to set up.

The student population has been selected for two reasons.

1. The study of an individual's initial reasons on selecting architecture and the remuneration expectations can be recorded and compared to that of members who now in the workforce. As the student is exposed to aspects of the profession these views may change. At third year the students will be graduating with a Bachelor of Architectural Studies (B.A.S) and will be entering the working work in their 4^{l} year of practical work. The sample frame will be the entire third year class.

In surveying firms, most of the initial cases were self selected samples that have heard about the research being undertaken and expressed a desire to take part. These information-rich key informants were eager to participate and "point" the researcher in the right direction.

The point of departure will be the use of convenience sampling in an effort to find willing participants which would enable the researcher to conduct this study. Several organisations were considered for several reasons: size, location, availability of population and willingness to cooperate. The key to gaining further access to cases in

order to reduce bias and represent the total population, is by using the snowball or chain sampling approach.

3.4.3 Suitable sample size

Henry (1990) advises against populations less than 50 cases. There are two questionnaires targeting A.) U.C.T students and B.) Individuals employed in the architectural profession in firms with < 10 employees.

In terms of U.C.T students the sample size is:

3rd year students- 57

Although a questionnaire is being used, the researchers relationship as a lecturer at U.C.T with the students should allow a 50% response rate to be used. In order for the sample to be representative of the population of 57 at a 95% level of certainty a min of 54 cases would be need to be collected.

In terms of persons employed in the architectural profession that meet the criteria of firms <10 employees, the Economist (1997) advises a minimum number of 30 cases for statistical analysis. Again there is no current data base of architectural firms reflecting the number of employees involved in individual practices and only those firms that have volunteered information to the SAIA, CIA and CETA have been captured. However the nature of the Cape Town architectural profession is, that due to its size, most architects know roughly which firms are deemed medium to large practices and therefore those not recorded on any formal data-base have be added to the sample frame.

Architectural Firms <10 employees: 10 firms were contacted

Therefore a sample size of approximately: <100

Although high response rates are achievable as mentioned earlier, conservatively a response rate of approximately 30% is reasonable (Owen and Jones 1994). Neuman

(2000) suggests a response rate of 10 -50%, Healey (1991) a 50% rate and Saunders, Lewis and Thornhill (2003) say 10-20% should respond. The calculation will used 30%.

The estimated sample size required is

$$n^a = \frac{nxlOO}{re\%}$$

$$n^a = \frac{30x100}{30}$$

n^a - 100 < questionnaires needed to be sent out

3.4.4 Sample is representative of the population

It is possible to compare data collected with data collected from other sources such as the SAIA data bases. The closed questions i.e. gender, salary etc, are designed to provide sufficient detail to compare characteristics of our sample with the entire population, however this is not the aim of the paper as data is limited and can be an additional study for future research. The sample is therefore only representative of those firms that where surveyed.

3.5 Research Ethics

Wells (1994) defines "ethics in terms of a code of behaviour appropriate to academics and the conduct of research". Significant problems of ethics are raised whenever investigators enter into the daily lives of others. Will the participants' privacy be violated? Will the research disrupt their everyday world? Will they be putting themselves in danger or at risk by participating in the study? Will the procedures violate their human rights in any way? As Wells (1994) puts it, "the closer the research is to actual individuals in real-world settings the more likely ethical questions are to be raised."

"The ideal rule of ethical conduct requires that whenever the researcher has a choice between using or not using material that is valuable to the study but that may make the subject vulnerable, the interest of the subject must be selected over that of the investigation" (Locke, Spirduso and Silverman 1991).

According to Saunders, Lewis and Thornhill (2003) the follow ethical issues should be addressed.

3.5.1 Privacy of possible actual participants

Privacy may be the cornerstone of the ethic issues (Saunders, Lewis and Thornhill 2003) deVaus (2002) advises a unique identification number on each questionnaire to make tracking easier and according to Dillman (1991) this has little effect on response rates, however Saunders, Lewis and Thornhill (2003) advises not to use these if respondents have been assured anonymity. The researcher has opted not to track individual questionnaires, but rather the total number of papers issued and received by each firm. Thereafter the instruments will receive a unique number for data capture.

Everything that is answered in the questionnaire will remain confidential. After the answers have been entered into a computer, the questionnaires will be destroyed. The name of the firm does not have to be mentioned in the dissertation if that is their desire.

3.5.2 Voluntary nature of participation

The researcher should not attempt to apply any pressure on intended participants to grant access. (Robson 2002 and Sekaran 2000). The very nature of the questionnaire being a paper mail survey allows members to volunteer information. Those that choose to answer some or all do so of their own will.

Saunders, Lewis and Thornhill (2003) recommended that research is not undertaken at home if it is of an organisational nature, however, by allowing the participants to fill in the questionnaire in their own time without the fear of reprisal or intimidation, adds to the wellbeing of the participant.

3.5.3 Consent and possible deception of participants

The researcher has an obligation to protect the best interests of the participants and will have to accept any refusal to take part. (Cooper and Schindeler 2001; Robson 2002) In order to establishing trust, the researcher will set up initial meetings with all of the participants on either an individual or group basis. During this meeting, issues such as the research procedures and purposes, confidentiality, consent, benefits and risks will be discussed. The researcher is required by ethical principles to obtain full, informed consent from the participants.

The nature of questions to be asked also requires consideration. Sekaran (2000) states that one should avoid asking questions that is in any way demeaning to the participant. The questionnaire was initially tested with a sample test group to check against, firstly, ethical, racial, sexist or other sensitive material that may infringe on the participants rights or safety and secondly, reduce answers that were prone to bias in both directions, the use of stereotypic thinking and a tendency to give socially correct answers.

3.5.4 Maintenance of the confidentiality of data by individuals.

As stated in point 1 the survey data is destroyed. No single individual is mentioned and firms that participate have the right to anonymity.

3.5.5 Reactions of participants to the way in which you seek to collect data.

Dale, Arber and Procter (1988) believe ethical problems are less difficult in quantitative research due to the nature of structured survey questions that are clearly not designed to explore responses and the avoidance of the in-depth interview situation, where the ability to use probing questions exists.

3.5.6 Behaviour and objectivity of the researcher.

The assumption is that the researcher is independent of and neither affects nor is affected by the subject of the research (Remenyi, Williams, Money and Swartz 1998). The researcher examined the questionnaire from the perspective of the subject. While doing this, he explored both his own bias to the instrument l.a) as a male in the architectural profession, b) an owner of an architectural firm, c) as lecturer at the university and 2. that he owed the participants and the organisation being studied "the ordinary ethical duties of confidentiality, honesty, responsibility, and fair "return"" (Dobbert 1982) The questionnaire has taken this into consideration.

Chapter ***4***

THE PROBLEM AND ITS SETTING

At the University of Cape Town the percentage of architectural students is increasing. From 2002 to 2004, Bachelor of Architectural Studies (B.A.S) applications increased from 241 to 275 and BAS intake form 1994 to 2004 increased from 52 students to 63 students and in 2001 first year classes were as high as 81 students. (BAS entry statistics compiled from the UCT registration system) However this increase is not reflected in the architectural profession and analysis in the literature survey reveals that both men and women are leaving the profession after qualifying (RIBA, 2001)

No single reason emerged from the secondary research to explain why architects, mainly women, have left but rather a multiplicity of factors, such as low pay, poor promotion prospects, discriminatory attitudes and sexist behaviour were found to influence departure.

Anthony (2001) comments that without greater diversity in the membership of the construction professions to reflect the composition of society, the resultant built environment will fail to meet the needs of the diverse population. This problem has serious implications for the future of the profession, if through its culture and practice, it loses skilled people after they have qualified.

From the literature review it was possible to formulate the following propositions:

- **"the lack of a grading system for architects, produces remuneration differences in similar job descriptions that are unrelated to a quantifiable measure i.e. length of service, qualification or decision making responsibility"**

- **"there is a perception by architects and students, that there is a lack of measures to accommodate work-family interaction in the profession."**

4.1 Sample Data

Initially 10 firms were approached to participate in the questionnaire with six practices accepting. Using opportunistic sampling such as convenience sampling, purposeful random sampling and snowball or chain sampling, basically taking advantage of whatever unfolds as it unfolds; another six firms participated in the survey. This totaled 12 firms all within the Cape Town CBD, all having more than 10 employees, and resulted in a population of 134 employees ranging from administration staff, technical staff and architects with varying degrees of education, experience and responsibility.

The sample frame for the Architectural profession in Cape Town according to the SAIA data base is 940 individuals in the architectural profession and therefore the total sample was asked to participate to reduce bias and try and reflect the overall profession. Of the questionnaires sent to these firms, 42 individuals responded, a participant response rate of 32%, higher than 30 % initial estimate.

The other sample group selected was third year students from UCT, chosen for their non-bias view of the architectural profession before entering the work place. This would also aid in the understanding of whether the respondent's expectations to remuneration and cost to company benefits were realistic and if these contributed to qualified members leaving. The sample frame for the Architectural students at U.C.T consists of 141 architectural students however and the total third year class of 56 students forming the sample population. All were asked to participate, with 35 individuals responding. This is a 63%, response rate, again higher than the anticipated 50% response rate.

The respondents' anonymity was protected throughout and at no time was a respondent's name linked to a completed questionnaire. The analyses in this report is also presented in such a way that the anonymity of individuals is safeguarded.

Surveys were mailed to all sampled individuals during the first week of May 2006 and reminder cards were sent to non-respondents during the third week of May. Two lessons were learnt and in future studies the following will need to be applied.

Firstly, in order to increase response rate, incentives should be used. Secondly, in survey research there is always a trade-off between the completeness of the survey and the "completeness" of participation, in other words, the longer and more complex the survey, the lower the response rate. Referring to Annexure A, the questionnaire consisted of four sections.

A. Personal particulars with 5 questions
B. Education with 4 questions
C. Employment / Career choice with 7 questions
D. Current Employment with 34 questions.

In the excitement to find the answers to every question, we erred on the side of completeness. Some of the questions were too detailed, there were some unnecessary questions and some asked personal opinions and satisfaction levels on overall company policies, remuneration and cost to company packages. Not surprisingly, some firms and individuals refused to participate, stating that some of the information was confidential. The overall number of firms participating in the survey was lower than we would have liked and does indeed lessen the ability to make generalizations about the findings of applicability to others in the profession. On the basis of the small number of firms participating, this survey cannot be regarded as a fully representative sample of all architects and firms and therefore users of the data should use it with caution.

This study focused on the areas of grading, compensation and cost to company benefits with all data being maintained using Microsoft Access 97 and all statistical analyses that was conducted using the Statistical Package for the Social Sciences (SPSS, release 14).

The survey is separated into the following categories looking at:

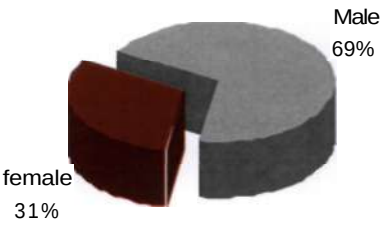
- Personal particulars
- Educational factors
- Factors influencing career choice
- Employment factors such as grading, salary etc
- Rewards and benefits offered by employers
- Reasons for leaving architecture.

4.2 Personal Particulars of Sample

Gathering demographic information allows the sample's characteristics to be compared to known population demographics. This comparison gives us another check on how "representative" of the sample to the population is likely to be.

In the questionnaire **"Section A - Personal Particulars",** the survey asked five questions, gender, age, the number of dependant children in the age groups, current status i.e married/single and lastly any long standing health problems or disabilities.

Figure 4-1 survey population



Of the 134 employees in the firms surveyed Figure 4.1 shows that 93 individuals or 69% of these employees are male. This reflects that of the SAIA 2001 report of a ratio of 2.2 males to 1 female. Respondents where also asked which gender performed the majority of work in their firms. Figure 4.2 shows that 64%o stated mainly by men..

Figure 4-2 Work / Gender Population

Work performed by	N	Percent	Valid Percent
mainly by men	27	64.3	67.5
equally men and women	12	28.6	30.0
only women	1	2.4	2.5
Total	40	95.2	100.0
Missing	2	4.8	
Total	42	100.0	

Figure 4-3 Sample Population

Male • female

	N	Percent
Male	25	59.5
female	17	40.5
Total	42	100.0

Figure 4-4 Student sample population

Male • female

	N	Percent
Male	14	40.0
female	21	60.0
Total	35	100.0

42 participants responded to the survey with 59.5% being male, which allows a reflective view of the posed questions across both genders. The third year student sample of 60% women is now the norm in most years at UCT and is a warning to firms that the majority of new architects being trained and entering the profession are

women and that practices will need to accommodate and adapt in order to retain these professionals.

It is evident in figure 4.5 that although there is an increase in female architects in the younger ages, there are no females in the "architect 10+ years" band, the technologist bands have no women and is again reflective of the industry. Most technikon students studying at Cape Technikon or Penisula Technikon are male (discussions with head of ND program Jake Devillers, Cape Tech) and that there is a need to attract more females into these areas of the industry. The other bands were populated firstly, with interns which had an equal amount of male and female, secondly, technical staff consisting of interior designers and lastly support staff, both these categories fulfilled by females, and being viewed by many as a female role.

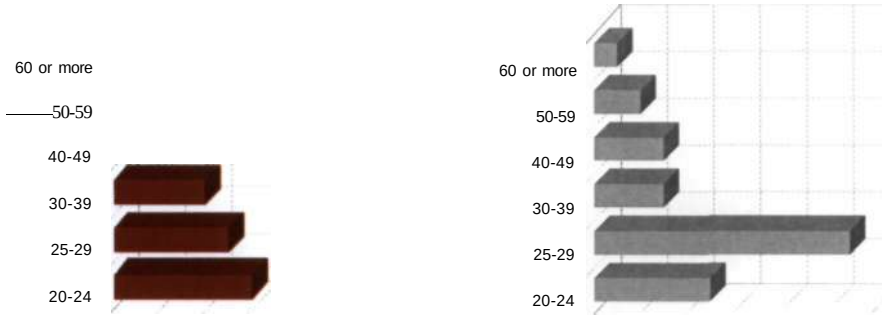
Figure 4-5 Gender / Job Grade

		Job Grade								
		intern	architect 1-5 years	architect 6-10 years	architect 10+ years	technologist 1-5 years	technologist 10+ years	other technical staff	support staff	Total
Gender	Male	3	2	**4**	5	6	2			22
	female	2	4	3				2	4	15
	Total	5	6	7	5	6	2	2	4	37

Figure 4-6 Age / Job Grade

		Job Grade								
		intern	architect 1-5 years	architect 6-10 years	architect 10+ years	technologist 1-5 years	technologist 10+ years	other technical staff	support staff	Total
Age Groups	20-24	5	1			2			1	9
	25-29		5	4		4		1		14
	30-39			3			1	1	1	6
	40-49				2		1		2	5
	50-59				2					2
	60 +				1					1
	Total	5	6	7	5	6	2	2	4	37

Figure 4-7 Age / Gender



The age range of respondents to the questionnaire was between 18 and 65+ years old with the majority aged between 25 and 29.

Figure 4-8 Gender / Age of respondents

		Gender		
		Male	female	Total
	20-24	5	6	11
	25-29	11	5	16
	30-39	3	4	7
	40-49	3	2	5
	50-59	2	0	2
>	60 or more	1	0	1
	Total	25	17	42

From figures 4-5, 4-6 and 4-8, the number of females and their grading can be determined. In the age group 20-24 there are 2 x interns, 1 x architect 1-5 years and lx support staff member. In the 25-29 band there are 3 x architects 1-5 years, lx architect 6-10 years and lx other technical staff. In the 30-39 band there are 2 x architects 6-10, 1 x other technical staff and 1 x support staff. Finally in the 40-49 age group there are 2 x support staff. There were 2 non responses.

51% of the sample are married, 12 of the 21 being architects, but only 3 of these being female.

Figure 4-9 Gender / Marital status

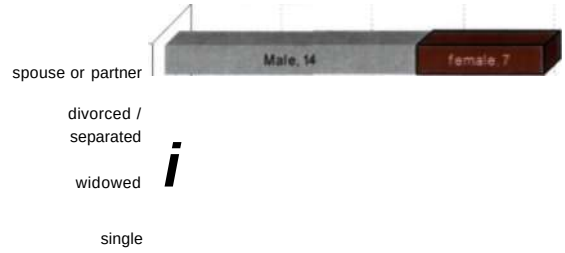


Figure 4-10 Age of dependants / Gender

		Gender		
Age of dependants		Male	female	Total
	0-4	2	1	3
	5-11	3	1	4
	12-18	2		2
	no dependent children	18	15	33
	Total	25	17	42

Figure 4-11 Age of dependants / Job grade

		Job Grade								
Age of dependants		intern	architect 1-5 years	architect 6-10 years	architect 10+ years	architectural technologist 1-5 years	architectural technologist 10+ years	other technical staff	support staff	Total
	0-4						1			2
	5-11				2	1				4
	12-18			1			1			2
	no dependent children	5	6	5	3	5	0	1	4	29
	Total	5	6	7	5	6	2	2	4	37

From figures 4-10 and 4-11 it can be determined that a female architect falling in the 6 - 1 0 year experience band has dependants between ages 0-4 and the other female under "other technical staff has dependants aged between 5-11 years. Again it was quite unusual that 15 females had no dependants given that the majority of female respondents fell in the 20 - 29 age group. Seven males have dependants and are either architects or technicians.

Lastly the importance of figure 4-12 showing lx female under "other technical staff and 1 x male technologist and 1 x male intern reporting long standing health problems or disabilities, is to if there is discrimination against "disabled" members or if firms offer benefits to assist these individuals.

Figure 4-12 Gender / Health

		Gender		
!		Male	female	Total
	yes	2	1	3
	no	22	16	38
	Total	24	17	41

Figure 4-13 Summery of personal particulars of sample

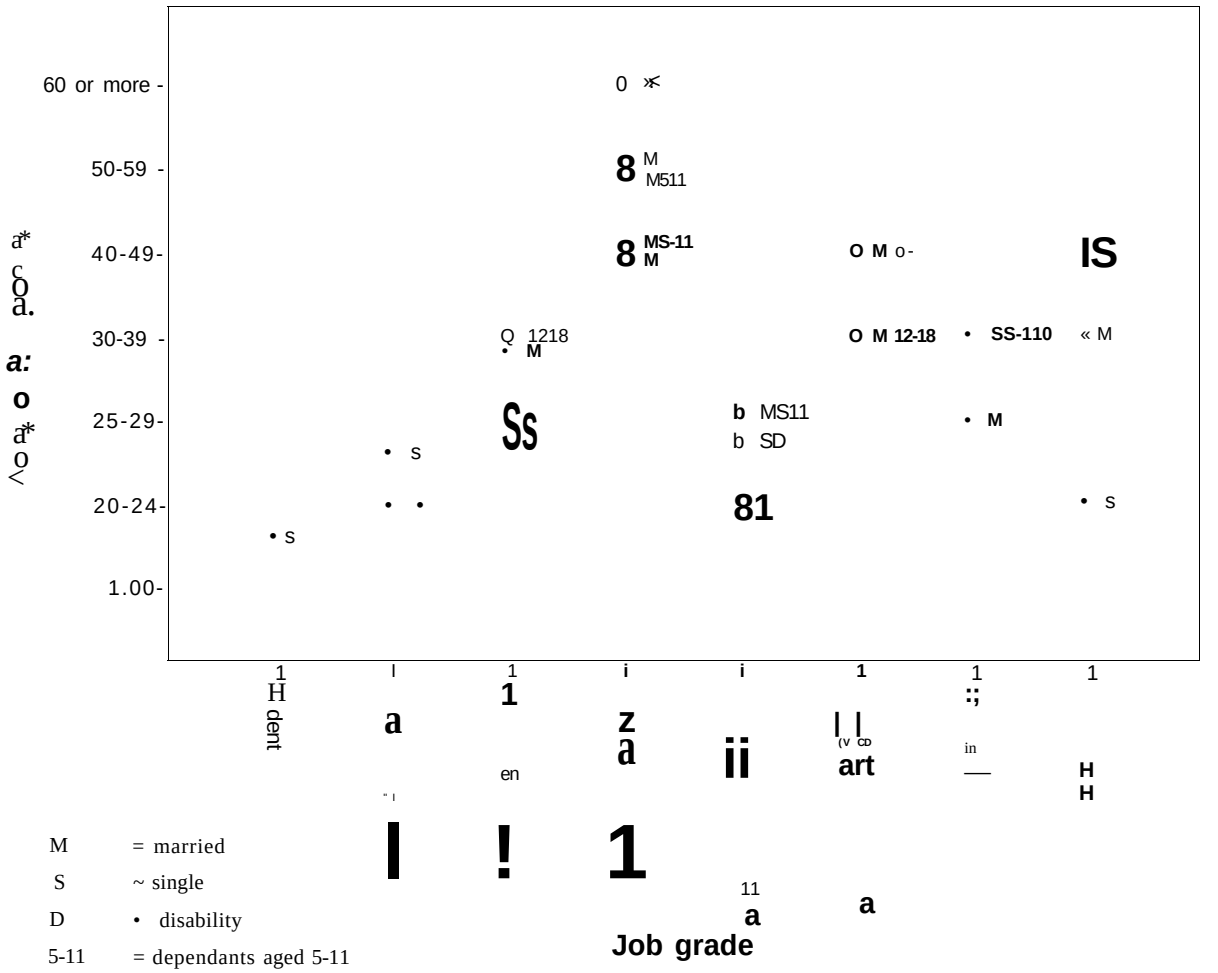


Figure 4-13 is a summary of the personal particulars of the sample. There are 38 valid responses and 4 non responses are recorded. It is clear that the senior and technical positions are still dominated by males and the stereotypical support and other technical roles are fulfilled by women, however it is visible that in the category of architect 1-5 years experience, there are more females and a balance between males and females in the 6-10 band and an emerging balance in the student interns.

It is also interesting to note that most of sample in senior positions are married and we discuss under the section "Benefits offered by Employers" whether this has had any influence in determining a firms policy in offering work / life benefits.

4.3 Education Factors

The sample was asked a number of questions regarding their educational experience and qualifications.

Figure 4-14 Qualification

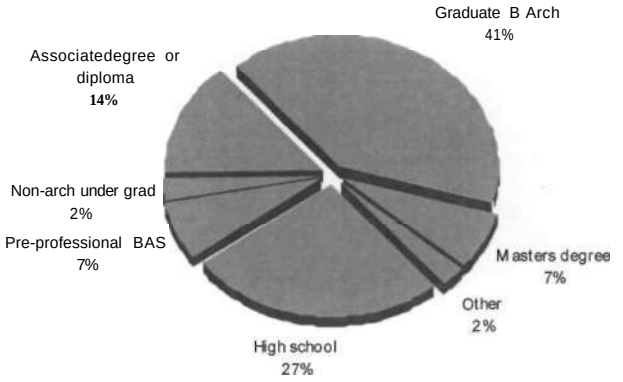


Figure 4-15 Gender / Qualification

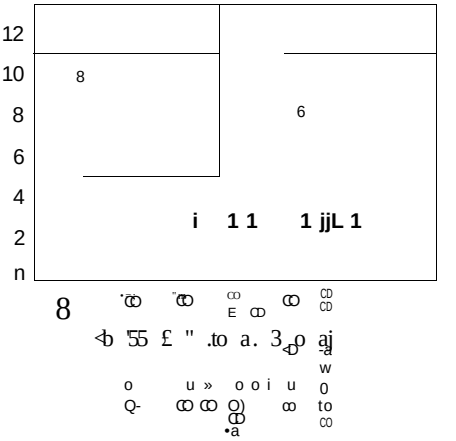


Figure 4-16 Pay /Qualification

		Qualification							
		high school	Pre-prof undergrad degree (BAS)	Non-arch undergrad degree	associate degree, diploma or equivalent	graduate architectural degree (BArch)	masters degree	other	Total
Pay	less than R2500	3							3
	R2501-R5000	2	1					1	4
	R5001-R10000						1		14
	R10001-R15000								10
	R15001-R20000					2	1		3
	R20001-R25000					3	1		4
	R25001-R35000					1			1
	R35001 and above					1			1
	Total	9	3	1	6	17	3	1	40

Currently the Cape Institute of Architects (CIA) uses qualification and length of service as the bench mark in order to determine grade and remuneration. Figure 4-15 demonstrates the theory of Skill-base pay, as there are three female employees in support and clerical positions, aged 30-49 years old, earning R5 001 - R10000 per month which is the equivalent of 6 individuals with associate degrees or diplomas, 3 people with B.Arch degrees and one member with a masters.

The need for a formalised method that acknowledges the worth of an individual's contribution over qualification is illustrated with the male employee, who has no tertiary education, but is performing the role of a grade C technician, earning between RIO 0001 - R15 000 which is more than the qualified technicians and comparable to 7 architects salaries.

It is also evident that although these unqualified individuals earn more than architects initially, it is clear that there is a gross return on the educational investment, as those with the higher education levels earn the most as their career progresses..

Figure 4-17 Currently studying

Currently Studying	N	Percent
undergrad pre prof	1	2.4
B.Arch	3	7.1
other graduate arch prog	2	48
other grad program	2	4.8
no	33	78.6
Total	41	97.6
Missing	1	2.4
Total	42	100.0

Figure 4-18 Currently studying /Gender

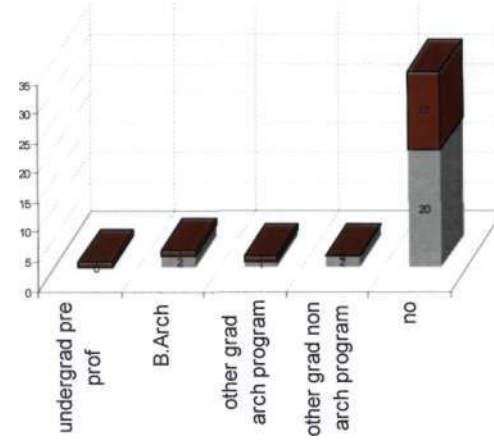


Figure 4-19 Qualification / Currently studying

		Currently Studying					
		undergraduate pre professional	B.Arch	other graduate arch program	other graduate program	no	Total
fie atloc 3 a	high school	1	2	1	1	5	10
	undergrad degree (BAS)		1			2	3
	Non-arch undergrad degree					1	1
	assoc degree or diploma			1		5	6
	graduate architectural degree					17	17
	masters degree				1	2	3
	other					1	1
	Total	1	3	2	2	33	41

Currently 19.1% are of the sample are studying and although the majority fall within the high school segment, the three top earners in this field indicated that they were not currently studying or had the intention to study further.

Figure 4-20 Continue further studies

Continue further study	N	Percent
yes	13	31.0
no	24	57.1
Total	37	88.1
Missing	5	11.9
Total	42	100.0

Figure 4-21 Future studying / Gender

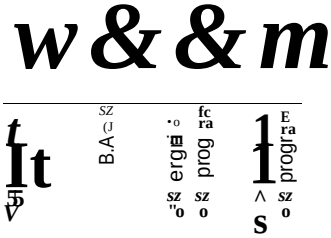


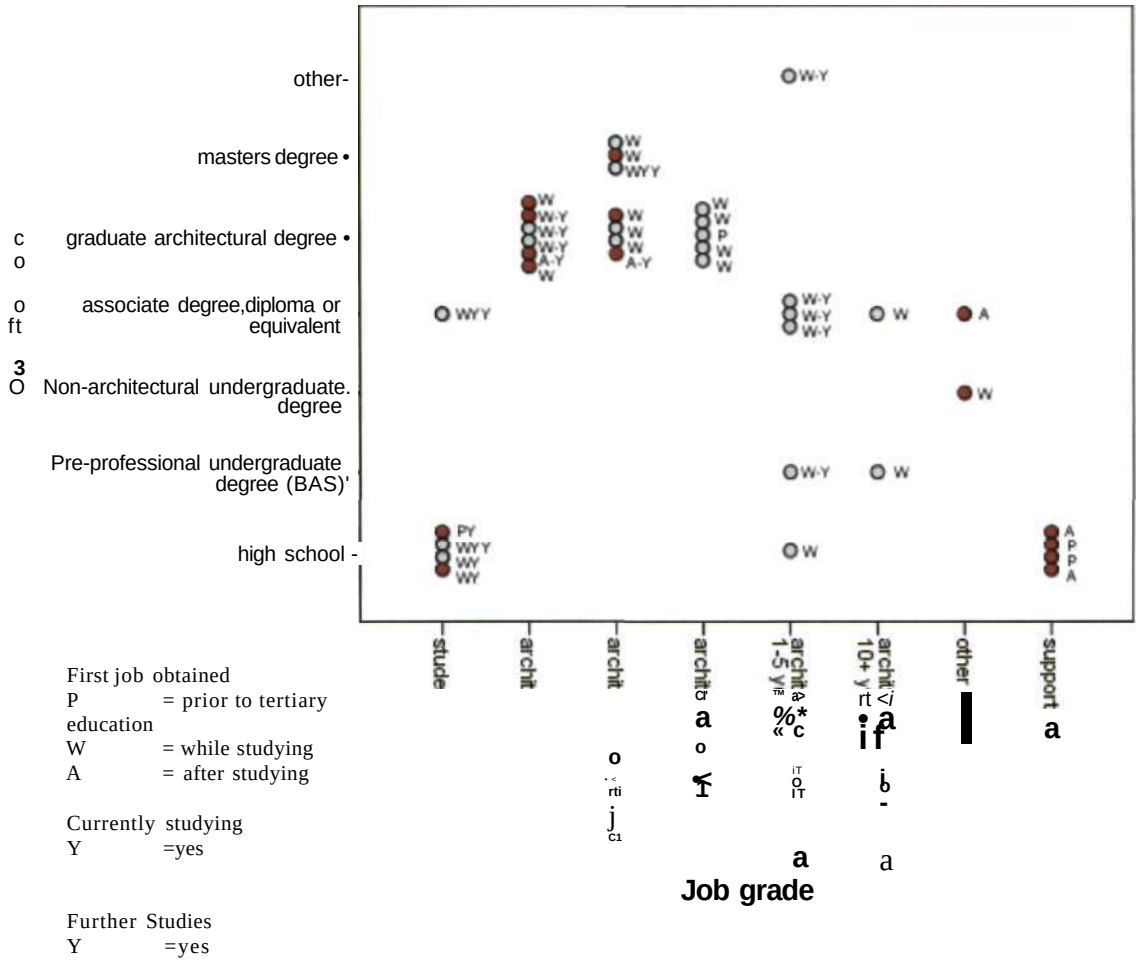
Figure 4-22 Qualification / Future studying

		Continue Studying		
		yes	no	Total
ification	high school	0	7	7
	undergrad degree (BAS)	1	1	2
	Non-arch undergrad degree	0	1	1
	assoc degree or diploma	4	2	6
	graduate architectural degree	6	11	17
	masters degree	1	2	3
	other	1	0	1
	Total	13	24	37

23.8%) of the sample had discussed their training needs with there employers and 40%> of the respondents had received between 1 and 10+ training days from their respective firms with 7.1 %> of companies providing 100%> funding towards education needs.

The survey found that 70%> of firms use educational qualifications as an informal grading method and 42% say that work experience is a major factor in the hiring criteria. 31 % of the sample indicated that they would continue tertiary studies in the future and the majority of these individuals already have one or two degrees / diplomas which indicates that these individuals recognise the return on educational investment.

Figure 4-23 Summary of educational factors



In the category architects 1-5 years and architectural technologists 1-5 years, 72% indicated that they intended further studies. In the architects 6-10 years band there are three masters degrees , with the two males earning between R15 000 - R25 000, one being in a grade F - policy decision making position. The female architect with the masters works part time (24 hours) and earns R5001 - R10 000, but if equated to a 45 hour week based on the mean (R7 500), she would she would earn the same as her counterparts.

These extra qualifications have increased their salaries to compete with the lower earners in the architects 10+ years field and suggest that extra qualifications give a greater return on investment. This again supports the skills-based pay theory.

4.4 Factors influencing career

4.4.1 Career Choice

Literature on the differences in male and female career choices has centred on the early social learning experiences such as sex-role stereotyping and other environmental constraints which serve to negatively shape preferences for the non-traditional career (www.work4women.org). Recognizing that vocational choice is influenced by these factors and theory suggests that women enter traditionally male-dominated occupations less frequently as a result of these early experiences (www.work4women.org).

However it is important to ascertain whether remuneration, grading and the type of systems and benefits that a firm offers has any influence on the initial reasoning for selecting architecture as a career. Remuneration and cost to company packages play a major role once the individual has entered the work environment (Rees,1979), but an understanding of the expectations prior to entering the profession is essential as this sets the foundation to anticipated satisfaction levels.

A comparison between third year U.C.T architectural students, prior to their 4th year of compulsory work experience, to that of the members in the industry is evaluated. Respondents were asked to identify their three most important reasons for entering into architecture.

Figure 4-24 Working members

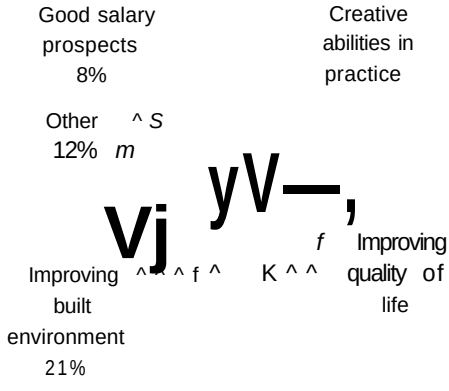
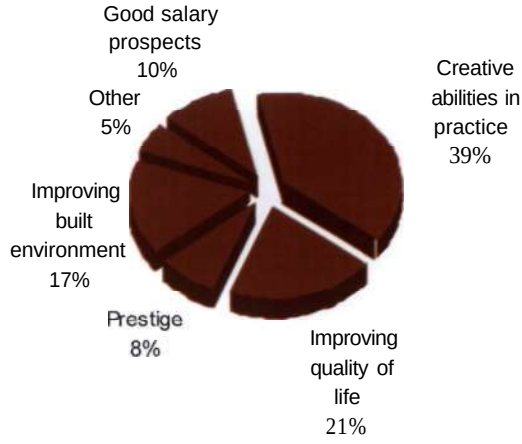
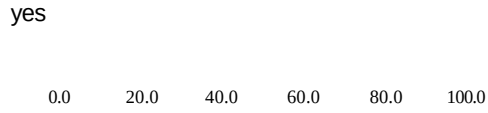


Figure 4-0-25 Students



Remuneration and good salary prospects are not as important as putting creative abilities into practice. 21% rated "improving quality of life" as important and it is assumed that this includes a variety of factors (pay, work life balance, etc).

Figure 4-26 Previous Career



14.3 % of respondents had previously worked in another industry, 83.3% had not and there was a non response of 2.4%.

Those members who had previously worked consisted of a 30-39 female under the band "other technical staff." 3 female support staff aged lx 20-24 and 2x 40-49 , one male intern aged 25-29 and one male technologist aged 40-49.

Figure 4-27 Previous career / Job grade

Previous career	Yes	No	Valid Percent
intern	1	5	6
architect 1-5 years		6	6
architect 6-10 years		7	7
architect 10+ years		5	5
technologist 1-5 years		6	6
technologist 10+ years	1	1	2
other technical staff	1	1	2
support staff	3	1	4
Total	6	32	38

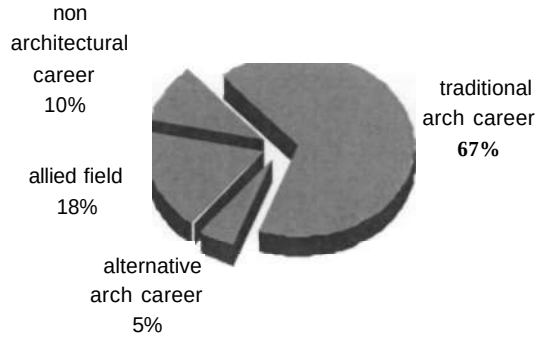
Figure 4-28 Previous career / Gender

Previous career	Yes	No	Valid Percent
Male	2	23	25
female	4	12	16
Total	6	35	41

Figures 4-27 and 4-28 show that the majority of participants did not have previous careers and those that did, were mainly support staff with transferable skills not tied to a particular industry. There are two participants with technical expertise, firstly a female who has been in her current employ for over 5 years and a male technician with 10+ years of experience. Both these suggests that their previous career change was over 5 years ago. Lastly it can be assumed that the intern, who is 20-25 years old and has a 3 year B.A.S qualification, has recently changed to the architectural profession.

4.4.2 Career Path

Figure 4-29 Anticipated career path



67% of the participants are following a traditional architectural career, however two female architects are either moving into an allied field (work such as engineering, construction, landscape architecture, planning, interior design, furniture designer, surveyor etc) or pursuing a non-architectural career.

Figure 4-30 Job grade / Career path

	Job Grade					
Career Path		traditional arch career	alternative arch career	allied field	non arch career	Total
	intern	3		1		5
	architect 1-5 years	4				6
	architect 6-10 years	7				7
	architect 10+ years	5				5
	technologist 1-5 years	6				6
	technologist 10+ years		1	1		2
	other technical staff			2		2
	support staff				3	3
	Total	25	2	5	4	36

Figure 4-31 Students career path

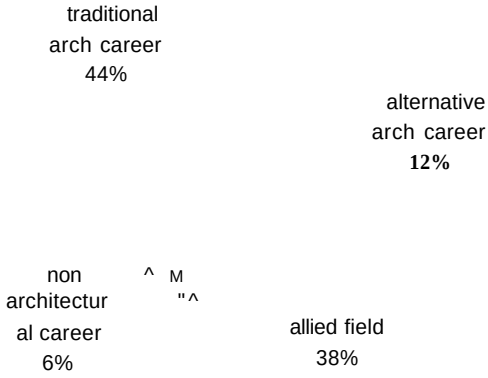


Figure 4-32 Career path / Gender

	Gender			
		Male	female	Total
% of career path	traditional arch career	6	9	15
	alternative arch career	3	1	4
	allied field	4	9	13
	non arch career			2
	Total	13	21	34

Figure 4-32 shows that more females intend to follow a traditional architectural career, working in an architectural firm or some other institution focused primarily on design, in work typically associated with the role of an "architect."

12% of the individuals want to move into an alternative architectural career working in a traditional setting but in a role other than that of an "architect" (i.e. marketing, office management, business development etc or architectural work in a non-traditional setting such as a corporation, government office or in architectural education). 38% want to pursue allied fields and two females are leaving the profession.

The New Zealand Architects Education and Registration Boards research suggested that approximately two-thirds of graduates practice architecture, however 56% of the third year B.A.S class (figure 4-31) have stated they will not be trained up as traditional architects. Another concern is that 6% of the students, and the 3% of practicing architects that indicated they were persuing a non architectural career, are all women. These small percentages do not support Ahrentzen and Groat's (1992) argument, that women in architecture are :

- less likely than their male counterparts to complete their education

- more likely than male graduates to pursue marginal occupation like interior design or landscape design upon graduation.

4.4.3 Choice of Firm

Participants were asked to rate from -2 (not at all important) to +2 (very important) on how important each of the following factors are in choosing their place of employment.

Figure 4-33 Factors / working sample

Working	-2.0	-1.0	0.0	1.0	2.0
Reputation of firm	7.7	0.0	10.3	46.2	35.9
Practice emphasis	2.7	5.4	18.9	40.5	32.4
Location	7.7	2.6	28.2	33.3	28.2
Principals/Partners	5.1	2.6	38.5	20.5	33.3
Commitment to interns	7.7	5.1	28.2	25.6	33.3
Compensation	2.6	15.4	23.1	35.9	23.1
Fringe Benefits	24.3	5.4	43.2	16.2	10.8
Personal / family considerations	23.1	7.7	20.5	20.5	28.2
Level of responsibility	2.6	0.0	7.7	41.0	48.7
Size of firm	15.4	7.7	30.8	25.6	20.5
Opportunity to	2.6	0.0	10.3	23.1	64.1

Figure 4-34 Factors / student sample

Students	-2.0	-1.0	0.0	1.0	2.0
Reputation of firm	0.0	0.0	20.0	46.7	33.3
Practice emphasis	3.3	3.3	13.3	50.0	30.0
Location	3.3	3.3	36.7	43.3	13.3
Principals/Partners	3.3	3.3	30.0	43.3	20.0
Commitment to interns	0.0	10.0	16.7	53.3	20.0
Compensation	3.3	10.0	20.0	50.0	16.7
Fringe Benefits	13.3	13.3	30.0	30.0	13.3
Personal / family considerations	13.3	10.0	36.7	20.0	20.0
Level of responsibility	10.3	0.0	17.2	51.7	20.7
Size of firm	3.3	16.7	33.3	30.0	16.7
Opportunity to advance	0.0	0.0	16.7	26.7	56.7

4.4.3.1 Reputation of firm

When compared to the student's responses, 80% rated reputation and practice emphasis as important or very important. This closely matches those of the participants in practice. In the +2 band, males and females equally rated reputation, however architects with 6-10+ years where the majority in this grade. Architects with 1-5 years and one with 10+ years rated this as not very important. It is interesting to note that the technical and support staff rated this highly.

4.4.3.2 Practice emphasis

The majority of architects, technologists and technical staff rated practice emphasis as important, however two architects with 10+ years rated this as not important, which suggests that as architects progress through their career their focus shifts and the priority in the type of work changes.

31% of the sample indicated that using their creative abilities in practice was important, but depending on the size of firm, some individuals only work on certain

aspects of the work or stages and if the firm is "top heavy" then more senior staff will be delegated to perform more junior tasks accounting for this unhappiness.

21%) wanted to improve the built environment and 16%> wanted to improve their quality of life. These are sometimes difficult to fulfil on every project. In the firm Rennie Scurr Adendorff Architects, jobs are graded A, B and C according to various factors. "A" grade jobs are projects that either are award winning or large income generating commissions. These type of projects meet the above criterion wishes, however "B & C" grade jobs, generally smaller projects which are the majority of "bread and butter" work, can be very rewarding but not on a large scale with mass impact. It is understandable that there is some dissatisfaction in these areas, but decisions regarding a firm's work load and type of project is left to the discretion of the partners.

4.4.3.3 Location

80% of students stated that location was important. Seven women rated this as very important with the majority being interns and support staff aged 25-29 with an equal balance between single and married individuals. Technicians in general rated this lower, with three males including an architect with 10+ years rating this as very low. However only one was married and we can therefore surmise that this is due to the sample being older and more settled and not wanting to travel.

4.4.3.4 Principals/Partners

Only 20%) of students said that principals were important with 60%> valuing 0 or +1. The majority of males rated this highly as well as married individuals although two architects with 10+ years did not think this was important. Again we can guess that due to the size and nature of the current practices, the collective office culture and systems are now more important than an individual in choosing firms.

4.4.3.5 Commitment to interns

73% of students rated the commitment to interns as important or very important, but this is understandable as they will be applying for their fourth year of practical training. It is encouraging to see that 21% of the working women and 12% of men showed that a good commitment to training up the next generation of architects is important, however 2 architects with 10+ years experience who are in grade F positions rated this as not important and the other two 10 + years in grade F positions another two scored 0 which suggests that owners of firms may not rate this highly.

The point of an internship is to provide a practical work and learning experience to the laudable end of producing competent new architects, however Cuff (1991) suggests that the "everyday life of most entry-level architects resembles that of a "CAD Jockey" producing drawings rendered tediously on a computer aided drawing (CAD) system.

In an interview with Rennie Scurr Adendorff Architects, most interns are not exposed to the management side of running a practice. Interns and many architects are not trained in understanding economic trends, forecasts, and indicators in relation to the firm's performance, nor are many given the opportunity to be involved in the non drawing aspects of a project i.e. cost reports, financial budgeting, people budgeting, or the contract forms and tender processes. These learnt skills can make the difference between future firms surviving or failing as a business.

4.4.3.6 Compensation

Half the student sample rated compensation as important; however the working sample was 8% higher in the very important category. Technical and support staff rated compensation as important whereas the majority of architects including four grade F architects 10+ years where neutral (0) on the matter.

4.4.3.7 Fringe Benefits

Fringe benefits or cost to company packages were rated by 60% of both samples as either 0 (neutral) or +1 (important. Benefits are more important to younger members aged 20-29, however equal numbers of married / single voted at opposite end of the scale with the majority being neutral. Again the Architects +10 grade F policy makers rated this as neutral to low.

4.4.3.8 Personal /family considerations

Only 20%) of students and 28%> of working members rated personal/family considerations as important. Males/females and single/married members in equal numbers scored on both ends of the spectrum, however those with children generally scored important or higher and all four individuals with dependants aged between 0-11 graded +2 very important. Equal numbers of single people scored at opposite ends of the spectrum -2 very unimportant - +2 very important. The majority of younger individuals rated this high (+1 or +2 very important). In contrast to this, the four male architects in the 10+ years grade F category rated this a low priority (-1 and -2) which again is a concern as these are policy decision makers.

4.4.3.9 Level of responsibility

Levels of responsibility were rated highly with 90%> of the working sample and 70%> of students grading this important and above. Three architects 10+ years graded this as important and one as very important. This is key to any grading system and if the Paterson grading system is implemented into architectural firms then this will become the most important factor for individuals and employers.

4.4.3.10 Size of firm

Approximately 30%> of workers and students remained neutral while individuals aged 20-39 graded this as relatively important but older members scored it progressively lower. According to Paterson (1975), size of practice does matter when determining

the grading structure, however to be effective and have meaning a firm generally needs a staff compliment of at least 10 individuals.

4.4.3.11 Opportunity for advancement

64% of the working sample and 54% of students rated the opportunity to move up grades and advance with the company as of utmost importance both as individuals and in firms offering advancement strategies. Three architects in +10 years graded this as important and one architect 10 + years as very important. If a company sets up a grading system with the correct advancement training programs and evaluation systems, most firms should be able to meet this need

It is clear from figures 4-34 and 4-35 that benefits and personal/family considerations are not of huge importance which is contrary to some of the literature, which is arguing that there is a need amongst architects for better work / life relationships and better benefits. Opportunities to advance and greater responsibility are tied together and can be seen as complimentary or symbiotic, as one directly affects the other.

4.5 Employment Factors

4.5.1 Grading

The criteria for dividing the various jobs into grades have been based on job descriptions and levels of responsibility within an architectural firm.

Grade A: perform some or all of the following duties

- Routine office tasks according to well established procedures.
- Prepares less complicated drawing or layouts or detail drawings.
- Uses a computer or other drafting techniques to perform scaling, dimensioning, or line locating according to standard industry procedures.
- Combines various details from sketches, drawings, or blueprints and makes required calculations.

Employment requirements

- Usually an entry level position requiring no previous experience

Grade B: perform some or all of the following duties

- Uses computer-aided drafting software to develop layouts, drawings and designs that meet specifications.
- Reviews architectural drawings, analyzes design and retrieves information to complete drawing, layout or design.
- Uses detail drawing or specifications to develop preliminary sketches, layout, detail drawings.

Employment requirements

- Usually an intermediate level requiring a 2 year degree plus 2 years relevant experience, or equivalent

Grade C: perform some or all of the following duties:

- Assists in the development of architectural designs
- Analyzes building codes, by-laws, space requirements, site requirements and other technical documents and reports
- Prepares manual and CAD (computer-assisted design) drawings, specifications, cost estimates and listings of quantities of material from conceptual drawings and instructions
- Constructs architectural and display models, and 3-D virtual models of architectural designs
- Prepares contract and bidding documents
- May supervise drafters, technicians and technologists on the architectural team
- May supervise construction projects and coordinate, monitor and inspect work done by others.

Employment requirements

- Completion of a two- to three-year program in architectural technology or a related subject is usually required.

Grade D: perform some or all of the following duties:

- Consults with clients to determine type, style and purpose of renovations or new building construction being considered

- Conceptualizes and design buildings and develop plans describing design specifications, building materials, costs and construction schedules
- Prepares sketches and models for clients
- Prepares or supervise the preparation of drawings, specifications and other construction documents for use by contractors and tradespersons
- Prepares bidding documents, participate in contract negotiations and award construction contracts
- Monitors activities on construction sites to ensure compliance with specifications
- Conducts feasibility studies and financial analyses of building projects

Employment requirements

- A bachelor's degree from an accredited school of architecture Completion of a two-year internship under the supervision of a registered architect is required.
- Completion of the architect registration examination is required.

Grade E: perform some or all of the following duties:

- Co-ordinates and directs administrative support functions for the office or department. Oversees design activities, determines the sequence of production operations, and determines resource requirements.
- Implements policies and procedures for production of documents, work flow etc.
- Assists in decision process for hiring, terminating, promoting, or evaluating office personnel.
- May monitor budget, accounting, or time records.
- Analyzes production methods to ensure time and cost objectives are met.
- Performs as part of a work team involved in the planning, organizing, and developing of complicated projects and typically supervises less than ten employees.
- Requires ability to use and apply extensive knowledge for a specific engineering field.
- Supervises other project professionals or technicians.

Grade F: perform some or all of the following duties:

- Develops primary goals, operating plans, policies, and short and long range objectives for the organisation.
- Directs and coordinates activities to achieve profit and return on capital.
- Establishes organisational structure and delegates authority to subordinates.
- Leads the organisation towards objectives, meets with and advises other executives and reviews results of business operations.
- Determines action plans to meet needs of stakeholders.
- Represents organisation to the public.
- Directs the overall financial plans of an organisation.

The Board Notice 161 OF 2001 Architectural Profession Act, 2000 (Act 44 of 2000) and the SAIA Client/Architect agreement, divides commissions into five work stages.

Stage 1: Appraisal and Definition of the Project.

This stage is the initial contact with the client where the architect receives, appraises and reports on the client's requirements with particular regard to site information, planning and statutory regulations and budget. A partner or senior architect is generally involved in this stage.

Stage 2: Design Concept

This stage is where the architect prepares a design concept in broad outline showing space provisions, planning relationships and materials and services intended to be used. At UCT, students primarily produce work up to this stage as part of their design curriculum and although this forms the bulk of their 6 years of training, unfortunately in practice this stage is relatively small when reviewed against the total contract period. This stage is usually dealt with by the senior designer and technical staff to produce concept boards in order to "sell" the ideas to the client.

Stage 3: Design Development

This stage is where the design concept is drawn in sufficient detail to define the construction of the building. This stage is where junior architects 1-5 years and technicians are mainly used to spatially co-ordinate the work designed by consultants and specialists and produce drawings for review with the relevant authorities.

Stage 4: Technical Documentation

Construction documentation is prepared from which to build. This stage is where most of the detailing of the building happens. Architects and technicians with more experience, that understand the intricacies of how a building is constructed and how its components are used in this stage.

The saying goes that "design is in the detail" however, with a tertiary education that instils design as the broad concept (stage two) aspect, it is understandable that an architect may feel frustrated that they have limited design roles.

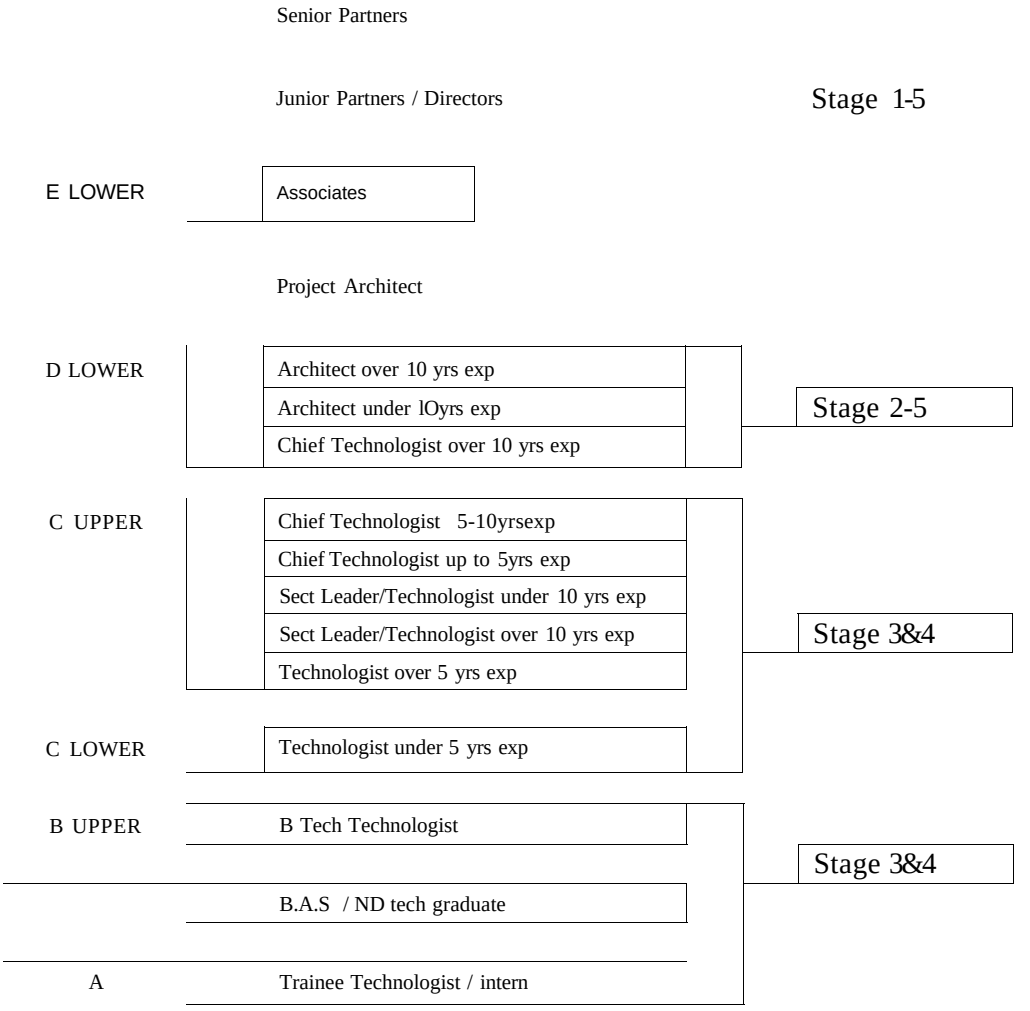
Stage 5: Contract Administration and Inspection.

Architects administer and perform the duties of the site, meaning they inspect the site and its works and co-ordinate documentation and consultants. This stage requires experience and is performed mainly by architects.

If one was to grade the involvement of individuals in the stages to that of responsibility levels and hierarchy in an office:

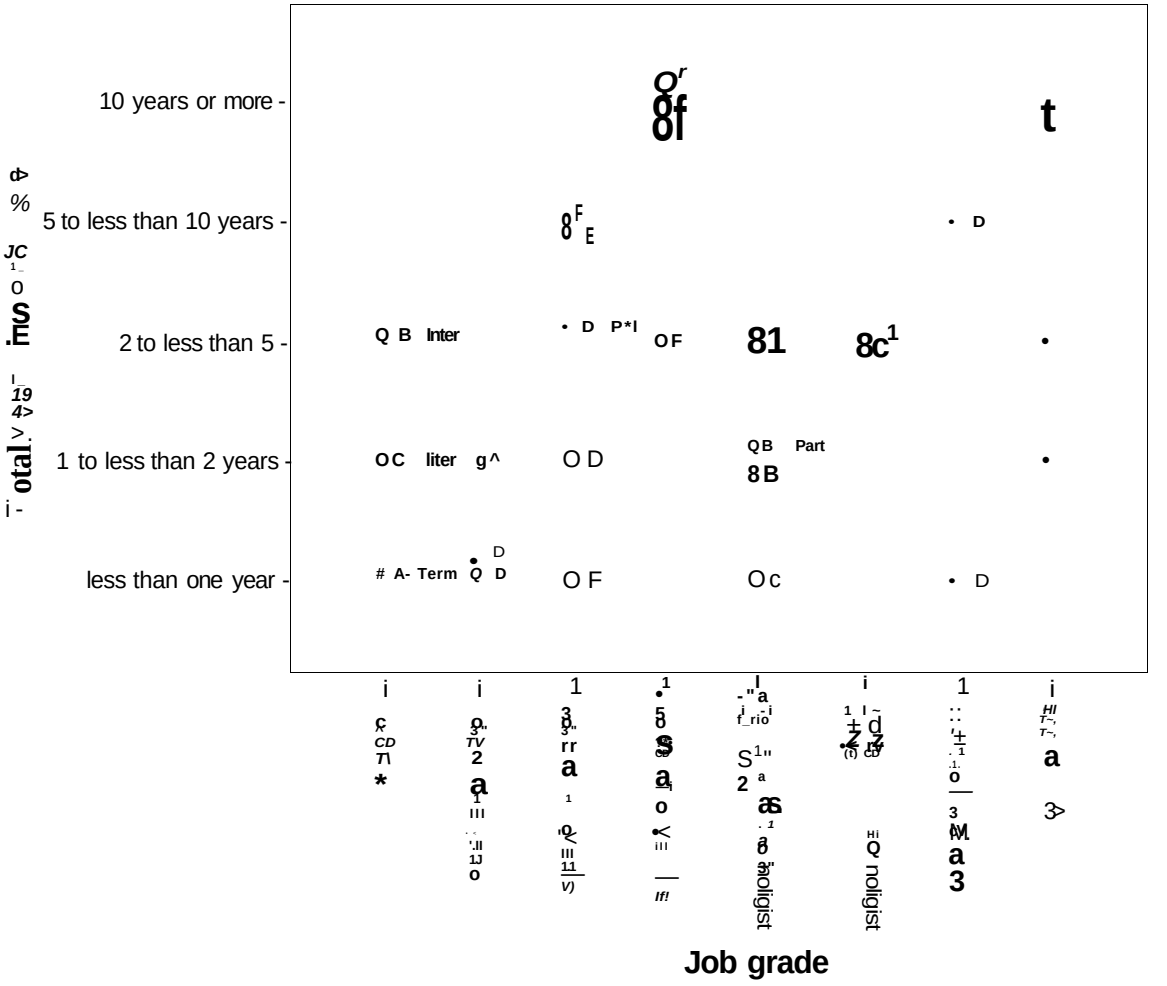
1. Stage 1 -Senior members (architects and partners) liaise with client - Junior staff (technicians, under graduates etc) used for documentation purposes.
2. Stage 2 - Senior members and Junior architects
3. Stage 3- Junior architects and technicians under senior members supervision
4. Stage 4 - Junior architects and technicians with design input from senior members
5. Stage 5 - Senior members

Figure 4-35 Grading and Work stages



Respondents were asked to indicate whether they practised their occupations on a full-time or part-time basis. They were also requested to indicate whether they occupied the post permanently or temporarily

Figure 4-36 Total years in workplace and Job grade



Many of the student/interns are intermittent or part-time as they are either in their second year ND Technikon or B.A.S fourth year internship and are performing either defined (A) or operative (B) decisions. It is also evident that there are more new female architects in the less than one year band suggesting either first time jobs or workplace hopping. It is interesting to note that architects with 10+ years have remained in their practice for over ten years whereas technologists with a similar experience have only served half the time. The two male architects, one with 10+ years in the 2-5 year band, the other with 6-10 in the less than one year and the female

architect with 6-10 years are all in a policy making position which suggests a job hop or the start of their own firm.

Figure 4-37 Decision making responsibility

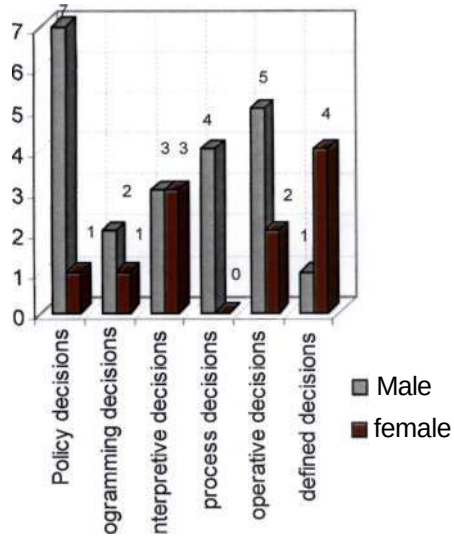
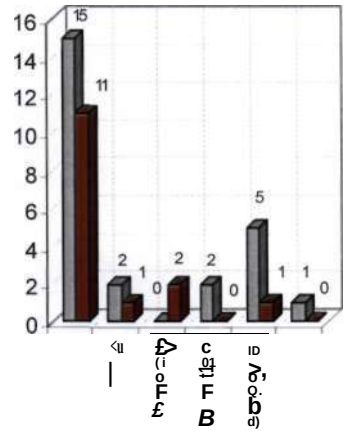


Figure 4-38 Employment Status



The majority of senior positions are held by males, but this is mainly due to the historical nature of the profession being a traditionally male career choice and therefore having obtained their grade through experience and time.

In the architects 6-10 years with 5-10 years in the firm, the male architect aged 25-29, married with no dependants has a masters degree and is a grade F. His female equivalent at this level is aged 30-39, married with dependants 0-4 and is a Grade E and suggests that education has an advantage. However there is another male architect with the same amount of experience but less time in a particular firm in the same grade (E) band but has no dependants and this may be a factor for discrimination, but needs further research.

There are two part-time members, firstly a female architect with 6-10 years experience, who has been with the firm for 2-5 years and has a masters degree, and secondly a technician with 1-5 years experience and who has been with his firm for between 1 and 2 years. They both earn the same salary and are both the same grade.

Although there seems to be a discrepancy between age, experience and qualification, the woman only works on average 24 hours a week versus the technician who works on average 60 hours.

There may be evidence of gender discrimination in the architects 1-5 band as the males generally hold higher grades than their female counterparts, however this needs further investigation. This again indicates that using time in the profession as a grading factor needs to be substantiated by other criteria in order to justify the grading status.

Respondents were asked to rate (-2 none and 2+ a lot) how much influence they had over: 1. The range of tasks 2. The pace at which they worked and 3, he resources they had at their disposal at their place of work.

Figure 4-39 Job grade / Influence over tasks

	Influence over range of tasks					
		-2	-1	0	+1	+2
1	student		2	1	2	
	architect 1-5 years			2	4	
	architect 6-10 years				3	4
	architect 10+ years			1		4
	technologist 1-5 years		2	1	2	1
	technologist 10+ years				1	1
	other technical staff				1	1
	support staff	1		3		

From the data it is clear that increased influence over these factors is greater with job status and experience.

Figure 4-40 Job grade / Influence over resources

	Influence over resources					
		-2	-1	0	+ 1	+2
1	student		1		3	1
	architect 1-5 years	1			2	3
	architect 6-10 years			2	1	4
	architect 10+ years		1	1		3
	technologist 1-5 years		2		4	
	technologist 10+ years					2
	other technical staff					2
	support staff		1	2	1	

Figure 4-41 satisfaction / influence

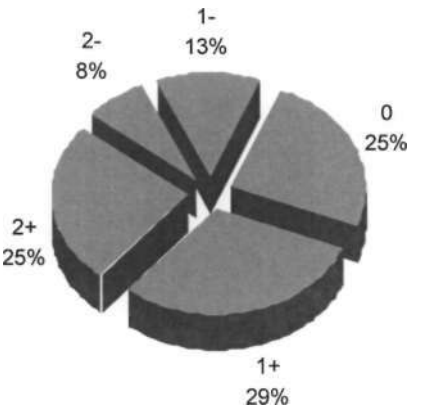


Figure 4-42 Job grade / Influence over pace of work

	Influence over pace of work					
Job Grade		-2	-1	0	+1	+2
	student		1		2	2
	architect 1-5 years			1	2	3
	architect 6-10 years				2	5
	architect 10+ years				1	4
	technologist 1-5 years		1	1	3	1
	technologist 10+ years					2
	other technical staff				1	1
	support staff			2	2	

When asked about the satisfaction with the amount of influence they had over their job. 30 % were reasonably satisfied and 25% were highly satisfied.

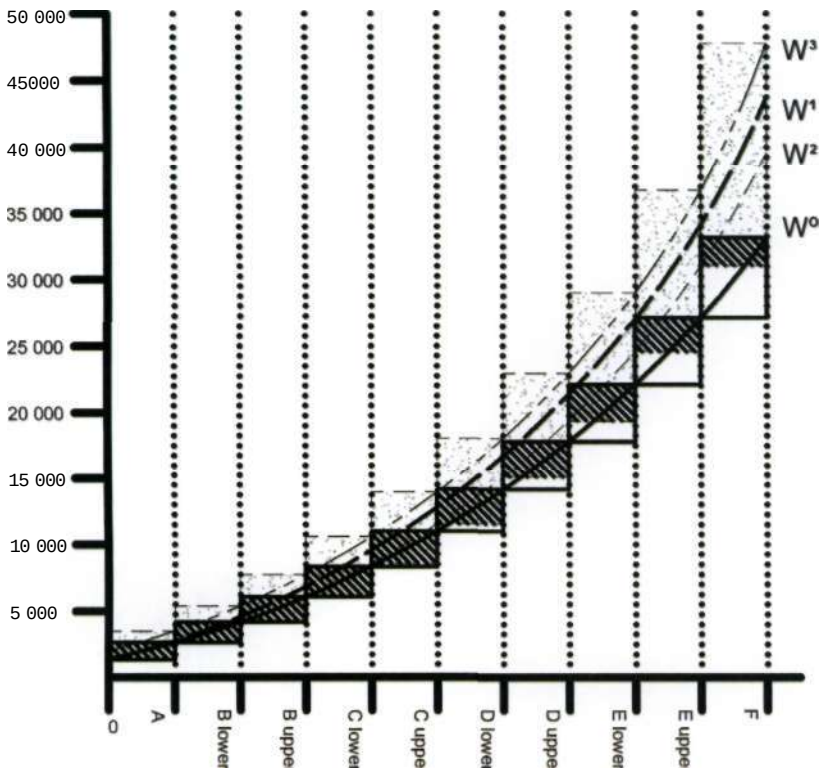
The sample was asked if any formal grading structure was used to determine job grade and benchmark salaries. Of the five systems - Hay, Peromnes, Paterson, JE Management, and Task, 21.2% are graded using the Task system.

In those firms where no formalised grading system was present, individuals were asked to rate which factors were used in grading evaluation.

- 70% Educational qualifications
- 76% Training/experience
- 67% Job know how
- 42% Problem solving
- 42% Decision making
- 33% Accountability
- 42% Pressure of work
- 12% consequence of error/judgment

The two top factors, Education and Training/experience are the main factors which govern the recommended salary guide produced by the Cape Institute of Architects. When this is compared to a formalised grading system, where the mean wage curve is plotted through each grade were W°= current salary range, W^{x}= salary 1:29, W^{2} = CIA salary guide 2003 and W^{3} = PE Corporate Services salary guide 2006.

Figure 4-43 Pay Ranges



Pay ranges are shown at the intersecting points at each grade and the curve gradient is based on the mean of each grade. W^x, PT^2 and W' are very similar and have been combined to form grade boxes. The shaded area is the overlap between these boxes and the pay range of $W°$.

The devising of job grade lines is not a scientific process, and the criteria for doing so must be set in terms of common sense. We have classified jobs into groups of like activities. In analytical methods of job evaluation, natural break points often show between differing grades. The shape of the grade structure curves upwards as there is unequal range values within each grade. These grade ranges are tentative and can be adjusted within a limited range, according to the definitions of the kind of jobs which can be grouped together.

It is obvious that in the lower grades the four gradients that form the bands are very similar, however as they move through to grade F the formalized systems have no relationship with what is paid in reality. When evaluating$^{\wedge 2}$, the CIA salary survey is also not reflective of bands E and F.

65.7%) agreed that there is a defensible and logical basis for determining what rates of pay should be applied to jobs and 69.4%> of the sample stated that there should be a formalized grading structure to bench mark salary and remuneration packages.

4.5.2 Compensation

Remuneration is a key issue, both influencing and being influenced by the individuals in practice. Respondents were asked to indicate their financial remuneration. Their salary/income: -refers to the gross salary received before any deductions and includes the net income from the direct pursuit of the occupation prior to taxation and includes any other monetary payments i.e.

- Overtime or related salaried work done after hours.
- Commission earned.
- Profit from own business if self-employed.
- Profit sharing or production bonus.
- Cash bonus, e.g., 13th cheque, service or holiday bonus.

Participants were asked to rate the skills (-2 none to +2 a lot) that affect their salary. It is assumed these individuals are in a position to know how their salaries are formulated through their firms performing some form job evaluation and advising these members.

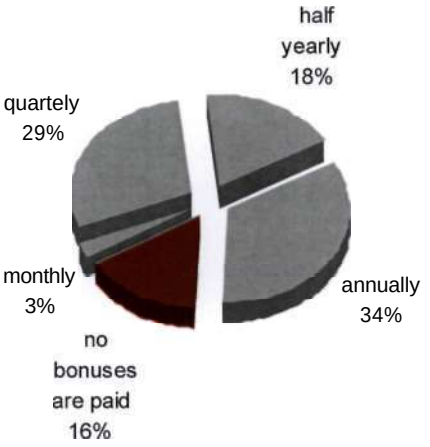
Figure 4-44 Skills / Influence on salary

	Rating in influence on salary					
		-2	-1	0	+1	+2
Skills	Technical	1	1	2	17	15
	Cad	1	0	10	14	10
	Design	1	1	4	13	17
	Computer Modelling	4	1	11	16	3
	Rendering	3	4	12	14	2
	Speaking and Writing	2	4	8	13	8
	Management	1	2	4	12	18

It is clear that technical knowledge, design capability and management are rated very highly in determining ones salary. The acquiring of further skills and training are discussed under "Benefits."

Participants were asked which system or combination of systems were used when determining salaries, 42% used a local salary survey, *11.5%* used peer comparison and 25.4 used other systems.

Figure 4-45 Frequency of bonuses

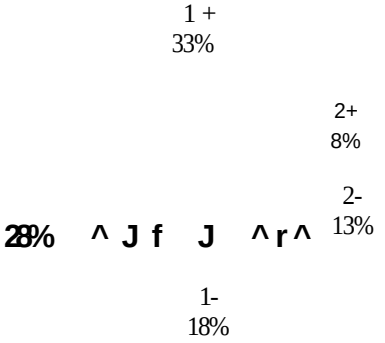


83%o of the sample had received a salary increase within the last 12 months (May 2005 -May 2006), however 16% did not receive any form of bonus.

Most grades had no variances in pay between gender, however, in the band architects 1-5 years experience; males earned 30%> higher than their female colleagues.

Respondents were asked to indicate satisfaction levels with their current compensation. -2 representing highly dissatisfied and +2 very satisfied.

Figure 4-46 Overall Satisfaction towards compensation



Although good salary prospects was only rated 8%> in the initial reasons for perusing architecture as a career, 31% of the sample expressed dissatisfaction.

Figure 4-47 Satisfaction with Compensation

		Compensation					
		-2.0	-1.0	0.0	1.0	2.0	Total
Gender	Male	3	6	6	9		24
	female	2	1	5	4	3	15
Age	20-24	1	1	4	3		9
	25-29		4	2	8	2	16
	30-39	2		1	2	1	6
	40-49	1	1	3			5
	50-59	1	1				2
	60 or more			1			1
Dependents	0-4	1	1		1		3
	5-11	2			1	1	4
	12-18			1	1		2
	no dependent children	2	6	10	10	2	30
Status	single	1	4	5	7	1	18
	living with spouse or partner	4	3	6	5	2	20

When the actual income figures are analysed the median monthly salary for an architect 1-5 years is R10 000, an architect 6-10 years getting R17 500 and an architect with 10+ years earning a mean salary of R30 000. Architects in this grade express frustration with the level of pay they receive and the seeming gap between the amount of work they do and the length of study needed in order to qualify.

This dissatisfaction is not surprising, given the frequent lament that "architects are the lowest paid profession." In order to assess if this is the reality, the most comprehensive source of graduate's salaries residing in South Africa, the HSRC Register of Graduates which is maintained by the South African Qualifications Authority (SAQA) is studied.

Figure 4-48 Median Income: Full time Employees in Private Sector (HSRC 2000)

	Basic Salary			Package
	25P	Me	75P	Me
Architect	69600	110436	157640	161700
Quantity surveyor	91000	129252	213000	205749
Engineer	124000	170000	250000	259239
Medical Practitioner	120000	224000	291000	294000
Medical Specialist	162945	200000	323040	320000
Attorney	60000	88620	120000	93120

Figure 4-49 Median Income: Self Employed Graduates in Private Sector (HSRC 2000)

	Basic Salary			Package
	25P	Me	75P	Me
		150000	220000	
Quantity surveyor	150000	207500	300000	212500
Engineer	167250	240000	339300	311000
Medical Practitioner	120000	200000	300000	216000
Medical Specialist	200000	300000	500000	381000
Attorney	118200	200000	300000	240000
Advocate	143800	240000	400000	250000
Computer Science Occupations	120000	183000	240000	240000

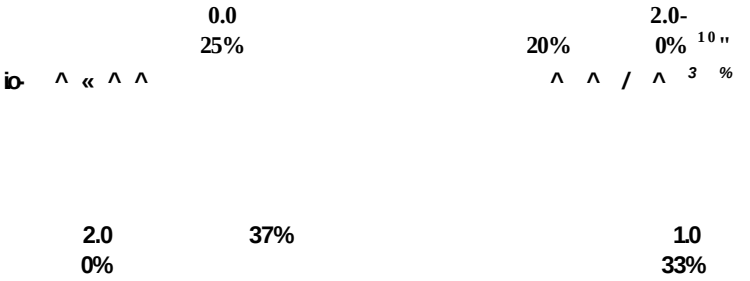
When architects are compared to similar professionals, both in the same sector and those in different ones, and have studied for similar lengths of time and are considered part of the professional fraternity, it is clear that the architects' sentiment has validity.

The above figures also confirm statements made in the literature review by the SAIA (2001) that potential entrants are being swayed to more lucrative industries and that professionals may be leaving due to bad pay prospects.

Figure 4-50 Job grade / Compensation Satisfaction

Db Grade	Compensation						
		-2.0	-1.0	0.0	1.0	2.0	Total
	Student	1			3		4
	architect 1-5 years		1	1	3	1	6
	architect 6-10 years	1	1		5		7
	architect 10+ years			2			5
	arch technologist 1-5 years		2	2	2		6
—>	arch technologist 10+ years		1	1	0		2
	other technical staff					2	2
	support staff			3			3

Figure 4-51 Gender / Expectations- compensation



Expectations are generally worse for men, mainly technologists. Students and the two women technical staff have better pay levels than expected. There are equal numbers on of married/single individuals on both sides of the spectrum; however those with 0-4 year old dependants ranged from 0 to -2. It is interesting to note that one of the architects with 10+ years, whose pay was lower than expected, earns the highest in the sample falling in the R35 000 or more a month.

We are also able to establish the pay gradient between the various bands.

n = 10 (total number of grades)

Y_0 = R3000 (Intern/ Student)

Y_n = R17 500 Y_6 (Architect D Upper)

$$r = \{YJYj''$$

$$= (17500/3000)^{1/7}$$

$$= 1\text{-}29$$

Hence there is a constant 29% increase between grades. Given the gradient (r) and the minimum pay (Y_0) it is now possible to calculate the mean pay for any other grade. If the minimum pay is R3 000 and the gradient is 1-29 then pay for a technologist 1-5 years $[Y_4)$ is obtained thus:

$$Y = Y r''$$

$$Y_4 = 3000X(1\text{-}29)^4$$

$$= R8\ 307$$

Given the gradient 1-29 and a technologists mean pay (Y_4) as R 8 307, the mean pay for a Senior partner (7_{10}) can be calculated as

$$Y_{10} \quad Y_4 r^{10-4}$$

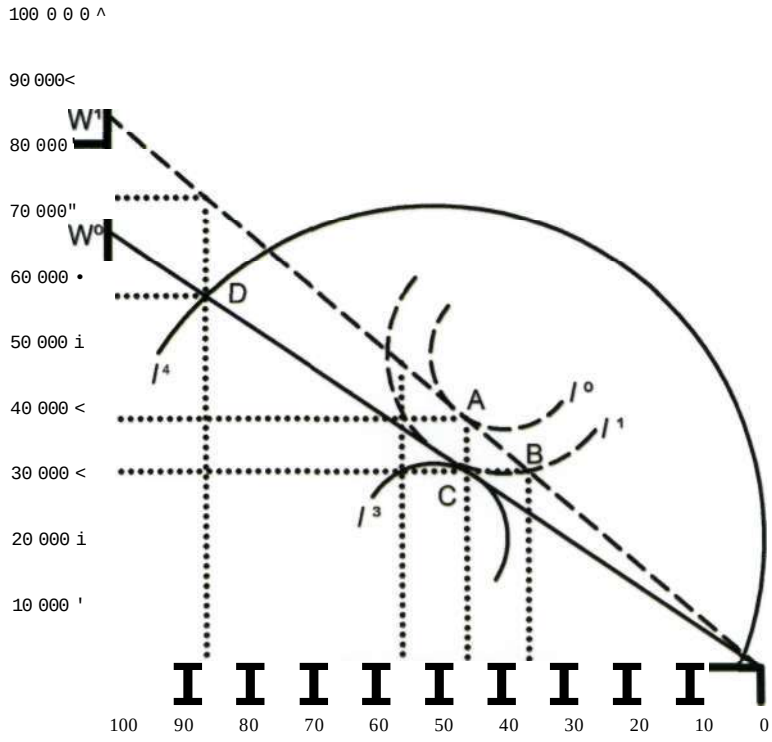
$$8307X(1\text{-}29)^6$$

$$R38\ 280$$

However, the statistics from the survey reveal the average mean pay for this band is R30 000 per month.

When plotted on an indifference map, wage line Oto $W°$ represents the current pay grade and line 0 to W^l is the ideal grade to pay ratio (1:29). The indifferent curve I^1 intersects W^l (A) based on the average of a 45.8 hour working week showing the ideal satisfaction level with a pay level of R38 000.

Figure 4-52 Satisfaction indifference map based on Rees (1979)

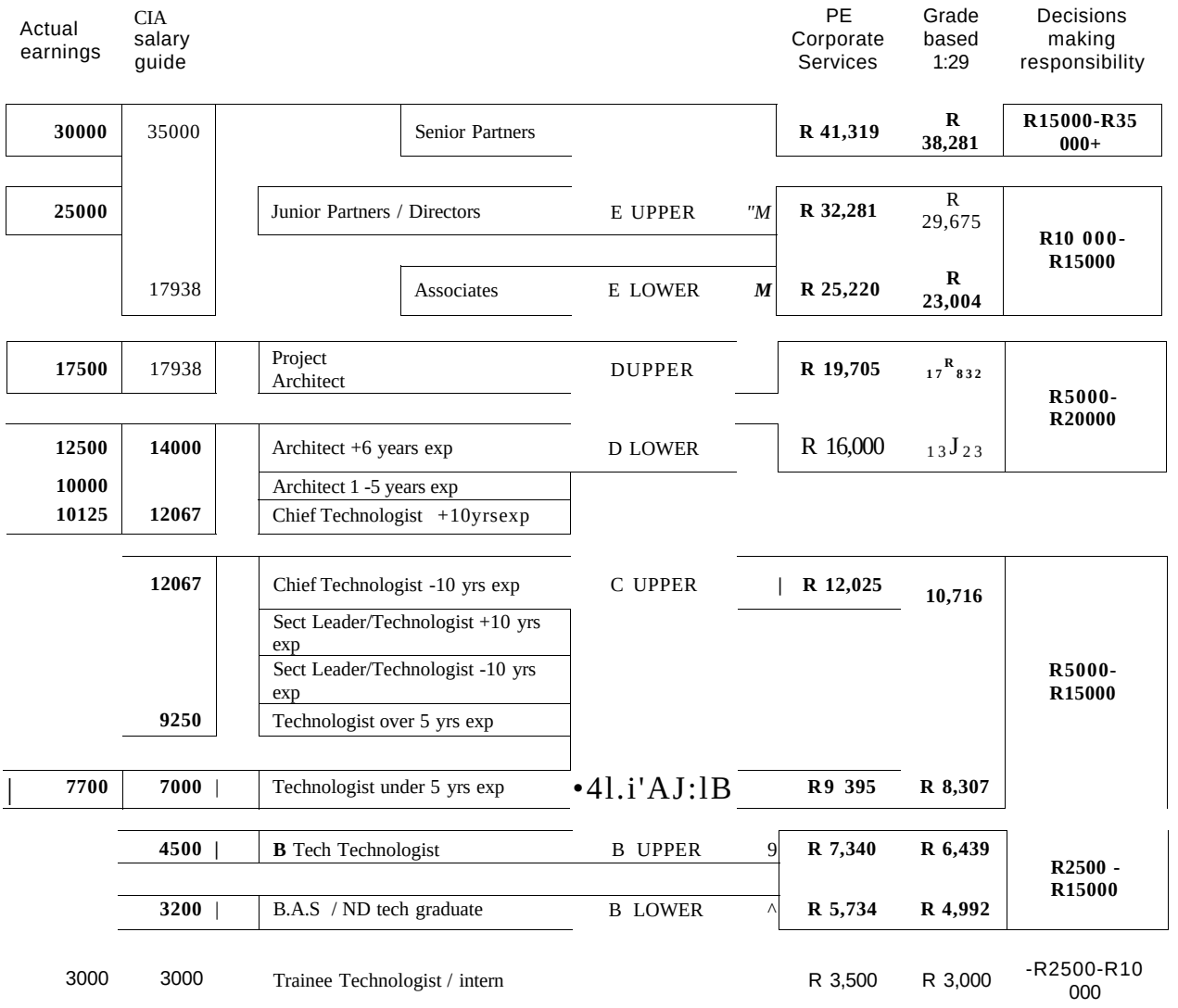


The current wage grade is shown as $0W°$ which demonstrates that an architect with this level of pay would be satisfied at (B), only working a 36 hours a week. If point (C) is the current satisfaction point where the indifference curve I^3 is tangent to $W°$*then* a new satisfaction point (D) on curve/^{4}is generated for 86 hours and the earnings should be R57 000.

Figure 4.53 shows the comparison between the various grading systems and pay. The actual earnings column has salaries recorded from the survey per grade. The CIA salary guide is based on recommended figures issued by the Cape Institute of Architects in 2003. PE Corporate Services produce a salary guide for architects which have a ratio curve of 1:28. The pay grades based on the ratio 1:29 is based on actual earnings surveyed; however it is adjusted to reflect recommended mean pay in each grade. When compared to actual earnings the figures are very close in the lower grades but differ in the upper grades suggesting that either the lower grades are paid to high in relation to the upper grades or that grades D and above are not earning

proportionately more to their level of responsibility and decision making in relation to the lower grades. This accounts for the levels of dissatisfaction in the upper levels for the hours worked and pay received. The last column shows the actual range in earning per grade. Again this is concerning as there are large ranges in pay in relation to the sample's decision making responsibility level. 48% of the sample stated that there were large differences in pay between similar jobs in their workplace.

Figure 4-53 Grade / compensation



4.5.3 Hours worked

Architects have a reputation for working long hours, however when we analyzed the survey data for the average work week, the resulting picture did not seem so extreme. The mean number of hours worked is 45.8 hours per week, with an average of 6.55 hours of overtime.

Figure 4-54 Full time Employees in Private Sector (HSRC 2000)

	Age	Experience	Hours
Architect	32	6	40
Quantity surveyor	39	15	41
Engineer	37	12	43
Medical Practitioner	45	23	49
Medical Specialist	45	19	46
Attorney	31	6	45

When this is compared with the HSRC Register of Graduates (2000) the average is 40 hours over all grades. Interestingly, this is the lowest average when compared to other professionals.

Figure 4-55 Self Employed in Private Sector (HSRC 2000)

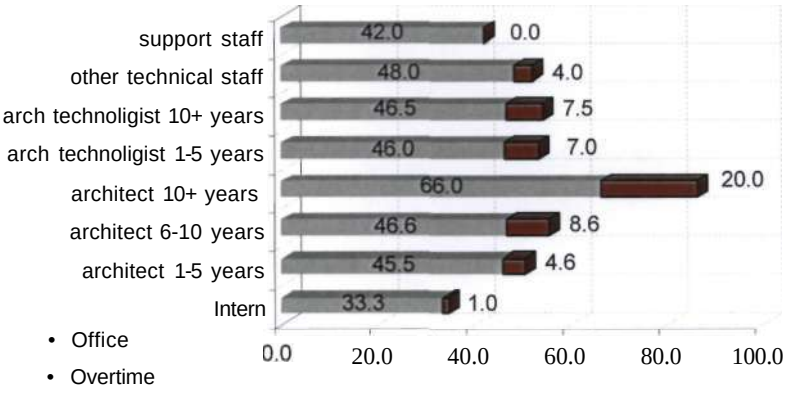
	Age	Experience	Hours
Architect	52	25	40
Quantity surveyor	49	28	43
Engineer	50	25	45
Medical Practitioner	49	22	52
Medical Specialist	50	24	52
Attorney	46	20	45
Advocate	46	23	46
Computer Science Occupations	33	9	40

Respondents were also asked to indicate the number of hours worked per week, firstly office hours and secondly overtime hours.

Figure 4-56 Hours worked weekly / Hourly rate

Hours Worked	Total hours per week	Ave income	Hourly rate
Intern	34.3	3000.0	87.5
Architect 1-5 years	50.1	10000.0	199.6
architect 6-10 years	55.2	17500.0	317.0
architect 10+ years	86.0	30000.0	348.8
arch technologist 1-5 years	53.0	7700.0	145.3
arch technologist 10+ years	54.0	10125.0	187.5
other technical staff	52.0	10000.0	192.3
support staff	42.0	6562.0	156.2

Figure 4-57 Normal work time and overtime



The data reveals that the median work week (forty-six hours) is only slightly higher than the "regular" South African work week of forty to forty five hours. Perhaps the notion of "long hours" stems not so much from the average work week, but rather from the normal work weeks punctuated by short bursts of intensive work manifested in consecutive days (including weekends) of overtime. This pattern of "crisis work" may be the more accurate source of the complaint about the profession's "hours."

One would have expected a higher than average reported number of hours worked with increased responsibility, however the average number of hours worked for an architect with 10+ years experience is 86 hours a week, this is average of 12 hour day, 7 days a week, whereas an architect 6-10 years on average worked 55 hours a week which is only working 11 hours, five days a week. When the hourly rates are compared the architect 10+ years is working 56% harder than R31 more an hour or a 10% increase in salary. It is understandable that senior architects are concerned with the amount of time being spent in order to earn their salary.

Figure 4-58 Satisfaction with hours worked

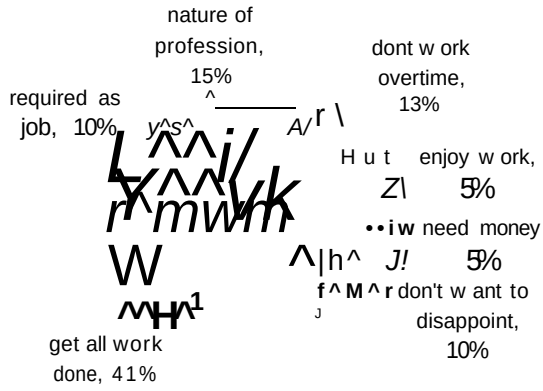
		Satisfaction with Hours Worked					
		-2.0	-1.0	0.0	1.0	2.0	Total
Gen«	Male	4	4	12	4	1	25
	female	1	1	6	2	5	15
c	20-24	1	2	4	2	1	10
	25-29	1	2	6	2	5	16
	30-39			4	2		6
EC	40-49	1	1	3			5
	50-59	2					2
	60 or more			1			1
	0-4	1		1	1		3
	5-11	1		2	1		4
»	12-18			2			2
Q	no dependent children	3	5	13	4	6	31
tus	single	1	3	8	3	4	19
w	living with spouse or partner	4	2	9	3	2	20

Two male architects 10+ years (both married and one has dependants 5-11 years old), a technician 10+ years (married with dependants 0-4 years old), an architect 6-10 years (married) and a single female student are highly dissatisfied with the amount of hours work, but the majority are moderately or very satisfied.

The architect 6-10 years works 50 office hours and 5 overtime hours, but the student only works 15 office hours. It is understandable that the architects 10+ and the

technician 10+ are unhappy as they work an average of 65 office hours and 20 hours overtime. They listed improved quality of life and a better work life balance as the top two reasons as to why they would leave the profession. The long hours and family commitments may be the primary factor for this dissatisfaction.

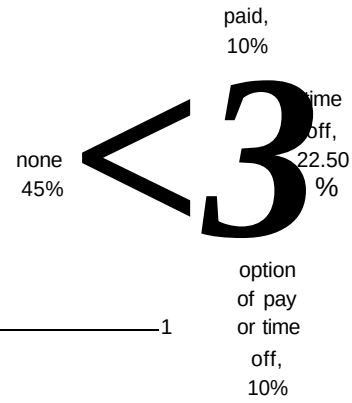
Figure 4-59 Reasons for working overtime



41% of respondents stated "so I can get all my work done" as their main reason for working overtime and 15% said it was the nature of the profession. However the two are not mutually exclusive.

Figure 4-60 Overtime Hours

Figure 4-61 Overtime Payment

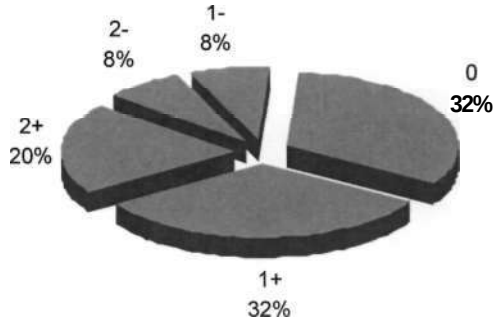


87% of the sample work overtime, however 45% of these receive no payment for this. The preferred option of rewarding employees for overtime is time off, meaning that if they work a certain amount of hours, they can take paid leave to the equivalent amount of time. 10% had the choice of time off or pay and 10 % get paid.

In terms of BCEAct the overtime threshold gazetted in March 2003 does not apply if persons earn above Rl 15 572 per annum or R9 631 per month which applies to most

of the sample. However when asked to state if they were paid overtime, some individuals were paid during the week and on a Saturday, either at a regular rate or at time + ^{X}A and on a Sunday and holidays, at regular pay or time x 2.

Figure 4-62 Time / work



Respondents were asked whether they agreed +2 or disagreed with the statement that they "never seem to have enough time to get the job done." 22% felt they needed more time. Of those who performed overtime and were compensated it is clear that there is more dissatisfaction with those who get time off rather than those with a monetary option.

Figure 4-63 Overtime payment / satisfaction with hours worked

		Over time payment					
tisfaction over hours w		never work overtime	paid	time off	option of pay or time off	No pay	Total
	-2	2		3		1	6
	-1		1	1	1	2	5
	0	2	2	4	2	6	16
	+1		1		1	5	7
	+2					4	4
	Total	4	**4**	8	4	18	38

This is also a need for further investigation as those who indicated dissatifation with working hours wanted a greater work/life balance and an improved quality of life.

Although the majority of more senior architects stated they worried about their hours, it is interesting to note that members who did work overtime with no pay generally were not worried. It is recommended that employers put adequate measures in place to monitor time correctly which would reduce wasted office hours to prevent

purposeful overtime work to gain extra pay, but more importantly to reduce dissatisfaction and reward accordingly.

4.6 Benefits and cost to company packages.

Employee benefits can help develop a stable and productive work force, however, only comprise one portion of the compensation package. These are not intended to reward an employee's individual productivity or performance, but rather are offered to all members of the firm. Benefits generally include holidays and paid vacations, insurance, health care, pensions etc. Respondents were asked which benefits were offered in their firms.

Figure 4-64 Benefits / Funding

Benefit funding			
	Provides no funding	Provides a fixed R amount	Provides 100%
Insurance			
Life Insurance	34		1
Health Insurance /Medical Aid	20	12	4
Dental Insurance	35		1
Liability Insurance (Prof indemnity)	26	1	8
Voluntary disability insurance (PPS)	35		1
Group life insurance plans	35		1
Retirement / Pension Program	34		2
Travel Expenses	18	8	12
Entertainment	30	2	4
Car Allowance	28	2	6
Petrol Allowance	26	2	8
Cell Phone Allowance	27	3	6
Spending Allowance (books etc)	29		7
Miscellaneous			
Education / Tuition Assistance	33		3
Profit sharing plans	28	6	2
Professional Association Dues / fees	27	2	6
t^^&W^^^^^^R			
Employee stock ownership plans	33	1	1
Other	30		1

Gone are the days when employees had benefits as a given. Employers in architectural firms are not offering many of the traditional benefits.

All companies, regardless of size, are struggling to keep employees from leaving for more money or better opportunities. Studies consistently show cost to company packages are now becoming a major factor in firm selection and an employee retention strategy.

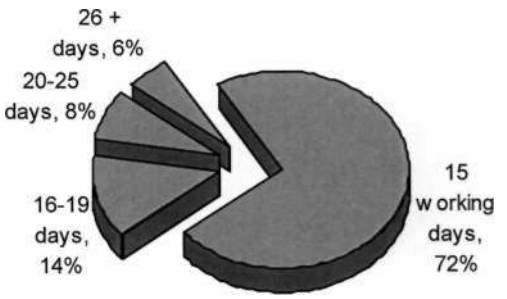
Firstly, the legalities: The Basic Conditions of Employment Act 20, Annual Leave •.allows in the "annual leave cycle" (meaning a 12 month employment period) 21 consectutive days on full remuneration. Act 22 of the BCEAct also states that during every "sick leave cycle" (36 months) an employee is entitled to an amount of paid sick leave equal to the number of days the employee would normally work during a period of six weeks.

Furthermore, Act 25 entitles eligible employees to take 4 consecutive months of unpaid, job-protected maternity leave in a 12-month period.

The only legally required benefit employers are obligated to maintain is Unemployment Insurance and Compensation for Occupational Injuries and Diseases Act (COIDA) -formaly known as workmans compensation insurance.

According to Anthony (2000) the issue of benefits and those not complying is also a concern among architects. Generally the percentage of firms providing benefits increases as the firms size grows. Solo practioners are much less likely than employees in larger firms to receive benefits through their firm. The survey asked what kinds of benefits firms provided. In the insurance section medical aid topped the list, but over half (55%) did not have this benefit.

Figure 4-65 Leave entitlement



Respondents were asked to indicate their normal leave entitlement with 72% receiving 15 working days. What is a concern is that 34% of the sample are not offered paid leave.

The industry standard for paid leave is 15 working days or 21 consecutive days, however extra time is generally offered to those individuals that have served the company for a long period of time as a form of reward.

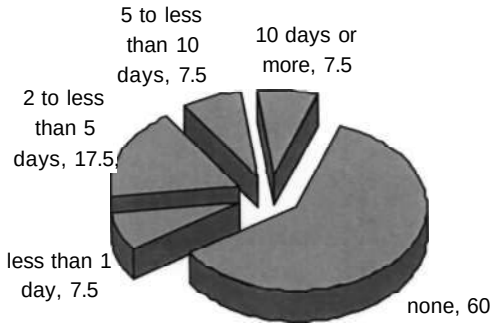
Of the other benefits related to personal leave and family commitments, 59% stated that they could work flexible hours, 41% are given parental leave, only 13% have job sharing, 15% can work from home during office hours and only 3% had access to a workplace nursery or help with childcare.

For those members that have been with the firm for longer than four months and work at least four days a week the BCEAct enforces employers to grant the employee three days paid family responsibility leave (section 27 of the basic conditions of employment act 1997.) When asked if a day off was required at short notice to look after a sick family member, 33% would use paid leave, 51% would take time off and make it up later, 10% would take unpaid leave and 13% were offered another form of leave i.e family responcibility leave. This is a major concern as it shows a lack of understanding and compliance with Basic Conditions of Employment and needs to be addressed.

Education/training is also an important benefit in allowing personal advancement and also increases skill levels within the firm, however only 8% had received training as part of their benefit package.

According to Anthony (2000) architects want advancement through the firm and receive recognition for their efforts. 60% of the sample had received no training within the previous twelve months.

Figure 4-66 Training



Regarding discussions with their employers on this advancment, 51% of the sample said they had discussed how they were getting on with their job. Only 27% had talked about their chances of promotion and their training needs and 54% had discussed their pay options.

It is obvious that advancement is recognised through increases in pay rather than personal development.

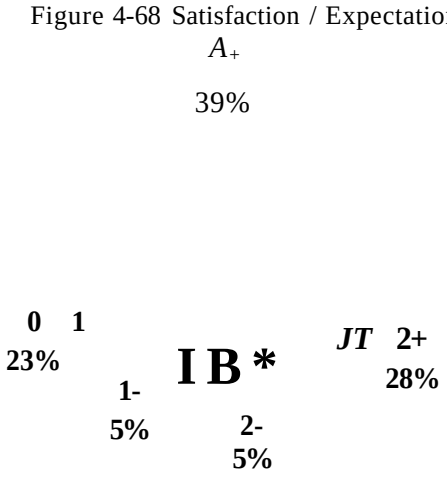
4.7 Reasons for Leaving Architecture

Individuals were asked to compare their current career outlook with their expectations when they first embarked in their architectural pursuit (worse than expected -2 to better than expected +2)

Figure 4-67 Satisfaction with work

		Satisfaction with work					
		-2.0	-1.0	0.0	1.0	2.0	Total
Gender	Male	2	1	2	14	6	25
	female		1	7	2	5	15
t: 1	20-24		1	2	4	3	10
	25-29			3	8	5	16
	30-39		1	1	2	2	6
	40-49	1		3	1		5
	50-59	1			1		2
	60 or more					1	1
	0-4	1	1			1	3
	5-11	1		1	1	1	4
	12-18				2		2
	no dependent children		1	8	13	9	31
3	single		1	4	8	6	19
	living with spouse or partner	2	1	5	7	5	20

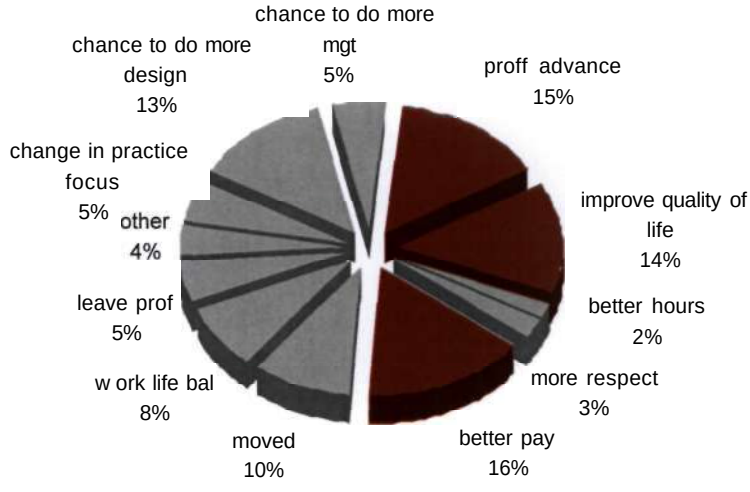
Figure 4-68 Satisfaction / Expectations



Regarding satisfaction with work, 39% indicated +1 and 28 % of the sample's expectations were better than expected (+2). Two male individuals - an architect and an architectural technologist, both married with children and +10 years of experience- expressed that architecture was worse than expected.

46% of the sample felt very secure in their workplace and only 13% felt a little insecure.

Figure 4-69 Reasons for leaving the profession



The three biggest reasons for someone to leave their current place of work would be the lack of professional advancement, a desire to improve their quality of life - which could be a combination of all the factors, and lastly better pay.

Students rated professional advancement, improved quality of life and the chance to do more design as their top three reasons for entering architecture, however 5 students have already indicated that they would not do it. This needs investigation as to what factors have influenced this.

Figure 4-70 Working Sample "do it over"

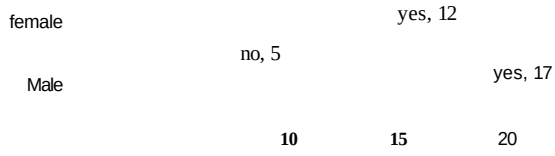
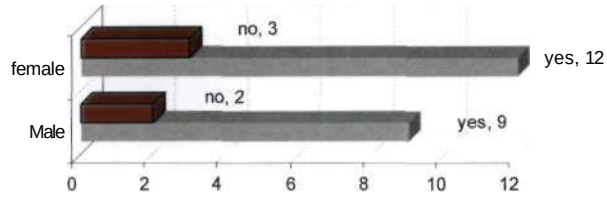
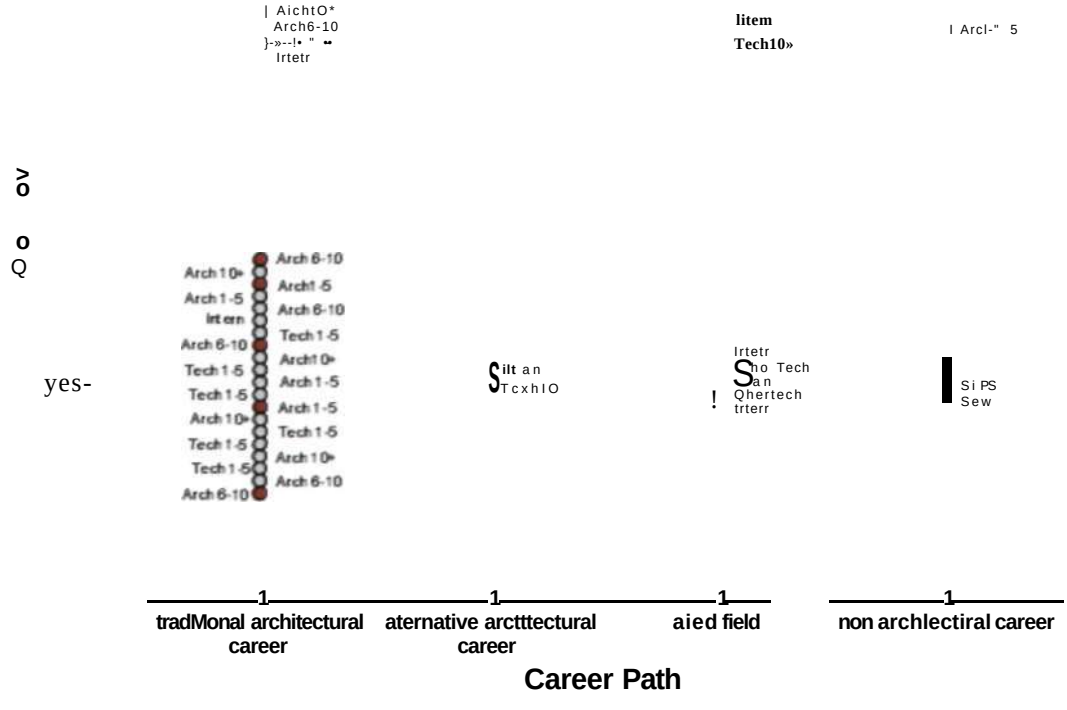


Figure 4-71 Students "do it over"



In the working sample, nine individuals said that if they could do it over, they would choose another career. Both women are single with no dependants. One woman is an intern and the other an architect 1-5 years. Six of the seven males are either married or living with a partner and six have dependants. There are two architects 1-6 years, two architects 10+, one technician 10+ and one intern. This is concerning as these individuals form 50% of the married sample.

Figure 4-72 Career Path / Do architecture over



A multitude of answers express frustration with the level of pay received and the gap between the amount of work they do and their pay and although 80% of the sample felt satisfied with the sense of achievement they received from work and the respect form their peers and management, they also felt they worked very hard for their wage.

4.8 Summary of findings

It is clear that there are discrepancies in the grading and remuneration packages offered between various firms; however not to the extent that RIBA has warned about internationally.

There are more noticeable differences in job grades and remuneration in the higher grades, but there were also signs of disparity in the architects 1-5 years in terms of gender towards pay within similar job descriptions. When pay was directly compared to years of experience, members received similar pay, however when compared to levels of responsibility and pay there were major differences.

The current informal systems are not reflective or accurate in guiding employers on the correct levels of compensation for a particular level of responsibility. When asked how many individuals subscribed to the various professional bodies only:

- 48% were currently registered with the South African Council for the Architectural Profession, although from the 1st of June it has become compulsory to join.
- 16% belonged to the Cape Institute of Architects,
- 19% belonged to the South African Institute of Architects,
- 4.8 % belonged to the South African Guild of Interior Designers
- 7% belonged to other organisations.

These institutes set the guideline to salary grading and qualification recognition. To date the SAIA is the only institute that has attempted to identify issues regarding the

state of the profession nationally in their 2000 survey and the CIA last salary survey as done in 2003. These should be conducted yearly, similar to that of their international counterparts, and it is these international bodies that are identifying the problems within the profession.

The proposition that **"the lack of a grading system for architects, produces remuneration differences in similar job descriptions that are unrelated to a quantifiable measure i.e. length of service, qualification or decision making responsibility"** is valid and those architects practicing in the higher grades D, E and F certainly need to evaluate their current levels of responsibility to their pay level and hours worked. With 48% of the sample warning that there are noticeable differences between members in their offices performing similar jobs and requesting that a formalised grading system should be implemented, the various institutes should consider this as a priority.

When compared to other professionals and businesses, the lack of knowledge that architects have, especially in the upper grades in terms of good business practice, needs to be addressed.

When asked if the following HR functions were performed the figures are surprisingly low.

People Budgeting	27%
Job Descriptions	46%
Job Analysis	32%
Job Evaluation	59%
Salary Structuring	50%
Succession Planning	23%
Career Path planning	18%
Affirmative Action Planning	27%
Organisational Structural Planning	50%

The second hypothesis that **"there is a perception by architects and students, that there is a lack of measures to accommodate work-family interaction in the profession"** is more difficult to answer. Again in the upper grades, especially in grade F, with the long hours stated, and that most of these individuals are the owners of firms and are "paid" for time worked, discourages a work / personal time balance and is not condusive to normal work-family interaction. However in the lower grades the hours worked are in line with the normal 45hour week and are of little concern. The all-nighter syndrome of the academic design studio is evident in some of the overtime hours recorded, but these marathon hours are few and far between and do not infringe on a regular home life.

The key question is, can architects- be they male or female - balance a working career with family responsibility? The days of a part-time architect have vanished, and those that do work part-time are confined to helping other architects with less responsibility as seen in the grade B female architect 1-6 years.

Although 51% of the sample are married and 21% have dependants, it is discouraging that 50% regret entering architecture, however all have indicated they are remaining in the profession. Further investigation is needed to assesses the reasons why the single female Architect 1 -5 years, is moving to a non architectural career.

Most firms offer paid leave but only 29% contribute to maternity / paternity leave. It is understandable that architectural firms are smaller and cannot afford mass benefits. 59% of firms offered flexible working hours and 51 % of the sample had the option of taking time where necessary as long as time was made up. 15% of individuals could work from home and one firm offered a child care facility.

Other than some of the contraventions to the basic conditions of employment act, most firms are trying to address options for a balanced work / life relationship and at the lower grade levels the hypothesis is invalid. However at the higher grades there is clearly dissatisfaction and a need to address this issue.

Many argue, and rightfully so, that the profession will not change until the educational system undergoes a fundamental transformation as well. There will also need to be more collaboration between firms, the educational institutes and the professional bodies on a more regular basis.

Firms will have to become more transparent in their HR and Compensation policies in order to unify the profession and reverse some of the stigma's that are associated with the career. Only when a critical mass of individuals wanting change is reached, will the current problems begin to be remedied.

Chapter 5

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The Oxford English Dictionary definition of a "profession" is "a body of persons engaged in a calling (which is) a branch of learning or science."

The idea that a true architect is a person "called" to provide service to the community through creation of a better built environment is noble. What is concerning is that sometimes this "calling" of an architect's inherent desire to solve the intricacies, complexities and challenges of the clients brief, supersedes good business practices and overrules acceptable working hours and levels of remuneration.

Based on the information that exists in the review of literature, it is clear that internationally firms are confronted with numerous HR problems in the profession and there is a failure of many organisations to follow what would appear to be best practices in compensation and grading structures. (RIBA 2001)

This chapter reviews some of the salient points made in the study and a list of recommendations is outlined for consideration. Actions which might be taken to address these are identified as well as the bodies which might most appropriately move the situation forward.

The recommendations that follow, if implemented, would benefit all sectors of the architectural profession. We also consider that the profession needs to improve its public profile in the face of competition from other career choices and that adopting the recommendations would have long-term benefits.

5.1 Develop more expertise in business management

Due to the lack of opportunity within architectural practices, and lack of emphasis placed on business management in the university curriculum, it is felt that there is a strong need to develop more expertise in general business management amongst professionals.

Based upon the observations of the researcher there were examples of poor employment practice which included:

- inexperienced employers lacking knowledge of current employment legislation
- employers and employees unaware of their legal rights and obligations under employment legislation

The institutes must reinforce best practice treatment of employees and it may be necessary for the various professional bodies to offer training and human resource expertise to help employers manage a growing staff structure. This could take the form of a web page or booklets that various members could access. Institutes should:

- Provide business courses, as well as courses in assertiveness and negotiations.
- Encourage a specific MBA type program within the architectural schools.
- Make business studies a requirement for owners who are wishing to register their practices.
- Institute a set of good practice and employment compliancy regulations.
- Provide HR services to smaller practices on a contract/consulting basis.

5.2 Working Hours

Tertiary institutions must assume some of the responsibility for the industry's woes. The "long hours" tradition often laid down during education is being passed on to the next generation of young architects. It is recommended that these institutions instil a culture of working in studio "office hours" rather than the "all nighter" syndrome.

Those practices that operate with poor family-friendly working conditions and "overtime" culture are making it difficult to combine a developing architectural career, especially those in the D-F grades or starting their own practices, with active parenting and personal commitments.

Recommended time benchmarks could be set up between professionals and institutes to help estimate the amount of hours needed to produce work within the certain work stages based on the value of projects. This would set realistic time frames to guide clients and their programs and prevent architects trying to meet unattainable deadlines. This is not always possible given competition, clients deadlines etc and then perhaps firms should consider the possibility of more staff working part-time at reduced pay.

A need to balance the personal and professional demands placed on architects has long been recognized by the majority of literature. Apart from maternity and parental leave, flexible working hours and other flex options such as job-sharing and meaningful part-time positions are some of the means by which employers recognize the needs for balancing career with child bearing, parenting and home management - the bulk of which typically fall on women.

Those firms surveyed fell short of the norm in this area, but are recognizing the problems and do offer certain benefits that cater towards this. Further recommendations that could be implemented are:

- Institutes should provide support and advice to practices wishing to establish more flexible work options (e.g. part-time, job share, flexitime).
- Firms should provide flexible employment options, e.g. job sharing, part time, flexitime, etc to help individuals cope with the challenges of balancing work and family commitments.
- Opportunities for individuals with dependants to have flexibility during the child caring years and if possible in-house child care facilities.

5.3 Salaries

Salaries in particular are extremely low in relation to length of training when compared to similar professions. In addition, while this applies to both males and females, there is concern that the current grading system is inadequate to measure individual contribution to a firm and that in the upper grades, the remuneration compared to hours and expertise, needs to be evaluated. This could be in the form of firstly, architects joining together and taking a more proactive role in setting fee structures and benchmarking salary levels that would be more acceptable, or secondly, institutes giving salary guidance and enforcing better fee structures that do not impinge on the fair right to competition, but also safeguarding its members from being exploited.

Employers must adopt good practice principles and set clear and transparent salary structures. There must be a drive to change the image of architects to ensure appropriate remuneration of fee paying work and that salary levels are appropriate for skills/experience needed for architectural practice.

- Re-evaluate the current grading and remuneration practices and formalize a structure for professionals to follow.
- Institutes must publish, on a regular basis, graded salary benchmarks.
- Salary information must be easily uploaded/downloaded (anonymously if required) by members.

5.4 Training

The research found that poor advancement prospects were a significant factor in members choosing to leave the profession. With lack of training opportunities leading to lack of experience, lower levels of responsibility and poor career progression paths, combined with limited opportunities for creativity, are leading to architects expressing their dissatisfaction in the industry.

Firms should develop and put in place strategies that address the development needs of both the practice and the employees. For example, develop succession training programs or management developing programs which should result in saving money in the long term.

Further recommendations are:

- establish a formal tracking system and deliberate development of high potential employees.
- give employees opportunities to develop track records for achievement by giving them tasks that are of a more advanced grade.
- implement programs such as mentoring, networking and career planning

Criteria used to evaluate employee potential for advancement should also be examined. Managers should be instructed on equal employment opportunity requirements and how to manage employee advancement strategies. Formalised plans for assessing, communicating and implementing these strategies must be established within the firms and guidelines set up by the institutes.

5.5 The image of the profession

Against a backdrop of skills shortages in the industry, the findings of this survey present several challenges and opportunities to the sector.

Agencies such as the Construction Industry Development Board (CIDB), Construction Education and Training Authority (CETA) and the Institutes need to embark on a vigorous marketing campaign to promote the construction industry at large and accurately portray architecture as a profession which provides sustainable and financially rewarding employment in an environment characterized by good working conditions and opportunities for promotion.

Educational institutions are by definition the most fertile ground for instituting this culture change required for the industry development and enhancement. It was also found in the literature that there is a push for professions to diversify their intake, both in gender and culture, so that they are more representative of the communities they serve and that professions will have to adapt to change, driven by market forces, regulation and changing customer expectations.

Of particular concern, is the general resistance from industry stakeholders to participate in research that is targeted to address many of the issues that contribute to the prevailing negative image and problems within the profession.

Unless the members are prepared to make the time, which is rarely more than 20 to 30 minutes, to give input when called upon to do so, there will be no real basis to formulate industry strategies and standards and the profession will continue to be driven by the few individuals rather than the majority.

The recommendation is to encourage members to participate in as many functions and surveys to:

- Ensure an unbiased, objective process for promotion and salary decisions.
- Foster a positive, open workplace climate so that members feel comfortable, bringing issues forward for discussion and resolution.

5.6 Further research

It is hoped that this research has added to the knowledge of grading and remuneration strategies used in some architectural firms and helps with further research on the subject. This study will assist both corporations and individuals in identifying some of the issues around this topic and implement strategies to assist in solving them.

The study, although small, established some interesting findings that could be drawn on for a wider study of a similar nature or could look at the following aspects :

- Remuneration based on performance with reference to performance-driven rewards.
- Industry attractiveness and the perception of architects and their "value" to individuals outside the profession.
- Pay decisions and strategies during an organisation's points of strategic change.
- How different adoptions of grading and remuneration systems, influence a firm's characteristics, their financial performance and employee satisfaction and vice versa.
- How the cyclical nature of the construction industry influences compensation strategies within the profession.

5.7 Shortcomings of the study

- Due to the scarcity of literature on remuneration, grading and cost to company benefits being implemented in South African architectural firms, there has been a reliance on international articles. The reliance of information mainly from the UK and USA has its problems in that, although the issues may be the same, these countries have political and social contexts that are inherently different to those of South Africa.
- The lack of current survey material.
- Unwillingness of parties to participate and provide information meant that certain issues could not be dealt with as comprehensively as we would have liked.
- The questionnaire did not allow for respondents to give qualitative responses to issues that may have been relevant for certain decisions they have made.
- Observations and reflections remain largely speculative theory on how architectural practices grade and remunerate.
- There are limitations with both the size of the sample and the rigor of the hypothesis testing.
- The study is restricted to architectural firms in Cape Town and does not include other provinces or countries and is therefore not reflective of the whole architectural industry.
- Limited timescale (mid-November 2005 to latter part of May 2006)
- Limited resources
- Limited parallel research found to date on remuneration and grading structures of architects
- Web site fatigue

Firms need to commit to a pro-active approach in reviewing policies and strategies regarding remuneration, grading, recruitment and cost to company practices and that many organisations must rethink the structure of working patterns and if needed, change their culture to meet future demands and needs.

5.8 Conclusion

The RIBA "Why Do Women Leave Architecture?" report threw light on the reasons why architects are leaving the profession. Although it did not find one clear reason for the female brain drain, it raised some major concerns which reinforce the argument that the nature, culture and profile of the architectural profession must change.

Architectural firms are seeing the demise of the old arena, dominated by tiered hierarchies, vertical career ladders, practices and processes that are confrontational and authoritarian. Workplaces are becoming more suited to negotiation, to collaborative management systems, horizontal career paths and a more democratic view of how we can develop within the company structure.

Professional careers in the 21st century are tough and challenging. In most professions the essential elements of a recognizable code of ethics, a system of self regulation and a sense of vocation remain, but many aspects of professional life are subject to fundamental change. The old approach based on the paternalism of the professions and the blind trust of clients, is consigned to history. The new professionals have to be responsive to the needs and wishes of the people they serve and they have to reflect the broad sweep of modern society and the social, ethnic and economic mix of the communities where they live and work.

'It is no longer about what you can do for the company, but what the company can do for you.'

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APPENDIX A: QUESTIONNAIRE DOCUMENT

Employee Questionnaire

Dear survey participant.

I am a practicing architect in Cape Town. My name is Shaun Adendorff. I have recently completed my M.B.A degree and as you possibly know in order to graduate we have to complete a thesis. I have chosen as my topic:

"An Analysis of the Grading and Remuneration Structures of Architectural Practices in the Western Cape, Cape Town Metro pole with specific reference to establishing what methods are used in arriving at cost to company packages."

This is a local survey of the architectural profession in Cape Town. As someone engaged in our industry, you are asked to kindly assist me by filling in the attached questionnaire. We have tried to pick individuals at random so that we cover the full range of employees - from management to the most junior staff member. There is no special reason why you are being asked to fill in the survey or why others you work with were not picked. Please do not pass it to someone else as this will affect the results.

Everything that you say in the questionnaire will remain confidential. After the answers have been entered into a computer, the questionnaire will be destroyed.

The questionnaire should take no more than 20 minutes to complete. It can be done either at work or at home. It would be helpful if you could return the completed questionnaire within the next two weeks. If you need any help or want to know more about the survey, phone;

Shaun Adendorff on 021 4230328 or 082 789 6618.

Please use a black pen to complete the questionnaire and try to answer every question.

Many thanks for your help! I really do need this information to assist me in completing my research.

PERSONAL PARTICULARS

A1 Gender?

r Male

Female

A2 **How old are you?**

Less than 20 years

20-24

25-29

r 30-39

r 40-49

50-59

r 60 or more

A3 Do you have any dependent children in the following age groups?

Tick all that apply

r Children aged 0-4

r Children aged 5-11

r Children aged 12-18

r No dependent children

A4 Which of the following describes your current status?

r Single

r Widowed

r Divorced/Separated

n Living with spouse or partner

A5 Do you have any long-standing health problems or disabilities, which limit what you can do at work, at home or in your leisure time?

Tick one box only

Yes

No

EDUCATION

B1 Which of these qualifications do you hold?

Tick all that apply

r High school + certificate(s)

r Pre-professional undergraduate degree (BAS)

r Non-architecture undergraduate degree

Associate degree, diploma or equivalent (ND B.Tech)

Graduate architecture degree (B.Arch)

r Master's degree

r Doctoral degree

r Other (Please specify_____)

B2 At what point did you obtain your first job in the architecture profession?

r Prior to entering an tertiary education program

r While studying at a tertiary institution

r After earning a degree/diploma

r Have not yet obtained first architecture related job

B3 Are you currently studying?

r Yes, in an undergraduate (bachelors) pre-professional program

r Yes, in a B.Arch program

r Yes, in an M.Arch program

r Yes, in another graduate architecture program
(Please specify_____)

Yes, in a graduate non-architecture program
(Please specify_____)

r Yes, in an undergraduate non-architecture program

r No

If not currently studying, do you plan to someday continue studying for one or more additional degrees?

Yes, what degree(s)?
(Please specify_____)

No

EMPLOYMENT / CAREERS choice

C1 Please tick your three most important reasons for going into architecture in the first place.

r Good salary prospects

,—* Putting creative abilities into practical use

Improving the quality of life in communities

r The prestige of the profession

r Improving the built environment

r Other
(Please specify_____)

C2 Did you have a previous career before going into architecture?

Yes

No

C3 Which one of the following best describes your current anticipated career path?

Please select the one best option

Traditional architecture career: Work in an architecture firm, design/build firm, or some other institution or agency focused primarily on facility design, in work typically associated with the role of an "architect."

r **Alternative architecture career:** Work in a traditional setting but in a role other than that of an "architect," such as marketing, office management, business development, rendering, CAD coordinator or computer graphics, etc. OR architectural work in a non-traditional setting, such as a corporation, community design center, government office, or in architectural education, etc.

Allied field: Work such as engineering, construction, landscape architecture, development, art, planning, interior design, furniture designer, surveyor, estimator, specifier, owner's rep, etc.

r **Non-architecture career**

C4 How important was each of these factors in choosing where to seek your professional architecture job?

please select one rating for each

not at all important				very important	
-2	**-1**	**0**	**+1**	**+2**	
r	r	r	r	r	Reputation of firm
r	r	r	r	r	Practice emphasis/specialty
r	r	r	r	r	Location
r	r	p	r	r	Principals/ Partners
r	r	i—·	r	r	Firm's commitment to interns
r	r	r	r	r	Compensation/ salary package
r	r	r	r	r	Fringe benefits
r	r	r	r	r	Level of responsibilities
r	r	r	r	r	Size of firm
r	r	r	r	r	Personal/family considerations
r	r	r	r	r	Opportunity to advance

C5 If you were to leave your current workplace, tick your three most important reasons.

r Want a change in practice focus
r Chance to do more design
r Chance to do more management
r Professional advancement
r Improved quality of life
r Better hours
r More respect for skills and knowledge
r Better pay/benefits
r Moved from the area
r Work life balance
r I wanted to leave the profession of architecture
r Other (Please specify_____)

C6 **How does your current career outlook compare with your expectations when you first embarked on your pursuit of architecture?**

please select one rating for each

worse than expected				**better than expected**	
-2	**-1**	**0**	**+1**	**+2**	
r	r	r	r		satisfaction with work
		r	r		Compensation
r	r	r*	r		Hours worked

C7 **At this point in your career if you could *'do* it *over,* would you still go into architecture?**

Yes **No** (Please specify_

T

D1 How many years in total have you been working at this workplace?

r Less than 1 year
r 1 to less than 2 years
r 2 to less than 5 years
r 5 to less than 10 years
r 10 years or more

D2 What is your current employment status with your firm?

r Full-time, permanent employee
r Part-time, permanent employee
r Temporary employee
r Intermittent employee
r Contracted consultant or other contracted position
r I am the employer
r In partnership with an architect
r Other

D3 How many hours do you usually work each week, including any overtime or extra hours?

D4 How many overtime or extra hours do you usually work each week, outside the 45 hours, Monday through Friday time frame? whether paid or unpaid?

do not usually work overtime or extra hours, write 0

D5 Are you normally paid or given time off later, when you work overtime or extra hours outside the 45-hours, Monday through Friday time frame?

Tick one box only

r I never work over time or extra hours

r I am normally paid

r I normally take time off later

I have options of either time or pay

None of these

D6 If you do work overtime or extra hours, what would you say is the one main reason you do so?

Tick one box only

I never work overtime or extra hours

r I enjoy my work

r I need the money

r I don't want to disappoint/ let down the company

So that I can get all my work done

r It is required as part of my job

r It is the nature of the profession

r Other
(Please specify_____)

D7 Is the work in the office performed by

Tick one box only

Only by men

r Mainly by men

r Equally by men and women

r Mainly by women

r Only by women

D8 List the number of employees in your company

Women Men

D9 Do you agree, or disagree, with the following statements about your job?

Strongly disagree				**Strongly agree**	
-2	**-1**	**0**	+1	**+2**	
r	r	r	r	r	My job requires that I work very hard
r	r	r	r	r	I never seem to have enough time to get my job done
r	r	r	r	r	I feel my job is secure in this workplace
r	r	r	r	r	I worry a lot about my working hours

D10 In general, how much influence do you have about the following?

None				**A lot**	
-2	**-1**	**0**	**+1**	**+2**	
r	r	r	r	r	The range of tasks you do in your job
r	r	r	r	r	The pace at which you work
r	r	r	r	r	What resources you use to do your work

D11 How satisfied are you with the following aspects of your job?

Very dissatisfied				**Very Satisfied**	
-2	**-1**	**0**	**+1**	**+2**	
					The amount of influence you have over your Job
r	r	r	r	r	The amount of pay you receive
r	r	r	r	r	The sense of achievement you get from your work
r	r	r	r	r	The respect you get from Peers/ Management

D12 How much do you get paid for your job, before tax and other deductions are taken out? Base this on your average

r Less than R2500 per month

R2501-R5000 per month

R5001- R10000 per month

R10001-R15000 per month

r R15001-R20000 per month

r R20001-R25000 per month

R25001-R35000 per month

R35001-and above per month

D13 Which of the following occupation group's best describes your job at present?

Managers & senior administrators e.g. general manager

Professional e.g. architect

Associate professional & technical e.g. technician

Clerical & secretarial

D14 Do you subscribe to any recognized Guilds, Forum Groups or Professional bodies

Tick all that apply

r SACAP South African Council for the Architectural Profession

r CIA Cape Institute of Architects

r SAGID South African Guild of Interior Designers

SAIA South African Institute of Architects

r Other
(Please specify)

D15 During the last 12 months, have you discussed any of these with your supervisor/employer?

Tick all that apply

r How you are getting on with your job

r Your chances of promotion

Your training needs

Your pay

r None of these

D16 During the last 12 months, how much training have you had, either paid for or organised by your employer?

Tick all that apply

None

Less than 1 day

r 2 to less than 5 days

r 5 to less than 10 days

10 days or more

D17 If you personally needed any of these arrangements, would they be available at this workplace?

Tick all that apply

r Flexible working hours (flexi-time)

Job sharing (sharing a full-time job with someone else)

Parental leave

Working at or from home in normal working hours

Workplace nursery or help with the cost of child care

None of these

D18 If you needed to take a day off work at short notice, for example to look after a sick family member, how would you usually do it?

Tick all that apply

r Use paid leave
r Take time off and make it up later
r Go on leave without pay
r Some other way
r Doesn't apply to me

D19 What is the expected time interval between salary increases at your workplace?

r 3 months
r 6 months
1 year
r More than 1 year
r Other (please specify.

D20 Did you receive a raise in your salary/wages in the last 12 months?

Yes
No

D21 If you are paid overtime, please use the scale below to indicate at which rate you are paid for overtime in each situation.

Regular	Time+1/2	Timex2	
r	r	r	Over 8 hours in one day
r	r	r	Over 40 hours in one week
r	r	r	Over 80 hours in one pay period
r	r	r	Saturdays (part of 40 hr. work-week)
r	r	r	Sundays (part of 40 hr. work-week)
MM*	f—	f—	Holidays (part of 40 hr. work-week)

D22 Please indicate how much funding your employer provides toward each of the benefits listed below.

Provides No Funding	Provides a Fixed % or R amount	Provides 100%	
			Insurance
r	r	r	Life Insurance
r	r	r	Health Insurance /Medical Aid
r	r	r	Dental Insurance
r	r	r	Liability Insurance (Professional indemnity)
r	r	r	Unemployment insurance (UIF)
r	r	r	Voluntary disability insurance (e.g. PPS)
r	r	r	Group life insurance plans
r	r	r	Workers' Compensation
r	r	r	Retirement / Pension Program
			Professional
r		r	Travel Expenses
r	r		Entertainment
r	r	r	Car Allowance
r	r	r	Petrol Allowance
r	r	r	Cell Phone Allowance
r	r	r	Spending Allowance (books etc)
			Miscellaneous
r	r	r	Education / Tuition Assistance
r	r	r	Profit sharing plans
r	r	r	Professional Association Dues / fees
r			Paternity/ Maternity Leave
r	r	r	Paid leave
r	r	r	Employee stock ownership plans
r	r	r	Other (Please specify _____)

D23 Which type of grading structure does your company use to determine your Job grade and benchmark salaries against.

Tick all that apply

Formal Grading structures

r Hay

Peromnes

r Paterson

r JE Management

Task

r No system in place

Informal Grading structures (factors used)

Educational qualifications

r Training or experience

r Job know how

Problem solving

r Decision making

r Accountability

Pressure of work

Consequence of error of judgment

D24 Should there be a formalized grading structure to benchmark salary and remuneration packages.

No. . . . . .Yes

D25 Are there large difference in pay rates between similar jobs in your workplace.

No Yes

D26 Do you agree / disagree with the statement that there is no defensible or logical basis for determining what rates of pay should be applied to types of jobs.

Agree I Disagree

D27 Rate the following skills as to how much affect they have on an increased salary.

None -2	-1	0	+1	A lot +2	
r	r	r	r	r	Technical
r	r	r	r	r	CAD
mum	r	r	r	r	Design
MM*	r	r	r	r	Computer Modeling
r	r	r	r	r	Rendering
r	r	r	r	r	Speaking and Writing
r	r	r	r	r	Management

D28 Rate the following credentials as to how much affect they have on hiring

None -2	-1	0	+1	A lot +2	
r	r	r	r	r	Personal Characteristics
r	r	r	r	r	Work Experience
r	r	r	r	r	CAD Experience
r	r	r	r	r	Portfolio
r	r	r	r	r	Recommendations
r	r	r	r	r	School Attended
r	r	r	r	r	Cost to company

D29 Please indicate which, if any, of the following information sources are consulted in reviewing and determining pay:

r A reputable local salary survey

r Peer comparison with local companies

r Other (specify)

D30 Does your company perform the following functions?

Tick all that apply

- [r] People Budgeting (Establishment Levels)
- [r] Job Analysis
- [ ] Job Descriptions
- [r] Job Evaluation
- [ ] Salary Structuring
- [ ] Succession Planning
- [r] Career Path Planning
- [r] Affirmative Action Planning
- [ ] Organizational Structure Planning

D31 Please indicate your normal standard leave entitlement.

- [ ] 15 working days (in compliance with statutory minimum)
- [ ] 16-19 working days
- [r] 20-25 working days
- [r] 26 working days or longer

D32 Please indicate at what frequency bonuses are payable.

- [r] Monthly
- [i] Quarterly
- [i] Half-yearly
- [i] Annually
- [t] No Bonuses are paid

D33 Please indicate what level of authority you have in the company.

Tick all that apply

r

POLICY DECISIONS: tasks that involve policy decisions in all major areas of operation. These affect the entire company/s and give overall direction to the entire firm: i.e. marketing, human resources, corporate strategy, financial management.

PROGRAMMING DECISIONS: within the limits set by company policy, the jobs demand that incumbents are actively involved in making decisions on the long-term company functions such as production, operations, marketing, finance, sales and human resources i.e. how much finance, staff, equipment is needed in the office to implement projects and includes establishing overall budgets.

INTERPRETIVE/PROBALISTIC DECISIONS: have tasks that require interpretation of the overall long term plan, programme and /or budgets for the organisation so that they can make them work in their own functional area /projects: i.e. decisions determining the best use of available manpower and machines to achieve the targets agreed in a project.

r

PROCESS/SYSTEMS DECISIONS: The rules and procedures have been set out. These decisions involve considerable experience, or qualifications, to ensure that the best use of techniques/skills and resources are used in order to implement the project.

OPERATIVE / SUB-SYSTEMS DECISIONS: decisions that involve the production within a project. This requires both training and experience to ensure that operators in the project make the correct judgements on how they execute their duties.

DEFINED DECISIONS: decisions in which the processes are defined and freedom of choice is restricted: i.e. you are told, shown, or taught how the job must be done and are not required to make any decisions which may materially affect the accepted standard or performance of the job.

D34 Please indicate your current Job Grade.

r Student

r Architect 1 -5 years

Architect 6-10 years

r Architect 10+ years

r Architectural Technologist 1-5 years

r Architectural Technologist 6-10 years

r Architectural Technologist 10+ years

r Other Technical Staff - Please Specify (_

Support Staff - Please Specify (_____

THANK YOU FOR YOUR HELP!

APPENDIX B: LETTER TO ARCHITECTS

>

.run73
RennieScurrAdendorff

15 **New** Church Street Cape **Town 8001**
PO Box 21706 Kloof Street 8008
Tel: +27 (0) 21 423 0328
Fax: +27 (0) 21 424 9396
Email: cape@archrsa.com
Website: www.archrsa.com

CCCK 1990/006711/23

Facsimile

TO:	**COMPANY:**	**FAX:**
FROM: Shaun Adendorff		**DATE:**
COPY TO:	**COMPANY:**	**FAX:**
REF NO:	**NO. OF PAGES (INCLUDING COVER):**	

RE: MBA Research dissertation • Permission to Survey Firm

C/J

Dear

I have recently completed my M.B.A degree. In order to graduate we have to complete a thesis - the topic which I have chosen is :

"An Analysis of the Grading and Remuneration Structures of Architectural Practices in the Western Cape, Cape Town Metro pole with specific reference to establishing what methods are used in arriving at cost to company packages."

This is a local survey of the architectural profession in Cape Town. As someone engaged in our industry, you are asked to kindly assist me in granting permission to allow the filling in of a questionnaire by as many members of your organisation as possible. The research will look at the work/life relationships, remuneration packages, working hours and the number of women/men in the profession, as well as the employee's background, education, personality, attitudes, skills and how these have been influenced by a firms culture and policies.

From this research I hope to establish whether there are formal grading structures in architectural firms and how architects are remunerated. It will try to answer some of the problems we face in trying to regulate the fluctuations in remuneration packages and form some guidelines and framework around which the South African Institute of Architects can build a formal grading structure.

* John W L Rennie B Arch **(UCT)** Dip Conservation Studies {York} Pr.Arch MIArch CIA
P Michael J Scurr BAS |UCT) B Arch **(UCT)** Pr.Arch MIArch CIA
m Shaun M Adendorff BAS (UCT) B Arch (UCT) MIArch **CIA**

Everything answered in the questionnaire will remain confidential. Once the answers have been entered into a computer, the questionnaires will be destroyed. The name of your firm does not have to be disclosed or mentioned in the dissertation if you so desire.

I will gladly accommodate any requests and time slot that is deemed convenient and should take no more than 20 minutes to complete. I will drop off as many copies as required and will collect a couple of days later.

If you require any further information about the survey, please do not hesitate to phone me :

Shaun Adendorff on 021 423 0328 or 082 789 6618.

I hope to make this an exciting, useful, and helpful opportunity for both your firm and the architectural profession. I will also give you a copy of the final paper for your info if you so desire.

Thank you for considering this request.

Sincerely,

Shaun Adendorff