

**JOB SEEKERS' PERCEPTIONS ABOUT THE PNet WEBSITE AS AN
E-RECRUITMENT TOOL WITHIN SOUTH AFRICA**



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DECLARATION

This work has not previously been accepted in substance for any degree and is not being concurrently submitted in candidature for any degree.

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The thesis is the result of my own independent work/investigation, except where otherwise stated. Other sources are acknowledged by giving explicit references. A bibliography is appended.

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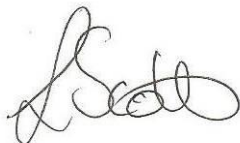
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To whom it may concern

This is to confirm that I, the undersigned, have language edited the completed research of Lesuthu, K. for the Magister Technologiae in Human Resource Management degree thesis entitled: *Job seekers' perceptions about the PNet website as an e-recruitment tool within South Africa.*

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The responsibility of implementing the recommended language changes rests with the author of the thesis.

A handwritten signature in black ink, appearing to read 'L. Scott', with a stylized, cursive script.

Yours truly,

Linda Scott

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This is to confirm that the statistics for the thesis entitled: *Job seekers' perceptions about the PNet website as an e-recruitment tool within South Africa* were checked by Prof BR Grobler (DEd (RAU); MEd (RAU); BEd. Hons. (RAU). BSc. (Wits); TTHD. Emeritus professor University of Johannesburg.

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ABSTRACT

Keywords: recruitment, perceptions, Internet, technology acceptance

E-recruitment is one of the e-commerce applications that has enjoyed a multiple growth since its introduction in the early 1990s. There have been many variations regarding sophistication, types and success; as a result, this has posed a number of challenges to all stakeholders in these technologies. Thus, specific stakeholders may find specific applications suitable for their needs or within their reach to utilise. Companies can use these applications by implementing their own e-recruitment systems or by buying e-recruitment services provided by the third party, or a combination of both, depending on their objectives. The current study is focused on e-recruitment service providers who use general-purpose job boards that are fairly advanced in sophistication, such as the PNet recruitment website.

These e-recruitment service providers are mostly recognised as online firms that manage their operations through their websites. However, behind these websites the physical ordinary businesses utilise the Internet as a means to perform their operations. Like other businesses, these e-recruitment service providers constantly face rapid shifts in technology, which places a considerable amount of pressure on them, as they persistently have to seek ways to stay ahead of their competitors.

The competitiveness of every business lies in their knowledge of the market in which it operates in, as well the extent to which it is able to meet the needs of its customers. This study extends market knowledge and satisfaction of customers' needs in the context of e-recruitment. It views the job seekers as the major customers for sustainability and competitiveness for e-recruiting companies or firms. The study was conducted using a survey method, sampling with $n = 717$ job seekers who use the PNet website to search for jobs.

The primary data was obtained from the sample by means of a 6-point Likert questionnaire ranging from 1=strongly disagree to 6=strongly agree, measuring factors that influence the perceptions of job seekers regarding their use of the website. The questionnaire was administered via the Internet using the Sogo-Survey online tool. The main objective of the study was to evaluate job seekers' perceptions about the PNet website as an e-recruitment tool, as well as to discover which factors are the best predictors of the continued use of the PNet website.

The job seekers' perceptions about the PNet website, as an e-recruitment tool in South Africa, were founded on the nine theoretical factors used in the questionnaire. From these factors, statistically significant differences in the factor means were present within the two independent groups, namely qualifications and gender. Using the standardised Beta value (β) the findings revealed that the attitude towards the website (.285) was the most important predictor, followed by information timeliness (.231), then attraction to the website (.182), usefulness of the website (.180) ease of use of the website (.170) and quality of website (.167).

Findings and recommendations of this study are of importance to recruitment service providers and employers as it provides crucial information regarding their markets and how to improve the profitability of their businesses.

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CHAPTER 1: INTRODUCTION AND BACKGROUND TO THE STUDY

1.1 INTRODUCTION AND BACKGROUND OF THE STUDY

One of the most important aspects of the changing environment, especially relevant to management, is the information revolution (Panayotopoulou, Vakola & Galanaki 2007:271). New technology has presented innovative means of gathering information from multiple sources, managing vast volumes, storage, indexation, analysis and access (Searle 2006:338). E-recruitment has become one of the most successful e-commerce applications as a method of quickly reaching a large pool of potential job seekers, and has enjoyed multiple growth since late 1990s (Liu & Chen 2009:9415). In recent years, there has been a tight competition within organisations to utilise technology in their recruitment practices (Searle 2006:336).

Maurer & Liu (2007:305) define e-recruitment as,

the online environment that allows companies and job applicants to interact with each other. Such environments may vary in sophistication from relatively simple bulletin boards that provide basic job descriptions with little or no opportunity to the applicant, to highly sophisticated sources that allows applicants to complete job application and even perform job interviews.

Panayotopoulou *et al.* (2007:279) define e-recruitment as,

posting of vacancies on the corporate website or on the vendor's website and allowing applicants to send their résumés electronically through e-mail or in some electronic format. It also includes active searches of the Internet and locating of résumés.

While Van Birgelen, Wertzels and Van Dolen (2008:732) explain e-recruitment as the activity encompassing of all organisational practices and decisions that affect individuals who are willing to apply for or accept a given vacancy online.

Companies can directly use their websites to recruit or use websites of other companies, which are e-recruitment service providers (Tong 2009:282). These third party e-recruiters provide professional hiring solutions to their clients, and these may include combined service software, infrastructure and résumé databases, that support the client's hiring processes (Tong & Sivanand 2005:104). These websites are designed to allow employers and job seekers to interact through; (a) posting of vacancies by employers, (b) posting of résumé profiles by job seekers, and (c) searching for résumés by employers or vacancies by job seekers, specific criteria can be used to limit the search output by both (Liu & Chen 2009:9416). Tong and Sivanand (2005:104) perceive that the labour market has become a true market, uncontrolled by individual companies, and unconstrained geographically, with thousands of résumés being posted daily by job seekers to the online hiring websites.

The e-recruitment process is stimulated by generalisation, sophistication, reliability, reduced cost of technology and the emergence of networked company forms of organisation (Kinder, 2000:469). The main goal of e-recruitment is to enlarge the potential candidate pool, while its outcomes include applicant attraction, influence of their intentions to remain in the selection process, post-hire outcomes such as job performance, and organisational performance (Hu, Su & Chen 2007:2510). According to Van Birgelen *et al.* (2008:733), the prominent advantage of e-recruitment is the almost unlimited space to communicate career information; also, that information may be customised for potential employees based on known preferences.

More than 90 percent of global firms use e-recruitment (Searle 2006:342). These organisations implement technology-based recruitment to improve efficiency, enable new assessment tools, reduce costs, standardise systems and expand the applicants' pool (Parry & Wilson 2009:656). Despite the benefits enjoyed by stakeholders in these technologies, there are challenges that remain unresolved regarding e-recruitment. These challenges are highlighted in the problem statement discussed below.

1.2 PROBLEM STATEMENT

People tend to differ with regard to the level of comfort they experience when using more advanced ways to interact with persons or organisations, as a result, they may hold different dispositions towards e-recruitment (Van Birgelen *et al.* 2008:735). More importantly, little is known about applicants' reactions to e-recruitment because research has only begun to explore this issue (Thompson, Branddy & Wuensch 2008:2385).

Baron, Petterson and Harris (2006:118) identify certain strategies through which consumers cope with paradoxes of technology products; the so-called consumption avoidance coping strategies (neglect, abandonment and distancing), as well as the confrontative coping strategies (accommodation, partnering and mastering), which all appear relevant, especially to the degree to which consumers may accept technology-based services. The acceptance and use of e-recruitment systems will be influenced by the degree to which applicants perceive they will facilitate the attainment of their job and career-related goals (Stone, Stone-Romero & Lukaszewski 2006:234). Therefore, there is a need for a better understanding of how job applicants psychologically engage with the organisation through the corporate website (Van Birgelen *et al.* 2008:732).

As with marketing any product, marketing of jobs requires knowledge of a target market of persons who are capable of consuming the product. Product consumption refers to effective online search for jobs, meeting requirements of the vacancy and the availability of the applicant for the job (Maurer & Liu 2007:307). Understanding a market and delivering new products have been identified as two of the most critical factors to a new product's success (Sondergaard & Harmsen 2007:194). A marketing strategy should be founded on two pillars – through understanding of consumer's needs and behaviour, and a critical analysis of opportunities for competitive advantage (Javalgi, Radulovich, Pendleton & Scherer 2005:663). Market knowledge should be useful to the business in understanding their customers and business environments allowing business firms to make wise decisions and take successful action in order to keep their competitive edge (Gronhaug & Norway 2002:370).

According to Sylva and Mol (2009:312), organisational attraction has become vital to the extent that job seekers on the Internet are treated more like consumers. While, recruiters are faced with a challenge to acquire and retain talent in competitive labour markets, recruitment practices are increasingly becoming characterised by marketing approaches (Sylva & Mol 2009:312). As the emphasis of Internet recruitment is on attracting candidates, market orientation has characterised this field (Lievens & Harris 2003:132). Hoe (2008:242) defines market orientation as, “organisation-wide generation of knowledge on current and future customer needs, dissemination of knowledge across departments, and organization-wide responsiveness.” Hughes, Morgan and Kouroplatis (2008:1377) state that studies have

concluded that market orientation provides a firm with market sensing and customer linking capabilities, which lead to superior organisational performance. According to Hoe (2008:241), “customer and competitor knowledge in the real markets are characterised as imperfect, subjective and fallible; thus, organisations can never be sure whether their knowledge of the market is accurate.” Hoe (2008:241) further elaborates that, as a result, organisations have to constantly search for better market knowledge.

Research into technological innovations in the World Wide Web, that have significantly changed recruitment practices, have somehow lagged behind these rapid shifts in practice, leaving an understanding of applicants’ perceptions of online application procedures open to question and in a demonstrable need of a topical research (Sylva & Mol 2009:311). From a consumer behaviour perspective, the digital media are affecting the information environment and consumer behaviours in an extraordinary way due to unique characteristics of the Internet, such as the speed of access, scope of access, provision of interactive assistance, and flexibility in representing information (Kim, Lehto & Morrison 2007:426).

On one hand, Constantinides (2004:112) notes that more recent anecdotal and empirical evidence indicate that many online firms still do not completely understand the needs and behaviour of the online consumers, while many of them continue to struggle with how to effectively market and sell their products online. On the other hand, previous research has shown that people vary widely in their ability to find and retrieve information in flexibly structured information environments (Kim *et al.* 2007:246).

Despite the knowledge gap between service providers and customers, companies continue to make huge investments in e-business applications but are pressurised to evaluate the success of their e-business systems, as a result, researchers have turned their attention to developing, testing, and applying e-business success measures (Lee & Kozar 2006:1383). Livari (2005:8) is of the opinion that, “In view of the high investments in information technology and its ubiquity, the success of such investments and the quality of the systems developed is of the utmost importance, both for research and in practice.” Besides recent reviews of applicant reactions and web-based recruitment procedures, research into applicant reactions to recruitment websites remains notably sparse (Sylva & Mol 2009:311), hence this study is focused on job seekers' perceptions about one of the recruitment websites in South Africa.

Kardes, Cline & Cronley (2008:162) propose the meaning of perceptions as, “beliefs entailing the assessment about the probability or the likelihood that a product possesses a given attribute or benefit, while, consumers also maintain beliefs about the importance of a particular attribute or benefit.” Thus, in the context of this study, job seekers' perceptions refers to job seekers' beliefs regarding their assessment of the key attributes of the PNet website.

1.3 THE OBJECTIVES OF THE STUDY

1.3.1 Primary objective

The primary objective of the study was to evaluate job seekers' perceptions about the PNet website as an e-recruitment tool within South Africa. In order to adhere to the primary objective of the study, the theoretical and empirical objectives were formulated as follows:

1.3.2 Theoretical objectives

- To conduct a literature review on e-recruitment and job seekers' behaviour online
- To review benefits and constraints for e-recruiters, online job seekers and the organisations
- To conceptualise the nature of the relationship of e-recruiters and job seekers, as well as the online labour market.

1.3.3 Empirical objectives

- To ascertain online job seekers' perceptions about the PNet website as a tool to search for jobs
- To identify marketing strategies and methods applicable for e-recruiters
- To establish factors influencing job seekers' and e-recruiters' decisions.

1.4 RESEARCH DESIGN AND METHODOLOGY

Two methods of research were undertaken, namely a literature review and an empirical investigation.

1.4.1 Literature review

A literature study on e-recruitment was conducted. This included a review of textbooks, journals, magazines, newspaper articles and the Internet, which will all be utilised to establish a theoretical background.

1.4.2 Empirical study

1.4.2.1 Target population

The research was conducted among the job seekers who use PNet to search for jobs. The population consisted of PNet users who logged on to the PNet website during the survey period, which was the first two weeks of October 2012. The population was estimated at N=10647, that is the number of registered users who logged on to the PNet website during the survey period.

1.4.2.2 Sampling technique

A purposive sampling technique was used; it refers to deliberate choosing of units of analysis that have similar attributes to that of the total population (Welman, Kruger & Mitchell 2005:51). The advantage of this method is that it may reflect the attributes of the target population as a whole. When this happens, the sample may be regarded to be representative and unbiased (Goodwin, 2008:438).

1.4.2.3 Sample size

The sample size chosen for the study was based on guidelines provided by Leedy and Ormrod (2010:212), who state that if the population size exceeds 5000, 400 may be sampled, depending on the homogeneity of the population. However, the anticipated heterogeneity of the population led to higher sample size, hence a sample size of n=717 was used for this study.

1.4.2.4 Method of data collection

The primary data was obtained from the samples by means of a questionnaire for a quantitative research technique. The quantitative research technique is a method that involves collecting and interpreting information from the viewpoint of amounts, frequencies or magnitudes of objects, ideas or events (Thomas 2003:225). According to Ogden and Goldberg (2002:75), quantitative research takes preference over qualitative research when it comes to validity, funding and reliability.

The questionnaire was distributed using the SogoSurvey online tools. These tools assisted with conversion of the original questionnaire into a copy that enables respondents to complete the questionnaire online. A banner, linked to the questionnaire, was posted on the PNet website to invite PNet users to participate in the survey. This banner was only accessible to those who logged on to the website, in order to restrict participation to the registered PNet users. This method was endorsed by Zikmund and Babin (2007:225-226), Fielding, Lee and Blank (2008:182-183), and Gaiser and Schreiner (2009:70-72) who have some online survey expertise. Chapter 3 of this study provides further elaboration regarding the method of data collection.

1.4.2.5 Measuring instrument

A questionnaire that measures perceptions about a website as an e-recruitment tool was used. The questionnaire was developed through adoption of constructs from existing scales of Liaw and Huang (2003:758); Van Birgelen *et al.* (2008:740), which were related to the technology acceptance model (TAM) and the theory of reasoned action (TRA). According to Yousafzai, Foxall and Pallister (2007:251), Davis originally formulated the (TAM) in 1986, and it is one of the most widely used models to test technology acceptance. Ajzen and Fishbein's theory of reasoned action (TRA) was utilised to explain the relationship between users' internal beliefs (usefulness and ease of use), attitude, intentions, and computer usage behaviour. The questionnaire that measures perceptions about the website as an e-recruitment tool is suitable for use with samples with at least a grade 12 qualification. It is a six-point Likert questionnaire ranging from 1=strongly disagree to 6=strongly agree. The questionnaire contained questions, which were general in nature and relatively specific to the sample population. For example, Section A, regarding demographic details, asked respondents questions like, 'Please indicate your gender' Male ☐ 1 Female ☐ 2. In Section B, questions were asked respondents about their perceptions, *inter alia* 'Visiting the career section provides me with relevant information?' 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐. Likewise, Section C asked about perceptions regarding the website, *inter alia* 'I believe by using PNet I can find information quickly?' 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐. The higher the score, the more likely that the individual had a positive disposition towards the website he or she was using.

1.4.3 Statistical analysis

Initially, descriptive statistics was used to analyse the composition of the sample. The Statistical Package for Social Sciences (SPSS version 20.0 for Windows) was used to analyse the data, and inferential statistical techniques were utilised if normality requirements for data analysis were met.

1.4.4 Reliability and validity analysis

The questionnaire was examined by an experienced researcher (supervisor of the study) to correct its face validity. Furthermore, the scales adopted in the questionnaire were checked for correctness and were re-tested to establish the scales' reliability and validity for the current study. The questionnaire was piloted on a convenience sample of 100 PNet users that were not included in the main study. The Cronbach alpha was computed based on the 52 appropriate responses. The KMO and Bartlett's test statistical techniques were used to establish the scale's reliability, which produced a Cronbach alpha of 0.96. Chapter 4 provides a more detailed statistical procedure regarding the reliability of the questionnaire.

1.5 ETHICAL CONSIDERATIONS

Permission to conduct the study was granted in writing from the national sales manager of the company. The identities of the respondents were kept anonymous, and findings were reported in terms of quantified statistics only. In addition, prior instruction was given to respondents indicating that their participation in the survey was strictly on a voluntary basis and that all responses would be kept confidential.

1.6 CHAPTER CLASSIFICATION

Chapter 1: Introduction and background to the study

Chapter 1 comprises the background and scope to the study. It highlights the problem statement, the research objectives, and scope of the study. The research methodology is also set out in this chapter.

Chapter 2: Literature study

This chapter outlines a review of the literature pertaining to recruitment, perceptions, internet, and technology acceptance. Additionally, a brief discussion of the literature is provided, as well as the objectives aimed to be accomplished by the study.

Chapter 3: Research design and methodology

Chapter 3 emphasises the design and the research method utilised in the research. The method of sample and data collection is discussed. The method of data analysis and statistical techniques is also outlined.

Chapter 4: Analysis and interpretation of results

Chapter 4 deals with analysis, interpretation and evaluation of the research findings.

Chapter 5: Conclusions, recommendations and limitations

This chapter presents the recommendations based on the main objectives and the study. There is also a discussion on limitations, and recommendations for additional research

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

This chapter emphasises in-depth, the literature behind the concepts emphasising the nature of the study, previously highlighted in chapter one. The concepts are recruitment, Internet and e-recruitment, market orientation, perception, technology paradoxes, theory of reasoned action, the technology acceptance model, and factors influencing job seekers to use a website. Chapter 2 aims to meet the theoretical objectives as outlined in the first chapter.

2.2 RECRUITMENT

It remains a challenge to define recruitment as its definitions vary from one author to the next; some authors define its initial stage only, while others include numerous stages when defining it. For example, Snell and Bohlander (2007:172) define recruitment as, “the process of locating potential individuals who might join an organisation and encouraging them to apply for existing or anticipated job openings.” Gatewood, Field and Barrick (2008:7) define recruitment as,

those organisational activities (such as choosing recruiting sources, developing what will be stated in recruitment ads and deciding how much money will be spent) that influence the number and types of individuals who apply for a position – and that also affect applicants’ decisions about whether or not to accept a job offer.

Billsberry (2007:81) in turn, defines recruitment and selection as a linear process that begins once the need to recruit has been identified and agreed upon. It is then followed by conducting an analysis with the aim of understanding the factors that contribute to its success. “Applications are invited and sifted, the shortlisted applicants are assessed more thoroughly, and the person who best satisfies the criteria is offered the job.” The above definitions agree that recruitment is a process, but vary widely about where it begins and ends. However, the recruitment model, as shown in Figure 2.1, sheds some light regarding the entire recruitment process and its determinants of success.

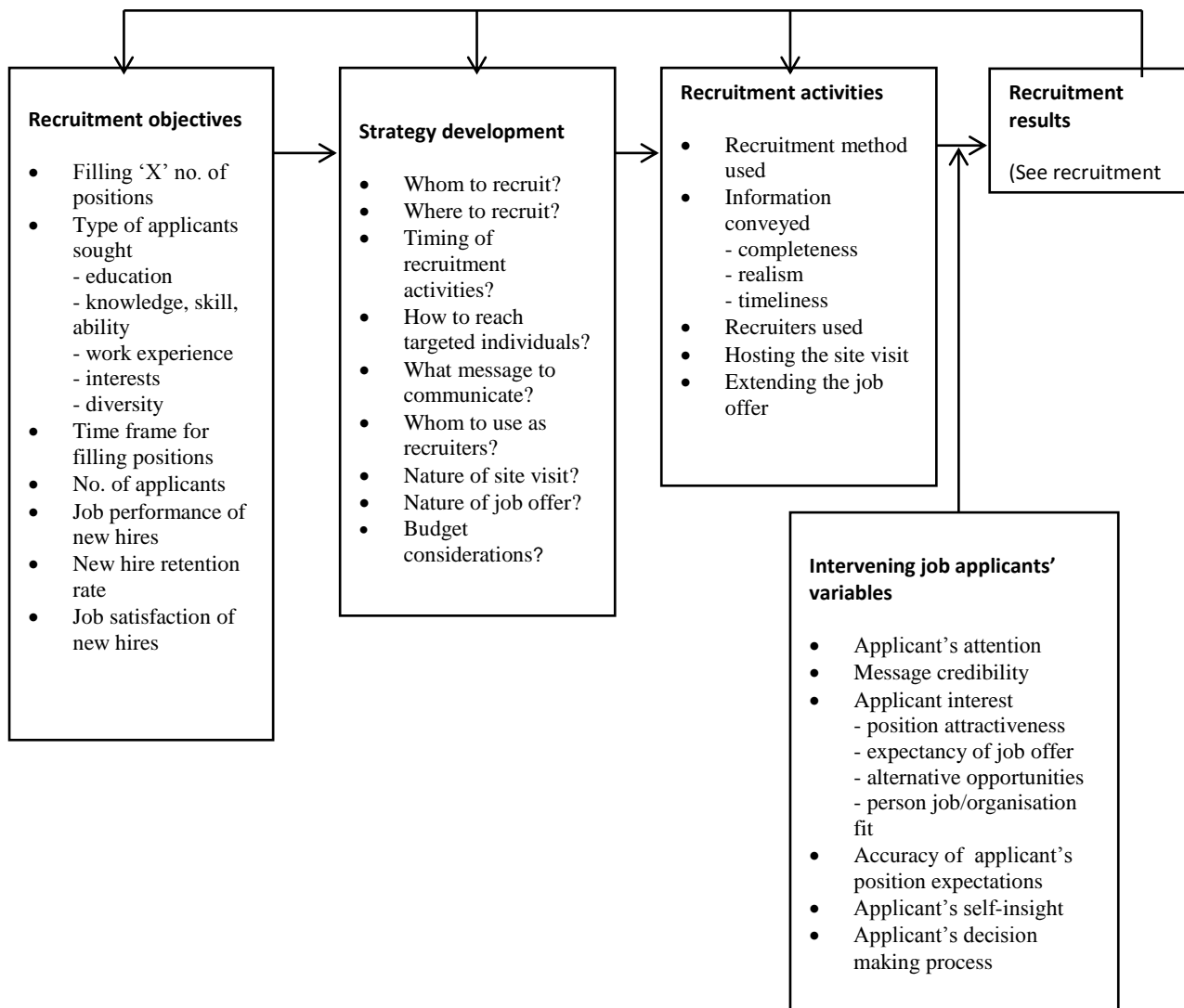


Figure 1: Model of the recruitment process

(Source: Breaugh (2008:104))

According to Breaugh (2008:105), the recruitment begins with the need to fill a vacancy and ends when the vacancy has been filled, while its success is determined by predefined objectives, if they were met or not. As with many studies, the definitions of recruitment may have varied to suit the context in which they were used, or to fit with the subject that is of concern regarding recruitment.

For example, Lee (2007) addresses the importance of the architecture of a holistic e-recruiting system. Lyons and Marler (2011) in turn investigate whether organisational image mediates person-job (P-J) fit and organisational attraction through the website, whilst Hogler, Henle and Bemus (1998) review e-recruitment from a legal perspective, especially regarding

discrimination, which all fall under recruitment as a topic. Thus, recruitment can be viewed from both a narrowed and a broader perspective, depending on the issue that is being dealt with.

2.2.1 Recruitment methods

Interestingly, methods of recruitment are determined by ways the employer tries to make individuals aware of job openings (Breaugh 2008:108). This refers to forms of advertising used; hence, some authors define recruitment within the range of this initial stage. Wiley (1992:76) described 12 traditional recruiting methods, with the most popular ones being employee referrals, newspapers, private employment agencies or search firms, walk-ins, former employees, friends and relatives. Thus, as forms of advertising continue to increase, so will recruitment methods.

Arthur (2006:34-45) discusses 18 traditional recruitment methods, which include campus recruiting, radio and television, newspaper inserts/pamphlets, direct mail, pre-recorded phone messages, open houses, and so forth. Furthermore, Arthur (2006:46-52) discusses 15 innovative recruitment methods, which include billboard advertising, banners and signs, kiosks, response cards, and company-sponsored social events. Recruitment methods are applicable depending on the suitability to the situation, and they are also subject to cost, targeted candidates, time frame to fill the vacancy and the exemption level of the position (Arthur 2006:53).

Lastly, e-recruitment according to Lee (2005:62), started with a function of only posting the vacancy information on the website with instructions on how candidates should apply (example, fax number or a postal address where candidates should send their résumés. Since the introduction of e-recruitment, it has evolved and multiplied into different types such as hybrid recruiting service providers and e-recruiting consortiums (Lee 2007:82), as well as on the Internet communities such as, “MySpace, Facebook, Twitter, LinkedIn” (Lee 2011:231).

Consistent with this, Wolfswinkel, Furtmueller and Wilderom (2010:3) define e-recruitment as,

the online attraction and identification of potential employees
using corporate or commercial recruiting websites, electronic

advertisements on other websites, or an arbitrary combination of these channels including optional methods such as remote interviews and assessments, smart online search agents or interactive communication tools between recruiter and applicant.

Wolfswinkel *et al.* (2010:10) further explain that e-recruiting research has not focused only on the attraction and identification of potential applicants, as the definition may suggest, but as shown earlier, research should cover the entire process of recruiting, although e-recruiting is a narrower concept. However, the other steps in the recruiting process and vice versa can influence it (Wolfswinkel *et al.* 2010:10).

2.2.2 E-recruitment evolution

As the Internet grew in popularity from mid 1990s towards the end of the 20th century, organisations began to sift ways to exploit the new technology to their benefit (Reynolds & Weiner, 2009:4). According to Reynolds and Weiner (2009:4), recruitment is one of the first business processes to adopt the Internet within business functions, while other organisations emerged as service providers of the Internet recruitment, undertaking the full function as their core business (Tong 2009:282). The emergence of this technology came along with many altered names such as e-recruiting, web-based recruiting, online recruitment, web recruitment, recruiting on the Internet and e-cruiting, all of which can be used as search terms about the topic on the Internet (Wolfswinkel *et al.* 2010:10).

As stated by the Miniwatts Marketing Group (2012), world statistics indicated that internet usage has sharply increased worldwide. From 2000 until 2011, world internet usage has grown with 480.4 percent, from 360,895,492 users to 2,095,006,005, while in Africa there has been a growth of 2,527.4 percent, from 4,514,400 to 118,609,620. In South Africa, 13.9 percent of the population accounts for internet usage and the growth moved from 2,400,000 to 6,800,000 users since 2000 (Miniwatts Marketing Group 2012). The website used for the study added more than 240 000 professional job seekers in the last nine months, and has over 7,900 recruiters with an average of 25,000 job adverts live monthly (SAON Group, 2012).

In line with the on-going growth of the Internet adoption, Singh and Finn (2003:295) declare that it has been estimated that e-recruitment is the second largest source of income for

providers following the adult content with regard to the use of the Internet. The available e-recruitment statistics are as follows:

In 1996 more than 1.2 million jobs were posted on the Internet, 3,512 employment websites and 5,800 companies recruiting online, while in 1998 approximately 28 million job postings were advertised over the internet, and it was estimated that in 2004, the number would rise to 30 million (Singh & Finn 2003:395). Thus, like any other business, e-recruitment is susceptible to competition hence the e-recruiters continue to seek ways to stay ahead of their competitors in the market (Javalgi *et al.* 2005:659).

Since the introduction of e-recruitment in the mid-1990s, there has been a plethora of research on factors that influence the use of e-recruitment. This is summarised by Lang, Laumer, Maier and Eckhardt (2011:33) in the form of the drivers, challenges and consequences model, as provided in Figure 2.2. According to the model, drivers refers to objectives for using e-recruitment, consequences are the outcomes which could either be positive or negative, while challenges are possible pitfalls that needs to be addressed in order to achieve positive outcomes when implementing e-recruitment (Lang *et al.* 2011:33).

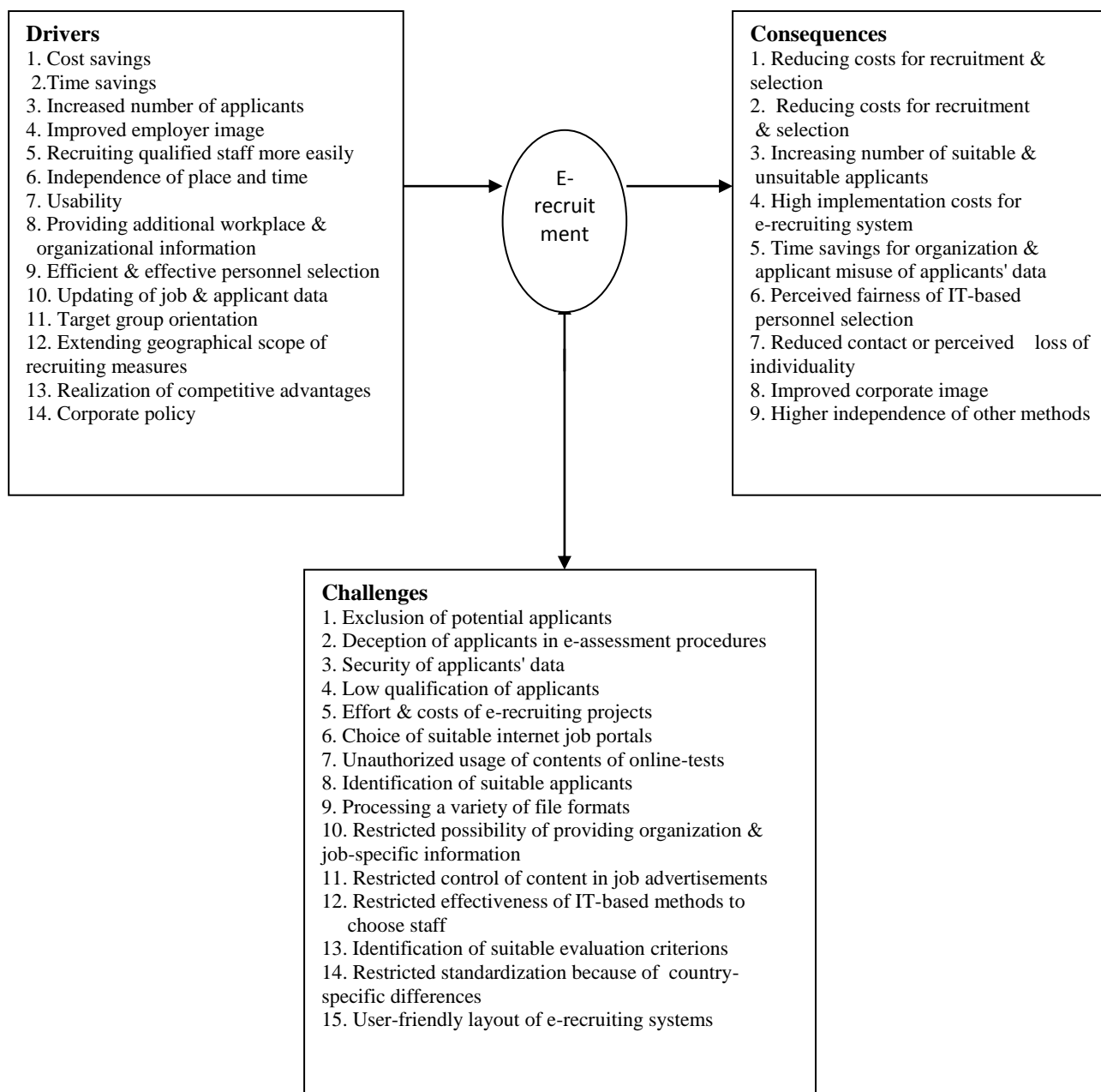


Figure 2: Drivers, challenges and consequences of e-recruitment

(Source: Lang *et al.* (2011:33))

These drivers, challenges and consequences of e-recruitment have been cited by many researchers, but not limited to Hogler, Henle and Bemus (1998:150), Bartram (2000:266), Lin and Stasinskaya (2002:5), Zusman and Landis (2002:286) and Chapman and Webster (2003:117-118). They were gathered over time through different research methods and types of websites, mostly general-purpose job boards and corporate career websites, since the introduction of e-recruitment. Therefore, an up-to-date list of challenges, drivers and consequences will vary, depending on technological advancement stages of e-recruiting

systems and their types (Lee 2005:62). Hence, successful usage of e-recruitment differs from one organisation to the other.

However, while some organisations experience large amounts of success, others experience mixed success when using e-recruitment (Chapman and Webster 2003:118; Parry & Tyson 2008:259). As a result of this, some companies abandoned e-recruiting after years of experimenting with it and fell back to traditional recruiting sources such as employee referrals and newspaper advertisements (Lee 2011:230). On the other hand, in the study undertaken by Parry and Tyson (2008:270), some organisations reported partial success regarding the use of e-recruitment. This finding is also in line with Chapman and Webster's study that was undertaken in 2003 (Parry and Tyson, 2008:271).

In contrast to the rather unsuccessful use of e-recruitment indicated above, there has been a wide circulation of e-recruiting success stories (Chapman & Webster 2003:119; Lee 2011:230). Despite all these experiences, the utilisation of e-recruitment is expected to grow as internet penetration and advancements increase (Chapman & Webster 2003:119; Parry & Tyson 2008:271; Lee 2011:231).

As the Internet technology improves, e-recruitment systems have also undergone tremendous developments and their evolution stages have been specified as follows, namely an information delivery system, an engine search system, a search agent system, a decision support system and stage, and a holistic e-recruiting system (Lee 2005:59-61). In addition to these stages, other recruiters have identified different categories of e-recruitment in this manner and categorised them under, "General-purpose job board, Niche job board, E-recruiting application service providers, Hybrid recruiting service providers, E-recruiting consortiums and corporate career websites" (Lee 2007:82).

Thus, the more websites are identified and categorised, the easier it will be to assess their strengths and weaknesses, leading to better choices when investing in e-recruitment systems (Lee 2007:85). It is therefore imperative to specify the type and the technological stage of the website that is being used for this study. The PNet website is a general-purpose job board that is used currently at search agent system stage (3rd evolution stage) moving towards the decision support system stage (4th evolution stage).

2.2.3 Type of website used for this study

General-purpose job boards are privately-owned websites that provide job seekers and employers with e-recruitment services (Tong & Sivanand 2005:104). Most of these websites are designed to allow employers and job seekers to interact through (a) posting of vacancies by employers, (b) posting of résumé profiles by job seekers, and (c) searching for résumés by employers or vacancies by job seekers. A specific criterion (for example location, skill level, vacancies' category, qualifications) can be used to limit the search output by both job seekers and employers (Liu & Chen 2009:9416). However, these functions are dependent on the evolution stage of the e-recruiting system.

The benefits of general purpose job boards include aspects such as job seekers being constantly exposed to a vast number of employment opportunities, while employers are provided with direct access to a continuously expanding pool of employment candidates (Tong, Duffy, Cross, Tsung & Yen 2005:698). According to Tong *et al.* (2005:698), job seekers usually enjoy these services free of charge once they have joined the membership of these websites, whereas employers pay subscription fees. Additional advantages of general-purpose job boards are high brand recognition, more e-recruiting experience, high traffic, use of industry's best tools, and larger candidate and recruiter bases (Lee 2007:82)

The possible limitations of general purpose job boards include a low security for applicants' identity, thus increasing the possibility of identity theft through false job postings, to steal personal information from unsuspecting job seekers (Lee 2007:82). Furthermore, medium and small sized recruiters with low name recognition can access a pool of qualified job applicants at a reasonable cost (Lee 2007:82). Thus, they are using job boards to select the best candidates, while they too are competing for the same subscribers (employers). Other limitations can be potentially low-quality applicants, limited content control, stickiness of the job board and limited relationship between job candidates and recruiters (Lee 2007:82).

Lee (2007:82) alludes that, in order to address job seekers and recruiters' rising dissatisfaction by means of services and costs, general-purpose job boards have evolved into comprehensive career services where customised placement services, assessment, and relationships between job candidates and recruiters are improved.

2.2.4 Evolution stage of the PNet website

Currently the general-purpose job board used for the study is probably at the technological development stage (stage three) and is moving towards stage four (SAON Group 2012). According to Lee (2005:59), the technological development stage refers to the addition of features and functions of the website, with the aim of better targeting of candidates and integration of human resource systems, due to e-commerce technology advancing and e-recruiters gaining more experience. Stage three is characterised by a search agent function that can search the predefined information by recruiters or job seekers on their behalf.

In line with Graham (2000:97), the search agent automatically sends information, usually the email addresses of job seekers and recruiters as they have predefined it. They pre-set that the information should be sent either periodically or continuously. Information sent to recruiters commonly entails availability of the jobseeker that meets requirements of job positions advertised by the recruiter, while information sent to job seekers consists of job positions that are of interest to the job seekers (Graham 2000:97).

Therefore, job seekers and recruiters can stay informed about all opportunities without searching the database (Graham 2000:94). The search agent also has the job basket, that is, a tool that allows job seekers to apply simultaneously for multiple job openings available. The search agent is critical for recruiters who want to keep an on-going active relationship with the job seekers who may not currently qualify for the job but are likely to be available in the future (Lee 2005:60).

Stage four is characterised as a decision support e-recruiting system, and it assists with decision making for recruiters and job seekers by providing an assortment of support tools that perform customised analysis and generate reports (Reynolds & Weiner 2009:71). The technologies used for decision-making support include web-based pre-screening, self-assessment tools, applicant tracking tools, and data warehousing (Lee 2005:60). Furthermore, Reynolds & Weiner (2009:71) connotes that these tools help job seekers to realise if they are suitable for the position they are applying for, while for recruiters they assist in narrowing down a pool of candidates to the best-qualified candidates.

For the purpose of this study, the PNet website is viewed as an innovative technological product in the developing process that is used for searching, advertising and applying for jobs over the Internet. Behind the e-recruitment websites, are physical ordinary firms whose business is to provide e-recruitment services. These firms are recognised as global businesses by virtue of marketing their products or services through their websites with the aim to build and sustain a competitive advantage (Javalgi *et al.* 2005:659). One the most comprehensive ways to do so is through market orientation, which is the next aspect to be discussed.

2.3 MARKET ORIENTATION

2.3.1 Definition

As numerous definitions regarding market orientation exist (Jaworski & Kohli 1996:120), and because they have been conceptualised from both behavioural and cultural perspectives (Kirca, Jayachandran & Bearden 2005:24), great caution must be exercised when choosing the particular definition applicable for the research study or organisational intervention (Kohli & Jaworski 1996:120). For the purpose of this study, the behavioural perspective will be used. According to Kohli and Jaworski (1990:6), market orientation is defined as, “the organisation-wide generation of knowledge on current and future customers’ needs, dissemination of knowledge across departments, and organization-wide responsiveness.”

Organisation-wide generation is referred to as market intelligence, which is the first step of market orientation (Kohli & Jaworski 1990:4). According to Wang, Hult, Ketchen and Ahmed (2009:100), market intelligence is a broader concept that goes beyond customers’ verbalised needs and preferences as it includes the analysis of external factors such as government regulations, technology, and competition, all of which influence customers’ needs and preferences. Approaches to the generation of market intelligence may include customers’ surveys, observation, in-depth interviews, archetype research and customer visits (Schieffer 2005:33).

According to Wang *et al.* (2009:102), dissemination of knowledge across departments entails information sharing, while responsiveness refers to action taken regarding the information generated, which can be in the form of selecting target markets. Once the target market has been chosen, product designing, producing and offering should cater for target market’s current and anticipated needs through distributing and promoting products in a way that they

prompt favourable end-customer's response (Kohli & Jaworski 1990:6). According to Hughes *et al.* (2007:1387), effectiveness of market orientation is dependent on its antecedents.

2.3.2 Antecedents of market orientation

Antecedents of marketing orientation are referred to as elements that enable market orientation (Hughes *et al.* 2007:1377). According to Jaworski and Kohli (1993:55), there are three sets of antecedents pertaining to market orientation, which are top management, interdepartmental dynamics, then organisational structure and systems. Top management will be the first antecedent to be discussed.

2.3.2.1 Top management

This set includes management's role and managers' risk posture antecedents. Due to the precarious role played by top management in shaping the organisation's values and orientation, in order for the organisation to become market orientated, the organisation must get clear signals about the importance of responding to customers' needs from top management (Mullins, Walker & Boyd 2006:37). If top management reinforces the importance of a market orientation, there is a likelihood that individuals in the organisation will be encouraged to track changes in the markets, share market intelligence with others in the organisation, and be responsive to market needs (Jaworski & Kohli 1993:55).

A manager's risk posture antecedent refers to the level of encouragement provided by top management to junior managers in order for them to take risks, and encourages a willingness to accept failure (Jaworski & Kohli, 1993:55). According to Kohli and Jaworski (1990), the rationale behind risk posture is that, if top management treats failure of new products or ideas as natural, junior manager are likely to propose new and creative ideas to address customers' changing needs.

2.3.2.2 Inter-departmental dynamics

Inter-departmental dynamics entails inter-departmental conflict and the connectedness among various departments. According Jaworski and Kohli (1993:55), inter-departmental conflict denotes, "tension among departments arising from the incompatibility of actual or desired responses," resulting in lower market dissemination. This is so, because interdepartmental conflict has the likelihood of hindering a concerted response by departments to the needs of the market.

Departments' connectedness means the "degree of formal and informal direct contact among employees across departments" (Jaworski & Kohli 1993:55). In line with this reasoning, it is believed that connectedness facilitates interaction and exchange of information as well as the actual utilisation of information. Therefore, depending on how networked the various individuals in the departments are with one another, it will influence their likelihood to exchange market intelligence and respond to it in a concerted manner.

2.3.2.3 Structure and systems

Jaworski and Kohli (1993:64) suggest that a decentralised organisational structure will also have an impact on the market orientation; as such, a structure can empower employees at lower levels in the organisation to take decisions. Jaworski and Kohli (1993:64) also suggest that such market sensing and response to market needs should be suitably rewarded, as this will have a significant impact on market orientation. Having discussed antecedents, subsequent to this will be an overview of the consequences of effective market orientation.

2.3.3 The consequences of a market orientation

Kohli and Jaworski (1993:57) categorise the possible consequences of a market orientation into the following categories, namely organisational performance, customer consequences, innovation consequences and employee consequences. Furthermore, Kirca *et al.* (2005:31) provide a revised model of consequences of market orientation, depicting how innovativeness leads to perceived quality and customer loyalty, as shown in Figure 2.2.

Organisational consequences refer to financial and non-financial measures (Kirca *et al.* 2005:38). Financial measures may include cost-based performance (the net profit on sales after the cost of implementing a strategy has been accounted for), and revenue-based performance, which do not account for the cost of implementing a strategy, for example increase in market share (Kirca *et al.* 2005:38). Non-financial measures, on the other hand, can include measures that weigh strategy implementation against the objectives of the organisation, for example by changing the organisational culture (Kirca *et al.* 2005:38) enabling a more rapid response to changing market conditions.

Customer consequences are referred to as benefits that can be reaped by both the organisation and customers (Kirca *et al.* 2005:25). Through effective implementation of market

orientation, such benefits may include customers' perceived quality and value, customers' satisfaction with the organisation's products and services, customer based order-to-delivery times, and customer loyalty (Mullins *et al.* 2006:37).

“Innovation consequences comprise a firms' innovativeness” (Kirca *et al.* 2005:38). Menguc and Auh (2006:66) differentiate innovation from innovativeness as follows, innovation is an end (an improved or a new product or service), while innovativeness is the means to an end (a set of behaviours that lead to producing a new or improved product or service). “Innovativeness refers to a firm's proclivity, receptivity, and inclination to adopt ideas that depart from the usual way of approaching business” (Menguc & Auh 2006:66). Menguc and Auh (2006:66) also indicate that if the level of innovativeness is high, then the following benefits will be reaped, namely products of the firm will be difficult to imitate and the firm will be perceived as not only meeting customer's expectations, but also far exceeding them. In addition, innovativeness also contributes to the firm's positional advantage and, therefore, a competitive advantage will also be achieved.

According to Kohli and Jaworski (1990:13; 1996:129), employee consequences refer to psychological and social benefits, such as a sense of pride and companionship among employees, as employees work together towards a common goal, organisational commitment as the result of motivation due to organisational climate, job satisfaction, team spirit, and team morale.

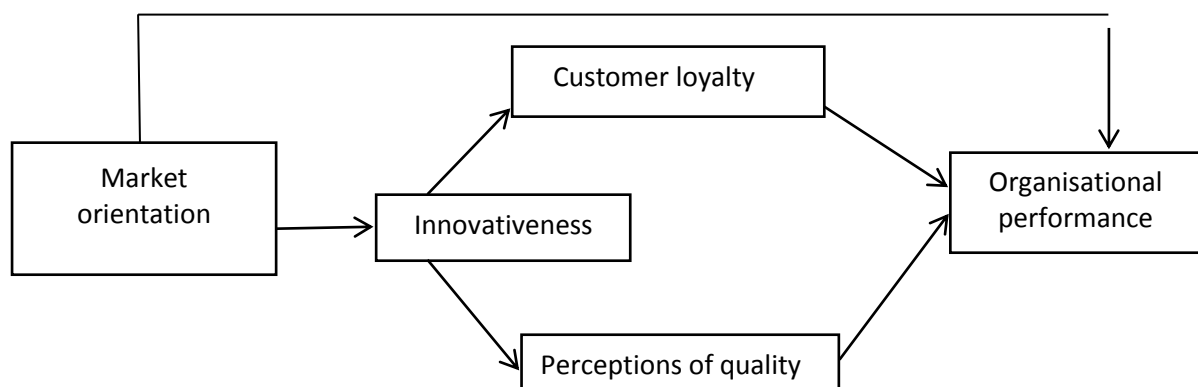


Figure 3: Revised model of the consequences of market orientation

(Source: Kirca *et al.* (2005:31))

Customer loyalty consequences include customer-related benefits. Market-oriented firms have been found to enhance customer satisfaction and loyalty because such firms are well

positioned to anticipate customers' needs and to offer goods and services to satisfy those needs (Hughes *et al.* 2007:1378). Loyalty development has been one of the objectives of managers because of benefits such as customers' increased positive word of mouth, lower price sensitivity, stable and higher incomes, and so forth (Casalo, Flavia'n and Guinali'u 2008:328).

In line with Chang and Chen (2009:412), loyalty in the context of this study is defined as "the customer's favourable attitude toward an e-commerce website that predisposes the customer to repeat a buying behaviour." However, this researcher defines it as the jobseeker's favourable attitude toward the recruiting website that predisposes the jobseeker to repeat the use of the website.

A perception of quality is defined as an overall judgment; a service that contributes to a customer's satisfaction, purchase intentions, and a firm's performance (Lin & Hsieh 2006:499). Its benefits include, *inter alia* retention of customers, re-purchase intentions, and perceived superiority of service (Kirca *et al.* 2005:25; Lin & Hsieh 2006:499).

2.3.4 Synopsis

It has been argued above that a market orientation can lead to greater market competitiveness, and ultimately influence organisational performance. Therefore, it is imperative to recognise the market orientation elements that interrelate closely with e-recruitment objectives, especially the customer's (jobseeker's) loyalty and quality perceptions. Once the job seekers find employment, it does not mean their days of using e-recruitment services are over, as they tend to re-use the e-recruitment services for different reasons such as looking for better opportunities, finding leverage against their employers to negotiate better salaries, staying informed about their alternative job offers, and so forth (Hoye & Saks 2008:360-361).

Contrary to popular opinion that younger candidates are mostly using the internet, Barber (2006) found that candidates with ample work experience are also using the internet to search for jobs. The observation that many senior positions are also advertised over the internet backs up this finding. Thus, job seekers with more job experience (higher recruitment market value) are likely to return to the Internet to search for better career prospects.

According Lin and Hsieh (2006:501), “retention of e-customers can only be accomplished by providing superior quality service.” Therefore, when the above-mentioned job candidates’ need to use e-recruitment services arises, they are likely to use websites that provide superior quality service. This is so, because superior service prompts brand preference in customers (Javalgi *et al.* 2005:663). Consequently, if job candidates prefer the recruiter’s website, it will enable the recruiter to supply the employer with qualified job candidates.

PNet website, as a technological product, advertises positions that vary greatly with exemption level, for example, from domestic workers and gardeners to professors and CEOs (SAON Group 2012). Therefore, PNet website users may hold different paradoxical experience with regard to its usage; henceforth, technology paradoxes are conferred.

2.4 TECHNOLOGY PARADOXES

Johnson, Bardhi and Dunn (2008:418) define paradox as,

the existence of simultaneous opposite assumptions or statements. Something is both liked and disliked or advantageous and disadvantageous at the same time. Individually, each statement is incontestably true, but when juxtaposed against each other, they appear inherently contradictory.

For example, e-recruitment is meant to cut recruitment costs, while the system itself is costly to implement. According to Mick and Fournier (1998:125), “The paradox perspective highlights the friction, indeterminacy, and required vigilance that accompanies ongoing activities or interactions with anything in daily life that harbours a paradoxical nature.”

According to Johnson *et al.* (2008:418), technology users are familiar with paradoxical experience with regard to its usage. These consumers constantly shift between adverse positive experiences (control, freedom and efficiency) and negative ones (chaos, enslavement and inefficiency). However, one of these shifts often takes dominance over the other. On the one hand, if the negative shift takes dominance it results in conflict and ambivalence that stimulate anxiety and stress, which then prompt avoidance coping strategies (Mick & Fournier 1998:127). Table 2.1 provides some examples of the technology paradoxes. On the

other hand, if the positive ones prevail they prompt confrontative coping mechanisms. Section 2.3.1 provides a further explanation of these coping strategies.

Table 1: Examples of various technology paradoxes

Paradox	Explanation	Example
Freedom/ enslavement	Technology can facilitate independence but also lead to behaviour that is more restrictive.	E-recruitment facilitates independence of place and time. But, can restrict applicants to personally impress the recruiter for being considered in the selection process.
Engaging/ disengaging	Technology can facilitate involvement/activity but also lead to disconnection/passivity	A job alert may consistently send new jobs advertised on the website, but the applicants who hardly receive feedback regarding their applications may stop applying or become passive job seekers.
Assimilation/ isolation	Technology can facilitate human togetherness, but also lead to human separation.	Job seekers and recruiters who use the same recruitment websites are virtually together and can eventually meet personally, but others may never meet due to a number of different reasons.
Competence/ incompetence	Technology can result in feelings of intelligence/efficacy but also lead to feelings of ignorance/ineptitude.	Recruiting websites have functions that improve and standardise résumés/CVs, but have also have features that can perplex inexperienced users.
Efficiency/ inefficiency	Technology can facilitate less effort or time spent in certain activities, and technology can lead to more effort or time in certain activities.	Recruitment websites can quickly reach a large number of candidates, but both suitable and unsuitable applicants; thus, leading to increased time and effort on selection process.

(Source: Mick & Fournier (1998:127))

2.4.1 Coping strategies associated with technology paradoxes

Mick and Fournier (1998:133) classify technology paradox coping strategies as either avoidance or confrontative, and further subcategorises them according to stages of pre-acquisition or consumption. However, through salient behaviours, only consumption strategies will be explained briefly, as the study is focused on users who have already acquired the product (the recruiting website).

2.4.1.1 Consumption avoidance

Consumption avoidance has three aspects associated with it, namely neglect, abandonment and distancing. Neglect indicates a temporary indifference toward a technological possession or consumption. Abandonment refers to declining or discontinuing the use of a technological

product, or leaving it unrepaired if it malfunctions. Avoidance consumption is distancing, where restrictive rules are developed for when or how a technological product will or will not be used, or by physically placing a technological product in an unobservable or isolated place.

2.4.1.2 Consumption confrontation

Consumption confrontation has three aspects associated with it, namely accommodation, partnering and mastering. Accommodation makes use of changing tendencies, preferences, and routines, according to the perceived requirements, abilities, or inabilities of a technological product. Partnering refers to establishing a close, committed relationship of heartfelt attachment with a technological product. Mastering is characterised by the dominating of a technological product by thoroughly learning its operations, strengths, and weaknesses (Mick & Fournier 1998:133).

According to Mick and Fournier (1998:140), consumers tend to realise paradoxes at varying times, such as at pre-purchase, post-purchase or during experimenting time. Then consumers make one or more paradoxes salient, requiring an associated coping strategy. Thus, the paradox's salience and behavioural coping strategies are constantly surfacing, fading, and transforming as consumers and technological products interact over time. It therefore becomes imperative that the paradox be timeously identified, so that sufficient time is available to identify the particular intervention needed (Mick & Fournier 1998:140).

2.4.2 Characteristics that ease the adoption of technology products

Schieffer (2005:17-18) alludes to five technology product characteristics that influence consumers to adopt them. These technology characteristics are briefly discussed.

2.4.2.1 Relative advantage

The relative advantage is the degree to which potential customers perceive the innovation to be better than currently available alternatives, for example using the internet to look for a job is far less costly than other recruitment methods such as buying a newspaper, walk-ins and door-to-door recruitments.

2.4.2.2 Compatibility

Compatibility refers to the degree of consistency with existing values, practices, past experience, and needs of potential customers, for example, internet adoption is increasing so

more and more people are using it to fulfil different needs such as shopping, playing games, and joining online chat communities.

2.4.2.3 Complexity

Complexity indicates how difficult it is to understand, learn and use the innovation. Usability testing is one the most common ways of finding out difficulties that may be experienced by potential consumers by letting them use the product under observation of product promoters or designers. For example, by letting students explore an e-recruitment website and noting difficulties they experience.

2.4.2.4 Trial ability

Trial ability refers to the degree to which the innovation can be experienced on a limited, cost-effective basis. This boosts the confidence of reluctant adopters of technological products; for example, when an e-recruiting company offers employers free e-recruiting services for a certain period.

2.4.2.5 Observation

Observation involves the degree to which the benefits of the innovation are visible to others; for example, people can be seen in public places such as internet cafés, using the internet for job searching and sending applications, which can draw the attention of other people.

Having discussed characteristics that enable customers to adapt to technology usage a model, which influences technology acceptance, is now discussed.

2.5 TECHNOLOGY ACCEPTANCE MODEL

According to King and He (2006:740), identifying factors that influence people to accept and make use of systems developed for their use is an infinite issue within the information systems field. There have been a number of theories and approaches to address this problem, such as “analyst-user teamwork, prototyping, user-demonstration exhibitions, models of PC utilisation and so forth” (King & He 2006:740). Among these, the technology acceptance model is one of the most widely used approaches, guided by the theory of reasoned action, due to its easiness to be understood by the researchers (King & He 2006:740). This is also the case regarding the current study.

The technology acceptance model (TAM) was originally developed by Davis in 1986 and was derived from the theory of reasoned action (TRA) as alluded to by many authors (Legris, Ingham & Colletette 2003:192; Yousafzai *et al.* 2007:251; Lin & Chou 2008:32; Hsiao & Yang 2011:129). According to Davis (1993:475), the TAM provides an informative representation of how functions and interface characteristics of a system affect acceptance and usage of a system. The TAM depicts how such design choices (functions and interface characteristics) leads to actual system usage through TAM motivational variables, which are attitude toward using, perceived usefulness, and perceived ease of use (Davis, 1993:481) as shown in Figure 2.3. Subsequently, these motivational variables are discussed.

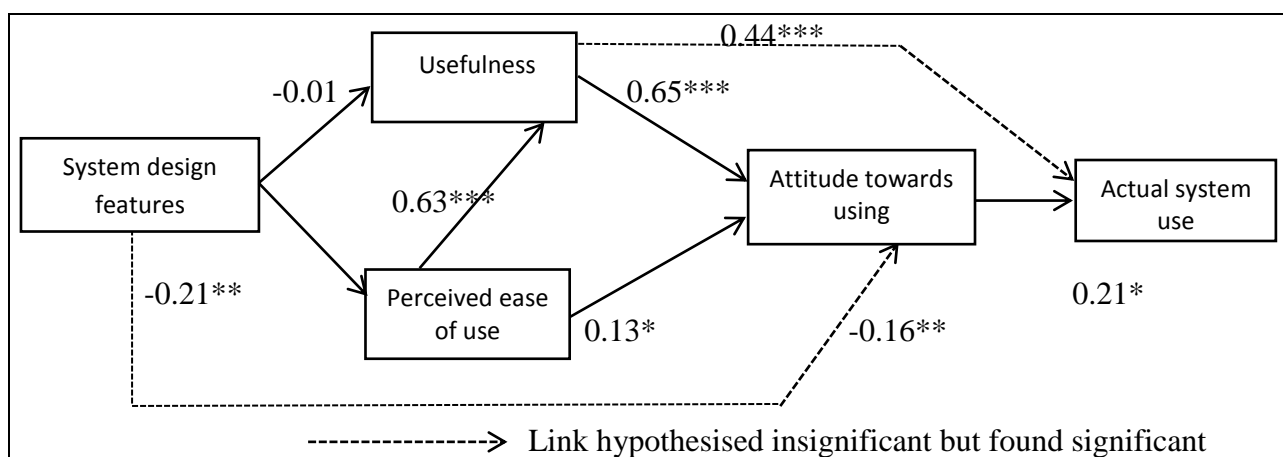


Figure 4: Technology acceptance model

(Source: Davis (1993:476))

2.5.1 Attitude toward using

Davis (1993:476) connotes a very important view which distinguishes between “an attitude towards an object” and “an attitude towards using something” as two separate constructs. It is possible that Davis (1993:476) reasoned this way because an attitude consists of an evaluative component (likes, dislikes), a cognitive component (beliefs, emotions), and a behavioural component (intention to act in a specific way). Davis (1993:476) thus differentiates an attitude towards an object as a person’s evaluative affect towards an object, whilst an attitude towards using something as the person’s evaluative affection of a specified behaviour involving the object. Thus, attitude towards using something relates more to the actual behaviour than to the attitude towards an object (Davis 1993:476).

As a result, Davis (1993:476) defines the attitude towards using something as, “the degree of evaluative affect that an individual associates with using the target system to perform a particular task.” Davis (1993:476) further states that, “Attitude towards using is determined by the expectancy-value model of the possible benefits weighted by evaluation of the possible consequences.” Thus, an individual’s attitude towards using something will be determined by the extent to which a person believes that the performance of the specific behaviour will lead to his or her prospective desired outcomes. According to Davis (1993:477), attitude towards using is a function of perceived ease of use and perceived usefulness. These two constructs, as defined by Davis (1989:320), will now be analysed further.

2.5.1.1 Perceived ease of use

Davis, (1989:320) explains perceived ease of use as “the degree to which a person believes that using a particular system would be free of effort.” He further explains the definition of ease as freedom from difficulty or great effort, while effort is a finite resource that a person may allocate to the various activities for which he or she is responsible (Davis 1989:320). Ease of use may be seen as part of the cost from the users’ perspective; hence, its influence is more dependent on usefulness, compared to its direct link to attitude towards using (Davis 1993:483).

2.5.1.2 Perceived usefulness

Davis (1989:320) clarifies perceived usefulness as, “the degree to which a person believes that using a particular system would enhance his or her job performance.” The usefulness construct was founded under the principle that people tend to use or not use an application depending on the extent they believe it will help them perform the task better. According to the TAM model, perceived usefulness is the strongest construct ($R=0.65$ in Figure 2.2) that influences actual use directly and indirectly through attitude (Davis 1993:483). The reason why perceived usefulness has the strongest effect is that it perhaps reflects the consideration of both benefit and cost of using the target system (Davis 1993:483).

2.5.2 Synopsis

Since the TAM was designed primarily to predict technology acceptance through attitude towards using, but perceived usefulness applied more than twice as much direct influence on use than attitude towards using did (see Figure 2.2), this emphasised the importance of the usefulness variable (Davis 1993:482). According to Davis (1993:483), even though direct

influence of the system characteristics on attitude was significant (-0.16) but small, it “suggests that perceived usefulness and perceived ease of use may not be the only beliefs mediating between system and attitude.” This, leads to the fact that there are possible beliefs that can be added to the model, and they should be to be taken into consideration (Davis 1993:483). In addition, individuals may not use the system because they have positive affect towards using it, but they may do so because they are compelled (for example by their managers in the workplace), this seems typical of the paradoxical consequences discussed in Section 2.3. As a result, Davis and Venkatesh (1996:20) provide the revised TAM that excludes attitude towards using, as shown in Figure 2.5.

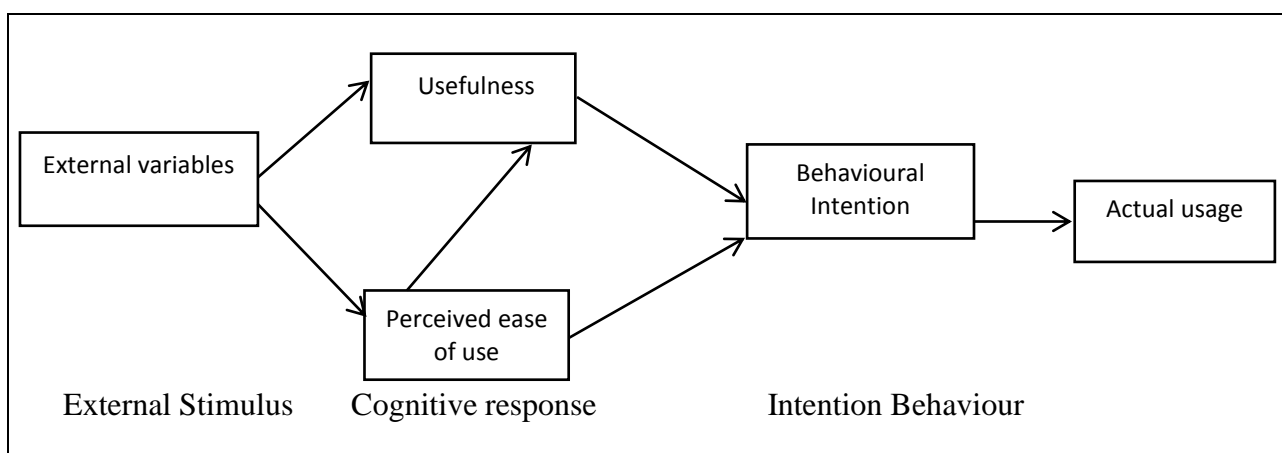


Figure 5: The revised technology acceptance model

(Source: Davis & Venkatesh (1996:20))

Furthermore, the sample systems that were used to develop TAM were available for voluntary use by employees (Davis 1993:483), that is, the outcome of attitude towards using might have differed, if employees were forced by circumstances (for example to increase productivity). Thus, strength of affect is thought to vary, depending on the users circumstances. This may be a reason why authors such as Shih (2004:721), Lee, Fiore and Kim (2006:623), Snowden, Spafford, Michaelides and Hopkins (2006:527), and Teo, Lee, Chai and Wong (2009:1006) continued to include attitude in TAM for their studies.

Davis (1993:483) is of view that individual’s affect towards using the system is jointly determined by both intrinsic and extrinsic rewards, and not only on extrinsic rewards, as the model initially indicated. Therefore, more research is needed to address the relative roles of

intrinsic and extrinsic motivation in user acceptance as well as additional variables within TAM, such as system familiarity or experience, top management support, user involvement, task characteristics, system layout, and so on (Davis 1993:483).

Thus, TAM is subject to alterations to suit other information system studies. For the purpose of this study, detailed alterations will be addressed in the next chapter. The following section will discuss the theory that TAM is based on, which is the theory of reasoned action (TRA).

2.6 THEORY OF REASONED ACTION

The theory of reasoned action (TRA) is a widely-studied model in social psychology, focused on causes of consciously intended behaviour (Davis, Bagozzi & Warshaw 1989:983). “According to TRA, a person's performance of a specified behaviour is determined by his or her behavioural intention (BI) to perform the behaviour, and BI is jointly determined by the person's attitude (A) and subjective norm (SN) concerning the behaviour in question,” thus $BI = A + SN$ (Davis *et al.* 1989:983). The main aim of the theory is to predict and understand the causes of behaviour through the BI equation (Leone, Perugini & Ercolan 1999:162), as shown in Figure 2.6.

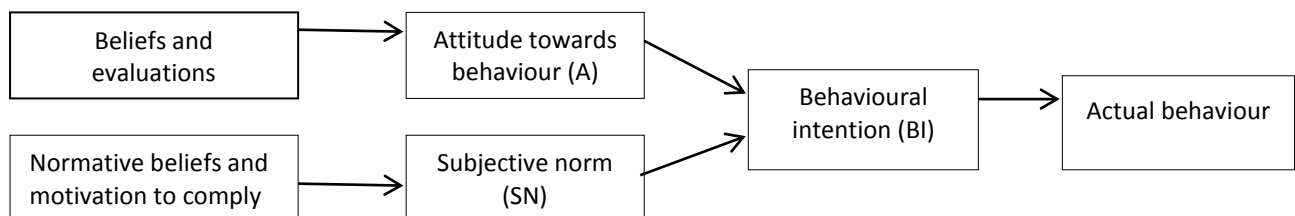


Figure 6: Theory of reasoned action model

(Source: Davis *et al.* (1989:984))

According to Davis *et al.* (1989:984), “BI is a measure of the strength of a person’s intention to perform a specified behaviour. It is defined as an individual's positive or negative feelings (evaluative affect) about performing the target behaviours” (Davis *et al.* 1989:984). Along a similar line, Leone *et al.* (1999:162) argue that intentions are a direct function of both individual and social related variables, which are attitude towards the act and subjective norms. Attitude towards an act refers to a person’s evaluative like or dislike towards performance of a specific behaviour, which is defined by a function of salient beliefs and

evaluations of behaviour outcomes (Shih 2004:720). Subjective norms, in turn, refer to beliefs and motivations to comply with expectations of people whom a person considers important regarding performance of the specific behaviour (Shih 2004:720).

2.6.1 Synthesis of the theory of reasoned action

The theory of reasoned action is a thoroughly researched intention model with proven success in predicting and explaining behaviour across a wide variety of domains (Davis *et al.* 1989:983). Since it is general in nature, it is a prerequisite for researchers to find the determinants of the behaviour first, which the researchers are trying to predict when applying TRA. In this particular research, the researcher is attempting to predict website usage, and Davis uses the constructs of ‘perceived ease of use’ and ‘perceived usefulness’ to formulate the technology acceptance model (Davis *et al.* 1989:983). Furthermore, Sheppard, Hartwick and Warshaw (1988:338-340) recommend conditions under which the TRA best predicts behaviour, since it has been applied beyond its intended design by other researchers, even though it still performed favourably.

The use of TRA beyond its intended use has to do with prediction of behaviours that are not completely within people’s volitional control (Sheppard *et al.* 1988:326). According to Sheppard *et al.* (1988:326), “whenever the performance of some action requires knowledge, skills, resources, or others’ cooperation, or necessitates overcoming environmental obstacles, the conditions of the model cannot be met.” Thus, regardless how strong the intention to perform the act is, if the aforementioned resources are not readily available to the person willing to perform the act, prediction of the intentions becomes inaccurate (Sheppard *et al.* 1988:326).

In attempt to resolve such inaccuracies, Ajzen (1991:182) extended TRA to theory of planned behaviour (TPB) by adding the perceived behavioural control (PBC) construct in 1985. “Consistent with an emphasis on factors that are directly linked to a particular behaviour, perceived behavioural control refers to people’s perception of the ease or difficulty of performing the behaviour of interest” (Ajzen 1991:182). In line with Ajzen (1991:183), “resources and opportunities available to a person must to some extent dictate the likelihood of behavioural achievement.” However, modification of TRA to TPB does not make TRA redundant, but to rather supplement it when the necessity arises. According to Ajzen

(1991:185), caution should be exercised as to when either of theories applicable are used to predict behaviour.

Sheppard *et al.* (1988:326) simplify the applicability of either TRA or TPB by separating acts into two classifications; behaviours and goals. According to Sheppard *et al.* (1988:326), the extent to which resources are readily available to perform an act, differentiates behaviours from goals (*inter alia* the more readily resources are available to perform the act, the more an act is classified as behaviour, and vice versa, the act will be classified as the goal). Therefore, TRA predicts behaviour as it states that, “when the behaviour/situation affords a person complete control over behavioural performance, intentions alone should be sufficient to predict behaviour” (Ajzen 1991:185).

Opportunities and resources determine control over behaviour (Ajzen 1991:185). This means that if the current study was focused on prospective website users, resources such as internet access, ability to use internet, readiness of an electronic résumé/cv and e-mail address would have to be determined if they are within the users’ reach, that is TPB would have been applicable. However, since this study focuses on current website users, TRA is applicable as the aforementioned resources are already at users’ disposal.

Although the predictive power of TAM is widely acknowledged, Davis (1993:483), however, subjects TAM to alterations as he suggests the addition of intrinsic rewards for using the system, and consideration of possible beliefs to suit other information system studies. Thus, subsequently, the role of those possible rewards and beliefs will be discussed as factors influencing the use recruitment websites.

2.7 FACTORS INFLUENCING RECRUITMENT WEBSITE

According to Chiou, Lin and Perng (2010:285), in every information system study 97 percent included *ease of use as a factor*, and the most frequently used criteria were navigation, logical structure, user-friendly interface, loading speed, well linkage, searching mechanism, ease of access, and ease in finding targeted information. *Information quality* (82%) was the second most used factor in information system studies, which included criteria such as relevancy, usefulness, comprehensive coverage, currency, readability and accuracy (Chiou *et al.* 2010:285). For the purpose of this study, factors influencing the recruitment website were collected from other preceding studies of e-recruitment, information

technology, information management and the like, which are part of information systems studies.

2.7.1 Attraction to the website

Lyons and Marler (2011:59), state that research shows that a website's aesthetic features and employment content information are positively associated with organisational attraction (the firm or company behind the website). Therefore, favourable perceptions of both website attributes and employment content information should invoke positive beliefs about the organisation. Schreurs and Syed (2011:40) note that, some predictors of job pursuit such as recruiter characteristics, influence job choice more through attractiveness.

As discussed earlier, advertising of jobs is a major recruitment function (Lang *et al.* 2011:33). Zusman and Landis (2002:288) connote that, as with consumer advertisements, job advertisements should attract attention through website characteristics, hold interest through information relevant to the viewer, gain acceptance depending on information credibility, establish preference over other websites, and motivate action by allowing for a search and application for positions. In line with Williamson, Lepak and King (2003:243), the first critical step in employee recruitment is to attract individuals to apply for positions, as organisations that attract more applicants that are qualified will have a larger pool from which to choose. Nevertheless, if individuals do not apply, they cannot be influenced by subsequent recruitment activities (Williamson *et al.* 2003:243).

Zusman and Landis (2002:289) allude that the website's characteristics that differentiates attractive websites from less attractive ones are technical format, textual format, layout, and colouring. Additionally, providing tools that ease the navigation of the site and allow direct access to the information that the viewer desires to see, increases attractiveness of the website (Zusman & Landis 2002:289). This attractiveness can facilitate capturing of attention of a potential applicant, ignite interest and direct the applicant's action (Zusman & Landis 2002:289). Thus, attraction will play a major role on job seekers' preference on websites that equally meet his or her needs.

According to Celani and Singh (2011:230), the extent to which applicants identify with the recruiting organisation positively influences applicant attraction outcomes such as job pursuit intentions, job-organisation attraction, and job acceptance intentions. The utmost importance

of applicant attraction is that suitably qualified applicants are likely to remain in the selection process (Hu *et al.* 2007:2510), that is, after the recruiter has filled the vacancy, qualified candidates who were not chosen to fill the vacancy, may remain available for recruitment for future opportunities that may arise.

2.7.2 The ease of use of the website

Davis (1989:320) explains perceived ease of use as "the degree to which a person believes that using a particular system would be free of effort." He further explains the definition of ease as, freedom from difficulty or great effort, while effort is a finite resource that a person may allocate to the various activities for which he or she is responsible (Davis 1989:320). According to Casalo *et al.* (2008:326), website usability is defined as, "a quality attribute that assesses how easy user interfaces are to use."

Briefly, Casalo *et al.* (2008:326) state that the concept of usability considers the following factors, namely the ease of understanding the structure of a website, its functions, interface and the contents that can be observed by the user; its simplicity of use in its initial stages; the speed at which the users can find what they are looking for; the perceived ease of site navigation in terms of time required and action necessary in order to obtain the desired results; and the ability of the users to control what they are doing and where they are at any given moment.

2.7.3 Perceived usefulness of the website

Davis (1989:320) clarifies perceived usefulness as "the degree to which a person believes that using a particular system would enhance his or her job performance." Perceived ease of use (EU) and perceived usefulness (PU) are two primary predictors in the technology acceptance model (King & He 2006:740).

2.7.4 Attitude towards the website

Teoa, Oha, Liua and Weib (2003:284) define an attitude as, "a predisposition to respond in a particular way towards a specified class of objects." Furthermore, the literature indicates that a positive attitude towards information systems will increase the actual use of the system (Teoa *et al.* 2003:284). Although several authors recommend the elimination of attitudes to increase the parsimony to TAM models, other researchers have identified attitudes towards

usage as a major determinant of the behavioural intention to use a system, including studies focused on Internet applications (Egea & González 2011:321).

“In general, object-based attitudes (attitudes about a system) can also be predictive of a behavioural disposition by influencing the way in which information about it is perceived and judged” (Wixom & Todd 2005:90). Wixom and Todd (2005:90) also state that, “Beliefs about using the system to accomplish a particular task will be shaped, in part, by the attitude toward the system itself. Indirectly these beliefs will shape the attitude toward use and eventual usage behaviour.” In addition, Liaw (2007:400) indicates, “no matter how advanced or capable the technology is, its effective implementation depends upon users having a positive attitude toward it.”

Besides that attitude plays a major role in brand preference among consumers. According to Kardes *et al.* (2008:151), when consumers are faced with a choice between competing products, they hardly recall each of the products’ attributes that motivate their choices; instead, attitudes are readily in place to make a choice in most cases.

2.7.5 Quality of the website service

Kim and Stoel (2004:110) note that the dimensions of website quality would be expected to differ according to the function of the site. For the purposes of this study, website quality will be defined “the performance of the system in delivering information” (Lee & Kozar 2006:1389). It is an overall judgment, or evaluative component of attitude relating to the superiority of a service (Tong *et al.* 2005:699). Lee and Kozar (2006:1389) further indicate that according to the e-business context, website system quality has been known to have a significant effect on online customer satisfaction. Furthermore, a number of studies using path analysis (see Figure 2.2) found that information quality and system quality were significant determinants of overall user satisfaction (Livari 2005:11).

Website quality factors also appear to have an impact on users’ acceptance, as they are a means of influencing user beliefs and their behavioural intentions. In addition, they are within the control of the company (Hernández, Jiménez & Martín 2009:363). Furthermore, Hernández *et al.* (2009:363) state, “the quality of the website affects the users’ impression of the company because it is the portal through which the company’s transactions are conducted.” According to Tong *et al.* (2005:698), if job seekers are unhappy with the service

provided by the recruitment website, they may look for other websites that fulfil their expectations for service quality. If this continues to happen, the websites with low service quality for the job seekers may experience a decrease in the number of active job seekers (Tong *et al.* 2005:689).

2.7.6 Intentions to apply

“The behavioural intention construct refers to the degree to which a person has formulated a conscious decision to perform or not perform a particular behaviour” (Hasan & Ahmed 2007:3031). According to Hasan and Ahmed (2007:3028), the technology acceptance model postulates that the acceptance of information systems is determined by behavioural intention (BI) to use a system. Behavioural intention is in turn jointly determined by beliefs about the ease of use (PEOU) and perceived usefulness (PU) of a system.

Casaló, Flavián and Guinalú (2010:899) state that, in technology acceptance contexts, intentions often serve to measure consumer behaviour. Behavioural intentions imply that a person is likely to behave in a specified way, for example to apply for a job that is advertised over the Internet. This is so because real behaviour and behavioural intentions are highly correlated (Casaló *et al.* 2010:899).

2.7.7 Information relevancy

In addition to perceived usefulness, user attitudes toward using the Internet and perceived performance (Shih 2004:725) connote relevance as a strong determinant of perceived ease of use. Relevance includes information depth, scope and completeness applicable to the user (Lee & Kozar 2006:1388). Information relevance assures that the information content provided within web pages is in line with users’ needs and interests (Kim, Kishore & Sanders 2005:79).

There is a strong relationship between users' opinions about the relevance of the system and their own goals and aspirations, as these opinions will influence how they value the system as well as its success (Seddon & Kiew 1996:95). For example, if what the system does is not important to the user, there seems to be a little chance that the user will perceive the system as useful, no matter how well designed it is, or how easy it is to use (Seddon & Kiew 1996:95).

2.7.8 The timeliness of information

In the context of this study, “timeliness represents user’s perception of the degree to which information is up-to date” (Wixom & Todd 2005:91). Boritz (2005:265) states that, “it must be accepted that absolute completeness and accuracy are impossible or impractical to achieve.” For example, an employment position that has already been filled may still be found available on the recruiting website for potential candidates to apply for it. Information currency/timeliness is affected by the difference of information on the website about the product and its actual condition (as well as by information processing delays), as the world changes over time with a proportionate impact on information accuracy (Boritz 2005:265). Boritz (2005:265) further endorses that, as time is continuous, completeness and accuracy must be understood in a context that defines acceptable limits for information timeliness, hence its accuracy. Thus, if information on the website has scheduled standardised updating periods, information that was not updated accordingly is deemed as not up-to date.

2.7.9 Information accuracy

Batini, Cappiello, Francalanci and Maurino (2009:6) define accuracy as the extent to which information is correct, reliable and certified. According to Wixom and Todd (2005:91), accuracy represents the users’ perception that the information is correct.

Data quality approaches have primarily involved the content of the information (such as its relevance, accuracy, and completeness) (Kim *et al.* 2005:76). Furthermore, Kim *et al.* (2005:79) indicate that the content dimension consists of three quality constructs, which are information accuracy, information relevance, and information completeness, as it commonly is agreed that retrieved information should be accurate, relevant, and complete in order to add value to the task for which it is retrieved.

The final review is the role of perceptions and beliefs, as they are the key concepts to the topic of this study, which is followed by the conclusions from this chapter.

2.8 PERCEPTION

Perception is a process through which a person notices, attends to and interprets stimuli (objects, temperatures, sounds, smells and observations) that are encountered in the environment (Quester, Neal, Pittigrew, Grimmer, Davis & Hawkins 2007:226). According to Quester *et al.* (2007:226), perception is a critical part of the human information processing

system that involves a series of interrelated activities by which stimuli are transformed into information and stored in the brain.

These interrelated activities are viewed in four main steps or stages in the following manner: Firstly, exposure, which refers to the person's sensory receptors (ears, eyes, nose and touch) coming into contact with stimuli (sound, colour, smell and touch). Second follows attention, which occurs when nerves pass the sensation to the brain for processing. Third is the interpretation, which is the assignment of meaning to the received sensation (blue in the case of colour and a smell of a burning rubber in the case of the nose). Lastly, memory refers to how the meaning is recorded, either in the short-term memory for immediate decision-making, or the long-term memory for recall for later usage (Quester *et al.* 2007:227). This process occurs virtually below humans' consciousness (Kardes *et al.* 2008:157).

In social psychology, research on perception of causation and consequences of behaviour has been conducted mainly in attempt to explain and understand human behaviour (Kelley & Michela 1980:458). "The study of perceived causation is identified by the term 'attribution theory'" (Kelley & Michela, 1980:458). Kelley and Michela (1980:458) explain attribution as, perception or inference of cause. According to the definition, attribution theories are many, but the common ideas are that people interpret behaviour in terms of its causes, and thus interpretations play an important role in determining execution of behaviour (Kelley & Michela 1980:458). Figure 2.7 illustrates the general model of the attribution field.

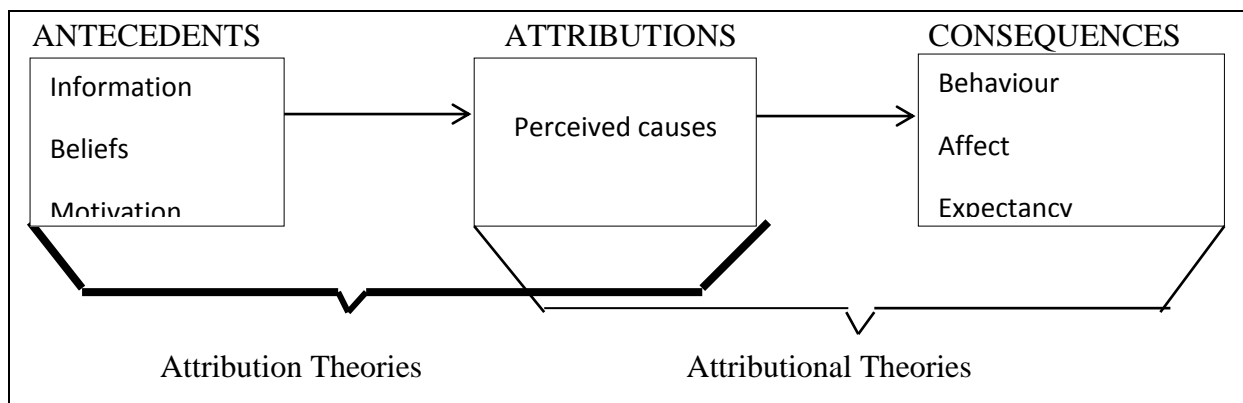


Figure 7: The general model of the attribution field

(Source: Kelley & Michela, (1980:459))

The purpose of Figure 2.7 is not to discuss attribution theory, but rather to show how the perception role fits into explaining behaviour. As the attribution theory says that causes of behaviour are perceived, it may be the reason why, generally speaking, these causes are called perceptions. According to Folkes (1988:549), causal ascriptions examined by consumer research, “are a commonly studied paradigm that examines attribution for product purchase or selection.” In those studies, consumers’ beliefs are key antecedents that can be manipulated in order to establish product purchase or preference by the consumer (Folkes 1988:549-550). As the current study is in line with Folkes’ aforementioned view, a discussion of beliefs follows.

2.8.1 Beliefs

According to O’Shoughnessy and O’Shoughnessy (2003:72), a belief is a disposition to accept certain statements’ as the likelihood that they are either true or false (for example, about a product’s performance). Kardes *et al.* (2008:161) opine, “Beliefs capture consumers’ assessments about a specific relationship between a brand and a perceived attribute or benefit”. In line with the explanation of perceived attributes given by Kardes *et al.* (2008:161), marketers define perceived attributes as specific features or characteristics of a brand (PNet website’s search alert, search option either by location, salary or experience level, job basket), and perceived benefits as outcomes or consequences that follow from each attribute (easy to use, saves time and money, convenient, and so on.).

Beliefs entail the assessment about the probability or the likelihood that a product possesses a given attribute or benefit, while consumers also maintain beliefs about the importance of a

particular attribute or benefit (Kardes *et al.* 2008:162). These attributes and benefits are largely responsible for brand choice amongst products (Kardes *et al.* 2008:116). They do not necessarily have to be correct – all that is needed is for them to be favourable according to the customers' overall perception (Du Plessis & Rousseau 2003:265).

O'Shoughnessy and O'Shoughnessy (2003:73) state that, "Beliefs can thus be viewed as being composed of internal mental structures (mental models) that seek to direct actions in line with their informational content about what seems to be the truth." Beliefs are often seen to be synonymous with expectations. An expectation is a consumer-defined probability of a positive or negative event occurring if the consumer should engage in some behaviour. Thus, expectations are a feeling of what a service provider should offer (the ideal), rather than what they would offer (the real).

In line with Kardes *et al.* (2008:161), in the marketing context, beliefs can be viewed as customers perceived characteristics and benefits about a product. According to Du Plessis and Rousseau (2003:265), the extent to which a customer believes that characteristics and benefits are inherent in a product is called the strength of a belief. This strength of belief is represented by strength of probability on a how strongly or weakly a customer believes something (Du Plessis & Rousseau 2003:265).

According to Kardes *et al.* (2008:162), consumers' beliefs are founded on several different types of information, which can be viewed as descriptive, informational and inferential beliefs. Descriptive beliefs refer to direct experience with a product; what one has seen with their own eyes or heard with their own ears. Informational beliefs are based on secondary information from other sources (friends, sales people, media and so on), and inferential beliefs are based on consumers' own conclusions or inferred from direct or indirect experience with the product.

As individuals act and react on the basis of their perceptions, not on objective reality (evidence based reality), it is vital for marketers to know consumers' perceptions other than consumers' objective reality because consumers' perceptions are responsible for their actions, buying habits and leisure habits (Du Plessis & Rousseau 2003:217). Since individuals' decisions and actions are based on what they perceive as reality, it is important for marketers

to understand perception and its related concepts so that they can determine what influences consumers to buy (Du Plessis & Rousseau 2003:217).

In order for marketers to formulate strategies that will increase their market and satisfy consumers' needs more effectively, it is imperative that they understand how consumers perceive their products and services (Du Plessis & Rousseau 2007:117). The reason being that consumer perceptions are not necessarily in line with those of experts', and that consumers base their purchase decisions on their own views rather than on those of the experts (Van Rijswijk, Frewer, Menozzi & Faioli 2008:453). The starting point being, to look at things from the consumers' perspective, rather than to think in terms of what the business makes and sells, marketers should emphasise more and think in terms of what benefits do consumers obtain and how they perceive products and brands (Evans, Jamal & Foxall 2009:83).

2.8.2 Product perception

The image that a product or service evokes in the mind of a consumer is probably important to its ultimate success (Du Plessis & Rousseau 2007:177). According to Schieffer (2005:121), consumers are constantly presented with many options to help them solve their problems; therefore, they buy solutions to their problems (benefits of the product).

Søndergaard and Harmsen (2007:195) indicate that to understand what consumers seek in products, it is important to look beyond simple product attributes; to be precise, by understanding what a product is and does for a consumer. This requires information on several layers of abstraction – from attitudes regarding specific product attitudes (I would recommend this website for friends and family, which can be seen as a positive attitude) to perceived consequences (I will find employment opportunities and career information) to most general buying motive such as convenience and cost effectiveness (Søndergaard & Harmsen 2007:195).

According to Pickett-Baker and Ozaki (2008:290), as product perception is influenced by situational variables and social reference groups, product benefits are therefore linked to potential customers' specific needs. Thus, the closer the product is linked to customers' needs, the more it appeals to the targeted customer. How customers think and feel about a particular product is affected by what they are accustomed to and expect (Pickett-Baker &

Ozaki 2008:290). It is the marketer's job to appeal to or alter the consumer's perception about the benefits offered by his or her product in such a manner that they are exactly what the consumer needs (Matt & Scott 2002:23). "The skilled marketer reinforces existing positive perceptions about his or her products while carefully reducing or eradicating the less favourable ones" (Matt & Scott 2002:23). In this way, they meet the customers' expectations of the product.

2.9 CONCLUSION

According to Tong et al. (2005:699) customers that regularly use the Internet are selective, more demanding, and have higher expectations, but some of these customers are infuriated by frustrating experiences, such as slow connections, poor quality, out-of-date content, missing links, and errors (Wu & Wang 2005:721). Such frustrating experiences are likely to lead to unintended consequences, such as changing the service providers or discontinuing use of the service, which is highly likely with job seekers, due to low switching costs such as free affiliation to unlimited number of e-recruiting websites. Such users only incur internet costs. Therefore, understanding the particular customer's needs is extremely important.

Very often, the one and only survival and success of an organisation depends on its ability to harness and use knowledge. Therefore, knowledge becomes a key asset to building an organisation's competitive advantage (Hoe 2008:240). However, the mere possession of knowledge is inadequate. In order for knowledge to be useful, it must sustain and elevate the business. This is expressed as a need for a higher degree of market orientation, whereby methods used to gather information and its dissemination and response to it are key points (Sondergaard & Harmsen 2007:194).

"In terms of the customer related benefits, the market orientation has been found to enhance customer satisfaction and loyalty because market-oriented firms are well positioned to anticipate customer needs and to offer goods and services to satisfy those needs" (Hughes *et al.* 2007:1378). This occurs through market orientation antecedents; such orientation will serve as a means for firms to become more adept at serving their focal markets, also for tapping into latent customer needs and strategies that may have not been practically explored (Hughes *et al.* 2007:1388).

Due to on-going growth of statistics for internet usage and e-recruitment service providers, it goes without saying that competition is still going to intensify among e-recruitment service providers. Therefore, it is pivotal for current e-recruitment service providers to seek or practice ways to stay ahead of their competitors or retain and improve their competitive advantage. The employers affiliate to websites that provide them with good job candidates and, therefore, it remains the e-recruiter's job to provide job seekers with a high quality website, which meets their expectations and needs. Indeed, job seekers' treatment is becoming more alike to the one given to customers. If a website meets the customer's expectations, there is likelihood that he or she will re-use it when the need arises. This can be viewed as loyalty to the website.

Employment is an important need for individuals. They will thus tolerate a website that provides them with relevant vacancies, even though the website may be of poor quality. The shortcomings of poor quality websites is that they may be used by inexperienced job seekers that are desperate to find employment. Thus, the e-recruitment service provider will only be able to supply employers with new inexperienced job seekers. While, if the quality of service is excellent, job seekers with lots of working experience may avail themselves for better career prospects.

CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

As literature, pertaining to perceptions of consumers has been discussed in the previous chapter, Chapter 3 aims to evaluate these perceptions and ensure that pertinent research procedures are followed by adhering to research steps suggested by most authors; these authors are Welman *et al.* (2005:51); Babbie (2007:113); and McDaniel and Gates (2008:48). Figure 3.1 illustrates the research steps, while the steps (2), (3), (4) and (5) highlighted in bold are the ones that are relevant for this chapter. Chapter 3 lays emphasis on research design and methodology utilised for this study; it includes sampling method, data collection and statistical techniques.

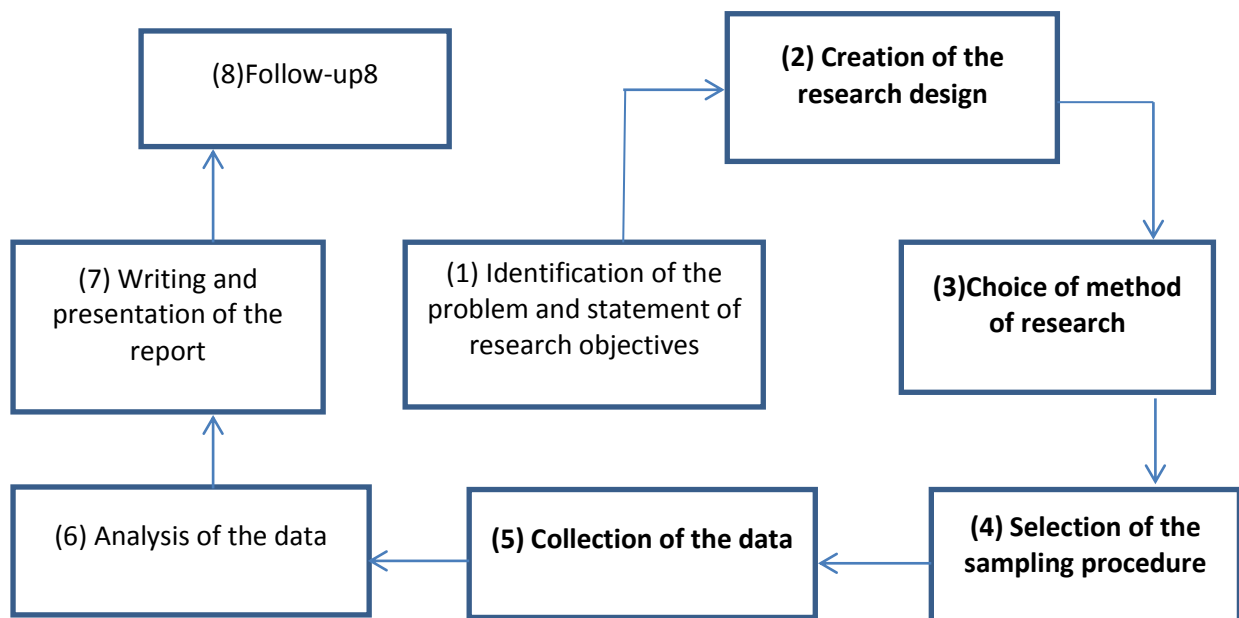


Figure 8: Research process

(Source: McDaniel & Gates (2008:48))

Welman *et al.* (2005:52) define research design as the plan on how the research sample will be obtained, and how the information will be collected from it, while methodology considers and explains the logic behind research methods and techniques used in the research study.

There are number of designs and methods that are available for conducting research and ensuring that the investigation leads to the truth (Aaker, Kumar & Day 2004:73). This is done

with the systematic process shown in Figure 3.1 that provides a planned approach to ensure that all aspects of the research project are consistent with another (Aaker, Kumar & Day 2004:43); otherwise, the conclusions made about the research questions are bound to be unreliable. In descriptive and causal designs, usually once the data has been collected, no revision of the procedure is possible; hence, proper design and methods must be ensured and rigorously explained (Churchill & Iacobucci 2005:45).

Some methods may be more appropriate and preferable than others, as McDaniel and Gates (2008:42-43) state that research projects must be well within the available resources (*inter alia* time and budget allocated for the research project). Therefore, it is self-suggestive that some methods applied in some studies may not necessarily be the perfectly suitable ones.

3.2 RESEARCH DESIGN

According Churchill and Iacobucci (2005:74), the degree of availability of knowledge about the research problem determines the research design, which is how much is known about the research topic. If little is known about the problem, an exploratory design will be applicable, while if there is a lot known about the research problem, a descriptive or causal design will be applicable. The outstanding feature that differentiates exploratory design from descriptive and causal design lies with the flexibility in the research methods used during the course of a research project. Research methods used in exploratory design are flexible and may change, while in respect of descriptive and causal design, methods are thoroughly planned, fixed and firmly specified prior to data collection (Churchill & Iacobucci 2005:40). The aim in these two designs is to obtain precise results and conclusions, with implications that yield actionable results. Churchill and Iacobucci (2005:40-41) classify the following research designs:

3.2.1 Exploratory design

The general objective in exploratory research is to gain insights and ideas about the research problem. The exploratory study is particularly helpful in breaking large, vague problem statements into smaller, more precise sub-problems (Babbie 2007:92).

3.2.2 Descriptive design

A descriptive design aims to explain phenomena such as human behaviour in the business, and administrative sciences, by indicating how variables are related to one another, and in

what manner one variable affects the other (Churchill & Iacobucci 2005:74). According to Cooper and Schindler (2006:20-21), descriptive studies attempt to discover answers to questions that ask how, what, when, where and sometimes how. These types of studies usually have a greater appeal to administrators and policy analysts for planning, monitoring and evaluating purposes.

3.2.3 Causal design

The purpose of causal design is to explain and provide evidence of cause-effect relationships between variables and conditions under which the cause precedes the effect (Babbie 2007:94). These types of designs are commonly conducted through experiments whereby the independent variable can be manipulated in order to provide evidence that the change in the independent variable precedes the change in the dependent variable (McDaniel & Gates 2004:28).

However, as the current study aims to explain and provide evidence of cause-effect relationships between variables, but the researcher does not have control over independent variables, a quasi-experimental approach was found suitable for the study. Consistent with Zikmund and Babin (2007:276), in order to meet basic requirements of an experiment, researchers treat the subject variable as part of the independent variables (independent variable is multiplied by subject variable). The subject variable refers to groups which participants belong to, such as age, gender, level of education, and the like; this technique is called factorial design (Zikmund & Babin 2007:276).

According to (Churchill & Iacobucci 2005:45) factorial design uses two or more independent variables, and examines every combination in the categories. It is a type of experimental design, which simultaneously considers the impact of several independent variables (Churchill & Iacobucci 2005:45). Thus, relationships between variables shall be tested according to the extent to which participants' scores varies with their categories.

Since the research design of the current study has been explained in accordance with steps shown in Figure 3.1, the target population and sampling shall be discussed next. The discussion shall include sampling frame, method and sample size.

3.3 TARGET POPULATION AND SAMPLING

3.3.1 Target population

Welman *et al.* (2005:52) states that a target population refers to homogenous units of analysis as characterised by the researcher; it encompasses the total collection of all units of analysis about which the researcher wishes to make specific conclusions. Units of analysis can be a group, organisations, products, events, and the like. Since the target population can be made up of the aforementioned, it is important to specify the target population in order to design an appropriate sample for the research project (Babbie 2007:103).

For the purpose of this study, the target population includes all the PNet users who are registered with the website as job seekers and those who logged onto the website during the survey period.

3.3.2 Sampling frame

McDaniel and Gates (2004:102) describe a sampling frame as a master list containing all units of analysis from which sample units are to be drawn. It serves to ensure that the sample of the population is ideally the same as the population (Babbie 2007:208). With regard to studies conducted over the internet, compilation of a satisfactory sampling frame is usually problematic (McDaniel & Gates 2008:160); this is a challenge with regard to the current study. A sampling frame could not be assembled due to problems ascribed to the nature of e-recruitment environment. Such problems include; some of the job seekers stop using the website without notifying the service provider, and others stop logging onto the website upon finding employment and later return to the website to search for better employment opportunities and the like.

3.3.3 Sampling method

In quantitative research, it is usually impractical and uneconomical to involve all the members of the population due large population size; hence, sampling is effected (Welman *et al.* 2005:52). Sampling is the process of selecting units of analysis from the population with the aim to make fair generalisation of the results back to the population from which they were chosen (McDaniel & Gates 2004: 396). Thus, a sample is subset that is representative of the population (Welman *et al.* 2005:52).

The choice of sampling method is determined by factors such as the nature of the research problem, research objective, budget constraints, time, and so forth (McDaniel & Gates 2008: 334). According to Singh and Bajpai (2007:139), sampling methods are commonly categorised into two main streams, mainly probability and non-probability sampling or random and non-random sampling. Probability sampling refers to the likelihood of selecting a member of the population over other members to represent the population as a whole, that is, the probability is calculated and a specific pattern is used when selecting the sample. It includes simple random, systematic, stratified, cluster and multistage sampling (Singh & Bajpai 2007:144-154).

As for non-probability sampling, the chances of selecting a member of the population over another target population member is unknown; hence, members of the sample are selected based on the subjective judgement of the researcher. It includes convenience, judgement/purposive, quota and snowball sampling (Singh & Bajpai 2007:142-143).

Probability serves to avoid bias when selecting the sample; the objective is to match the sample to the population as closely as possible in order to generalise results from the sample to the target population (McDaniel & Gates 2008:324). However, each method has its strengths and weaknesses. For example, probability sampling is prone to sampling error, which can have a detrimental effect on generalising the results. Non-probability sampling, in turn, can provide a perfect sample that meets the objectives of the research project.

Even though probability sampling is encouraged over non-probability sampling with regard to descriptive and causality designs, the previously mentioned factors that determine the sampling method dictate which method should take preference. There are two reasons for this study pursuing purposive sampling. Firstly most the studies that evaluate a website's usefulness and ease of use, applied purposive sampling using participants who have some form of experience in using the internet. Such studies include those conducted by (Shih 2004; Lin, Wu and Tsai 2005; Ahn, Ryu and Han 2007; Thompson *et al.* 2008; Lin 2010).

Secondly, according to Fielding *et al.* (2008:181-182) it is usually expensive, if not impractical, to compile a sampling frame for online surveys. For example, if the mailing list is to be used as a sample frame, the email addresses have to be verified if they are still active and if they will not reject or spam the sender's email address. Furthermore, the sampling

frame should consist of the population that is willing to participate in the research project. Purposive sampling is a type of non-probability sampling which involves deliberate choosing of units of analysis that have similar attributes to that of the total population (Welman *et al.* 2005:51).

3.3.4 Sample size

Sample size refers to the actual number of units of analysis the researcher will collect research data from (Babbie 2007:103). Determining sample size depends on the type of sample and considers factors such as the statistics in question, homogeneity or heterogeneity of the population, time frame, budget and availability of the sample (McDaniel & Gates 2004:296-297).

For the purpose of this study $n = 717$, based on response rate initially explored in the pilot study, time limit to run the survey online, and anticipated heterogeneity in the sample. Even though Leedy and Ormrod (2010:212) are of view that beyond a certain point ($N = 5000$), population size is almost irrelevant and a sample size of 400 is sufficient. However, if the population is markedly heterogeneous, a larger sample size is deemed necessary.

As the sample size has been determined, details regarding collection of data and the measuring instrument used for this study will follow.

3.4 DATA COLLECTION AND MEASURING INSTRUMENT

3.4.1 Data collection

Data collection refers to the gathering of specific information from the sample (Creswell, Plano and Clark 2011:117). In this regard, specific information would mean the perceptions of job seekers about the PNet website as an e-recruitment tool. Leedy and Ormrod (2010:108) provide a table that guides selection of an appropriate method for certain types of research goals. Consistent with this table, a survey method was deemed suitable, as the study aims to describe and predict the use of the PNet through incidence, frequencies and distribution of certain characteristics in the population.

According to Leedy and Ormrod (2010:187), “Survey methods include acquiring information about one or more groups of people (about their characteristics, opinions, attitudes or previous experiences).” Methods of acquiring information from the sample mostly comprise

interviews, questionnaires and observations (Zikmund & Babin 2007:64-65). Furthermore, mediums such as cameras for observations, internet and mail for questionnaires, and telephone for interviews and the like, can be used for effective implementation of these methods (Zikmund & Babin 2007:64-65).

Since e-recruitment is a virtual environment, the researcher considered two methods to reach the sample from which to collect data. The first method was to post a banner, linked to a questionnaire on the website, to invite participants to partake in the survey. The second method was to send the questionnaire to the participants using e-mail. The latter was found not suitable because of challenges that were raised earlier regarding the sampling frame; thus, posting the banner was deemed more suitable. Moreover, arguments raised by Zikmund and Babin (2007:225-226), Fielding *et al.* (2008:182-183), and Gaiser and Schreiner (2009:70-72) with regard to response rates, were in favour of posting the invitation to the questionnaire on the website.

As field workers did not administer the online questionnaire, the design needed to be suitable. Russell and Purcell (2009:84-120) provide advice on certain basics about creating a survey online, which includes ensuring that all properties of the questionnaire work properly, the questionnaire must be as user-friendly as possible, control of skip patterns, questionnaire display to all participants, and assistance and support for individuals who may seek further clarity regarding the questionnaire. The required computer skills needed by respondents should also be considered.

The questionnaire could not be submitted if it were incomplete as all questions were set as compulsory, instead a skipped question would highlight and flicker, but a specific pattern of replies could not be controlled, namely giving a similar response to all questions. Instructions on how the questions should be answered were provided, as well as the contact details of the researcher for further enquiries. The questionnaire was intended for specifically registered website users who were able to log-on to the website, therefore, it was reasonable to assume that they possess the average computer skills required to respond to an online questionnaire.

The SogoSurvey online tools were used develop the questionnaire online, and ensured that it was attractive and user-friendly. The SogoSurvey is a company that supplies online survey tools as well as professional support and advice. Furthermore, it offers a database for

collection of data and basic statistic tools (SogoSurvey 2012). A banner inviting participants to part take in the study was set in such a manner that only those who log onto the website would be exposed to the invite. By clicking on the banner, participants were connected to the questionnaire that requests their responses.

3.4.2 Measuring instrument

The current study used a questionnaire as a measuring instrument. “A questionnaire refers to a set of questions designed to generate data to accomplish the objectives of the research project” (McDaniels & Gates 2008:286). A questionnaire was chosen on the basis of it being able to reach a wide range of respondents in a shorter time, at a lower cost, being easier to administer, and having standardised responses that are easy to summarise in comparison to the interviews (Kumar 2011:130). However, as the observation method involves the use of mediums such as a video camera to capture information (Kumar 2011:130), and such perceptions are not easy, if not impossible, to capture using an observational method, this method was not considered for the study.

For the questionnaire to fulfil the researcher’s objective, the questions must meet the basic criteria of relevance and accuracy (Zikmund & Babin 2007:353). Relevance means the extent to which the collected information addresses a research question and will help the decision maker to address the problem, while accuracy refers to consistency in measuring what should be measured (Zikmund & Babin 2007:353). Section 3.4.4 provides an in-depth discussion on accuracy and relevance.

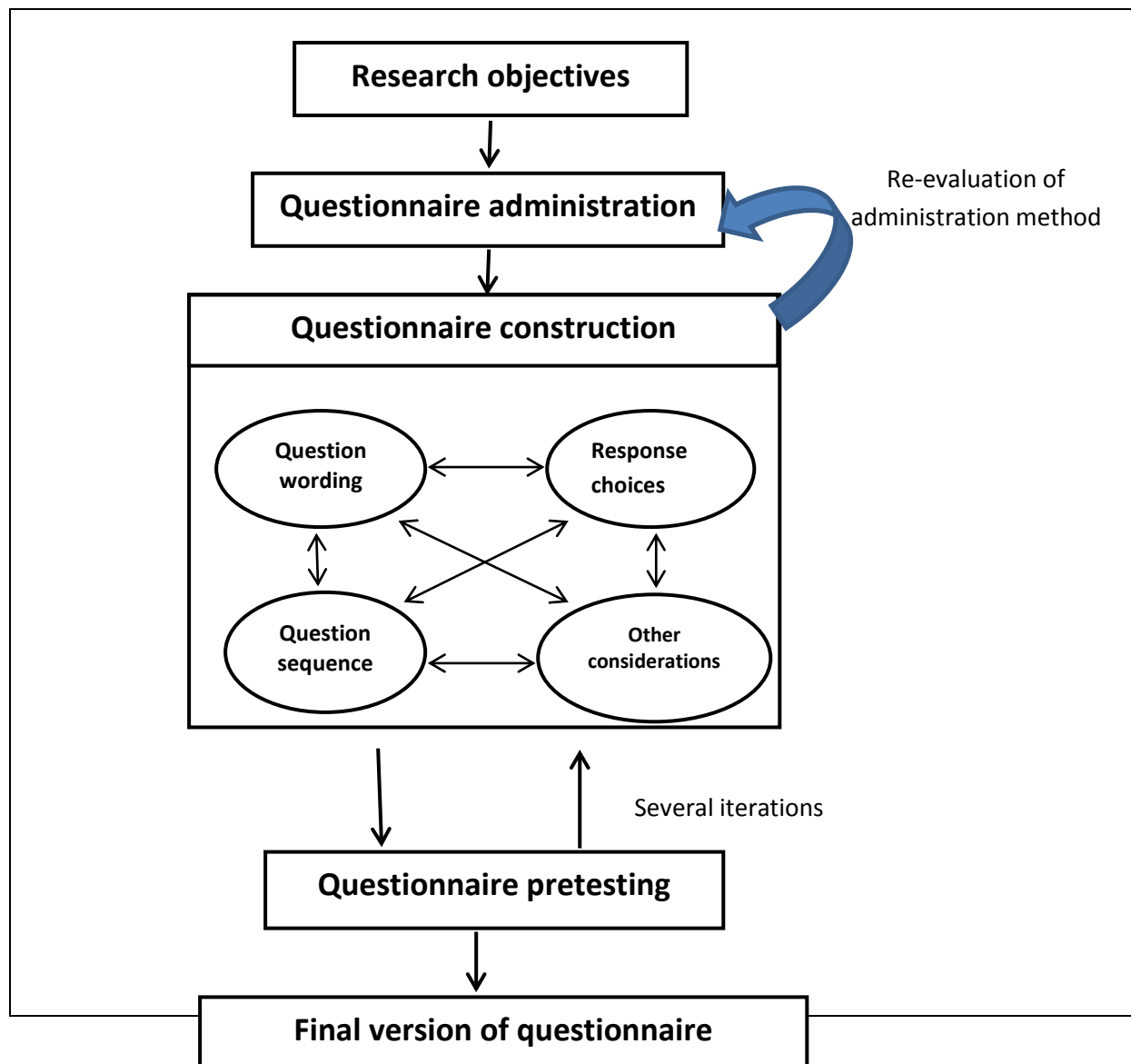


Figure 9: Stages of a questionnaire

(Source: Synodinos (2003:225))

The measuring instrument was developed by following the questionnaire development procedure alluded to by Synodinos (2003:225), as depicted in Figure 3.2. The questionnaire was built through the adoption of relevant constructs from Liaw and Huang (2003:58) and Van Birgelen *et al.* (2008:740). It consisted of closed-ended or structured questions. These are types of questions that give the respondents fixed alternatives to choose from when answering the questions, that is their responses will fit into a specific category (Cooper & Schindler 2006:398). This will make it easier for the researcher to summarise data and make statistically based conclusions.

The questionnaire was divided into four sections, namely A, B, C and D. Section A contained demographic questions; this section included demographics regarding age, gender, experience using recruitment websites, educational levels and the like, which may have an effect on users' perceptions. Demographics such as experience in using websites and educational level can be attributed to self-efficacy. Self-efficacy is known to have significant effect on users' perceived ease of use (Davis, Bagozzi & Warshaw 1989; Venkatesh 2000; King & He 2006).

Section B consisted of factors that are known to influence jobseekers in responding to a job advertisement (Zusman & Landis 2002; Van Birgelen *et al.* 2008; Breaugh 2008). While Section C entailed technology acceptance factors that influence individuals to accept and predict usage of a technological products or services (Davis 1989; Lee & Kozar 2006). Lastly, Section D contained questions that measure intentions of respondents' future use of the website.

3.4.3 Scoring of the instrument

As all the constructs were adopted from existing scales, it is understood as to how the measuring instrument should be scored. From section B to D, all responses were measured on a six point Likert-type scale ranging from 1=strongly disagree and 6=strongly agree with the given statements. A Likert-type scale is a scale that asks respondents to indicate the extent to which they agree or disagree with the given statements about a particular subject (McDaniel & Gates 2008:265). The purpose was to capture the respondents' strength of mental beliefs or behavioural beliefs against factors that describe and predict the usage of the PNet website.

3.4.4 Reliability and validity

3.4.4.1 Reliability

"A survey instrument is considered reliable if its repeated application results in consistent scores" (Hair, Babin, Money & Samouel 2003:170). O'Leary (2004:59) adds that the conditions under which the measuring instrument performs consistently must also be comparable. Hair *et al.* (2003:170) state three types of reliability, namely test-retest reliability, alternative forms reliability and internal consistency reliability. A brief explanation of each of these types follows.

3.4.4.1.1 Test-retest reliability

This reliability is obtained through a repeat of measurement using the same instrument, approximating the original conditions as closely as possible. The rationale behind this method is that if random variations are present, they will be revealed by differences in the scores between the first and the second test. If the scores between the first and the second test do not differ much, the instrument is said to be stable. Limitations regarding this method are that the group used in the first test may be unwilling to cooperate in the second test, and environmental or personal factors may change (McDaniel & Gates 2004:201).

3.4.4.1.2 Alternative forms of reliability

These can be used to reduce problems experienced in test-retest reliability. This type of reliability is assessed by developing two equivalent forms of the construct. “The same respondents are measured at two different times using equivalent alternative constructs. The measure of reliability is the correlation between the responses to the two versions of the construct” (Hair *et al.* 2003:170).

3.4.4.1.3 Internal consistency reliability

This measures the ability to produce similar results with different samples when measured at the same time. In this method equivalence is used, it has to do with how much error may be introduced by using different samples of the items to measure a phenomenon; it focuses on variation at one point in time among sampled items. A researcher can test for item equivalence by assessing the correlation in the homogeneity of a set of items (Cooper & Schindler 2006:354).

There are two types of internal consistency reliability; the first one is the split-half technique. With split-half reliability, the researcher randomly divides the scale items in half and correlates the two sets of items. A high correlation between two halves indicates high reliability. The second one, the coefficient alpha, also known as Cronbach’s alpha, can be used to measure the internal reliability of the responses. Coefficient alpha is obtained by calculating the average of coefficients from all possible combinations of split halves, and it ranges from zero to one. A good Cronbach’s alpha is the one equivalent to 0.7 or above, although lower coefficients may be acceptable depending on research objectives.

3.4.4.2 Validity

According to Zikmund and Babin (2007:323), an instrument is valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed. Thus, the instrument is valid depending on the extent to which the instrument actually reflects the concept being measured. A precondition for validity is that the measuring instrument must be reliable (McDaniel & Gates 2004:202). Failure to meet this requirement means that the measuring instrument is useless and all the hard work behind developing it goes to waste. The three most important types of validity are content validity, criterion-related validity and construct validity (Zikmund and Babin 2007:323).

3.4.4.2.1 Content validity

This refers to extent to which an instrument provides adequate coverage of the topic being researched. In order to meet this criterion, McDaniel and Gates (2004:205) recommend that what needs to be measured must be predefined as precisely as possible. Furthermore, opinions of a panel of experts regarding whether a certain item should be included in the scale can be considered. Lastly, the items can be piloted using respondents who are not part of the actual sample and asking them about clarity regarding the items selected.

3.4.4.2.2 Criterion-related validity

Criterion-related validity assesses whether a construct performs as expected relative to other variables identified as meaningful criteria. For example, theory may suggest that employee training improves job performance. Correlation measures between training and job performance should be positive and significant, and if this is so, criterion validity for the construct has been established (Hair *et al.* 2003:205). Criterion validity includes concurrent validity and predictive validity. Concurrent validity of a construct has to do with degree to which another variable, measured at the same point in time as the variable of interest, can be predicted by the measurement instrument. Predictive validity refers to degree to which a future level of a criterion variable can be predicted by a current measurement scale.

3.4.4.2.3 Construct validity

Construct validity is the degree to which a measuring instrument represents a logically theoretical rationale underlying the measurements. It includes convergent validity, which is a degree of correlation among different instrument measurements of that which it is supposed to measure, as well as discriminant validity, which is a measure of lack of association among

constructs that are supposed to be different (Cooper & Schindler 2006:351). The researcher makes use of the factor analytic procedure to determine the construct validity of the dependent variables.

3.4.4.2.4 Face validity

Face validity is considered the weakest form of validity. It is referred to as degree to which a measurement seems to measure what is supposed to measure, taken at face value (McDaniel & Gates 2008:250).

3.4.5 Questionnaire pre-test

Consistent with Hair *et al.* (2003:200), no questionnaire should be administered before the researcher has evaluated the probability regarding the accuracy and consistency of the responses. This was achieved by pre-testing the questionnaire using a small sample of respondents with characteristics similar to the target population. Respondents should complete the questionnaire in a setting similar to the actual research project. These respondents should be asked probing questions about each part of the questionnaire including instructions, scaling, format, and wording, to ensure each question is relevant, clearly worded and unambiguous.

The condition that respondents should complete the questionnaire in the similar setting to the target population could not be met as the actual research questionnaire was administered online; instead, a paper-based questionnaire was used. Some aspects that caused concern were that as the respondents completed the questionnaire off-line they kept on forgetting the website to which the researcher referred. Furthermore, the length of the questionnaire was a bit of a concern as it entailed five A4-sized sheets, including the cover page. This was because the pop-down options gathering biographical data had to be printed. The respondents also felt that the instructions on how to complete the questionnaire were lengthening the questionnaire, as the manner of asking the questions was self-suggestive on how to answer them. The pre-test involved seven postgraduate students.

Alterations made as the result of the pre-test were that provision for instructions was made only once on how to answer section B to D as they required a similar way of replying. Furthermore, a question requiring length of work experience was added, as was the name of the website, to the questions in the various sections.

3.4.6 Pilot study

Along the lines of McDaniel and Gates (2008:43), a pilot study is a small-scale preliminary study conducted with the purpose to evaluate feasibility, time, costs, and adverse events for the main study. An appropriate sample for the main study may be predicted and improvements on research design may also be effected due to results obtained from the pilot study (McDaniel & Gates 2008:43). According to Brace (2010:175), the key underlying reason to pilot a questionnaire is to test its reliability and validity. It is a prerequisite to pilot a questionnaire under similar conditions as those under which the main study will be conducted. This includes testing a questionnaire on a certain portion of the targeted population that will not to be included in the sample for the main study (Brace 2010:175). Thus, piloting is a simulation of the main study, and failure to meet this condition may defeat the purpose of piloting.

With regard to the current study, the pilot study was undertaken on convenience of the first 100 PNet users to log on to the website and complete a questionnaire. The results revealed two errors in the design of the questionnaire. The first error was the unintended branching of the seventh question, whereby if respondents replied as daily users of the website, Section B of the questionnaire was skipped automatically. This skip pattern accounted for 42 respondents. However, 58 respondents completed all the questions, and approximately six respondents replied using patterns such as averaging all the responses.

The second error was that the sixth question did not allocate adequate space for respondents to fill in the name of the industry in which they are seeking employment. The Cronbach alpha was computed based on the 52 appropriate responses. Upon rectifying these errors, the banner inviting the users to partake in the main study was reloaded to pursue the main study. Since, the users log on to the website to complete the questionnaire, this enabled the researcher to exclude those who participated in the pilot study. The seven-point scale was found unnecessary, as a six-point scale was sufficient. Upon completion of data collection, the statistical analysis was conducted.

3.5 STATISTICAL ANALYSIS

According to Burns and Burns (2008:6), statistics entails various meanings to various people, as well as how it is applied in their daily lives. For the purpose of the current study, statistics

means, “techniques for collection, presentation, analysis and interpretation of data for decision making” (Burns & Burns 2008:6). Statistics is divided into two streams, mainly descriptive statistics and inferential statistics, and each serves its own purpose (Lomax 2007:7). Descriptive statistics are used to collect, present, summarise and describe data in a more comprehensible manner. It involves reduction of mass data to relatively easy-to-understand values such as averages, percentages, frequencies and the like. Inferential statistics are used to make interpretations as well as predictions about the population from sample measures (Lomax 2007:7). The descriptive analysis of the data is conducted using the Statistical Package for Social Sciences SPSS 20.0.

There are two basic methods used in descriptive statistics in order to reduce mass data to a comprehensive manageable data, namely measures of central tendency and measures of dispersal or variability. With descriptive analysis, the most useful step is to understand what patterns and trends describe the sample (Burns & Burns 2008:7). Thereafter, central tendency and dispersion are sufficient for research purposes to form a basis to move to more advanced statistics (Burns & Burns 2008:122). Central tendency can be referred to as a general location of scores indexed by some value around which distribution tends to centre; it is usually called the average. In statistics, averages are specified in terms of mode, median and mean.

Dispersion means the extent to which scores differ from one another, namely their scatter or spread. The notion of variability lies at the heart of the study of individual and group differences (Bless & Kathuria 2008:57). The focus of research is formed by the variability of individuals, cases, condition and events. Measures of dispersion include range, variance and standard deviation (Burns & Burns 2008:7). Central tendency is complementary to dispersal as a means of providing reference points against which variability can be assessed.

In the case of inferential statistics, there is a great variety to choose from, and it becomes a challenge for the researcher to choose which statistical tests are suitable for the research project. Jackson (2005:66) sheds some light on how to choose appropriate statistics, that is, by differentiating parametric from non-parametric inferential statistics. “Parametric procedures require certain assumptions about the parameters of the population represented by the sample data, such as knowing the standard deviation and mean in the population (N) and that the distribution is normal. They are mostly used with interval or ratio data” (Jackson 2005:66).

Non-parametric procedures do not require the assumptions about the parameters of the population represented by the sample data. In addition, the standard deviation and mean in (N) are not needed, and the underlying distribution does not have to be normal. They are often used with ordinal or nominal data (Jackson 2005:66).

On the contrary Maltby and Day (2002:74-75) are of view that there are various rules and practices that can be used as guidelines in choosing the statistics. Therefore, a choice between parametric or non-parametric must not be seen as big problem. These guidelines and practices include: (a) Following statistical tests that have been previously used by other researchers to investigate the variable; (b) The scale used to measure the continuous variable is a well-established, reliable valid measure of that variable which has been shown by previous research (among larger samples) to demonstrate a normal distribution of scores; and (c) Although some continuous variables may not comprise real numbers (ordinal data), assumptions that they are real numbers can be made on the basis that they have been assigned values to responses (Maltby & Day 2002:74-75).

Consistent with the objectives of the study and its design, both types of statistics were used. Statistical techniques applied in the study shall be briefly described below.

3.5.1 Mean

The mean is the most commonly used measure of central tendency, as it includes the values or scores of all subjects. It is calculated by adding all the scores of the subjects divided by total number of subjects, that is, the mean calculated is attributed to the scores of the subjects. The mean is the point that minimises the collective distances of scores to a common point.

3.5.2 Variance

Variance is a measure of how far a set of numbers is spread out, describing how far the numbers lie from the mean (expected value). Calculations of variance can be obtained by means of range or standard deviation, depending on the objective at hand.

3.5.3 Standard deviation

Standard deviation is the most commonly used measure of variation as it includes all scores in the distribution using the mean. It indicates how much variance or dispersion exists from the

average (mean, or expected value). A low standard deviation indicates that the data points tend to be very close to the mean; high standard deviation indicates that the data points are spread out over a large range of values (Bless & Kathuria 2008:63).

3.5.6 Multiple regression analysis

Hinton (2004:271) explains linear regression as an approach to show a relationship between two scaled variables. This relationship enables the researcher to predict the scores of the other variable (outcome variable) based on the scores of the independent variable. Linear regression analysis is used to quantify the strength of relationship between these variables. When more than two independent variables are associated with the dependent variable, multiple regression can be used (Huck 2004:459).

In line with Huck (2004:459) there are three types of multiple regression that are mostly used, namely simultaneous, stepwise, and hierarchical multiple regression. In the current study, stepwise multiple regression will be used. “It is a procedure whereby the computer programme such as SPSS 20.0 is used to determine the order in which the independent variables become part of the equation” (Huck 2004:459).

3.5.7 Factor analysis

Burns and Burns (2008:440-441) indicate that, “factor analysis is a major technique in multivariate statistics and has a vital task in demonstrating which variables clump together to form super-ordinate variables”. The aim is to make order out of chaos, whereby complex interactions between variables that inter-correlate can be analysed. Furthermore, “the purpose is to find out how much of the variation in all variables can be accounted for, by a much smaller number of factors or underlying dimensions” (Burns & Burns 2008:441). The aforementioned objectives can be achieved through analysis such exploratory factor analysis (EFA) to discover underlying factors; and confirmatory factor analysis (CFA) to confirm factors already proposed (Hinton 2004:305). The researcher makes use of principal component analysis (PCA) as a type of exploratory technique, where the original variables (items) are transformed into a smaller set of linear combinations, with all of the variance in the variables being used.

According to Hinton (2004:305), the two most useful tests often carried out prior to factor analysis are the Kaiser-Meyer-Olkin (KMO) test that examines the data for sampling

adequacy. “This gives a measure of the common variance amongst the variable that the factors will be accounted for” (Hinton 2004:305). It represents the ratio of the squared correlation between the variables, to the squared partial correlation between variables. It varies between zero and one; a value of zero indicates that the sum of partial correlations is large relative to the sum of correlations indicating a diffusion in the pattern of correlations (hence factor analysis is likely to be inappropriate); a value close to one indicates that patterns of correlations are relatively compact, and so factor analysis should yield distinct and reliable factors (Field 2009:788)

The second test is the Bartlett’s test of sphericity, which tests if there is a variable that does not correlate with other variables as expected and are worth investigating (Hinton 2004:305).

3.6 ETHICAL CONSIDERATIONS

Permission to conduct the study was granted by the sales manager of PNet recruitment agency in Gauteng, upon the researcher’s pledge to exercise confidentiality on information that may harm or defy the company’s principles directly or indirectly.

3.7 SUMMARY

In this chapter, the research design and methodology utilised for the study, including the sampling method, questionnaire development and data collection were explained, as well as the rationale behind choices of methods and techniques. The next chapter focuses on carrying out the statistical analysis of raw data and discussion of the findings.

CHAPTER 4: DATA ANALYSIS AND RESULTS

4.1 INTRODUCTION

The previous chapter outlined the research design and methodology used in this study. It provided details regarding the measuring instrument and the procedure used to collect data, population size, sampling, as well as description of statistical techniques that were applied in the current chapter. This chapter aims to report on the analysis of data and interpretation of results.

In order to meet the above-mentioned objectives, the Statistical Package for Social Sciences (SPSS version 20.0 for Windows) was used to analyse the data. The sample will first be described using descriptive statistics to indicate the representivity of the sample to the population, and then inferential statistical procedures will be utilised to analyse the data further.

4.2 DESCRIPTIVE STATISTICS

There were eight items asking respondents to provide certain biographic and demographic information, which will serve as the independent variables in this research. The first variable was gender and Table 4.1 provides the frequencies.

4.2.1 Gender

Table 2: Frequencies of gender in the sample (Q1)

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	368	50.8	51.3	51.3
	Female	349	48.1	48.7	100.0
	Total	717	98.9	100.0	
Missing	System	8	1.1		
Total		725	100.0		

The data in the table indicate a ratio of 1.05 males for every female. The census of 2011 (Statistics SA 2013) indicates that there are 100 females for every 95 males in South Africa, which is a ratio of 0.95 males for every female. Thus, the sample may be slightly over-

representative of males but is close enough to be considered representative of the population regarding gender. In similar studies such as Heijden (2003:545), Sylva and Mol (2009:314) and Lin (2010:68) it has also been found that males constituted a majority of the research sample. Thus, in this research sample more males make use of employment websites than females. Figure 4.1 graphically depicts this information.



Figure 10: A bar chart showing the frequency of males and females in the sample

4.2.2 Age

Respondents were asked to provide their age according to four categories. Table 4.2 provides the frequency of the responses and Figure 4.2 presents these graphically.

Table 3: Frequencies of the various categories of age in the sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18-24 years	120	16.6	16.7	16.7
	25-30 years	256	35.3	35.7	52.4
	31-35 years	126	17.4	17.6	70.0
	36 and above	215	29.7	30.0	100.0
	Total	717	98.9	100.0	
Missing	System	8	1.1		
Total		725	100.0		

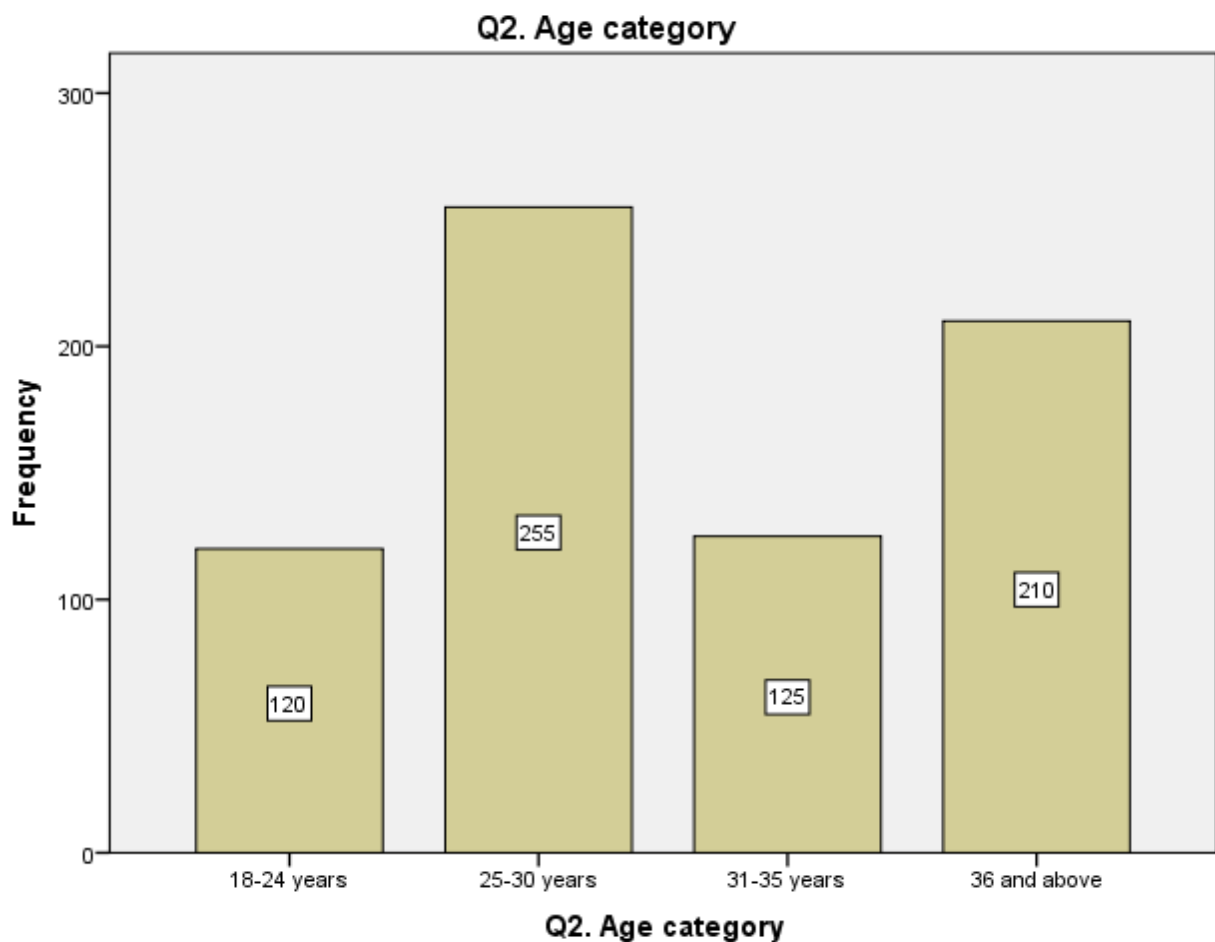


Figure 11: A bar chart showing the frequency of the age group categories in the sample

The data in the table and the graph indicate that the majority of the sample, namely 35.7 percent, falls in the 25-30 year age group. This is reasonable as most people that have

completed their tertiary studies would probably fall in this age group and would make use of the PNet website to search for possible employment. According to Statistics South Africa (2013:20), the median age in South Africa was 25, although it varies from 21 in the African population to 38 in the White population.

4.2.3 Highest educational qualification obtained

The original eight groups were collapsed to six. Table 4.3 provides the frequencies obtained and Table 4.3 diagrammatically represents these.

Table 4: Frequencies of the various qualification groups in the sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Grade 12/undergraduate college	201	28.0	29.1	29.1
	N6 or diploma	151	21.0	21.9	51.0
	Undergraduate at university	60	8.4	8.7	59.7
	University diploma	78	10.9	11.3	71.0
	University degree	119	16.6	17.2	88.3
	Postgraduate qualification	81	11.3	11.7	100.0
	Total	690	96.1	100.0	
Missing	System	28	3.9		
Total		718	100.0		

Table 4.3 indicates that 29.1 percent of the respondents either had a grade 12 qualification or were undergraduates at college. The first combined groups comprised the respondents who had a grade 12 or matriculation qualification and respondents who were undergraduates at college. The second combined groups included respondents who obtained an honours or masters qualification and those who have Doctorates or PhD qualification, because there were only two respondents who had a PhD or Doctorate qualification. Table 4.3 indicates that a large percentage (29.1%) of people who use PNet had the lowest qualifications. This percentage may be supported by low percentages of scholars who further their studies upon completion of grade 12. According to Soobrayan (2012:24) for the current year (2013), out of 50 percent of grade 12 candidates, only 24.3 percent qualified to pursue a bachelor's degree, and 17.2 percent qualified to study for a diploma. Thus, a high percentage of scholars who

fail to further their studies make use of the PNet website to look for jobs; the majority of job seekers who used the PNet website had low qualifications.

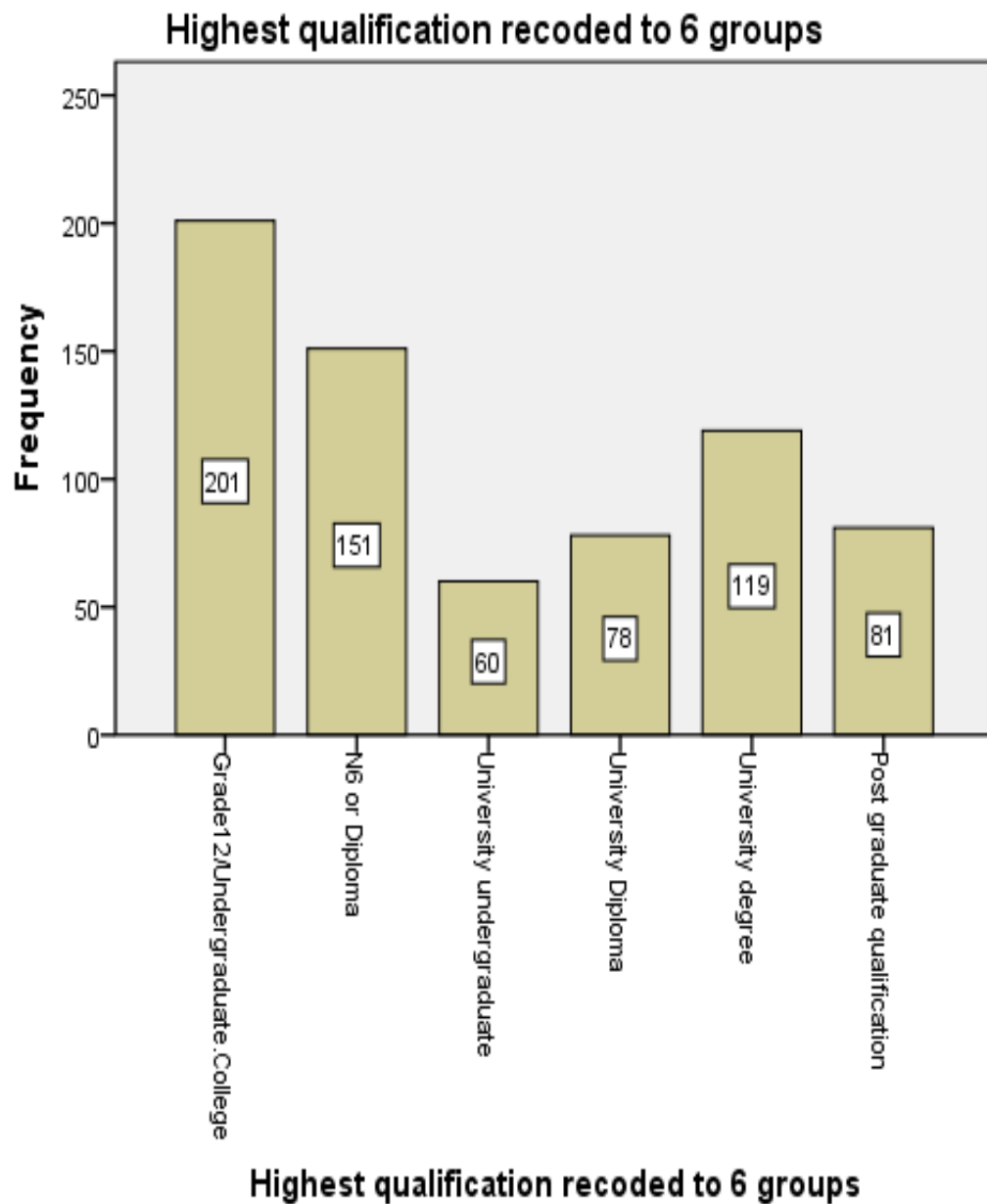


Figure 12: Bar graph indicating the frequencies of the various qualification groups in the sample

4.2.4 Years of experience using web search

Table 5: Frequencies of the various years of experience of groups in using web searches in the sample

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0-1 year	180	24.8	25.1	25.1
	2-3 years	215	29.7	30.0	55.1
	4-5 years	138	19.0	19.2	74.3
	6 years and above	184	25.4	25.7	100.0
	Total	717	98.9	100.0	
Missing	System	8	1.1		
Total		725	100.0		

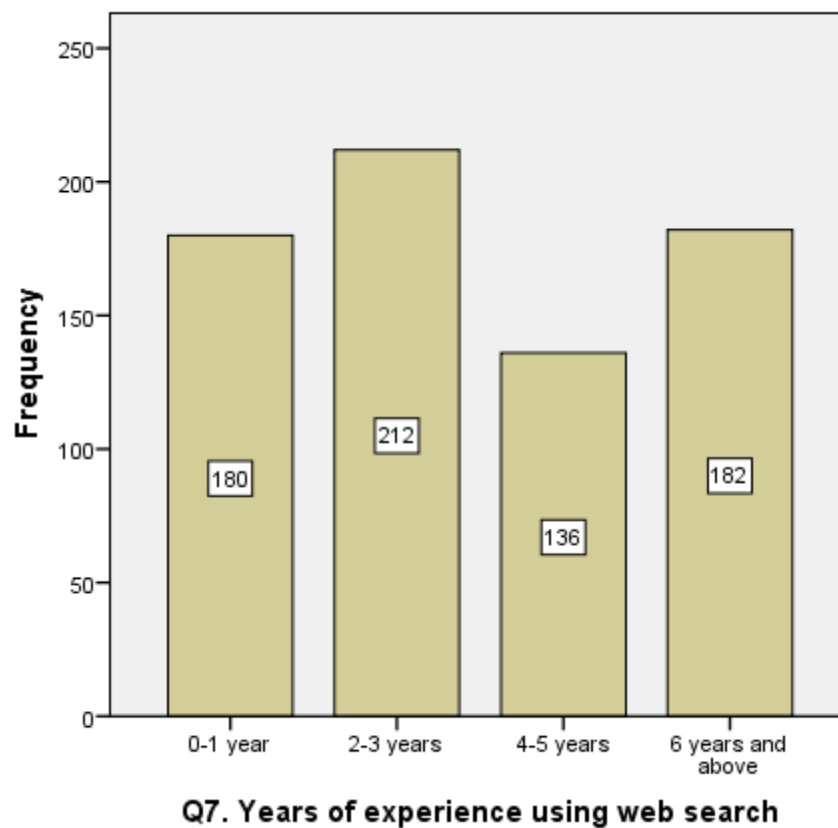


Figure 13: A bar graph indicating the frequency of responses in the various years of experience using web search

The data in Table 4.4 indicate that 25.1 percent of the respondents could be considered relatively inexperienced regarding the use of the web to search for possible employment. Of

the 717 respondents, 49.2 percent had between two to five years experience, while 25.7 percent could be said to be experienced as they had six or more years of experience.

4.2.5 The frequency of a job search using websites

The possible frequencies are given by four categories as indicated in Table 4.5.

Table 6: The frequency of job searches using websites

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	293	40.8	41.3	41.3
	Every 2-3 days	176	24.5	24.8	66.1
	Weekly	164	22.8	23.1	89.3
	Monthly	76	10.6	10.7	100.0
	Total	709	98.7	100.0	
Missing	System	9	1.3		
Total		718	100.0		

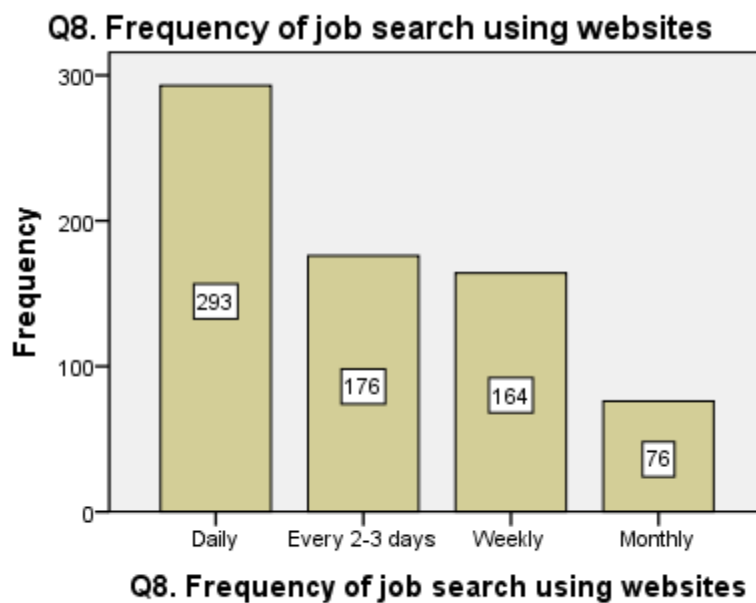


Figure 14: A bar graph indicating the frequencies with which respondents search the web

The graph in Figure 4.5 indicates an inverse proportion in the sense that persons who search the websites daily are in the majority (41.3%), while those who do it monthly are in the minority (10.7%). An assumption would be that the 41.3 percent of the respondents might be unemployed or wish to change their present site of employment.

4.3 INFERENTIAL ANALYSIS OF THE DATA

Items 8 to 17 made use of a six-point interval scale where respondents were asked to give their perceptions about various aspects of the PNet website. Items on the relevancy, accuracy, timeliness, attraction, attitude, perceived usefulness, ease of use of content of the career page and quality of the website service were posed with strongly disagree on one end of the scale, and strongly agree at the opposite pole. There were 37 items in all, and they related to job seekers' perceptions about the PNet website, as an e-recruitment tool in South Africa. In an effort to reduce the number of correlating variables to a smaller and more parsimonious number, the researcher made use of principal component analysis (PCA) by using SPSS 20.0. As the researcher expected the various items to correlate with one another, direct oblimin was chosen as the rotation method (Field 2009:653).

4.3.1 The factor analytic procedure

The PCA procedure had a Kaiser-Meyer-Olkin value of 0.96, which according to Field (2009: 647) was superb. None of the items had measures of sampling adequacies (MSA) less than 0.7, and the Bartlett's sphericity were significant ($p < 0.0005$). Five first-order factors resulted, which explained 69.06 percent of the variance present. All of these factors had Cronbach reliability coefficients above the recommended 0.7, with 0.85 being the lowest and 0.96 the highest. However, all of the factors were negatively skew, as respondents tended to agree with the items posed. The researcher thus decided to attempt a second-order factor analytic procedure. The five first-order factors were subjected to another or successive factor analytic procedure. The KMO of 0.85 and Bartlett's sphericity of $p < 0.0005$ indicated that such a procedure would be plausible. The five factors were reduced to one factor only, which contained 37 items, explained 66.0 percent of the variance present, and had a Cronbach reliability coefficient of 0.96. It was named: Perceptions of job seekers about the PNet website as an e-recruitment tool. This factor was then explored in order to see how many outliers were present. On removing seven outliers, SPSS produced the following histogram and box plot. The responses that fell within the lower limit of 4.67 were 95 percent, and the

upper limit was 4.74, and standard error 0.02. These values indicate a normal distribution and hence parametric statistical procedures could be used to test for possible differences between the independent groups.

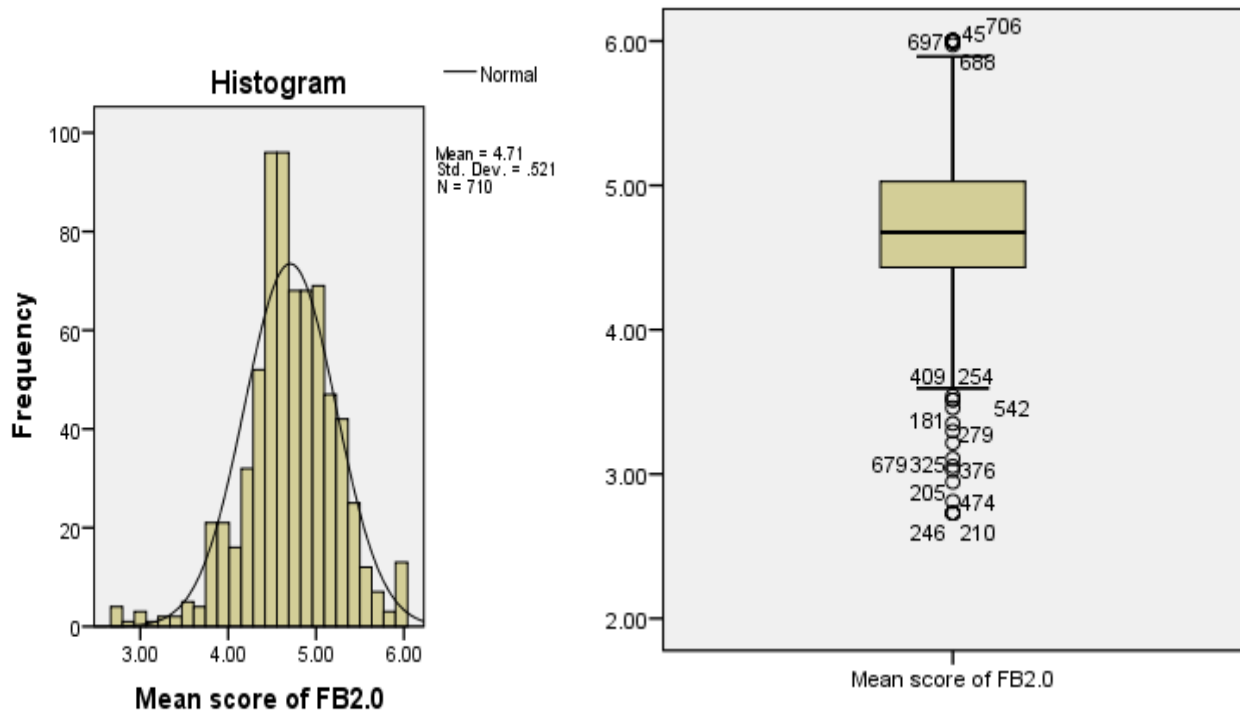


Figure 15: Histogram and box-plot of the perceptions of job seekers about the PNet website as an e-recruitment tool

The mean score of 4.71 indicated that the respondents tended towards agreeing with the factor. Moreover, the median value of 4.68 indicated that 50 percent of respondents had scores above this value and hence agreed with the various statements. Table 4.6 presents the items, together with their mean scores and standard deviations.

Table 7: The items in the factor perceptions of job seekers about the PNet website as an e-recruitment tool (FB2.0)

Item: Indicate the extent to which you agree or disagree with the following statements.	Mean	Std. Deviation	N
12D.I would encourage friends and relatives to consider PNet website	5.23013	.913148	717
12C.I would say positive things about PNet website to other people	5.19107	.917568	717
12E. Overall, my perception of the website as a future recruiter is positive	5.13250	.967642	717
12B. In my opinion, PNet website is a good website to spend time on	5.10181	.955408	717
Q17B.I consider this website as a potential future recruiter	5.29428	.865950	717
12A. Overall, I think this website is an attractive recruitment website	5.21757	.887576	717
Q17A. I intend to apply for a positions through this website	5.43794	.725135	717
Q17DI would be very likely to accept a job offer through the PNet website	5.14365	1.129965	717
Q10D with scale inverted	4.44770	1.289888	717
Q9D Scale inverted	4.16039	1.394600	717
Q10 C with scale inverted	4.44073	1.277617	717
Q9C. Relevancy scale inverted	4.12552	1.367369	717
Q15D with scale inverted	3.63459	1.551834	717
Q17C with scale inverted	4.25662	1.702275	717
Q15B.The PNet web site is user-friendly	5.20084	.883650	717
Q15C.I can quickly and easily obtain the career information I need	5.09763	.911722	717
Q15A. The PNet website is easy to use	5.22734	.868396	717
Q16A.I am satisfied with the searching methodology of PNet website	4.99163	.985899	717
Q15E.The career section provides easy to follow search paths	4.94003	.964757	717
Q16C. I am satisfied with the functions of the PNet website	5.00279	.994394	717
Q16B.I am satisfied with the quality of information generated from PNet website	5.03766	.916929	717
Q15F.The content of the career page is brief and focused, whereas more specific information is provided on demand	4.83264	.991526	717
Q14A.I believe, by using PNet I can find information quickly	5.05021	.897072	717
Q14B.I believe PNet website is an efficient job search tool	5.10739	.914449	717
Q14C. I believe, by using PNet website, it can help me to find useful information	5.04324	.901318	717
Q10A. The career section of PNet is accurate	4.94700	.889091	717
11B. The career information is current enough to meet my needs	4.80474	1.001859	717
11A. The career section provides up to date information which is relevant to me	4.93305	.965021	717
Q10B. The career section of PNet seems truthful to me	4.89679	.929320	717
Q9A. Visiting the career section provides me with relevant information	5.10600	.853799	717
Q9B. The information provided in the career section applies to me	4.87448	.935566	717
Q11C. The web site seems to provide the latest career information	4.91353	1.000446	717
13C.I make better career decisions because of information I get on PNet website	4.76709	1.104905	717
13D.Using PNet website provides me with career information that would lead to better career decisions	4.88285	1.039821	717
13B. By visiting PNet website, I have increased my knowledge of future careers	5.01674	.970083	717
13A.The use of PNet website has made me more aware of future career	5.11994	.902886	717
13E.I am more likely to find career information by visiting PNet website than through other sources of information	4.73361	1.127438	717

4.3.2 Comparison between two independent groups for significant differences between the factor means

When testing for significant differences between the factor means of two independent groups, Levene's t-test can be used. Levene's test is used to see whether the variances are different between the two groups involved. If the variances are similar ($p > 0.05$), then equal variances are assumed, and if they are significantly different ($p < 0.05$), then equal variances are not assumed. The only grouping that contained two independent groups was gender and Table 4.7 provides the appropriate data.

Table 8: Significance of differences between the two gender groups with respect to the perceptions of job seekers about the PNet website as an e-recruitment tool

Item	Group	Mean score	t-test (p-value)
The perceptions of job seekers about the PNet website as an e-recruitment tool (FB2.0)	Male	4.77	0.001**
	Female	4.64	

** = Statistically significant at the one percent level ($p < 0.005$)

* = Statistically significant at the five percent level ($p > 0.01$ but $p < 0.05$)

The data in Table 4.7 indicates that the male respondents agreed statistically significantly more strongly with the factor than female respondents did. The effect size was small ($r = 0.12$). Male respondents were thus significantly more positive in their perceptions about the PNet website as an e-recruitment tool than were female respondents. This finding can be attributed to self-efficacy or confidence in using the computer or the Internet. In the past studies, females have reported lower self-efficacy as compared to males (Durnell & Haag 2002:522; Sun & Zhang 2006:68; Li & Kirkup 2007:313). In line with Davis (1989:321) and Davis and Venkatesh (1996:20) self-efficacy strongly influences both perceptions of ease of use (PEOU) and perceived usefulness (PU) which are dominant determinants of technology acceptance. The higher the self-efficacy the more positive or favourable the (PU) and PEOU are likely to be.

4.3.3 Comparison between three or more independent groups for significant differences between the mean scores

When testing three or more independent groups for possible significant differences, the analysis of variance (ANOVA) can be used. If differences are found among all three groups taken together then post-hoc tests can be used to make a pair-wise comparison.

4.3.3.1 Qualification groups

The mean scores obtained by the various qualification groups are provided in Table 4.8 and graphically displayed in Figure 4.7

Table 9: Significance of differences between the various qualification groups with respect to FB2.0

Item	Group	Mean	ANOVA (p-value)	Pair-wise comparisons (Scheffe or Dunnett T3)						
The perceptions of job seekers about the PNet website as an e-recruitment tool (FB2.0)			0.002**		A	B	C	D	E	F
	A	4.76		A	/	-	-	-	-	**
	B	4.76		B	-	/	-	-	-	**
	C	4.71		C	-	-	/	-	-	-
	D	4.66		D	-	-	-	/	-	-
	E	4.72		E	-	-	-	-	/	-
	F	4.49		F	**	**	-	-	-	/

** = Statistically significant at the one percent level ($p < 0.005$)

* = Statistically significant at the five percent level ($p > 0.01$ but $p < 0.05$)

A= Grade 12/undergraduate at college

B= N6 or diploma

C= Undergraduate at university

D= University diploma

E= Bachelors degree

F= Postgraduate qualification.

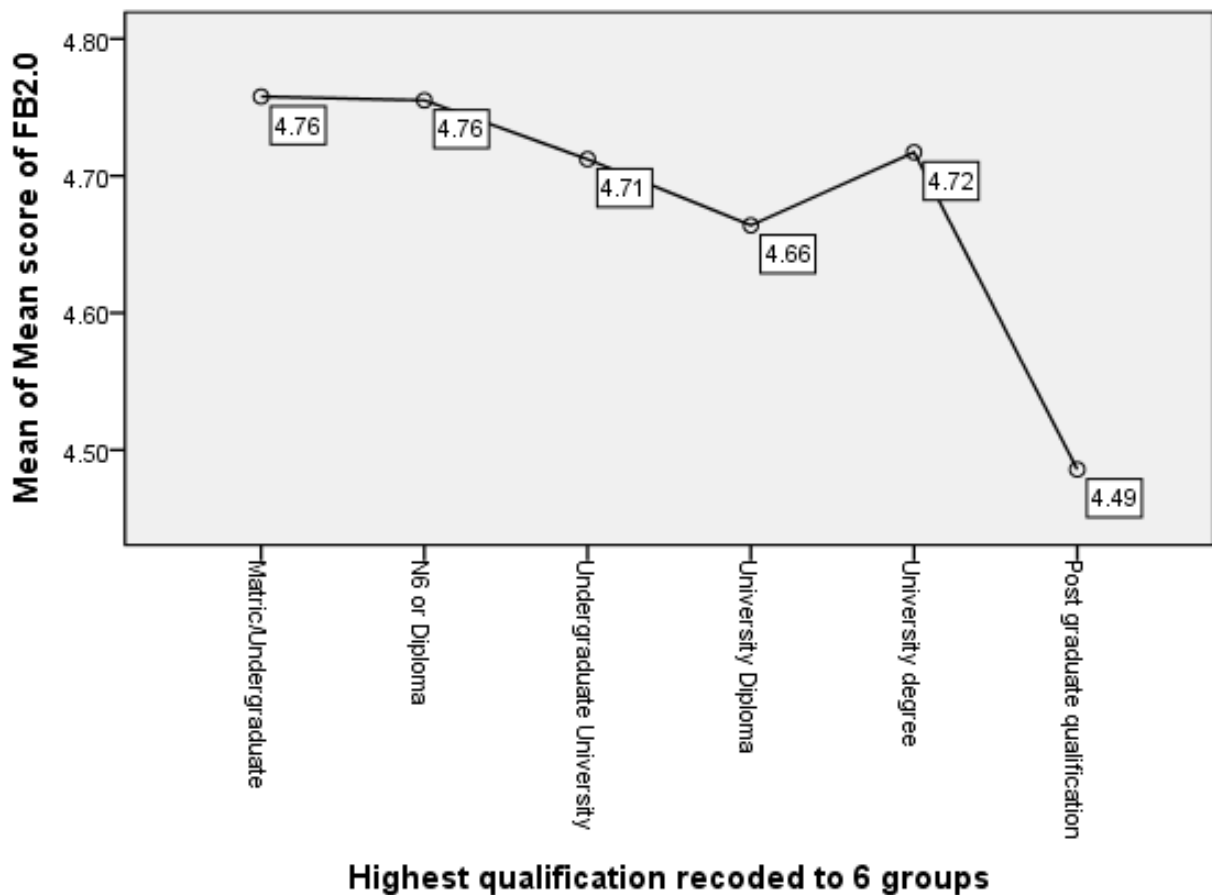


Figure 16: A line graph showing the mean scores as obtained by the various qualification groups.

The data and graph show that the respondents with the lowest educational qualifications agreed statistically significantly more strongly with the factor than did the respondents with postgraduate qualifications. The effect size was small ($r=0.16$). It would seem that the better-qualified respondents are, the less they agreed with the factor of the perceptions of job seekers about the PNet website as an e-recruitment tool, with the exception of the degree respondents. This perception may be attributed to the type of the website and its purpose as earlier explained in Chapter 2. General purpose boards are mostly used by recruitment agencies who post limited information about the vacancy and the employer (Lee 2005:60), hence niche job boards are emerging that are focused on recruiting competitively qualified applicants (Lee 2005:62). Information update remains a challenge as some agencies who post the vacancies on PNet may delay or forget to remove the vacancy that has been filled.

4.3.3.2 Age groups

There was statistically no significant difference between the four age group categories, even when collapsed to three groups [$F(2,707) = 1.66$; $p > 0.05$]. However, there was an inverse proportion in the sense that the younger the age groups the higher the agreement. Figure 4.8 depicts this tendency. It would seem reasonable that the older one becomes the less one would make use of a website such as PNet. It is also more difficult to get employment as one becomes older and hence perceptions would become negatively influenced in an inverse way with age.

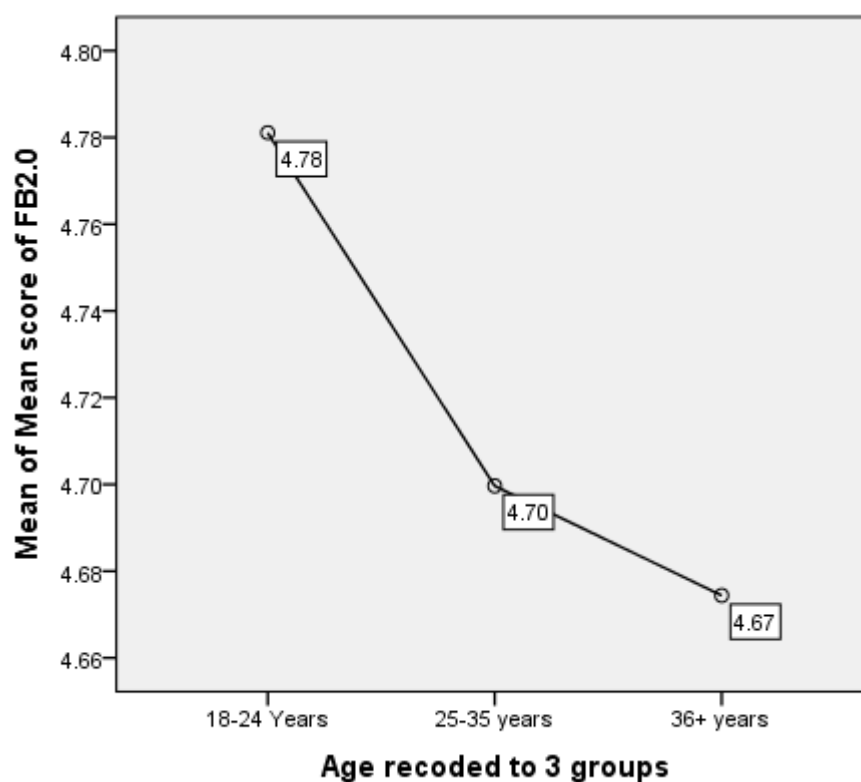


Figure 17: A line graph of age groups versus the factor mean of perceptions of job seekers about the PNet website as an e-recruitment tool.

4.3.3 Frequency of job searches using the web

At the univariate level, the ANOVA test indicates that there is a statistically significant difference between the four frequency of use groups [$F(3,705) = 2.95$; $p = 0.05$; $r = 0.11$]. However, no statistically significant difference could be found between the individual groups. Respondents who indicated that they use the website daily had the highest mean score (4.77), while respondents who indicated that they used it monthly had the second highest mean score

(4.71). The possible explanation to this finding is that respondents whose patterns are stable in using the PNet could be the result of more positive perceptions about the website as compared to those whose patterns are casual. For example, casual patterns could be unstable frequencies such as every two to three days usage; hence, the stable patterns scored the highest means.

4.4 THEORETICAL FACTOR ANALYSIS

The questionnaire contained nine theoretical factors or constructs and each one of the constructs had from three to four items that attempted to measure the construct. Table 4.9 provides a summary of the reliability of the various theoretical constructs.

Table 10: Reliability of the nine theoretical constructs of the PNet website

Theoretical construct	Number of items	Cronbach reliability
Q9.Information relevancy	4 (C and D inverted)	0.72
Q10.Information accuracy	4 (C and D inverted)	0.74
Q11.Information timeliness	3	0.85
Q12.Attraction to the website	5	0.93
Q13. Attitude towards	5	0.92
Q14. Perceived usefulness	3	0.93
Q15. Ease of use	4 (D inverted and removed)	0.90
Q16. Quality of service	3	0.91
Q17. Intention to apply	2 (C and D inverted- removed)	0.85

Each of the nine theoretical factors were tested for normality of distributions but all were negatively skew, and hence non-parametric procedures need to be used to test these theoretical factors and the independent groups. The factorial procedure method indicated that one factor, named the perceptions of job seekers about the PNet website as an e-recruitment tool (FB2.0), was the construct of interest. The theoretical factor analysis in Table 4.9 indicates that it is composed of nine sub-dimensions. When the second-order factor was tested for possible differences between males and females it was found that they do differ statistically significantly from one another with males having a mean score of 4.77 and females having a mean score of 4.64 with respect to the perceptions of job seekers about the PNet website as an e-recruitment tool.

It could be said that the nine theoretical factors are the underlying sub-dimensions on which the perceptions of job seekers about the PNet website as an e-recruitment tool are built. Thus, the question that now arises is on which of these nine sub-dimensions do male and female respondents differ?

4.4.1 Comparison between the gender groups for significant differences with respect to the nine sub-dimensions of the perceptions of job seekers about the PNet website

As all the distribution curves for the nine sub-dimensions were negatively skew, non-parametric statistical procedures will be utilised and only those sub-dimensions where significant differences were found will be discussed.

4.4.1.1 Information timeliness

Male respondents had a statistically significantly higher mean rank score (MRS=370.5) than females had (MRS=339.65). The data with respect to the timeliness sub-dimension was $U=57495.50$; $Z=-2.06$; $p=0.04$; $r=0.08$. Male respondents thus agreed more strongly with the timeliness of the information on the PNet website than female respondents did.

4.4.1.2 Attitude towards the PNet website

Male respondents agreed more strongly (MRS=372.24) with the attitude factor than female respondents did (MRS=335.84). The appropriate data was $U = 56853.50$; $Z=-2.259$; $p=0.02$; $r=0.09$. In the sample, tested males had a more positive attitude towards the PNet website than females did.

4.4.1.3 Usefulness of the PNet website

The mean rank score of males was 374.08 compared to the females 335.84. Hence, male respondents agreed to a statistically significantly greater extent with the usefulness of the PNet website than females did ($U=56179.50$; $Z=-2.59$; $p=0.01$; $r=0.10$).

4.4.1.4 Quality of the website

Again the male respondents (MRS=372.00) agreed to a statistically significantly greater extent with the quality sub-dimension than female respondents (MRS=338.04) did. The two

gender groups also differed statistically significantly in their mean ranked scores ($U=56940.0$; $Z=-2.302$; $p=0.021$; $r=0.09$). Male respondents were thus more positive about the quality of the PNet website than female respondents were.

When comparing three or more independent groups with one another, the Kruskal-Wallis test is the non-parametric counterpart of the ANOVA test (Field 2009:558). A comparison between the nine theoretical sub-dimensions against the six-qualification groups will be possible using this test. Only those sub-dimensions where statistically significant differences were found are discussed.

4.4.2 Comparison between the six qualification groups for significant differences with respect to the nine sub-dimensions of the perceptions of job seekers about the PNet website

4.4.2.1 Timeliness of PNet website

The Kruskal-Wallis test (H) indicated that the timeliness of information differed statistically significantly when all six qualification groups are considered together [$\chi^2(5) = 14.50$; $p=0.013$]. As there are six qualification groups, the comparisons were made selectively as the Bonferroni correction means that the 0.05 level must be divided by the number of comparisons made. Thus, if six groups are used, the p value is 0.008. Comparisons in this study were made between groups one with six and two with six, based on the analysis in Table 4.8. Hence, the significant p value was 0.025.

Group 1 was the grade 12/undergraduate at college group who had a mean rank of 152.39 compared to Group 6 who were postgraduates (MR=114.48). These two groups differed statistically significantly regarding the timeliness sub-dimension ($U = 5952.00$; $p=0.000$; $Z = -3.66$; $r=0.22$). Group 2, with an N6 or diploma, also differed statistically significantly from Group 6 respondents regarding the timeliness factor ($U=4794.00$; $p = 0.000$; $Z=0.005$; $r=0.18$). It seems reasonable to find a statistically significant difference between these groups regarding the timeliness sub-dimension, as the more qualified the person is, the higher the skills possessed. These skills may include assessment or interpretation of information at a different level, as well as attentiveness to details. Thus, better-qualified respondents can quickly realise if they come across the new or old information on the website.

4.4.2.2 Attraction of the website

With respect to the sub-dimension attraction to the website the Kruskal-Wallis test indicated that there was a significant difference between the various qualification groups [$\chi^2(5) = 11.50$; $p=0.04$]. When doing the post-hoc tests the Mann Whitney U test was utilised. A Group 1 comparison with Group 6 indicated that the grade 12/undergraduate at college group differed statistically significantly from the postgraduate group ($U=6301.000$; $Z=-3.06$; $p = 0.002$; $r=0.18$). Group 2 with an N6 or diploma qualification also differed statistically significantly from the postgraduate group ($U=4794.00$; $Z=-2.78$; $p=0.019$; $r=0.17$). Therefore, the significant p-value of 0.019 is met, as the probability value is less than the required Bonferroni correction of 0.025.

This difference could be ascribed to limited information about the job vacancy posted on the PNet website. As mentioned earlier, PNet as a general-purpose board allows recruiters to post limited information about the employer and the job (Lee 2005:60). It is thus possible that the attraction of well-qualified candidates to the employment website is mediated by the limited amount of information that is communicated to them (Zusman & Landis 2002: 289). Hence, highly qualified candidates, such as those with a postgraduate qualification, find the attractiveness to the website to be significantly less than respondents with lower qualifications find the attractiveness.

4.4.2.3 Attitude towards the website

The various qualification groups also differed from one another regarding their attitudes towards the PNet website [$\chi^2(5) = 19.07$; $p=0.002$]. It was again Group 6, the postgraduates, who differed from Groups 1 and 2 regarding the attitude towards the website. The postgraduates had a statistically significantly lower mean ranked score than did the grade 12/undergraduate at college and N6 or diploma group. For the Group 1/Group 6 comparison, the appropriate non-parametric values were ($U=5685.00$; $Z= -4.005$; $p=0.000$; $r=0.24$). For the Group 2/Group 6 comparison, the values were ($U=4472.00$; $Z=-3.41$; $p=0.001$; $r=0.20$). Concerning attitude, it is understood that it was an expected finding that is consistent with other important attributes of the website. According to Kardes *et al.* (2008:151), the extent to which a product satisfactorily meets one's expectations or needs would determine his or her attitude. In addition, the attributes of a product shape the attitude of the consumer; hence, consumers mostly already have attitudes in place before making a decision to purchase.

4.4.2.4 Ease of use of the PNet website

The Kruskal-Wallis test indicated that the various qualification groups differed statistically significantly from one another when considering all six groups together [$\chi^2 (5) = 25.72$; $p=0.000$]. The Mann-Whitney U-Test indicated that the lowest qualification groups, with grade 12 or undergraduates at college, differed statistically significantly from the postgraduate group ($U=5387.00$; $Z=-4.543$; $p=0.000$; $r = 0.27$). Group 2 also differed statistically significantly from the postgraduate group and the Mann-Whitney values were ($U= 4060.00$; $Z=-4.297$; $p=0.000$; $r=0.26$).

The important factors that influence perceived ease of use (PEOU) are familiarity and self-efficacy (Davis 1989:321; Davis & Venkatesh 1996:20). It may be worth exploring if experience regarding usage of the website can be related to PEOU. However, as most South Africans access the Internet at workplaces or schools (Brown, Letsididi & Nazeer 2009:1), and seek employment at different levels of their qualifications, it becomes reasonable to find differences among qualification groups, as time spent to familiarise themselves with the website is likely to vary.

4.4.2.5 Quality of the PNet website service

The Kruskal-Wallis test results were [$\chi^2 (5) = 16.90$; $p=0.005$]. The Mann-Whitney U-test for pair-wise comparison again indicated that Group 1 and Group 2 differed from Group 6 regarding the quality of the website service with the postgraduate group agreeing less strongly with the sub-dimension of quality service. For the Group 1/Group 6 comparison the values were ($U=5984.00$; $Z=-3.64$; $p=0.000$; $r=0.22$). The Group 2/Group 6 comparison gave similar results ($U=4362.00$; $Z=-3.73$; $p=0.000$; $r=0.22$). The lowest qualified groups thus agreed more strongly about the quality of the website service than did the postgraduate group. This finding was similar throughout this research. As quality of service is an overall individuals' judgement on how good or bad the service is (Tong *et al.* 2005:699) this finding is compatible with sub-dimensions that were measured earlier, where statistically significant differences between Group 6 and Group 1 or Group 2 were also found.

Having discussed each of the associations of each of the nine theoretical factors with the various independent variables, this researcher wished to determine which of these theoretical factors were the best predictors of job seekers' perceptions of the PNet website as a recruitment tool (FB2.0). Multiple regression analysis was used to assist in this regard.

4.5 USING MULTIPLE REGRESSION TO DETERMINE WHICH THEORETICAL FACTORS ARE THE BEST PREDICTORS OF FB2.0 AS OUTCOME

Making use of websites for job seekers in the South African context is a relatively new concept with respect to the other methods that companies use in recruiting employees. It would thus be useful to know which of the predictors used in the questionnaire were found to be the most important with respect to the PNet website. The outcome variable (FB2.0) can be found by using the multiple regression equation,

$$Y_{FB2.0} = (b_0 + b_9X_9 + b_{10}X_{10} +b_{17}X_{17})$$

where Y is the outcome variable, b_9 is the coefficient of the ninth predictor (X_9) and so on (Field 2009:210).

The researcher also added all nine theoretical factors as predictors, as it was uncertain which of these factors were significant predictors of the PNet website as an e-recruitment tool in the South African context. Table 4.10 provides the model produced by SPSS 20.0.

Table 11: The regression model with the theoretical factors as predictors of PNet as an e-recruitment tool

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.968 ^a	.938	.937	.13086	.938	1170.828	9	700	.000	1.943

a. Predictors: (Constant), Theoretical factor on intention to use, Theoretical factor on information relevancy, Theoretical factor on information timeliness, Theoretical factor on ease of use of the website(D Removed), Theoretical factor on information accuracy, Theoretical factor on attitude towards the website, Theoretical factor on attraction to the website, Theoretical factor on quality of website, Theoretical factor on perceived usefulness of the website

b. Dependent Variable: Mean score of FB2.0

The data in the model indicates that the theoretical factors explain 93.8 percent of the variance present in the outcome variable. Furthermore, it indicates that the change in the F-ratio is statistically significant ($p < 0.0005$). The Durban-Watson value is close to two, indicating that the errors in the regression are independent. The ANOVA model indicated that the model was a significant fit of the data overall [$F(9,700) = 1170.83$; $p = 0.000$]

In Table 4.11, the b-values in the multiple regression equation are provided in the second column as B values. In other words they provide the individual contributions of each theoretical factor to the outcome variable.

$$(PNet \text{ as recruitment} = b_0 + b_9 \text{ intention to use} + b_{10} \text{ information relevancy} + \dots b_{17} \text{ usefulness})$$

$$[PNet = 1.296 + (0.056 \text{ Intention to used}) + (-0.091 \text{ Information relevancy} + \dots)]$$

All nine of the theoretical factors were significant predictors of the outcome variable. The b-values were all positive, with the exception of information relevancy and accuracy, which were negative. The positive b-values indicate that as those predictors increased so does the outcome, namely the perceptions of job seekers regarding PNet as an e-recruitment tool. With respect to information accuracy and relevancy it needs to be remembered that the scales of the items were reversed and hence these two are more difficult to interpret. If the scale was reversed then the interpretation would still be a positive one with respect to the outcome variable. The standardised Beta value (β) indicates the importance of each predictor in the outcome variable. Thus, the attitude towards the website (.285) was the most important predictor, followed by information timeliness (.231), then attraction to the website (.182), usefulness of the website (.180), and so on.

Table 12: The coefficients of the regression model produced by SPSS 20.0

Model		Unstandardised Coefficients		Standardised Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.296	.044		29.272	.000
	Theoretical factor on information relevancy	-.091	.008	-.147	-11.314	.000
	Theoretical factor on information accuracy	-.093	.009	-.147	-10.932	.000
	Theoretical factor on information timeliness	.145	.008	.231	17.744	.000
	Theoretical factor on attraction to the website	.124	.011	.182	10.813	.000
	Theoretical factor on attitude towards the website	.173	.010	.285	17.769	.000
	Theoretical factor on perceived usefulness of the website	.120	.012	.180	9.865	.000
	Theoretical factor on ease of use of the website(D Removed)	.118	.012	.170	10.094	.000
	Theoretical factor on quality of website	.105	.011	.167	9.558	.000
	Theoretical factor on intention to use	.056	.010	.074	5.482	.000
a. Dependent Variable: Mean score of FB2.0						

4.6 SYNTHESSES OF TAM

As mentioned earlier in section 2.5.2, (TAM) is a model that is subjected to alterations through addition of other factors that may be of importance depending on the nature of the information system that is being investigated. With regard to PNet website, upon addition of six factors to the pre-existing (TAM) factors, all nine of the theoretical factors were significant predictors of the continued use of the PNet website. These nine theoretical factors were found to be independent of each other as discussed in section 4.5; the standardised Beta value (β) indicated the importance of each predictor in the outcome variable. However, the new model produced by SPSS indicated that the model was a significant fit of the data overall.

The perceptions of job seekers about the PNet website as an e-recruitment tool were founded on the nine theoretical factors used in the questionnaire. These factors relate to the relevancy, accuracy and timeliness of the information supplied, attraction to and attitude towards the website, the perceived usefulness of the website as well as its ease of use, the quality of

service provided and the persons intent to apply for a particular job. Also of note is that, out of the eight biographic and demographic variables, which served as independent variables, significant differences were found between the factor means of only gender, highest educational qualifications and frequency of website use. However, within frequency of website use, there was a significant difference between the four groups [$F(3,705) = 2.95$; $p=0.05$; $r= 0.11$] but there was no significant difference between the individual groups, hence the focus was on the gender and qualifications variables.

4.7 SUMMARY

This chapter presented analysis and interpretation of data gathered in previous chapter, as well as the rationale behind statistical techniques used. The objective of this chapter was to find out which perceptions influence job seekers to use the PNet website. According TAM, these perceptions predict the usage of the system through the intentions variable. However, in the current study, the intentions variable was not presumed as the best predictor, instead it was tested with the other eight variables to find out amongst them, which one can best predict the use of the PNet website. Attitude was found to be the best predictor of the PNet website use, followed by information timeliness, and then attraction to the website, usefulness, and so on.

CHAPTER 5: CONCLUSIONS, RECOMMENDATIONS AND LIMITATIONS

5.1 INTRODUCTION

This chapter highlights the overview of the study with objective to report on specific findings that led to conclusions made. Furthermore, to report on findings if they are congruent with similar studies conducted in the past, in order to determine the contribution of the current study. Lastly, recommendations and limitations will follow as the closure of the study.

5.2 STUDY OVERVIEW

Chapter 1 emphasised the primary objective of the study, the need to carry out the study (problem statement), as well as the background literature to the study. It served as a guide that structured the study as a whole, by briefly touching on research methodology, both the theoretical and empirical objectives that were to be met, as well as the highlight of contents of the rest of the chapters.

Chapter 2 mainly focused on literature pertaining to recruitment, technology paradoxes, market orientation, factors that influence the use of recruitment websites, theory of reasoned action, the technology acceptance model, and perceptions. The literature revealed that recruitment websites vary with sophistication, types, and designs, and as a result the cost of running the website and return on investment will also vary. Parry and Tyson (2008) and Lee (2011) emphasise the importance of setting out clear goals and expectations before huge investments are made in such technologies.

Interaction with technology is paradoxical in nature, and those who are faced with it tend to use different strategies to cope with the paradoxical nature of technology and these strategies change over time as they interact with a new products or services. Technological products often lead to rapid shifts in the marketing of these products and services. Consumer adaptation to these technological products and services thus also becomes important. Hence, the market orientation was explained extensively in order for e-recruitment service providers to seize opportunities in keeping up with these changes. Lastly, the technology acceptance model and the theory of reasoned action provided guidance on which perceptions to measure.

Chapter 3 described and discussed the research methodology used for the study, this included, the questionnaire's reliability and validity, statistical techniques, data collection, the population sample and the like. Chapter 4 focused on analysis and interpretation of the findings. In order to make conclusions about the study, it is essential to review if the set objectives were met.

5.3 CONCLUSIONS

The findings regarding the perceptions about PNet as an e-recruitment tool were that perceptions were positive overall, but varied in strength on certain demographic groups, as reported in Chapter 4. These perceptions presented a strong prediction regarding continued use of the PNet website on variables such as attitude towards the website, information timelines, attraction to the website, usefulness of the website, perceived ease of use (PEOU), and perceived quality of the website. The conclusions made were based on both theoretical and empirical objectives emanating from the findings of this study. Foremost, the theoretical objectives are discussed.

5.3.1 Theoretical objectives

5.3.1.1 To conduct a literature review on e-recruitment and job seekers' behaviour online.

The literature review on e-recruitment revealed diverse challenges regarding recruiters, job seekers, e-recruitment service providers and companies (Lang *et al.* 2011:33). E-recruitment as an e-commerce application was introduced in the early 1990s as the initiative of companies to reach a large pool of candidates over the Internet through the websites of the companies (Reynolds & Weiner 2009:4).

Advancements in technology and the Internet have led to great improvements in e-recruitment. Such improvements include emergence of different types of recruitment websites that vary in sophistication as well as social networks (Lee 2011). As a result, these challenges tend to differ in accordance with the sophistication of the website, type of website, and its capabilities.

According to the literature review, the job seeker's behaviour online is similar to that of the normal consumers when they choose a product from the store shelf. As the Internet is a commodity that is paid for, online job seekers choose to spend time on recruitment websites

that satisfy their particular needs. Despite the fact that job seekers generally do not pay for website recruitment services, they somehow seem intolerant of low quality websites as well as poorly designed ones (Tong *et al.* 2005:698).

5.3.1.2 To review benefits and constraints for e-recruiters, online job seekers and the organisations.

Advancements in these recruitment websites cause benefits and constraints to vary amongst e-recruiters, job seekers and organisations. Constraints will also vary according to the type of website and its capabilities, recruiters' knowledge and the organisations' resources. Fortunately, Lang *et al.* (2011:33) have compiled a list of the most important constraints and benefits, as shown in Chapter 2.

5.3.1.3 To conceptualise the nature of the relationship between e-recruiters and job seekers as well as the online labour market.

The relationship between e-recruiters and job seekers is an interaction of recruiters and job seekers on the recruitment website sharing employment information of their interest, with the prospect of filling a job vacancy. Typically, job seekers post résumés and recruiters post job vacancies on the recruitment website. They both use search mechanisms provided by the website to find specific information of interest about each other (Liu & Chen 2009:9416).

According to Liu and Chen (2009:9416), on one hand, the job seekers', specific information may include certain job titles, salary range, job vacancies at the particular physical location, and the like. On the other hand, recruiters may search for job candidates with specific work experience, qualifications, skills, attitudes and the like (Lee 2007:84).

As for the online labour market, it is characterised by recruitment websites advertising vacant job posts and résumés advertising skills compatible to fill those posts. Usually, job seekers initiate contact by applying for the advertised job post. However, the recruiter can initiate the contact if he or she finds the résumé that matches the requirements of the job advertised on the website (Lee 2007:84). According to Lee (2007), this is a convenient way of recruiters and job seekers finding each other and is subject to website function called, applicant tracking management subsystem. Having discussed theoretical objectives, empirical objectives will follow.

5.3.2 Empirical objectives

5.3.2.1 To ascertain online job seekers' perceptions about the PNet website as a tool to search for jobs opportunities.

The perceptions of job seekers about the PNet website as an e-recruitment tool were found to be based on nine theoretical factors. These factors were relevancy, accuracy and timeliness of the information supplied, attraction to and attitude towards the website, the perceived usefulness and ease of use of the website, the quality of service, and the persons intent to apply for a particular job. Job seekers' perceptions were found to be positive.

There was a statistically significant association between the perceptions of job seekers about the PNet website as an e-recruitment tool and their educational qualifications, as well as with gender of the respondents. Male respondents were found to be more positive than female respondents' regarding the timeliness of the information provided, in their attitude towards the website and in the usefulness and ease of use of the website. Respondents with higher educational qualifications were found to have less positive perceptions regarding the timeliness, attraction to, attitude towards, ease of use and quality of the PNet website, than respondents with lower educational qualifications.

The best predictor of the perceptions of job seekers about the PNet website as an e-recruitment tool was found to be the attitude they have about the website. The timeliness of the information supplied was the second best predictor of the outcome, while the usefulness of the website was the third best predictor.

5.3.2.2 To identify marketing strategies and methods applicable for e-recruiters

Marketing strategies for job vacancies is similar to that of marketing any other product (Maurer & Liu, 2007:307). As attention attraction is central to advertising, so is the attraction of job candidates' attention to apply for the job vacancy as advertised online. Therefore, attraction of job candidate guidelines as identified by (Zusman & Landis 2002:289; Arthur 2006:41 and Reynolds & Weiner 2009:76) were as follows:

The website's characteristics should be attractive in terms of technical format, textual format, layout, and colouring. Additionally, tools that ease the navigation of the site and allow direct access to the information that the viewer desires to see should be provided. Information that the jobseeker may desire to see includes simplified job descriptions, name and location of the

hiring company, job level, job challenges and opportunities, primary duties and responsibilities, working conditions, work schedule, salary range, required qualifications and experience, skills and the like. Not all the aforementioned information should be included in the job advertisement but rather an alternative link or button that leads to more information about the job advertised should be made available.

However, attractiveness alone may not necessarily draw job candidates to apply for the advertised job. The prerequisite is that the website itself should have a high traffic of visitors, if this prerequisite could not met, it is recommended that medias that reach a large pool of candidates should be used to draw potential job candidates' attention to the website to apply. One of methods is to place the short job advertisement on websites that have a high traffic and brand recognition, such as the general-purpose job boards, together with a link that leads job seekers to the website where information about the job vacancy is available.

5.3.2.3 To establish factors that influence online job seekers' and e-recruiters' decisions

The perceptions of job seekers about the PNet website as an e-recruitment tool were found to be based on nine theoretical factors, namely attraction to the website, perceived ease of use (PEOU), perceived usefulness (PU), attitude towards the website, quality of the website service, intentions to apply, information relevancy, currency and timeliness. As recruitment websites are virtual environments, whereby relevant information search is vital, job seekers search for job posts of their interest, likewise recruiters search or filter information of their interest.

The recruiters decisions about using the website are equally influenced by the degree to which the website retrieves the desired information at the right time (job applicant ready to fill the post), with minimum effort (easiness to filter the right applicant out of many), relevant information (the applicant that meets the requirements of the vacancy), and useful information (the applicant that actual occupies the vacancy).

5.4 RECOMMENDATIONS

Despite impressive results that showed that PNet customers (the job seekers) were satisfied with the overall performance or service delivered by the website, there are some theoretical

and empirical findings that are noteworthy for strategic decision making. Therefore, the following recommendations are made:

- As previously shown the higher qualified the respondents are, the less they are likely to use the PNet website. The highly qualified job seekers are more costly to recruit, that is, they represent a more lucrative market for recruiters and PNet could probably lose this segment of job seekers. These job seekers were less positive in their perceptions regarding information timeliness, quality of the website, attractiveness, and attitude towards the website.

It is recommended that PNet find more information about these well-qualified respondents, as they represent a lucrative portion of the market segment. Theoretically, the niche job-boards are the ones that PNet is likely to lose this lucrative market to, as they are characterised as communities for professional job seekers (Lee 2007:82). On obtaining this information, PNet should consider two options, namely either to enter into partnership with the niche board-type of website or compete fiercely with them depending on which option will lead to higher profitability. Alternatively, PNet should consider ways to improve the dimensions that were perceived as less positive in order to increase the retention possibilities of these well-qualified job seekers.

It is also recommended that PNet should give more attention to the attraction of females to their website. This will enable the PNet website to be more in line with the requirements of gender equity, thus serving as a vehicle to reduce possible gender discrimination and stereotyping.

- Based on the response rate of the questionnaire used to collect data, its easiness to administer online, and its user-friendliness, combined with its reliability and validity, it is recommended that PNet should take advantage of this opportunity by taking customer surveys from time to time in order to track changes in market for competitive edge.

5.5 CONTRIBUTIONS OF THE STUDY

This study advances literature in e-recruitment as well as extending the technology acceptance model in the context of South Africa. However, the study is subject to certain limitations that pave way for further research opportunities. Below is the discussion of contributions of the study viewed in the light of insights gained from the study as well research gaps that were identified prior to undertaking the study.

Firstly, most studies that tested or measured recruitment websites' usability and usefulness used a laboratory setting or students who were non users of the website; these studies include Williamson *et al.* (2003), Tong *et al.* (2005), Ibrahim, Ithnin and Muslim (2006), Van Birgelen, Wertzels and Van Dolen (2008), Thompson *et al.* (2008), and Lin (2010). The current study used participants that were the actual users of the website (job seekers). Thus, the study included the employed, unemployed, active, and possibly passive job seekers as users of the website with various demographics.

Second, the study extended the technology acceptance model (TAM) in e-recruitment in the context of South Africa. The finding with regard to attitude as the strongest predictor of website highlighted that the inclusion of attitude in TAM may depend on the extent to which users of the system or computer applications are familiar with it. This finding was contrary to the recommendation of Davis and Venkatesh (1996:20) of eliminating the attitude construct in order to increase the parsimony of TAM.

This finding also supports consumer behaviour literature that states that mostly, consumers' attitudes are already in place when they make a decision to purchase some or other product, other than to recall important attributes of the products in isolation (Kardes *et al.* 2008:151). Thus, attributes of the products shape the consumer's attitudes in order to make a purchase decision, especially if these attributes are at the consumers' discretion.

Lastly, the literature signalled that e-recruitment has grown to such an extent that it necessitates extensive description of recruitment websites used in studies. This is owing to the fact that recruitment websites have multiplied into different types and vary with level of sophistication. Different types of recruitment websites entail niche job boards, general-purpose boards, hybrid recruiting service providers, corporate career websites, e-recruiting consortiums and e-recruiting application service providers (Lee 2007).

5.6 STUDY LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

This study was subject to certain to limitations, which present further research opportunities as listed below.

- The study used purposive sampling (the actual users of the website), but since the sampling procedure was not probability based it is unlikely to provide a sample that accurately reflects the total population. Furthermore, a cross sectional survey method was used, thus results may represent only the perceptions of the respondents who were available at the time the survey took place. Therefore, future research should consider a longitudinal survey with the probability of including both passive job seekers and employed website users.
- Despite the positive perceptions about the PNet website, it remains unknown as to how satisfactorily the PNet service compared to other general-purpose boards such as Career Junction, JobMail, Careers24, Best Jobs and the like. A comparative study beyond the scope of perceptions will give a clearer indication on how well these websites are performing in the recruitment market.
- One important construct that was not measured was perceived risk, which includes risks such as privacy or security. This is owing to the fact that the data was collected from the actual user of the website and may raise security concerns among job seekers that they initially did not have. The theoretical factors all correlated significantly with one another indicating that they influence one another. However, exactly how they influence one another was not explored.
- Recruitment websites are environments that aim to satisfy the needs of both the job seekers and recruiters. Even though the primary customers were job seekers, the extent to which the website satisfies the recruiters' issues, such as ease of use to search or filter job applicants and usefulness attraction of high quality candidates, were not addressed.

Prior to the summing up the chapter, insights obtained from the study are discussed as concluding remarks.

5.7 CONCLUDING REMARKS

The most important factor that determines the success of any computer application is the extent to which those, whom the application was designed for, actually make the use of these applications. The use of these applications is mediated by perceptions of ease of use, usefulness, attractiveness, attitude, quality, timeliness, and the like.

Investment in these technologies compels the designers to aim at satisfying those who these applications were designed for, that is, the end-users become the primary customers. As a result, even job seekers are seen as customers, as online job advertisements are meant for them. Furthermore, these applications vary in categories and level of sophistication. In addition, the primary customers targeted to use these applications differ on certain demographics such as age, gender, experience, educational levels, and the like. These demographics can assist marketers to segment the target market.

Even though according to Davis (1989), potential users' perceptions should be considered at the beginning when the system or application is designed, market orientation and technology paradoxes explain that changes in the market demand constant market research. As a result, through market orientation, the business will be able to keep up with changes in the market and enable it to be competitive in the market in which it operates.

The purpose this study was to measure job seekers' perceptions about the PNet website as an e-recruitment tool, with the aim to determine the extent to which the website meets job seekers needs. This chapter reviewed the important findings of the study and elaborated on conclusions, recommendations and limitations thereof. Research on e-recruitment remains notably sparse, especially with regard to South Africa, and this presents countless research opportunities for both academics and practitioners. Findings and recommendations may bring to the attention of recruitment service providers or employers how knowledge about their markets can improve their businesses' profitability.

BIBLIOGRAPHY

AAKER, D. A., KUMAR, V. & DAY, G. S. 2004. *Marketing research*. 8th ed. New York: Wiley.

AHN, T., RYU, S. & HAN, I. 2007. The impact of Web quality and playfulness on user acceptance of online retailing. *Information & Management*, 44(3):263-275.

AJZEN, I. 1991. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2):179-211.

ARTHUR, D. 2006. *Recruiting, interviewing, selecting & orientating new employees*. 4th ed. New York: AMACOM.

BABBIE, E. 2007. *The practice of social research*. 12th ed. California: Wadsworth Cengage Learning.

BARBER, L. 2006. E-recruitment development, research networks. Institute for employment studies. 1 – 22. [Online]. Available at <<http://www.employment-studies.co.uk/pdflibrary/mp63.pdf>>. Accessed: 16/02/2012.

BARON, S., PETTERSON, A. & HARRIS, K. 2006. Beyond technology acceptance: understanding consumer practice. *International Journal of Service Industry Management*, 17(2):111-135.

BARTRAM, D. 2000. Internet recruitment and selection: kissing frogs to find princes. *International journal of selection and assessment*, 8(4):261-274.

BATINI, C., CAPPIELLO, C., FRANCALANCI, C. & MAURINO, A. 2009. Methodologies for data quality assessment and improvement. *ACM Computing Surveys*, 41(3):1-52.

BILLSBERRY, J. 2007. *Experiencing recruitment and selection*. Chichester: Wiley.

BLESS, C. & KATHURIA, R. 2008. *Fundamentals of social statistics: an African perspective*. 7th ed. Cape Town: Juta.

- BORITZ, J.E. 2005. IS practitioners' views on core concepts of information integrity. *International Journal of Accounting Information Systems*, 6:260-279.
- BRACE, I. 2010. *Questionnaire design: how to plan, structure and write survey material for effective market research*. 2nd ed. London: Kogan Page.
- BREAUGH, J.A. 2008. Employee recruitment: current knowledge and important areas for future research. *Human resource management review*, 18:103-118.
- BROWN, I., LETSIDIDI, B. & NAZEER, M. 2009. Internet access in South African homes: a preliminary study on factors influencing consumer choice. *EJISDC*, 38(2):1-13.
- BURNS, R.P. & BURNS, R. 2008. *Business research methods and statistics using SPSS*. London: Sage.
- CASALO, L., FLAVIAˆN, C. & GUINALIˆU, M. 2008. The role of perceived usability, reputation, satisfaction and consumer familiarity on the website loyalty formation process. *Computers in human behaviour*, 24:325-345.
- CELANI, A. & SINGH, P. 2011. Signaling theory and applicant attraction outcomes. *Personnel Review*, 40(2):222-238.
- CHANG, H.H. & CHEN, S.W. 2009. Consumer perception of interface quality, security, and loyalty in electronic commerce. *Information & Management*, 46:411-417.
- CHAPMAN, D.S. & WEBSTER, J. 2003. The use of technologies in recruiting, screening and selection for job candidates. *International journal of assessment and selection*, 11(2/3):113-120.
- CHIOU, W., LIN, C. & PERNG, C. 2010. A strategic framework for website evaluation based on a review of the literature from 1995–2006. *Information & Management*, 47:282-290.

- CHURCHILL, G. & IACOBUCCI, D. 2005. *Marketing research: methodological foundations*. 9th ed. Mason: Thomson South-Western.
- CONSTANTINIDES, E. 2004. Influencing the online consumer's behavior: the Web experience. *Internet Research*, 14(2):111-126.
- COOPER, C.R. & SCHINDLER, P.S. 2006. *Marketing research*. New York: McGraw-Hill Irwin.
- CRESWELL, J.W. & CLARK, V.L.P. 2011. *Designing and conducting mixed methods research*. 2nd ed. Los Angeles: Sage.
- DAVIS, F.D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3):319-340.
- DAVIS, F. D., BAGOZZI, R. P., & WARSHAW, P. R. 1989. User acceptance of computer technology: a comparison of two theoretical models. *Management science*, 35(8): 982-1003.
- DAVIS, F.D. 1993. User acceptance of information technology: system characteristics, user perceptions and behavioural impacts. *International Journal of Man-Machine Studies*, 38:475-487.
- DAVIS, F.D. & VENKATESH, V. 1996. A critical assessment of potential measurement biases in the technology acceptance model: three experiments. *International Journal of Human – Computer Studies*, 45:19-45.
- DU PLESSIS, P. & ROUSSEAU, G.G. 2003. *Buyer behaviour – a multi-cultural approach*. 3rd ed. Cape Town: Oxford University Press.
- DU PLESSIS, P. & ROUSSEAU, G.G. 2007. *Buyer behaviour – understanding consumer psychology and marketing*, 4th ed. Cape Town: Oxford University Press.

DURNDELL, A. & HAAG, Z. 2002. Computer self-efficacy, computer anxiety, attitudes towards the Internet and reported experience with the Internet, by gender, in an east European sample. *Computers in Human Behavior*, 18:521-535.

EGEA, J.M.O. & GONZÁLEZ M.V.R. 2011. Explaining physicians' acceptance of EHCR systems: an extension of TAM with trust and risk factors. *Computers in Human Behavior*, 27:319-332.

EVANS, M., JAMAL, A. & FOXALL, G. 2009. *Consumer behaviour*. 2nd ed. Chichester: Wiley.

FIELD, A. 2009. *Discovering statistics using SPSS*. 3rd ed. London: Sage Publications.

FIELDING, N., LEE, R.M. & BLANK, G. 2008. *The SAGE handbook of online research methods*. California: Sage Publications.

FOLKES, V.S. 1988. Recent attribution research in consumer behavior: a review and new directions. *Journal of Consumer Research*, 14:548-565.

GAISER, T.J. & SCHREINER, A.E. 2009. *A guide to conducting online research*. London: Sage Publications.

GATEWOOD, R.D., FIELD, H.S. & BARRICK, M. 2008. *Human resource selection*, 6th ed. Mason: Thomson Learning.

GOODWIN, C.J. 2008. *Research in psychology: methods and design*. 5th ed. Hoboken: Wiley & Sons.

GRAHAM, D. 2000. *Online recruiting: how to use the internet to find your best hires*. California: Davies-Black.

GRONHAUG, K. & NORWAY, B. 2002. Is marketing knowledge useful? *European Journal of Marketing*, 36(3):364-372.

- HAIR, F.J., BABIN, B., MONEY, H.A. & SAMOUEL, P. 2003. *Essentials of business research methods*. Hoboken: Wiley.
- HASAN, B. & AHMED, M.U. 2007. Effects of interface style on user perceptions and behavioral intention to use computer systems. *Computers in Human Behavior*, 23:3025-3037.
- HEIJDEN, H. 2003. Factors influencing the usage of websites: the case of a generic portal in The Netherlands. *Information & Management*, 40:541-549.
- HERNÁNDEZ, B., JIMÉNEZ, J. & MARTÍN, M.J. 2009. Key website factors in e-business strategy. *International Journal of Information Management*, 29:362-371.
- HINTON, P.R. 2004. *Statistics explained*. 2nd ed. New York: Taylor & Francis.
- HOE, S.L. 2008. Benefiting from customer and competitor knowledge: a market-based approach to organizational learning. *The Learning Organization*, 15(3):240-250.
- HOGLER, R.L., HENLE, C., & BEMUS, C. 1998. Internet recruiting and discrimination: a legal perspective. *Human Resource Management Review*, 8(2):149-164.
- HOYE, V.G. & SAKS, A.M. 2008. Job search as goal-directed behavior: objectives and methods. *Journal of vocational behaviour*, 73:358-367.
- HSIAO, C.H. & YANG, C. 2011. The intellectual development of the technology acceptance model: a co-citation analysis. *International Journal of Information Management*, 31:128-136.
- HU, C. SU, H. & CHEN, C. B. 2007. The effect of person-organisation fit feedback via recruitment web sites on applicant attraction. *Journal of Computers in Human Behavior*, 23:2509-2523.
- HUCK, S.W. 2004. *Reading statistics and research*, 4th ed. Boston: Pearson education.
- HUGHES, P., MORGAN, R.E. & KOUROPLATIS, Y. 2008. Market knowledge diffusion and business performance. *European Journal of Marketing*, 42(12):1372-1395.

IBRAHIM, O., ITHNIN, N. & MUSLIM, N.A. 2006. The Acceptance Behavior of Online Recruitment Users in Malaysia. *The Tenth Pacific Asia Conference on Information Systems*, 685-696. [Online]. Available <<http://www.pacis-net.org/file/2006/1135.pdf>>. Accessed: 02/03/2012.

JACKSON, S.L. 2005. *Statistics, plain and simple*. California: Thomson Wadsworth.

JAVALGI, R.G., RADULOVICH, L.P., PENDLETON, G. & SCHERER, R.F. 2005. Sustainable competitive advantage of internet firm: a strategic framework and implication for global marketers. *Journal of International Marketing Review*, 22(6):658-672.

JAWORSKI, B.J. & KOHLI, A.K. 1993. Market orientation: antecedents and consequences. *The Journal of Marketing*, 57(3):53-70.

JAWORSKI, B.J. & KOHLI, A.K. 1996. Market orientation: review, refinement, and roadmap. *Journal of Market Focused Management*, 1:119-135.

JOHNSON, D.S., BARDHI, F. & DUNN, D.T. 2008. Understanding how technology paradoxes affect customer satisfaction with self-service technology: the role of performance ambiguity and trust in technology. *Psychology & Marketing*, 25(5): 416-443.

KARDES, F.R., CLINE, T.W. & CRONLEY, M.L. 2008. *Consumer behaviour: science and practice*. Mason: Cengage Learning.

KELLEY, H.H. & MICHELA, J.L. 1980. Attribution theory and research. *Annual Review of Psychology*, 31(1):457-501.

KIM, S. & STOEL, L. 2004. Apparel retailers: website quality dimensions and satisfaction. *Journal of Retailing and Consumer Services*, 11:109-117.

KIM, Y.J., KISHORE, R. & SANDERS, G.L. 2005. From DQ to EQ: Understanding data quality in the context of e-business systems. *Communications of the ACM*, 48(10):75-81.

- KIM, D., LEHTO, X.Y. & MORRISON, A.M. 2007. Gender differences in online travel information search: implications for marketing communications on the internet. *Tourism Management*, 28:423-433.
- KINDER, T. 2000. The use of the Internet in recruitment – case studies from West Lothian, Scotland. *Journal of Technovation*, 20(2):461-475.
- KING, W.R. & HE, J. 2006. A meta-analysis of the technology acceptance model. *Information & Management*, 43:740-755.
- KIRCA, A.H., JAYACHANDRAN, S. & BEARDEN, W.O. 2005. Market orientation: a meta-analytic review and assessment of its antecedents and impact on performance. *Journal of Marketing*, 69(2):24-41.
- KOHLI, A.K & JAWORSKI, B.J. 1990. Market orientation: the construct, research propositions and managerial implications. *Journal of Marketing*, 54:1-18.
- LANG, S., LAUMER, S., MAIER, C. & ECKHARDT, A. 2011. A literature review on drivers, challenges and consequences of E-recruiting. In Proceedings of the 49th ACM SIGMIS-CPR annual conference on computer personnel research, May 31 - June 2, 2011. New York, USA. [Online]. Available at: <<http://dl.acm.org/citation.cfm?id=1982152>> Accessed: 06/03/2012.
- LEE, H., FIORE, A.M. & KIM, J. 2006. The role of the technology acceptance model in explaining effects of image interactivity technology on consumer responses. *International Journal of Retail & Distribution Management*, 34(8):621-644.
- LEE, I. 2005. The evolution of e-recruiting: a content analysis of fortune 100 career websites. *Journal of electronic commerce in organisations*, 3(3):57-68.
- LEE, I. 2007. An architecture for a next-generation holistic e-recruiting system. *Communications of the ACM*, 50(7):81-85.

- LEE, I. 2011. Modeling the benefit of e-recruiting process integration. *Decision Support Systems*, 51:230-239.
- LEE, Y. & KOZAR, K.A. 2006. Investigating the effect of website quality on e-business success: an analytic hierarchy process (AHP) approach. *Decision Support Systems*, 42:1383-1401.
- LEEDY, P.D. & ORMROD, J.E. 2010. *Practical research: planning and design*. 9th ed. New Jersey: Pearson Prentice Hall.
- LEGRIS, P., INGHAM, J. & COLLERETTE, P. 2003. Why do people use information technology? A critical review of the technology acceptance model. *Information and Management*, 40:191-204.
- LEONE, L., PERUGINI, M. & ERCOLAN, A.P. 1999. A comparison of three models of attitude-behavior relationships in the studying behavior domain. *European Journal of Social Psychology*, 29:161-189.
- LI, N. & KIRKUP, G. 2007. Gender and cultural differences in Internet use: a study of China and the UK. *Computers & Education*, 48:301-317.
- LIAW, S. & HUANG, H. 2003. An investigation of user attitudes toward search engines as an information retrieval tool. *Computers in Human Behavior Journal*, 19:751-765.
- LIAW, S. 2007. Computers and the Internet as a job assisted tool: based on the three-tier use model approach. *Computers in Human Behavior*, 23:399-414.
- LIEVENS, F. & HARRIS, M.M. 2003. Research on internet recruiting and testing: current status and future directions. *International Review of Industrial and Organizational Psychology*, 18:131-165.
- LIN, C. S., WU, S. & TSAI, R. J. 2005. Integrating perceived playfulness into expectation-confirmation model for web portal context. *Information & Management*, 42(5):683-693.

- LIN, B. & STASINSKAYA, V.S. 2002. Data warehousing management issues in online recruiting. *Human Systems Management*, 21:1-8.
- LIN, J.C. & HSIEH, P. 2006. The role of technology readiness in customers' perception and adoption of self-service technologies. *International Journal of Service Industry Management*, 17(5):497-517
- LIN, P & CHOU, Y. 2009. Perceived usefulness, ease of use, and usage of citation database interfaces: a replication. *The Electronic Library*, 27(1):31-42.
- LIU, C. & CHEN, S. 2009. Prioritization of digital capital measures in recruiting website for the national armed forces. *Journal of Expert Systems with Applications*, 36:9415-9421.
- LIVARI, J. 2005. An empirical test of the Delone-McLean model of information system success. *The data base for advances in information system*, 36(2):8-27.
- LOMAX, R.G. 2007. *An introduction to statistical concepts*. 2nd ed. New York: Taylor & Francis.
- LYONS, B.D. & MARLER, J.H. 2011. Got image? Examining organizational image in web recruitment. *Journal of Managerial Psychology*, 26(1):58-76.
- MALTBY, J. & DAY, L. 2002. *Early success in statistics*. London: Pearson education.
- MATT, B. & SCOTT, B. 2002. Preconceived perceptions to purchasing realities: species names carry powerful marketing images. *Hardwood review weekly*, 18(45):21-23.
- MAURER, S.D. & LIU, Y. 2007. Developing effective e-recruiting websites: insights for managers from marketers. *Business Horizons Journal*, 50:305-314.
- MCDANIEL, C. & GATES, R. 2008. *Marketing research essentials*. 6th ed. Hoboken: Wiley.

- MENGUC, B. & AUH, S. 2006. Creating a firm-level dynamic capability through capitalizing on market orientation and innovativeness. *Journal of the Academy of Marketing Science*, 34(1):63-73.
- MICK, D.G. & FOURNIER, S. 1998. Paradoxes of technology: consumer cognizance, emotions and coping. *Journal of Consumer Research*, 25:123-143.
- MINIWATTS MARKETING GROUP, 2012. Internet world stats: usage and population statistics. [Online]. Available at: <<http://www.internetworldstats.com/stats.htm>>. Accessed: 18/01/2012.
- MULLINS, J.W., WALKER, O.C. & BOYD, H.W. 2006. *Marketing management: a strategic decision-making approach*. Boston: McGraw-Hill.
- OGDEN, T. E., & GOLDBERG, I. A. 2002. *Research proposals: A guide to success*. 3rd ed. California: Academic Press.
- O'Leary, Z. 2004. *The essential guide to doing research*. London: Sage.
- O'SHOUGHNESSY, J. & O'SHOUGHNESSY, N.J. 2003. *The marketing power of emotion*. New York: Oxford University Press.
- PANAYOTOPOULOU, L., VAKOLA, M. & GALANAKI, E. 2007. E-HR and the role of HRM: evidence from Greece. *Personnel Review Journal*, 36(2):277-294.
- PARRY, E. & TYSON, S. 2008. An analysis of the use and success of online recruitment methods in the UK. *Human Resource Management Journal*, 18(3):257-274.
- PARRY, E. & WILSON, H. 2009. Factors influencing the adoption of online recruitment. *Personnel Review Journal*, 38(6):655-673.
- PICKETT-BAKER, J. & OZAKI, R. 2008. Pro-environmental products: marketing influence on consumer purchase decision. *Journal of consumer marketing*, 25(5):281-293.

QUESTER, P., NEAL, C., PITTIGREW, S., GRIMMER, M., DAVIS, T. & HAWKINS, D.I. 2007. *Consumer behaviour: implications for marketing strategy*. 5th ed. Canberra: McGraw-Hill.

REYNOLDS, D.H & WEINER, J.A. 2009. *Online recruiting and selection: innovations in talent acquisition*. Malden: Wiley-Blackwell.

RUSSELL, B. & PURCELL, J. 2009. *Online Research Essentials: designing and implementing research studies*. New York: Jossey-Bass.

SAON Group, 2012. About us. [Online]. Available at:
<<http://www.pnet.co.za/#s=content&x=69>>. Accessed 19/01/2012.

SCHIEFFER, R. 2005. *Ten key customer insights: unlocking the mind of the market*. Mason, OH: Thomson. SCHREURS, B.H.J. & SYED, F. 2011. Battling the war for talent: an application in a military context. *Career Development International*, 16(1):36-59.

SEARLE, H.S. 2006. New technology: the potential impact on surveillance techniques in recruitment practices. *Personnel Review Journal*, 35(3):336-351.

SEDDON, P.B. & KIEW, M. 1996. A partial test and development of Delone and Mclean's model of IS success. *Australasian Journal of Information Systems*, 4(1):90-109.

SHEPPARD, B.H., HARTWICK, J. & WARSHAW, P.R. 1988. The theory of reasoned action: a meta-analysis of past research with recommendations for modifications and future-research. *Journal of Consumer Research*, 15(3):325-343.

SHIH, H. 2004. Extended technology acceptance model of Internet utilization behavior. *Information & Management*, 41:719-729.

SINGH, P. & FINN, D. 2003. The effects of information technology on recruitment. *Journal of Labor Research*, 24(3):395-408.

SINGH, Y.K. & BAJPAI, R.B. 2007. *Research methodology: techniques and trends*. New Delhi: APH Publishing.

SNELL, S. & BOHLANDER, G. 2007. *Human resource management*, 1st ed. Mason: Thomson Learning.

SNOWDEN, S., SPAFFORD, J., MICHAELIDES, R. & HOPKINS, J. 2006. Technology acceptance and m-commerce in an operational environment. *Journal of Enterprise Information Management*, 19(5):525-539.

SOGOSURVEY, 2013. About us. [Online]. Available at :
< <http://www.sogosurvey.com/why-sogosurvey.aspx>> Accessed 08/03/2012

SØNDERGAARD, H.A., & HARMSSEN, H. 2007. Using market information in product development. *Journal of Consumer Marketing*, 24(4):194-201.

SOOBRAYAN, P.B. 2012. Education statistics in South Africa. 1 – 42. [Online]. Available at <www.statssa.gov.za/Publications/SASStatistics/SASStatistics2012.pdf>. Accessed: 11/05/2013.

STATISTICS SOUTH AFRICA. 2013. Census 2011 statistical release – P0301.4. [Online]. Available at <<http://www.statssa.gov.za/Publications/P03014/P030142011.pdf>>. Accessed: 11/05/2013.

STONE, D.L., STONE-ROMERO, E.F. & LUKASZEWSKI, K. 2006. Factors affecting the acceptance and effectiveness of electronic human resource systems. *Human Resource Management Review*, 16:229-244.

SUN, H. & ZHANG, P. 2006. The role of moderating factors in user technology acceptance. *International Journal of Human-Computer Studies*, 64:53-78.

SYLVA, H. & MOL, S.T. 2009. E-recruitment: a study into applicant perceptions of an online application system. *International Journal of Selection and Assessment*, 17(3):311-323.

SYNODINOS, N. 2003. The art of questionnaire construction: some important considerations for manufacturing studies. *Integrated Manufacturing Systems*, 14(3):221-237.

TEO, T., LEE, C.B., CHAI, C.S. & WONG, S.L. 2009. Assessing the intention to use technology among pre-service teachers in Singapore and Malaysia: a multigroup invariance analysis of the technology acceptance model (TAM). *Computers & Education* 53:1000-1009.

TEOA, H., OHA, L., LIUA, C. & WEIB, K. 2003. An empirical study of the effects of interactivity on web user attitude. *International Journal of Human-Computer Studies*, 58:281-305.

THOMAS, R.M. 2003. *Blending qualitative & quantitative methods in thesis and dissertations*. California: Corwin Press.

THOMPSON, L.F., BRANDDY, P.W. & WUENSCH, K.L. 2008. E-recruitment and the benefits of organizational web appeal. *Computers in Human Behavior*, 24:2384-2398.

TONG, D.Y.K. 2009. A study of e-recruitment technology adoption in Malaysia. *Journal of Industrial Management & Data Systems*, 109(2):281-300.

TONG, D.Y.K. & SIVANAND, C.N. 2005. E-recruitment service providers review – international and Malaysian. *Employee Relations Journal*, 27(1):103-117.

TONG, J.P.C., DUFFY, V.G., CROSS, G.W., TSUNG, F. & YEN, B.P.C. 2005. Evaluating the industrial ergonomics of service quality for online recruitment websites. *International Journal of Industrial Ergonomics*, 35:697-711.

VAN BIRGELEN, M.J.H., WERTZELS, M.G.M. & VAN DOLEN, W.M. 2008. Effectiveness of corporate employment web sites: how content and form influence intentions to apply. *International Journal of Manpower*, 29(8):731-751.

VAN RIJSWIJK, W., FREWER, L.J., MENOZZI, D., & FAIOLI, G. 2008. Consumer perceptions of traceability: a cross-national comparison of the associated benefits. *Food Quality and Preference*, 19(5):452-464.

- VENKATESH, V., & DAVIS, F. D. 2000. A theoretical extension of the technology acceptance model: four longitudinal field studies. *Management science*, 46(2):86-204.
- WANG, C.L., HULT, G.T.M., KETCHEN, D.J & AHMED, P.K. 2009. Knowledge\ management orientation, market orientation, and firm performance: an integration and empirical examination. *Journal of Strategic Marketing*, 17(2):99-122.
- WELMAN, C., KRUGER, F. & MITCHELL, B. 2005. *Research methodology*. Cape Town: Oxford University Press.
- WILEY, C. 1992. Recruiting strategies for changing times. *International Journal of Manpower*, 13(9):13-22.
- WILLIAMSON, I.O., LEPAK, D.P. & KING, J. 2003. The effect of company recruitment web site orientation on individuals' perceptions of organizational attractiveness. *Journal of Vocational Behavior*, 63:242-63.
- WIXOM, B.H. & TODD, P.A. 2005. A theoretical integration of user satisfaction and technology acceptance. *Information Systems Research*, 16(1):85-105.
- WOLFSWINKEL, J., FURTMUELLER, E. & WILDEROM, C. 2010. Reflecting on e-recruiting research using grounded theory. *European Conference on Information Systems*, 18:1-12.
- WU, J. & WANG, S. 2005. What drives mobile commerce? An empirical evaluation of the revised technology acceptance model. *Information & Management*, 42:719-729.
- YOUSAFZAI, S.Y., FOXALL, R.G & PALLISTER, J.G. 2007. Technology acceptance: a meta-analysis of the (TAM) Part 1. *Journal of Modeling in Management*, 2(3):251-280.
- ZIKMUND, W.G. & BABIN. B.J. 2007. *Exploring marketing research*, 9th ed. Mason: Thomson South-Western.

ZUSMAN, R.R & LANDIS, R.S. 2002. Applicant preferences for Web-based versus traditional job postings. *Computers in Human Behavior*, 18:285-296.

ANNEXURE A : COVER LETTER AND PERCEPTIONS ABOUT THE WEBSITE QUESTIONNAIRE



Dear Jobseeker,

Pnet together with Vaal University of Technology are conducting a research study focused on service quality of the website. Pnet values your opinion in order to improve its e-recruitment services. Therefore you have been chosen as one of the participants to fill the below questionnaire. The questionnaire takes approximately 10 minutes to complete. All survey responses will be held in strict confidentiality and will be disclosed in the form of statistical summaries.

Please note the following as you complete the questionnaire:

1. Please follow the instructions on how to fill all sections.
2. The questionnaire consists, sections A, B, C and D.
3. Please complete all sections as honestly as possible.

Should you have any enquiries regarding this questionnaire, please do not hesitate to call the contact provided below.

Kind regards,

Kali Lesuthu
Vaal University of Technology
Faculty of Management Sciences
Department of Human Resources
Cell: 082 956 6742
keldio51@gmail.com

JOB SEEKERS' PERCEPTIONS ABOUT THE PNET WEBSITE AS AN E-RECRUITMENT TOOL

Section A Demographic details

Please fill in this questionnaire by ticking in one of the boxes allocated at the end to the question.

1. Please indicate your gender?

Male ☐1
Female ☐2

2. Please indicate your age category?

18 - 24 years ☐1

25 - 30 years ☐2

31 - 35 years ☐3

36 and above ☐4

3. What is your highest level of education?

High School education (Grade 12) ☐1

Undergraduate at college ☐2

College education (N6) or diploma ☐3

Undergraduate at university ☐4

University diploma ☐5

University degree ☐6

Postgraduate degree (honors, Masters, etc) ☐7

4. Please fill in the name of your highest qualification -

5. Please fill in the your length of working experience for the industry you are seeking employment in _____

6. Please fill in the name of the industry or field you are seeking employment in _____

7. Please indicate your level of experience regarding job search using websites

0 – 1 Years ☐1

2 – 3 Years ☐2

4 – 5 ☐3

6 Years and above ☐4

8. Please indicate how often you do your job search using websites

Daily ☐1

Every 2- 3 days ☐2

Weekly ☐3

Monthly ☐4

Section B Perceptions about pnet website

Please indicate by ticking in one of the boxes at the end the statements to indicate to what extent do you agree or disagree with the statement using the six-point scale as shown below.

For example, I prefer to use a newspaper for job hunting. 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐.

You therefore strongly agree with the statement if you tick in the box next to 6 while lowest number represents that you strongly disagree.

Strongly Agree	agree	Partially agree	Partially Disagree	Disagree	Strongly disagree
6	5	4	3	2	1

1. Information relevancy

- (a) Visiting the career section provides me with relevant information 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (b) The information provided in the career section applies to me 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (c) The information given in the career section does not relate to me 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (d) The career section provides information that does not seem relevant to me 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

2. Information accuracy

- (a) The career section is accurate 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (b) The career information seems truthful to me 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (c) The career information provided seems to be incorrect 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (d) The career information looks inaccurate 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

3. Information timeliness

- (a) The career section provides up to date information 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (b) The career information is current enough to meet my needs 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐
- (c) The web site seems to provide the latest career information 6 ☐ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐

4. Attraction to the website

- | | |
|---|-------------------|
| (a) Overall, I think this website is an attractive recruitment website | 6□ 5□ 4□ 3□ 2□ 1□ |
| (b) In my opinion, this website is a good website to spend time on | 6□ 5□ 4□ 3□ 2□ 1□ |
| (c) I would say positive things about this website to other people | 6□ 5□ 4□ 3□ 2□ 1□ |
| (d) I would encourage friends and relatives to consider this website
for future job search | 6□ 5□ 4□ 3□ 2□ 1□ |
| (e) Overall, my perception of the website as a future recruiter is positive | 6□ 5□ 4□ 3□ 2□ 1□ |

5. Attitude toward the pnet website

- | | |
|--|-------------------|
| (a) The use of pnet website has made me more aware of future career opportunities | 6□ 5□ 4□ 3□ 2□ 1□ |
| (b) By visiting pnet website, I have increased my knowledge of future career opportunities | 6□ 5□ 4□ 3□ 2□ 1□ |
| (c) I make better career decisions because of information I get on pnet website | 6□ 5□ 4□ 3□ 2□ 1□ |
| (d) Using pnet website provides me with career information that would lead to better career decisions | 6□ 5□ 4□ 3□ 2□ 1□ |
| (e) I am more likely to find career information by visiting pnet website than through other sources of information | 6□ 5□ 4□ 3□ 2□ 1□ |

Section C

1. Perceived Usefulness of the pnet website

- | | |
|---|-------------------|
| (a) I believe, by using pnet I can find information quickly | 6□ 5□ 4□ 3□ 2□ 1□ |
| (b) I believe pnet website is an efficient job search tool | 6□ 5□ 4□ 3□ 2□ 1□ |
| (c) I believe, by using pnet website, it can help me to find useful information | 6□ 5□ 4□ 3□ 2□ 1□ |

2. Web site ease of use

- | | |
|--|-------------------|
| (a) The pnet web site is easy to use | 6□ 5□ 4□ 3□ 2□ 1□ |
| (b) The pnet web site is user-friendly | 6□ 5□ 4□ 3□ 2□ 1□ |
| (c) I can quickly and easily obtain the career information I need | 6□ 5□ 4□ 3□ 2□ 1□ |
| (d) I have to search too much to find information of interest to me | 6□ 5□ 4□ 3□ 2□ 1□ |
| (e) The career section provides easy to follow search paths | 6□ 5□ 4□ 3□ 2□ 1□ |
| (f) The content of the career page is brief and focused, whereas more specific information is provided on demand | 6□ 5□ 4□ 3□ 2□ 1□ |

3. Quality of pnet website service

- | | |
|--|-------------------|
| (a) I am satisfied with the searching methodology of pnet website | 6□ 5□ 4□ 3□ 2□ 1□ |
| (b) I am satisfied with the quality of information generated from pnet website | 6□ 5□ 4□ 3□ 2□ 1□ |

(c) I am satisfied with the functions of the pnet website

6□ 5□ 4□ 3□ 2□ 1□

Section D

1. Intentions to apply

(a) I intend to apply for a positions through this website

6□ 5□ 4□ 3□ 2□ 1□

(b) I consider this website as a potential future recruiter

6□ 5□ 4□ 3□ 2□ 1□

(c) If I was offered a job interview having applied through pnet website,
I would not accept it immediately

6□ 5□ 4□ 3□ 2□ 1□

(d) I would be very likely to accept a job offer through the pnet website

6□ 5□ 4□ 3□ 2□ 1□