

MASTER OF ARTS IN THE FIELD OF ORGANISATIONAL PSYCHOLOGY

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Employer Attractiveness, Career Orientation and
Self-perceived Employability

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Declaration

I declare that this research report is my own, unaided work.

It has not been submitted before for any other degree or examination at this or any other university.

L.K. Meehan

Date

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Chapter 1: Literature Review

1.1 Introduction

Human capital is becoming extremely valued in the competitive and dynamic modern working environment (Alniacik & Alniacik, 2012). This has led to employers attempting to make themselves “attractive” as they want to attract and retain high quality employees (Berthon, Ewing, & Hah, 2005; Botha, Bussin, & de Swardt, 2011; Ergun & Tatar, 2016). The focus of organisations has thus shifted from not only improving the quality of current employees within the company through, for example, training and development, but also to seeking potential employees of the highest potential and using the company brand to obtain these (Berthon et al., 2005). If organisations find and retain high quality employees that are better than their competitors, this is an advantage (Boxall, 1996; Nilsen & Olafsen, 2013).

There are thus an increasing number of studies that have looked at the roles played by various factors in determining employer attractiveness across different contexts (Ergun & Tatar, 2016). Factors such as gender, personality, and current employment have been looked at in terms of how they influence employer attractiveness, and corporate social performance has been looked at in terms of how it is attractive to employees (Arachchige & Robertson, 2013; Backhaus, Stone, & Heiner, 2002; Tuzuner & Yuksel, 2009). One factor that has not been sufficiently explored, especially in the South African context, is career orientation. Career orientation focuses on how one’s interests, skills, and abilities are used to make career goals and paths (Bravo, Seibert, Kraimer, Wayne, & Liden, 2015). This study will therefore contribute to existing theory and research by exploring the nature of the relationships between different career orientations and employer attractiveness in a sample of South African students/ soon-to-be graduates as well as the extent to which various career orientations predict the importance given to different employer attractiveness attributes.

In addition, the study seeks to identify whether the relationships between employer attractiveness and career orientation are moderated by self-perceived employability. This is important because the extent to which a person feels valuable as a potential employee might determine what factors they find

attractive in an employer; and could change the nature of the associations between the different career orientations and aspects of employer attractiveness. This study may therefore help to identify patterns which could inform recruitment practice and help companies to tailor their strategies to attract and retain high quality potential employees. It could also provide guidance to university students in South Africa with regards to finding suitable potential employers based on their goals and priorities. Guidance is particularly necessary as there are significant changes in the workplace currently taking place. Careers have changed from traditional forms to protean and boundaryless careers where individuals can no longer rely on organizations for promotions and career paths but now have to rely on themselves (Arthur, 1994; Bravo et al., 2015; Hall, 1996). Students are likely to need value-driven and self-directed career attitudes as they are now in charge of their career; in addition to this, students need to be willing and able to adapt to changing career environments (Arthur & Rousseau, 1996; Briscoe, Hall, & Frautschy DeMuth, 2006).

This research report is divided into four chapters. The first chapter provides an introduction to the research as well as a review of previous literature and the frameworks for each variable. The second chapter outlines the methods used to investigate the research questions, including the design, sample, instruments, procedure, ethical considerations, and data analysis. The third chapter outlines the results of the analyses. The fourth chapter gives a discussion of the findings of the research compared and contrasted with previous literature, strengths and limitations of the study, directions for future research, and conclusions.

1.2 Employer attractiveness

In order for organizations to be successful and competitive, they need to meet their vision, goals, and ultimately make a profit (Backhaus & Tikoo, 2004). However, this cannot be done without employees who are of a high quality who aid in the company's success (Backhaus & Tikoo, 2004). This has led to organizations putting a heavier focus on employer attractiveness than in previous years as a way in which to attract and retain high quality employees (Bakanauskiene, Zalpyte, & Vaikasiene, 2014). Employer attractiveness is "... the envisioned benefits that a potential employee sees in working for a

specific organization” (Berthon et al., 2005, p. 156). “Envisioned benefits” can be a variety of things, such as money or development, however these are anticipated and not necessarily what an employee actually gets in a job (Berthon et al., 2005). Employers need to display and market their attractive qualities and benefits so that potential employees will not only want to become employed by them but will also want to remain at the company (Sokro, 2012). Employer attractiveness has become an increasingly ‘hot topic’ as the ‘Best Employer’ status is something that more and more organizations are striving for (Pingle & Sodhi, 2011). The focus of employer attractiveness has also shifted from not only focusing on external customers but also to focusing on internal customers (Ewing & Caruana, 1999).

Employer attractiveness is a part of employer branding, which refers to the “package of functional, economic and psychological benefits, provided by employment, and identified with the employing company” (Alniaciak, Alniacik, Erat, & Akcin, 2014, p. 337). This suggests that organizations need to market their best features in order to stand out and attract top employees by creating an identity and reputation that are not only true, distinctive, and relevant but that also show the organization as the employer of choice (Berthon et al., 2005; Botha et al., 2011). Employer branding is believed to produce positive organisational results thus an increasing number of companies are putting more of an emphasis on it (Love & Singh, 2011). Employer branding is said to help employees to follow organisational values and to assist in employee attraction and retention (Love & Singh, 2011). Over and above this, employer branding reduces turnover, fosters creativity and innovation, and increases customer satisfaction and loyalty (Bakanauskiene, Bendearaviciene, & Bucinsaitė, 2016). Thus employer branding, including employer attractiveness, not only benefits employees but also the organisation and this should thus be a focus for all parties involved such as customers, shareholders, and management (Bakanauskiene et al., 2016).

Backhaus and Tikoo (2004) states that employer branding is a three-step process: employer value proposition, marketing, and promise keeping. The first step is to develop an understanding of what the organisation’s values are and what makes them unique (Backhaus & Tikoo, 2004). The second step is marketing which is how organisations choose to highlight their employer value proposition in order to

attract potential employees (Backhaus & Tikoo, 2004). The last stage is promise- keeping which involves making sure that the employer value proposition is true and that it is blended into the organisation (Backhaus & Tikoo, 2004). Organisations need to thus figure out their values and uniqueness in order to market themselves positively and to make sure they keep their promises of what they have to offer.

Employer attractiveness is also a part of the organisation's external and internal marketing (Pingle & Sodhi, 2011). Internal marketing is "the promoting of the firm and its product(s) on product lines to the firm's employees (Greene, Walls, & Schrest, 1994, p. 5). Greene et al. (1994) state that employees are internal customers and jobs are internal products thus internal marketing is focused within the organisation whereas external marketing focuses on people outside of the organisation in order to attract potential employees (Martin, Beaumont, Doig, & Pate, 2005). Thus employers need to be able to satisfy the needs of both internal customers and external customers in order to be considered attractive (Ewing, Pitt, De Bussy, & Berthon, 2002).

According to Gatewood, Gowan, and Lautenschlager (1993), job seekers make their initial decisions and perceptions based on the attractiveness of the employer and organisation. When a potential employee's values fit with the organisation's values and image; the organisation becomes attractive for the person and the potential employee will want to work there (Backhaus & Tikoo, 2004). Thus there is a type of psychological contract where the employer highlights his/her best qualities in return for high quality employees wanting to work for them (Backhaus & Tikoo, 2004; Rosethorn, 2009; Rousseau, 1990).

Organisations do not, however, have complete control over their employer branding (Wallace, Lings, Cameron, & Sheldon, 2014). Whether potential employees want to work at the organisation or somewhere else also depends on where the information they hear about the organisation comes from and whether there is clarity and consistency in the brand. If a potential employee hears negative information from a credible source, this can undermine the company's attractiveness and efforts to attract and retain employees (Erden & Swait, 1998). Potential employees seek information from peers

and word of mouth and not only from the organisation itself (Wilden, Gurdergan, & Lings, 2010).

Wilden et al. (2010) reported that employees with work experience were more cynical about employer branding than potential employees, and that applicants valued strong corporate brands. Potential employees also wanted specific information on topics such as development programmes, salary, job descriptions, and climate; not just general information on the organisation (Wilden et al., 2010).

Chandler MacLoed (2007) states that there can also be difficulties if there is a gap between what job seekers value in an employer and what employers perceive to be important to market. For example, Chandler MacLoed (2007) asked 2 186 job seekers what they wanted in an organisation and 436 HR professionals what they thought made their organisation attractive. The employers ranked recognising the brand, challenging and engaging work, and strong company values much more highly than the job seekers whereas the job seekers ranked a vibrant and positive work environment, salary and benefits, rewards and recognition, and fair pay more highly than the HR professionals (Chandler MacLoed, 2007). This example shows the importance of understanding the perspectives of potential employees as part of the employer branding and marketing process (Bellou, Chaniotakis, Kehagias, & Rigopoulou, 2015)

1.2. (a). Dimensions of employer attractiveness.

Ambler and Barrow (1996) identified three elements of employer attractiveness: functional/instrumental, emotional/ symbolic, and economic. Organisations attract employees through their developmental and training activities (functional); their salaries and benefits (economic), and through creating feelings of belonging and purpose (emotional) (Ambler & Barrow, 1996). Berthon et al. (2005) extended this perspective to five domains of employer attractiveness: interest, social, economic, development, and application value. Both of these sets of theories believe that employees are attracted to not only tangible benefits but also intangible benefits (King & Grace, 2010). In terms of employer branding, interest and social value are psychological benefits, development and application value are functional benefits, and economic value is the economic dimension (Ambler & Barrow, 1996; Berthon et al., 2005).

The first factor identified by Berthon et al. (2005), interest value, considers how employers attract employees by creating an exciting work environment and using employees' creativity to produce high-quality products and services (Berthon et al., 2005; Okafor, 2015). The second factor, social value, considers how employers provide a space for social interaction and team spirit; and the third factor, development value, focuses on employers providing recognition, self-worth, confidence, and training and development opportunities (Berthon et al., 2005; Okafor, 2015). The fourth factor, economic value, focuses on whether the employee is attracted to salary, job security, and promotions; and the last factor, application value, looks at whether the employee is attracted to employers who allow them to apply what they have learnt previously to work situations (Berthon et al., 2005; Okafor, 2015). These five factors represent "envisioned benefits" that students and potential employees may look for in an organisation.

In addition, companies try to add benefits to the ones mentioned above to convince customers they are the best option. Some examples of additional benefits include flexible hours, paid leave, health insurance, lunches provided by the office, and adding a gym in the workplace (Jones, 2017). These benefits are attractive to employees, make employees feel special, and help employers to gain and retain employees (Jones, 2017). Corporate social performance (CSP) is another factor that has been identified as attractive and something that potential job seekers look for in an organization (Backhaus et al., 2002; Jones, 2017). Corporate social performance is one's social responsibility to help people and the environment (Berman, Wicks, Kotha, & Jones, 1999; Wood, 1991). Backhaus et al. (2002) state that corporate social performance is important at all stages of the employment process, particularly when a potential employee is determining whether to take a job offer or not.

Other studies have also explored factors that attract potential employees. For example, Arachchige and Robertson (2011) analysed business students' perceptions of a preferred employer and developed a list of eight dimensions of employer attractiveness. The first factor that was of importance was how large, well-known, and/or profitable the company was as well as the type and quality of the company's products or services and quality management (Arachchige & Robertson, 2011). The second factor was how good the salary, compensation package, security, opportunities, and promotions the

company offered were; the third factor was the use of university knowledge, how socially responsible the company was, and how accepting the company was; the fourth factor was how customer-oriented, honest and fair, and happy the company was and appreciation from management; the fifth factor was how good the relationships and support the employees had from colleagues and supervisors was; the sixth factor was the amount of confidence, self-esteem, and experience the employee gained from the company; the seventh factor was how innovative and creative the company was; and the eighth factor was the level of fun, excitement, and respect in the company (Arachchige & Robertson, 2011).

Roy (2008) also identified dimensions of employer attractiveness of an employer brand in an Indian context. The first factor identified was application value which referred to the quality and innovation of the products and services as well as social responsibility and opportunities to give back (Roy, 2008). The second factor was interest value which focused on how exciting, forward thinking, creative, and customer-orientated the company was; the third factor was ethical value which referred to how ethical and strong the company culture was; the fourth factor was economic value which focused on how happy the environment was as well as how good the salary and compensation package was; the fifth factor was social value which focused on how fun the company was, how good relationships were, and how supportive colleagues and supervisors were; the sixth factor was psychological value which focussed on recognition and appreciation as well as feeling more self-confident; the seventh factor was career opportunities which referred to how good future employment and promotion opportunities were; and the eighth factor was development value which referred to how good the experience was, the security given, and how happy the work environment was (Roy, 2008).

Although these various factors have been identified as playing a role in employer attractiveness, it is also important that there is a fit between what employers provide and what employees want, and a benefit that is attractive to one employee may not be attractive to another (Berthon et al., 2005). This highlights the importance of carrying out research on employer attractiveness with different samples and in different contexts.

1.2. (b). Research studies exploring employer attractiveness.

There is a lot of research that has explored what different sets of students find attractive in potential employers (Arachchige & Robertson, 2013; Tuzuner & Yuksel, 2009). There is also research that has looked at identifying factors that affect employer attractiveness, such as gender, personality, and current employment (Alniacik & Alniacik, 2012; Tuzuner & Yuksel, 2009). Alniacik and Alniacik (2012) used a sample of 600 adults (300 employees and 300 students) and found a significant difference between the different types of employer attractiveness on the basis of gender: female respondents rated social value, market value, application value, and cooperation value higher than male respondents. There were, however, no significant differences in attractiveness ratings on the basis of personality and current employment (Alniacik & Alniacik, 2012). Tuzner and Yuksel (2009) obtained a sample of 286 people and found that age and education had a strong effect on how attractive an organisation was.

Reis and Braga (2016) focused on employer attractiveness from a generational perspective; they defined workplace generations according to Baby boomers, Generation X, and Generation Y. Baby boomers were born between 1946 and 1960; Generation X were born between 1961 and 1981; and Generation Y were born between 1982 and 2000 (Reis & Braga, 2016). They found that Generation Y in the workplace viewed fun, interests and challenges, autonomy, freedom, fast promotion, diversity, flexibility, recognition, feedback, positive environments, and relationships as more attractive than the older generations (Cavazotte, Lemos, & Viana, 2012; Ng, Schweitzer, & Lyons, 2010; Reis & Braga, 2016; Smola & Sutton, 2002). In contrast, they viewed the job itself and extrinsic rewards such as salary as less attractive than the older generations (Twenge, 2010). This is important to highlight as the current study primarily focuses on students from Generation Y thus it is expected that interest and social value will be scored high.

Arachchige and Robertson (2013) compared 221 postgraduate and undergraduate students in Sri-Lanka to find out whether there would be a difference in what they found attractive in an employer. They found that there was a difference between the students in terms of what attracted them to an

employer. The postgraduate students focussed on the social and personal aspects of the job rather than the actual tasks whereas the undergraduate students focussed on the tasks related to the job (Arachchige & Robertson, 2013). Furthermore, the undergraduates were more enthusiastic about using their knowledge acquired from university however they were concerned about their future career opportunities (Arachchige & Robertson, 2013).

Another study by ten Broek (2015) compared 306 Business and Economics Masters students to 72 employees from Saint-Gobain BV, in order to see if there were differences between what they thought was attractive in an employer. The results showed that there were no significant differences in means between the students and employees in terms of work-life balance, work methods autonomy, task identity, flexibility in the workplace, and corporate social responsibility (ten Broek, 2015). However, there were significant differences between the students and employees for organizational image, training and development, job security, employment conditions, team cohesion, diversity, familiarity, work scheduling autonomy, decision making autonomy, task variety, task significance, leadership style, and flexibility in working hours (ten Broek, 2015). Students rated flexible working hours, task significance, and training and development as more important than employees. In contrast, the employees rated job security, employment conditions, team cohesion, diversity, familiarity, autonomy, and leadership styles as more important for attractiveness than the students (ten Broek, 2015).

The studies above highlight that there are a large number of factors that influence employer attractiveness for both current and potential employees.

1.3. Career orientation

One factor that may play a role in determining employer attractiveness that does not appear to have been previously explored empirically is career orientation. This is slightly surprising as an individual will have a career attitude and an idea of what they want to achieve in their career; and this seems likely to play a role in determining who they would want as an employer (Bravo, Seibert, Kraimer,

Wayne & Liden, 2015). It must, however, be kept in mind that the concept of career orientation is quite new which could explain why there is very little research available.

Career orientation refers to "... the features of work that define one's career goals reflecting the individual's self-concept regarding his or her self-perceived values, interests, experiences, skills and abilities" (Bravo et al., 2015, p.2). Thus the focus is on an individual's career attitudes, career goals, self-development, and career path/ direction as key determinants of career decisions (Bravo et al., 2015). The concept of career orientation represents an extension of the theory of career anchors. Schein (1990) developed the theory which focuses on "what one is good at, what one's needs and motives are and what values govern one's work related choices" (p.2). Schein (1990) proposed eight dimensions: technical/ functional competence, managerial competence, security and stability, autonomy and independence, entrepreneurial creativity, service and dedication to cause, pure challenge, and lifestyle. However, since the theory was originally developed the work environment has become boundaryless and protean therefore the set structure of the original theory may no longer be true to the working world (Bravo et al., 2015). It is also believed that individuals may be able to have more than one career orientation and furthermore that their career orientations may change over a period of time; thus Bravo et al. (2015) developed the concept of 'career orientation' as a way to extend the original career anchor theory and address the concerns raised.

In a traditional career, the individual had to follow the linear path prescribed by the organisation and success was judged on the basis of external indicators such as salaries and promotions (Akhtar, 2011; Levinson, 1978; Sullivan & Baurch, 2009). However, because of the change to a dynamic work environment where individuals cannot rely on the organisation for promotions and career paths, the concept of boundaryless/ protean careers has become more relevant (Arthur & Rousseau, 1996; Briscoe & Hall, 2006). Along with the dynamic work environment, there has been an increase in global trade, technology, and diversity that the traditional career is not well-suited for (Arthur & Rousseau, 1996; Sullivan & Baruch, 2009). The traditional career is fixed and thus can only unfold in a single organizational setting whereas boundaryless careers are not constrained by physical and psychological boundaries (Arthur & Rousseau, 1996; Briscoe & Hall, 2006). Careers that are

boundaryless are also guided by the individual's internal values and needs, and are able to hold up to changing career circumstances (Bravo et al., 2015; Briscoe et al., 2006). Career orientation is an internal career feature which is futuristic as it entails where the individual sees themselves going, what the individual believes career success is, and what they feel their role within the workplace should be like (Akhtar, 2011). This is a result of the internal career focus on one's self-perceived talents and abilities, motives and needs, attitudes, and values instead of those prescribed by an organisation (Clinton-Baker, 2013).

Career anchors can guide selection, placement, and development (Allen & Meyer, 1990). Matching career opportunities and job requirements to career anchors can also increase retention (Coetzee & Schreuder, 2013; Jaao & Coetzee, 2011; Ramakrishna & Potosky, 2003). Furthermore, Allen and Meyer (1990) state that organisations need to understand the relationship between career anchors and organisational commitment and use this to their advantage. All of these advantages would also apply to career orientation which is based on the theory of career anchors (Bravo et al., 2015).

1.3. (a). Types of career orientation.

Bravo et al. (2015) proposed six dimension or types of career orientation: entrepreneurial creativity, security, service to a cause, lifestyle, managerial, and technical/ functional. Entrepreneurial creativity involves an orientation towards creating something entirely from the start but also something that is entirely one's own (Feldman & Bolino, 1996; Schein, 1978). Security focuses on the money and stability jobs give that make the employee feel safe (Feldman & Bolino, 1996; Schein, 1978; 1990). Service to a cause is an orientation to not only work but also to have a job that aligns with one's values and ultimately helps society (Coetzee, Bergh, & Schreuder, 2010). Lifestyle is about allowing integration between the employee's personal life and career (Petroni, 2000). Managerial orientation is an individual's desire to not only have power and achieve great success but to also reach management positions (Feldman & Bolino, 1996; Schein, 1978; 1990). Lastly, technical/ functional is the individual's orientation towards developing their skills, being challenged, and growing their knowledge and expertise in their field (Bravo et al., 2015).

Feldman and Bolino (1996) proposed an octagonal model and although it applied to career anchors it can also apply to Bravo et al.'s (2015) six elements of career orientation. This theory proposes that although the career orientations are separate they can also relate to other career orientations (Feldman & Bolino, 1996). For example, Feldman and Bolino (1996) suggest that the managerial and entrepreneurship orientations are correlated, service to a cause and lifestyle orientations are correlated, and the technical/functional and security orientations are correlated; and also suggest that the security and entrepreneurship orientations and the managerial and service orientations are not related (Feldman & Bolino, 1996).

1.3.(b). Research studies exploring career orientation.

Bravo et al. (2015) carried out a study on 512 employees in the United States that explored career orientation; they found that career orientation was correlated with proactive personality, career self-management, mentoring by senior colleagues, and attitudes to one's work (Bravo et al., 2015). In particular, an entrepreneurial orientation was related to proactive personality and career self-management; a security orientation was related to desire for upward mobility; a managerial orientation was related to proactive personality, desire for upward mobility, mentoring received, and career self-management, and a technical/functional orientation was related to a desire for upward mobility (Bravo et al., 2015).

The concept of 'career orientation' as presented by Bravo et al. (2015) is relatively new thus there are not a lot of research studies available about the factors that may influence or may be influenced by it; however there is a lot of work available using Schein's (1978) career anchors theory which was the basis for career orientation. Research has shown that there are relationships between the various career anchors and job type; for example, police officers have been linked to the technical orientation, pharmacists have been linked to the general managerial orientation and service to a cause, teachers have been linked to the autonomy orientation, salespeople have been linked to pure challenge, and jobs with flexibility have been linked to the lifestyle orientation (van Sittert, 2006). Career anchors have also been linked to personality (van Sittert, 2006). Sensing/intuition has been linked to the technical, security, autonomy, service to a cause, pure challenge, and entrepreneurial creativity

anchors (van Sittert, 2006). Thinking/feeling has been linked with general management and judgement/perception has been linked to the technical, security, and pure challenge anchors (van Sittert, 2006).

In terms of the link between the traditional career anchors and employer attractiveness, Heckert et al. (2002) carried out a study with a sample of 371 students (261 females and 110 males) that looked at how gender would influence the link between these. They found that females put more of an emphasis on working conditions, career certainty, and working hours than men. Jacobs, Renard, and Snelgar (2014) carried out a study with a sample of 208 participants from a South African retail organisation. They also found that females were more focused on intrinsic rewards, attachment, and affiliation than males.

These findings suggest that there may also be a link between career orientation and employer attractiveness.

1.3.(c). Career orientation and employer attractiveness.

There appears to be no empirical work that directly addresses the relationship between career orientation and employer attractiveness, nonetheless based on the theory it seems plausible that there could be associations between the two concepts. For example, if someone has an entrepreneurial creativity orientation then the person could be strongly drawn towards the interest and developmental dimensions in an employer. This is a result of their desire to create and develop which could attract them to work environments that are perceived as innovative and exciting and that acknowledge and develop their skills (Berthon et al., 2005; Bravo et al., 2015). If someone has a technical/functional or a service to a cause orientation then that person may be drawn towards application value. This is because their desire to become an expert or improve the world could attract them to work environments that help them apply themselves and teach others (Berthon et al., 2005; Bravo et al., 2015). If someone has a lifestyle orientation then that person may be drawn towards social value in an organization. This is because their desire to be flexible and to have a balance between their family and work life could attract them to work environments that are perceived as group-oriented and happy (Berthon et al., 2005; Bravo et al., 2015). If someone has a security orientation then that person may

be drawn towards economic value because their desire to be secure in their job and finances could attract them to work environments that are perceived as having good benefits and promotional opportunities (Berthon et al., 2005; Bravo et al., 2015). All of these relationships seem plausible based on the theory but need empirical verification hence the importance of this study.

Career orientation is based on factors such as level of experience which vary at a particular time. Therefore it is necessary to explore the links between career orientation and employer attractiveness at different employment stages because there may be variations as people age or gain experience (Bravo et al., 2015). This study focuses on soon-to-be-graduates as a sample because these individuals are at the start of their careers and will have different orientations and perceptions of what attracts them to an employer than more experienced employees. In addition, soon-to-graduates will shortly begin to look for employment and are a vital target group for employers (Guglielmino, 2013).

1.4. Self-perceived employability

Employability is “the ability to realise potential through sustainable employment” (Hillage & Pollard, 1998, p. 24). It consists of an individual’s knowledge, skills, and attitudes that can either aid or detract from the individual gaining and sustaining a job (Hillage & Pollard, 1998).

Rothwell (2015) identified four perspectives that have been used to study employability: political, educational, human resource management, and individual. Political focuses on reducing unemployment and social disadvantages; educational focuses on graduates’ access to the labour market; human resource management focuses on strategies for individuals to sustain their career, and individual focuses on an individual’s ability to find and keep a job (Rothwell, 2015). Within the individual perspective there are three main approaches: competence-based employability, trait-based individual employability, and self-perceived employability (Rothwell, 2015). Competence-based employability analyses the skills and abilities of an individual looking for a job and trait-based individual employability analyses the proactive attitude an individual has when looking for a job and keeping the job (De Vos, De Hauw, & Van der Heijden, 2011; Fugate & Kinicki, 2008).

Self-perceived employability looks at how successful an individual believes they will be in acquiring and maintaining employment (Rothwell, Herbert, & Rothwell, 2008). Self-perceived employability is “what individuals seeking a particular type of work believe their chances of success are” (Rothwell et al., 2008, p. 1). For students, self-perceived employability reflects their belief that they will acquire full-time employment after graduating and their belief that the job they acquire will be in line with their qualification level (Bernston, Sverke, & Marklund, 2006; Rothwell et al., 2008).

Self-perceived employability is important for employees as they must not rely on organisations for career planning and job security but also must manage their own career (Petrovic & Cizmic, 2015). Employees need to be aware of internal factors such as knowledge and skills, seeking employment, and potential to learn, and external factors such as the external labour market (Forrier & Sels, 2003; Hillage & Pollard, 1998). This awareness of self and the environment is then used when reflecting on what the person believes their chance of success is (Drazic, Petrovic, & Vukelic, 2018; Rothwell et al., 2008).

Rothwell et al. (2008) developed a theoretical model that proposes several dimensions of self-perceived employability, namely: personal attributes, occupational attributes, internal factors, and the external labour market (Rothwell & Arnold, 2007). Rothwell et al. (2008) then constructed a self-perceived employability matrix consisting of four components: ‘my university’ which looks at brand reputation and image of the university; ‘my field of study’, which focuses on demand in the field; ‘the state of the external labour market’, which looks at job opportunities and perceptions about the labour market; and ‘self-belief’, which looks at perceptions about internal factors of the individual such as skills and knowledge (Karli, 2016; Rothwell et al., 2008). Although the four dimensions exist, the model can also be used to give a single indicator of general self-perceived employability, represented by a single score.

1.4.(a). Research studies exploring self-perceived employability.

Research suggests that university ranking does not necessarily determine level of self-perceived employability however biographical characteristics and subject choice can influence self-perceived

employability (Rothwell et al., 2008; Strathdee, 2002; Vargas, Sanches-Queija, Rothwell, & Parra, 2018). Qenani, MacDougall and Sexton (2014) found that self-perceived employability is affected by self-efficacy and self-perception and Cuong and Lu (2018) found that mentoring, cooperative learning, and internships affect the self-perceived employability of students.

There appear to be no studies that have looked at the link between self-perceived employability and employer attractiveness. However, there are certain patterns and links between the two concepts such as the importance of self, the importance of self-esteem, and the need for people to look internally and externally before deciding what they find attractive or knowing how successful they will be (Potgieter, 2012). In addition, it seems possible that if an employee does not believe they will be successful in their work, they may not be as concerned about attractiveness and may simply take any job that is available because they lack the confidence needed to get the best employer (Berthon et al., 2005; Rothwell et al., 2008). Furthermore, there appear to be no studies that have looked at the relationship between career orientation and self-perceived employability however Oosthuizen, Coetzee, and Mntonintshi (2014) present theory that points towards a link between the two variables. Oosthuizen et al. (2014) investigated the relationship between career anchors and psychosocial employability in a financial company. For career anchors they used Schein's (1978) conceptualization and for psychosocial employability they focused on meta-capacities such as proactivity, self-efficacy, career self-management, and career resilience (Botha, 2014; Bezuidenhout & Coetzee, 2010). The results showed significant positive correlations between the pure challenge, technical, and service to a cause anchors and psychosocial employability (Oosthuizen et al., 2014). This indicates that certain career anchors were associated with factors linked to aspects of self-perceived employability such as one's ability to take control of and make decisions about one's career; this suggests that there may be an association between career orientation and self-perceived employability as well.

There appear to be no empirical studies that have directly addressed the relationship between career orientation, employer attractiveness, and self-perceived employability. However, based on the theory, it is plausible that self-perceived employability could moderate the relationships between various career orientations and different dimensions of employer orientation. For example, if a person has a

higher level of self-perceived employability, then they may focus less on economic value and more on development, application, social, or interest value. They might feel that it would be easy to find other employment and thus be less drawn to an organisation based on financial incentives and security (Berthon et al., 2005; Rothwell et al., 2008). Similarly, if a person has a higher level of self-perceived employability, then they may also have less orientation towards security or lifestyle compared to the other orientations (Bravo et al., 2015; Rothwell et al., 2008). Thus an individual's level of self-perceived employability may be related to different career orientations and attractiveness factors, and may alter the nature of the relationships between these two factors (Baron & Kenny, 1986). This seems plausible based on the theory but requires verification hence this provides further reiteration that this study is necessary.

1.5. The current study

By analysing the literature, it is plausible to propose that there could be significant relationships between the various career orientations and different dimensions of employer attractiveness; furthermore, both of these constructs could be related to self-perceived employability and their relationships to one another could be moderated by self-perceived employability. There are, however, no empirical studies which have explored these proposals directly. The theory suggests that an individual's values, needs, and goals may predict what they find attractive in an employer and also that an individual's feelings about their self-perceived employability may change the nature of the relationships between employer attractiveness and career orientation (Berthon et al., 2005; Bravo et al., 2015; Rothwell et al., 2008). This study seeks to explore this by addressing the following research questions:

a) What are the nature of the relationships between the various career orientations (entrepreneurial creativity; security; service to a cause; lifestyle; managerial; and technical/ functional) and the relative importance given to different employer attractiveness factors (interest; social; economic; development; and application) in a sample of soon-to-be-graduate South African university students?

- b) To what extent do the various career orientations predict the relative importance given to the different employer attractiveness factors in this sample?
- c) To what extent are these relationships, if any, moderated by self-perceived employability?

Chapter 2: Methods

This chapter will outline the research design adopted for the study, the sampling strategy that was used, and the subsequent sample that was obtained. The instruments used to measure the variables will be described, and the procedure for the study will be outlined. Lastly, ethical considerations and the methods used for data analysis will be explained.

2.1. Research design

This study made use of quantitative methodology and the data was thus collected in quantifiable form and analysed statistically (Newman & Benz, 1998). Although this method lost the in-depth analysis available in qualitative studies, the purpose of this study was to find patterns, interpret, and generalize to the larger population (Newman & Benz, 1998). The research design was a non-experimental, correlational design as there was no manipulation of the independent variable, no random assignment, and no experimental and control group, and the study focused on establishing relationships between the variables (Smith & Mackie, 2009; Whitley, Kite, & Adams, 2012). The correlational design used in the study was able to show the strength and direction of the relationships between the variables however it did not show causal conclusions and did not explicitly outline why the variables were related (Smith & Mackie, 209; Stangor, 2011).

This study was cross-sectional as the data was analysed from a particular sample at only one point in time (Levin, 2006). In order to gain the data, questionnaires were used as they are time and cost-effective and can be used on large sample sizes (Babbie, 2008). Using a cross-sectional design did not allow for insight into the students' perceptions on employer attractiveness, career orientation, and self-perceived employability over a longer time period; whether their perceptions changed over time and in different contexts could also not be established (Gravetter & Forzano, 2015). The focus of the current study, however, was to understand students' perspectives on these issues based on their current circumstances, thus a cross-sectional design was appropriate.

2.2. Sample and sampling

Third year and postgraduate students registered at the University of the Witwatersrand were utilized as the available population for this study (Howell, 2004; Stangor, 2011). There were no exclusion criteria based on faculty, race, gender, or economic status however participants needed to be over the age of 18 years old. Third year and postgraduate students were used as they are close to graduation and are thus thinking about finding employment, their worth as an employee, and their future potential employers (Guglielmino, 2013).

This was a non-probability, convenience sample which is economical and time-saving however not everyone in the target population had the chance to participate which limits generalizability (Etikan, Musa, & Alkassim, 2015; Howell, 2004). In addition, using only third year and postgraduate students may cause additional issues for generalizability and limit who the results can apply to (Stangor, 2011). This study was also a volunteer-based study as students had the choice to participate or not participate in the study; this could create issues of volunteer bias (Stangor, 2011).

In order to gain more participants, snowball sampling was put in place. This is a non-probability strategy that relies on potential participants not only filling in the survey themselves but also asking other viable participants to complete the survey as well (Johnson, 2014). In addition to using online questionnaires, this study also used hard copy administration in order to increase the sample size and thus improve representativeness and generalizability (Biau, Kerneis, & Porcher, 2008).

Of the questionnaires that were returned, 21 (10.88%) were discarded due to incomplete responses or participants not meeting the criteria for participation. Consequentially, the final sample consisted of 193 third year and postgraduate students. A full summary of the characteristics of the final sample can be found in Table 1 in Appendix A.

The mean age for the final sample was 25.10 with a range of 20 to 66 and it consisted of 136 female (70.5%) and 56 male (29.0%) students. One participant did not state their gender and one participant did not state their age. The majority of the sample identified their racial group as Black ($n = 84$ (43.5%)), followed by White ($n = 69$ (35.8%)), Indian ($n = 23$ (11.9%)), Coloured ($n = 7$ (3.6%)),

other (n = 6 (3.1%)), and Asian (n = 4 (2.1%)). The majority of the sample indicated that their home language was English (n = 97 (50.3%)), followed by isiZulu (n = 25 (13%)), other (n = 15 (7.77%)), Setswana (n = 8 (4.1%)), isiXhosa (n = 9 (4.64%)), seSotho sa Leboa (n = 9 (4.63%)), Sesotho (n = 8 (4.1%)), Afrikaans (n = 7 (3.6%)), Xitsonga (n = 4 (2.1%)), siSwati (n = 4 (2.1%)), isiNdebele (n = 4 (2.1%)), Tshivenda (n = 2 (1.0%)) , and one participant did not answer (n = 1 (0.5%)).

The majority of the students were in third year (n = 108 (55.7%)), followed by Honours (n = 36 (18.7%)), Masters (n = 37 (19.17%)), other (n = 9 (4.66%)), and PhD (n = 3 (1.55%)). In terms of degrees, 39 (20.21%) participants were in the Commerce, Law and Management Faculty; 32 (16.58%) participants were in the Science and Health Science Faculties; 14 (7.25%) participants were in Engineering and the Built Environment Faculty; 17 (8.81%) participants were from Law; and 91 (46.91%) participants were from the Faculty of Humanities. For a detailed breakdown of the degrees being completed by the participants, please refer to Table 1 in Appendix A.

In an effort to analyse caretakers' occupation and level of education, the top five responses in each category were listed. Additionally, it should be noted that in both the occupation and level of education fields, there were a significant amount of unanswered responses. In terms of father/guardian's occupation, 14 (7.25%) were self-employed; 9 (4.66%) were police officers; 9 (4.66%) were retired; 7 (3.63%) were engineers, and 6 (3.11%) were accountants. In terms of mother/guardian's occupation, 21 (10.88%) were teachers; 12 (6.22%) were secretaries; 9 (4.66%) were housewives; 9 (4.66%) were retired; and 8 (4.14%) were nurses. In terms of father/guardian's education, there were 35 (18.13%) who matriculated; 23 (11.92%) who had received diplomas; 19 (9.84%) who had a degree; 15 (7.77%) who had their Master's degree, and 14 (7.25%) who had received some form of tertiary education. 34 participants did not enter their fathers' education and 1 father was deceased. In terms of mother/ guardian's education, 38 (19.69%) had received diplomas; 27 (13.98%) had a degree; 26 (13.47%) had matriculated; 11 (5.69%) had their Master's degree, and 8 (4.15%) had received honours degrees.

Participants indicated that salary and benefits, growth opportunities, culture, location, flexibility, and a good working environment where there is trust, understanding, and respect were the most important

features they looked for in an organisation. Least important was the history of the company, demographics, corporate social responsibility, the organisation's reputation, and the social side of organisations. What students identified as very important or less important was very individualistic and thus the concepts mentioned here represent the re-occurring themes that emerged from the answers given.

2.3. Instruments

Participants were asked to complete a self-developed demographic questionnaire as well as the Employer Attractiveness scale (Berthon et al., 2005), the Career Orientation scale (Bravo et al., 2015) and the Self-Perceived Employability scale (Rothwell et al., 2008).

Self- developed demographic questionnaire (please see Appendix B)

A brief demographic questionnaire was developed in order to describe the characteristics of the sample. Information such as: age, gender, race, year of study, degree, home language, parental education, and parental occupation was requested. There was also an open question about employer attractiveness that was analysed for descriptive purposes.

Employer Attractiveness (EmpAt) scale (Please see Appendix C)

The Employer Attractiveness (EmpAt) scale (Berthon et al., 2005) is a 25-item scale that measures five domains of employer attractiveness: social value (five items), development value (five items), application value (five items), interest value (five items), and economic value (five items). It is a self-report scale that participants answer on a 7-point Likert-type scale ranging from 'to very great extent' (7) to 'to a very little extent' (1). Higher scores indicate higher employer attractiveness for each respective category (Berthon et al., 2005).

Berthon et al. (2005) established reasonable internal consistency estimates for the various subscales, as follows: social value ($\alpha = .69$), development value ($\alpha = .66$), application value ($\alpha = .63$), interest value ($\alpha = .67$), and economic value ($\alpha = .68$). Composite reliabilities for social value, development value, interest value, and economic value were established as 0.91 and for application value as 0.89;

the scale was also found to have both convergent and discriminant validity (Berthon et al, 2005). In addition, Berthon et al. (2005) conducted a confirmatory factor analysis that supported the five-factor structure.

Career Orientation scale (please see Appendix D)

This scale was developed by Bravo et al. (2015) to examine the career orientations of students. It is a 29-item scale with a seven-point Likert-type response format ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (7). There are six career orientations: entrepreneurial creativity, security, service to a cause, lifestyle, managerial, and technical/functional. High scores indicate higher inclinations towards the respective career orientations (Bravo et al., 2015). Bravo et al. (2015) found high internal consistency reliabilities for the various orientations: entrepreneurial creativity ($\alpha = .90$), security ($\alpha = .89$), service to a cause ($\alpha = .91$), lifestyle ($\alpha = .85$), managerial ($\alpha = .85$), and technical/functional ($\alpha = .84$). They also found that the scale had good convergent and discriminant validity (Bravo et al., 2015).

Self-perceived Employability scale (please see Appendix E)

This scale was developed by Rothwell et al. (2008) to examine the self-perceived employability of undergraduate students. It is a 16-item scale with a five-point Likert-type response format ranging from ‘strongly disagree’ (1) to ‘strongly agree’ (5). There are four sub-scales: university commitment, self-perceived employability, ambition, and self-perceived ‘internal’ employability; however, the scale can also be used as a unitary measure of self-perceived employability (Rothwell et al., 2008). High scores indicate a high self-perceived employability in the respective categories or overall (Rothwell et al., 2008).

Rothwell et al. (2008) found that the internal consistency reliability for the overall scale was good ($\alpha = .75$) although reliabilities for the components were weaker; thus in this study only the single overall score was used. A varimax rotation verified there were four distinct components and that the components accounted for 48.99% of the variance in the employability scale (Rothwell et al., 2008).

Although there is a degree of discriminant validity, there may also be some overlapping of the four distinct components which supports the use of a single score as an alternative (Rothwell et al., 2008).

2.4. Procedure

Firstly, permission to conduct this study was obtained from the University of the Witwatersrand Human Research Ethics Committee (non-medical; Ethics clearance number: MORG/18/005 IH). Permission was then obtained from the University Registrar to conduct research on campus. Following this, heads of the departments, course co-ordinators, and lecturers were asked for permission to approach students in their classes or courses to request participants for the research (please see Appendix G). If permission was given, an invitation (please see Appendix H) with an electronic link and a full participation information sheet (please see Appendix I) was placed on SAKAI or emailed to the class. Alternately permission was requested for the researcher to hand out hard copy questionnaires with a participant information sheet (please see Appendix J) in class either in the first or last five minutes of a lecture.

The online survey and hard copy questionnaires contained the participant information sheet, the demographic questionnaire (please see Appendix B), the Employer Attractiveness scale (please see Appendix C), the Career Orientation scale (please see Appendix D), and the Self-perceived Employability scale (please see Appendix E). The online survey was posted on Survey Monkey. Participants were able to complete and submit the survey at any time during a set time period by accessing the link to the survey. Their responses were anonymous as no identifying information was asked for in the survey and IP addresses were deleted immediately after download. For hard copy questionnaires, participants were able to take these away from the lecture and complete them in their own time at any point during a set time period. They were asked to return the completed questionnaire to a sealed box in a central location, which ensured that they remained anonymous.

Snowball sampling was also used to collect data. In this case, students were approached and asked to participate in the study as described above, but were also asked to forward the email invitation with the link or to pass on copies of the hard copy questionnaires to other students they knew who met the

participation criteria (registered as a third year or postgraduate student at the University of the Witwatersrand and over the age of 18) as well.

After obtaining a sufficient amount of completed questionnaires, the questionnaires were scored, captured electronically, and analysed statistically.

2.5. Ethical Considerations

Permission to carry out this research was obtained from the University of Witwatersrand Human Research Ethics Committee (non-medical; Ethics clearance number: MORG/18/005 IH). In order to ensure informed consent (Yip, Han, & Sng, 2016), participants received a participant information sheet (please see appendix I and J) before completing the questionnaires; this information sheet stated all the ethical principles mentioned within this paragraph: informed consent, welfare, debriefing, storage and usage of the data, and confidentiality and anonymity. Participation was completely voluntary and the students were not advantaged or disadvantaged in any way whether they chose to submit the questionnaire or not. In order for the welfare of participants to be protected, participants were provided with the researcher's and supervisor's contact details for queries or concerns. There were also no direct benefits or foreseeable risks to participating in the study (Yip et al., 2016).

Submission of the completed questionnaire was regarded as consent to participate in the study; therefore there was informed consent. In order to ensure anonymity and confidentiality (Rosnow & Rosenthal, 1989), no identifying information, such as the students' name or student number, was asked for; in addition, for the online participants, IP addresses were deleted before the analysis took place. Debriefing was met (Rosnow & Rosenthal, 1989) as the students were able to obtain feedback for the study in the form of a summary of the general results; individual feedback was not possible as the data was anonymous. Lastly, in order to ensure storage and usage was handled appropriately, the students' permission was requested to store the responses permanently in anonymous, electronic form and to possibly use this for future research projects. In terms of publication, the results have been reported in a research report and will possibly be published in a journal. The report will be publically available (in the University of the Witwatersrand library).

2.6. Data Analysis

Once an adequate number of questionnaires were completed and scored appropriately, data analysis commenced. The data was captured and scored on Excel then exported into the statistical package SPSS 25 for analysis. Internal consistency reliability, descriptive statistics, and inferential statistics were run in order to answer the research questions.

Firstly, internal consistency reliability for the scales was run using Cronbach Alpha Coefficients (Coaley, 2009). Internal consistency is “the degree to which each item in a scale correlates with each item” (Terre Blanche, Durrheim, & Painter, 2006, p. 154). It is typically “determined mathematically by some formula that estimates the average inter-item correlation” (Terre Blanche et al., 2006, p. 154). Cronbach Alpha Coefficients ranges from 0 to 1 and anything over 0.75 is considered to have good internal consistency reliability (Terre Blanche et al., 2006).

Secondly, descriptive statistics for the categorical variables were analysed by means of frequencies (Hussain, 2012). Variables that were continuous and interval or ratio were analysed using measures of central tendency, spread, skewness, and distribution (Hussain, 2012). Data was considered to be sufficiently normally distributed when skewness coefficients fell between -1 and 1 and when kurtosis values did not exceed 3 or -3 (Huck, 2012; Panneerselvam, 2004). The sample was also sufficiently large ($n = 193$) for Central Limit Theorem to apply – this states that if a sample size is larger than 30 participants this is sufficient for the data to be considered to follow a normal distribution (Brase & Brase, 2014). Despite this, based on the histograms, the skewness coefficients, and the kurtosis values that were obtained, it was established that not all the data was sufficiently normally distributed. Hence, a mixture of parametric and non-parametric techniques were used to analyse the data collected from the study as appropriate.

In order to answer the first research question, parametric Pearson’s Correlation Coefficients were run for the data that was normally distributed and non-parametric Spearman’s Rank-Order Correlation Coefficients were run for the data that was skewed – this only applied to technical/functional career orientation and security career orientation (Huck, 2012). Correlation analyses provide the

significance, strength, and direction of the relationship between two variables and are interpreted as stronger as they approach one and weaker as they approach zero (Howell, 2008). An r of +1 indicates a perfect positive linear relationship, whereas an r of -1 indicates a perfect negative linear relationship (Asuero, Sayago, & Gonzalez, 2006; Howell, 2008). A positive relationship implies that both variables move in the same direction and a negative relationship implies that the variables move in the opposite direction (Howell, 2008; Nickolas, 2018). Results with a p-value less than 0.05 were considered to be statistically significant (Asuero et al., 2006).

In order to answer the second research question, multiple regressions were run. The predictor variables in this study were the different career orientations and the criterion variables were the different aspects of employer attractiveness (Huck, 2012). Regression follows correlation as it looks at not only the relationship but also whether the independent variable predicts the dependent variable (Bewick, Cheek, & Ball, 2003). The stronger the correlation; the more precise the prediction between the variables is likely to be (Bewick et al, 2003). Multiple regression is used to see how multiple independent variables are related to one dependent variable (Petrocelli, 2003). The assumptions for multiple regression are: the variables need to be interval in nature, there needs to be linearity, there should be no significant outliers, the data should follow a normal distribution, there should be independence of observation, and there should be homoscedacity (Schneider, Hommel, & Blettner, 2010). Multicollinearity is another issue that needs to be avoided; this occurs when the linear relations between two or more of the predictor variables are too strong (Paul, 2005). As two of the variables in the study (technical/ functional career orientation and security career orientation) did not meet the assumption for normality, these variables were transformed by squaring them – this normalised their distributions sufficiently for them to be entered into the regression models (Feng et al., 2014).

In order to answer the third research question, hierarchical moderated multiple regressions were run – these were only calculated in cases where the predictor variables were shown to significantly predict the criterion variable in the multiple regression analyses. Hierarchical regression involves looking at the theory to decide how the predictors in the analysis should to be entered into the model (Petrocelli, 2003). This was used as there was a sequence or hierarchy in analysing whether self-perceived

employability acted as a moderator of the relationships between the different career orientations and the different aspects of employer attractiveness – the main variables were entered first followed by the interaction (Baron & Kenny, 1986; Petrocelli, 2003). The assumptions for moderated multiple regression are similar to those for multiple regression and include: continuous interval or ratio variables; independence of observation; linear relationships; homoscedasticity; normal distribution; no significant outliers; and no multicollinearity (Kenny, 2018). The hierarchical moderated multiple regressions were used to establish whether the nature of the relationships between any of the different career orientations and any of the different aspects of employer attractiveness differed on the basis of self-perceived employability.

Chapter 3: Results

The following chapter presents an analysis of the statistical results obtained from the data that were collected for the present study. The statistics were produced by IBM SPSS Statistics 25. Before the research questions could be answered, internal consistency reliabilities, descriptive statistics, and normality estimates were calculated. This was followed by correlations, multiple regressions, and moderated multiple regressions to answer the research questions.

3.1. Internal consistency reliability

Cronbach Alpha Coefficients were calculated for all the scales and their corresponding subscales (Stangor, 2011). These estimates are presented in Table 2.

Table 2

Cronbach Alpha Coefficients for the scales and subscales

Name of scale/ subscale	Cronbach Alpha	Name of scale/ subscale	Cronbach Alpha
<u>Employer Attractiveness</u>	.913		
Social value	.803	Development value	.775
Application value	.742	Interest value	.823
Economic value	.796		
<u>Career orientation</u>	.884		
Entrepreneurial creativity	.882	Security	.921
Service to cause	.878	Lifestyle	.823
Managerial	.818	Technical/ functional	.897
<u>Self-perceived employability</u>	.842		

As is evident in Table 2 above, all the scales and their respective subscales had a moderate to high internal consistency. Development value had the lowest internal consistency ($\alpha = .78$) whereas security career orientation had the highest internal consistency ($\alpha = .92$). Overall, the results showed that all of the scales and subscales were internally consistent.

3.2. Descriptive statistics and normality

In order to describe the levels of employer attractiveness, career orientation, and self-perceived employability in the sample, descriptive statistics were calculated. These are presented in Table 3. The results in Table 3 as well as the histograms (please refer to Appendix L) showed that most of the data from the scales and subscales was normally distributed. However security career orientation and technical functional career orientation were not normally distributed as the skewness coefficients were larger than 1 and the histograms indicated that the data was skewed as well (Groenewald & Meeden, 1984). As a result of this, non-parametric Spearman's Rank-Order correlations were used for correlations that included these variables; and both variables were transformed by squaring the data for the regression analyses (Manikandan, 2010).

3.3. Correlations

Pearson's Correlation Coefficients were calculated for the normally distributed scales and subscales and Spearman's Rank-Order Correlation Coefficients were used for any correlations that included technical/functional career orientation and security career orientation as they were not normally distributed (Salkind, 2010a). Correlations were carried out to establish the nature of the relationships between employer attractiveness and career orientation, employer attractiveness and self-perceived employability, and career orientation and self-perceived employability. These are shown in Tables 4, 5, and 6.

Table 3

Descriptive statistics and normality for the scales and subscales

Variable	N	Mean	Standard Deviation	Min.	Max.	Skewness	Kurtosis
Interest value	193	28.59	4.624	14	35	-.453	-.265
Application value	193	26.85	4.811	6	35	-.555	.954
Economic value	193	29.83	4.208	18	35	-.722	-.241
Social value	193	28.83	4.149	15	35	-.433	-.234
Development value	193	29.51	4.090	14	35	-.667	.422
Employer attractiveness total	193	143.62	16.945	91	175	-.251	-.343
Entrepreneurial creativity	193	24.78	5.944	9	35	-.342	-.424
Security	193	30.66	4.930	10	35	-1.406	2.093
Service to cause	193	23.66	3.952	9	28	-.871	.264
Lifestyle	193	36.29	4.648	23	42	-.768	.052
Management	193	29.23	4.740	14	35	-.708	.086
Technical	193	24.02	3.896	7	28	-1.329	2.459
Career orientation total	193	168.64	16.732	109	203	-.383	.395
Self-perceived employability	193	59.53	8.618	39	80	.145	-.369

Table 4

Relationships between employer attractiveness and career orientation

	Entrepreneurial creativity	Security	Service to cause	Lifestyle	Managerial	Technical
Development	.144*	.337**	.201**	.299**	.286**	.383**
	.046	.000	.005	.000	.000	.000
Social	.400**	.242**	.324**	.349**	.287**	.292**
	.000	.001	.000	.000	.000	.000
Interest	.464**	.187**	.422**	.304**	.323**	.358**
	.000	.009	.000	.000	.000	.000
Application	.383**	.340**	.477**	.352**	.216**	.309**
	.000	.000	.000	.000	.003	.000
Economic	.179*	.595**	.114	.476**	.416**	.325**
	.013	.000	.114	.000	.000	.000
Employer attractiveness total	.413**	.436**	.407**	.458**	.392**	.425**
	.000	.000	.000	.000	.000	.000

As shown in Table 4 above, a large number of significant correlations were found between the employer attractiveness subscales and the career orientation subscales. Development value was significantly related to all of the career orientations. There were moderate, positive correlations between development value and security career orientation ($r_s = .337$; $p = .000$) and between development value and technical/ functional career orientation ($r_s = .383$; $p = .000$). Development

value was also positively and weakly correlated with entrepreneurial creativity career orientation ($r = .144$; $p = .046$), service to a cause career orientation ($r = .201$; $p = .005$), lifestyle career orientation ($r = .299$; $p = .000$), and managerial career orientation ($r = .286$; $p = .000$). Social value was significantly related to all of the career orientations. There were moderate, positive correlations between social value and entrepreneurial creativity orientation ($r = .400$; $p = .000$), service to a cause orientation ($r = .324$; $p = .000$), lifestyle orientation ($r = .349$; $p = .000$) and technical/functional orientation ($r_s = .346$; $p = .000$). Social value was also positively and weakly correlated with security orientation ($r_s = .242$; $p = .001$) and managerial orientation ($r = .287$; $p = .000$).

Interest value was significantly related to all of the career orientations. There were moderate, positive correlations between interest value and entrepreneurial creativity orientation ($r = .464$; $p = .000$), service to a cause orientation ($r = .422$; $p = .000$), managerial orientation ($r = .323$; $p = .000$), lifestyle orientation ($r = .304$, $p = .000$), and technical/ functional orientation ($r_s = .358$; $p = .000$). Interest value was also positively and weakly correlated with security orientation ($r_s = .187$; $p = .009$). Application value was significantly related to all of the career orientations. There were moderate, positive correlations between application value and entrepreneurial creativity orientation ($r = .383$; $p = .000$), security orientation ($r_s = .340$; $p = .000$), service to a cause orientation ($r = .477$; $p = .000$), lifestyle orientation ($r = .352$; $p = .000$), and technical/ functional orientation ($r_s = .309$; $p = .000$). Application value was also positively and weakly correlated with managerial orientation ($r = .216$; $p = .003$).

Economic value was significantly related to all of the career orientations except service to a cause ($r = .114$, $p = .114$). There were moderate, positive correlations between economic value and security orientation ($r_s = .595$; $p = .000$), lifestyle orientation ($r = .476$; $p = .000$), managerial orientation ($r = .416$; $p = .000$), and technical/ functional orientation ($r_s = .325$; $p = .000$). Economic value was also positively and weakly correlated with entrepreneurial creativity orientation ($r = .179$, $p = .013$).

Overall, the employer attractiveness subscales and the career orientation subscales were strongly related to one another in the sample. All of these relationships were positive, indicating that more highly the person rated each type of career orientation, the higher their reported levels of employer attractiveness for each aspect were.

Table 5

Relationships between employer attractiveness and self-perceived employability

	Development	Social	Interest	Application	Economic	EmpAt total
Self-perceived	.149*	.088	.161*	.072	.181*	.167*
employability	.039	.225	.026	.318	.012	.020

As shown in Table 5, self-perceived employability was significantly, positively, and weakly correlated with development value ($r = .149$; $p = .039$), interest value ($r = .161$; $p = .026$), economic value ($r = .181$; $p = .012$), and overall employer attractiveness ($r = .167$; $p = .020$). All of these relationships were positive, indicating that the more highly the person rated their self-perceived employability, the higher their reported levels of development value, interest value, economic value, and overall employer attractiveness were. However, self-perceived employability was not significantly correlated with social value ($r = .088$; $p = .225$) and application value ($r = .072$; $p = .318$).

Table 6

Relationships between career orientation and self-perceived employability

	Entrepreneurial creativity	Security	Service to cause	Lifestyle	Managerial	Technical	Career orientation total
Self-	.154*	.151*	.018	.134	.356**	.269**	.289**
perceived	.033	.036	.808	.064	.000	.000	.000
employability							

As shown in Table 6, self-perceived employability was significantly, positively, and moderately correlated with managerial career orientation ($r = .356; p = .000$). It was also significantly, positively, and weakly correlated with entrepreneurial creativity career orientation ($r = .154; p = .033$), security career orientation ($r_s = .151; p = .036$), technical/functional career orientation ($r_s = .269; p = .000$), and overall employer attractiveness ($r = .289; p = .000$). All of these relationships were positive, indicating that the more highly the person rated their self-perceived employability, the higher their reported levels of managerial career orientation, entrepreneurial creativity career orientation, security career orientation, and technical/functional career orientation were. However, self-perceived employability was not significantly correlated with service to a cause career orientation ($r = .018; p = .808$) or lifestyle career orientation ($r = .134; p = .064$).

3.4. Multiple regression

Multiple regression analyses were used to answer the second research question which examined whether the various career orientations predicted aspects of employer attractiveness in the sample. Five regression models were created – each of these included all of the career orientations as predictors and one of the five employer attractiveness aspects as the criterion variable (Rockinson-Szapkiw, 2012). Two of the variables, technical/functional career orientation and security career orientation, were transformed using a square transformation so that the distributions would be sufficiently normal to meet parametric assumptions (Feng et al., 2014).

Development value

The first regression model that was created included all six of the career orientations (entrepreneurial creativity, service to a cause, lifestyle, managerial, security, and technical/functional) as the predictor variables and development value as the criterion variable. The model is presented in Table 7.

Table 7

Model summary for Model 1

R	R²	Adjusted R²	Std. Error	F	Sig.
.492	.242	.218	3.617	9.913	.000

As shown in Table 7, the predictive model was significant ($F_{6; 186} = 9.913$; $p = .000$) and 24.2% ($r^2 = .242$) of the variation in development value was explained by the predictor variables.

Table 8

Coefficients and collinearity diagnostics for Model 1

	B	Std. Error	Beta	t	Sig.	Tol.	VIF	C.I.
(Constant)	15.304	2.522		6.069	.000			
Entrep Cr	0.043	0.049	0.062	0.874	.383	.814	1.228	9.985
Service	0.091	0.073	0.088	1.247	.214	.819	1.221	10.975
Lifestyle	0.078	0.066	0.088	1.178	.240	.726	1.377	15.037
Managerial	0.046	0.066	0.053	0.689	.492	.691	1.446	17.936
Security	0.003	0.001	0.193	2.690	.008	.793	1.261	24.606
Tech/func	0.007	0.002	0.282	3.914	.000	.785	1.274	30.485

As shown in Table 8, the condition index was slightly larger than 30, indicating that multicollinearity could be a concern for this model, however the tolerance values were all less than 1 and the VIF values were less than 2.5 thus multicollinearity was not a large concern (Adeboye, Fagoyinbo, & Olatayo, 2014). Only security career orientation ($t = 2.690$;

$p = .008$) and technical/functional career orientation ($t = 3.914$; $p = .000$) were significant predictors of development value.

Social value

The second regression model that was created included all six of the career orientations (entrepreneurial creativity, service to a cause, lifestyle, managerial, security, and technical/ functional) as the predictor variables and social value as the criterion variable. The model is presented in Table 9.

Table 9

Model summary for Model 2

R	R²	Adjusted R²	Std. Error	F	Sig.
.557	.311	.288	3.500	13.965	.000

Table 10

Coefficients and collinearity diagnostics for Model 2

	B	Std. Error	Beta	t	Sig.	Tol.	VIF	C.I.
(Constant)	9.742	2.440		3.993	.000			1.000
Entrep Cr	0.216	0.047	0.309	4.579	.000	.814	1.228	9.985
Service	0.141	0.071	0.135	2.002	.047	.819	1.221	10.975
Lifestyle	0.169	0.064	0.189	2.648	.009	.726	1.377	15.037
Managerial	0.026	0.064	0.030	0.406	.685	.691	1.446	17.936
Security	0.001	0.001	0.061	0.899	.370	.793	1.261	24.606
Tech/func	0.004	0.002	0.179	2.609	.010	.785	1.274	30.485

As shown in Table 9, the predictive model was significant ($F_{(6,186)}=13.965$; $p=.000$) and 31.1% ($r^2=.311$) of the variation in social value was explained by the predictor variable.

As shown in Table 10, the condition index was slightly larger than 30, indicating that multicollinearity could be a concern for this model, however the tolerance values were all less than 1 and the VIF values were less than 2.5 thus multicollinearity was not a large concern (Adeboye et al., 2014). Social value was significantly predicted by entrepreneurial creativity career orientation ($t=4.579$; $p=.000$), service to a cause career orientation ($t=2.002$; $p=.047$), lifestyle career orientation ($t=2.648$; $p=.009$), and technical/ functional career orientation ($t=2.609$; $p=.010$).

Interest value

The third regression model that was created included all six of the career orientations (entrepreneurial creativity, service to a cause, lifestyle, managerial, security, and technical/ functional) as the predictor variables and interest value as the criterion variable. The model is presented in Table 11.

Table 11

Model summary for Model 3

R	R²	Adjusted R²	Std. Error	F	Sig.
.619	.383	.363	3.689	19.272	.000

As shown in Table 11, the predictive model was significant ($F_{(6,186)}=19.272$; $p=.002$) and 38.3% ($r^2=.383$) of the variation in interest value was explained by the predictor variables.

As shown in Table 12, the condition index was slightly larger than 30, indicating that multicollinearity could be a concern for this model, however the tolerance values were all less than 1 and the VIF values were less than 2.5 thus multicollinearity was not a large concern (Adeboye et al., 2014).

Interest value was significantly predicted by entrepreneurial creativity career orientation ($t=5.094$; p

=.000), service to a cause career orientation ($t = 3.949$; $p = .000$), and technical/ functional career orientation ($t = 2.978$; $p = .003$).

Table 12

Coefficients and collinearity diagnostics for Model 3

	B	Std. Error	Beta	t	Sig.	Tol	VIF	C.I.
(Constant)	5.713	2.572		2.222	.028			1.000
Entrep Cr	0.253	0.050	0.325	5.094	.000	.814	1.228	9.985
Service	0.294	0.074	0.215	3.949	.000	.819	1.221	10.975
Lifestyle	0.113	0.067	0.114	1.687	.093	.726	1.377	15.037
Managerial	0.089	0.068	0.091	1.318	.189	.691	1.446	17.936
Security	0.000	0.001	-0.012	-0.180	.857	.793	1.261	24.606
Tech/func	0.005	0.002	0.194	2.978	.003	.785	1.274	30.485

Application value

The fourth regression model that was created included all six of the career orientations (entrepreneurial creativity, service to a cause, lifestyle, managerial, security, and technical/ functional) as the predictor variables and application value as the criterion variable. The model is presented in Table 13.

As shown in Table 13, the predictive model was significant ($F_{(6,186)} = 20.920$; $p = .000$) and 40.3% ($r^2 = .403$) of the variation in application value was explained by the predictor variables.

Table 13

Model summary for Model 4

R	R²	Adjusted R²	Std. Error	F	Sig.
.635	.403	.384	3.777	20.920	.000

As shown in Table 14, the condition index was slightly larger than 30, indicating that multicollinearity could be a concern for this model, however the tolerance values were all less than 1 and the VIF values were less than 2.5 thus multicollinearity was not a large concern (Adeboye et al., 2014).

Application value was significantly predicted by entrepreneurial creativity career orientation ($t = 4.323$, $p = .000$), service to a cause career orientation ($t = 4.952$; $p = .000$), security career orientation ($t = 3.712$; $p = .000$), and technical/ functional career orientation ($t = 2.358$; $p = .019$).

Table 14

Coefficients and collinearity diagnostics for Model 4

	B	Std. Error	Beta	t	Sig.	Tol.	VIF	C.I.
(Constant)	3.403	2.633		1.292	.198			1.000
Entrep Cr	0.220	0.051	0.271	4.323	.000	.814	1.228	9.985
Service	0.377	0.076	0.310	4.952	.000	.819	1.221	10.975
Lifestyle	0.121	0.069	0.116	1.751	.082	.726	1.377	15.037
Managerial	-0.064	0.069	-0.063	-0.931	.353	.691	1.446	17.936
Security	0.004	0.001	0.236	3.712	.000	.793	1.261	24.606

Tech/func	0.004	0.002	0.151	2.358	.019	.785	1.274	30.485
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Economic value

The fifth regression model that was created included all six of the career orientations (entrepreneurial creativity, service to a cause, lifestyle, managerial, security, and technical/ functional) as the predictor variables and economic value as the criterion variable. The model is presented in Table 15.

Table 15

Model summary for Model 5

R	R²	Adjusted R²	Std. Error	F	Sig.
.710	.505	.489	3.009	31.591	.000

As shown in Table 15, the predictive model was significant ($F_{(6,186)} = 31,591$; $p = .000$) and 50.5% ($r^2 = .505$) of the variation in economic value was explained by the predictor variables.

Table 16

Coefficients and collinearity diagnostics for Model 5

	B	Std. Error	Beta	t	Sig.	Tol.	VIF	C.I.
(Constant)	10.339	2.097		4.930	.000			1.000
Entrep Cr	.095	.040	.135	2.353	.020	.814	1.228	9.985
Service	-.082	.061	-.077	-1.356	.177	.819	1.221	10.975
Lifestyle	.199	.055	.220	3.638	.000	.726	1.377	15.037
Managerial	.122	.055	.137	2.211	.028	.691	1.446	17.936

Security	.008	.001	.492	8.494	.000	.793	1.261	24.606
Tech/func	.002	.001	.061	1.049	.296	.785	1.274	30.485

As shown in Table 16, the condition index was slightly larger than 30, indicating that multicollinearity could be a concern for this model, however the tolerance values were all less than 1 and the VIF values were less than 2.5 thus multicollinearity was not a large concern (Adeboye et al., 2014).

Economic value was significantly predicted by entrepreneurial creativity career orientation ($t = 2.353$; $p = .020$), lifestyle career orientation ($t = 3.638$; $p = .000$), managerial career orientation ($t = 2.211$; $p = .028$), and security career orientation ($t = 8.494$; $p = .000$).

3.5. Hierarchical moderated multiple regression

In order to determine whether self-perceived employability moderated the relationships between the various career orientations and different aspects of employer attractiveness (question three), hierarchical moderated multiple regressions were run. It should be noted that these analyses were only run in cases where there was a significant association between the career orientation and the aspect of employer attractiveness (please refer to Table 4).

Development value

The first set of hierarchical multiple regressions were run to establish whether the relationships between development value and entrepreneurial creativity, security, service to a cause, lifestyle, managerial, and technical career orientation were moderated by self-perceived employability.

For the first model (entrepreneurial creativity career orientation and development value), the first step was significant ($F_{(2,190)} = 3.667$; $p = .027$) however the second step was not significant ($F_{(3,189)} = 2.638$; $p = .051$). The change between the two equations was also not significant ($\Delta r^2 = .003$; $p = .441$) and the interaction term was not a significant predictor of development value ($t = -0.771$; $p = .441$).

This indicated that self-perceived employability did not moderate the relationship between development value and entrepreneurial creativity career orientation.

For the second model (security career orientation and development value), the first step was significant ($F_{(2,190)} = 12.462$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 8.412$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .002$; $p = .532$) and the interaction term was not a significant predictor of development value ($t = 0.626$; $p = .532$). This indicated that self-perceived employability did not moderate the relationship between development value and security career orientation.

For the third model (service to a cause career orientation and development value), the first step was significant ($F_{(2,190)} = 6.242$; $p = .002$) and the second step was significant as well ($F_{(3,189)} = 4.142$; $p = .007$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .937$) and the interaction term was not a significant predictor of development value ($t = 0.079$; $p = .937$). This indicated that self-perceived employability did not moderate the relationship between development value and service to a cause career orientation.

For the fourth model (lifestyle career orientation and development value), the first step was significant ($F_{(2,190)} = 10.727$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 7.125$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .859$) and the interaction term was not a significant predictor of development value ($t = 0.177$; $p = .859$). This indicated that self-perceived employability did not moderate the relationship between development value and lifestyle career orientation.

For the fifth model (managerial career orientation and development value), the first step was significant ($F_{(2,190)} = 8.919$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 6.672$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .010$; $p = .151$) and the interaction term was not a significant predictor of development value ($t = 0.451$; $p = .652$). This indicated that self-perceived employability did not moderate the relationship between development value and managerial career orientation.

For the sixth model (technical/ functional career orientation and development value), the first step was significant ($F_{(2,190)} = 17.776$; $p = .000$) and the second step significant as well ($F_{(3,189)} = 11.869$; p

=.000). The change between the two equations was not significant ($\Delta r^2 = .001$; $p = .652$) and the interaction term was not a significant predictor of development value ($t = 0.451$; $p = .652$). This indicated that self-perceived employability did not moderate the relationship between development value and technical/ functional career orientation.

Social value

For the seventh model (entrepreneurial creativity career orientation and social value), the first step was significant ($F_{(2,190)} = 18.198$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 12.075$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .888$) and the interaction term was not a significant predictor of development ($t = 0.141$; $p = 0.888$). This indicated that self-perceived employability did not moderate the relationship between social value and entrepreneurial creativity career orientation.

For the eighth model (security career orientation and social value), the first step was significant ($F_{(2,190)} = 4.677$; $p = .010$) and the second step was significant as well ($F_{(3,189)} = 3.112$; $p = .028$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .861$) and the interaction term was not a significant predictor of social value ($t = 0.176$; $p = .861$). This indicated that self-perceived employability did not moderate the relationship between social value and security career orientation.

For the ninth model (service to a cause career orientation and social value), the first step was significant ($F_{(2,190)} = 11.921$; $p = .000$) and the second step was significant ($F_{(3,189)} = 8.034$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .002$; $p = .560$) and the interaction term was not a significant predictor of social value ($t = 0.584$; $p = .560$). This indicated that self-perceived employability did not moderate the relationship between social value and service to a cause career orientation.

For the tenth model (lifestyle career orientation and social value), the first step was significant ($F_{(2,190)} = 13.369$; $p = .000$) and the second step was significant ($F_{(3,189)} = 9.288$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .005$; $p = .293$) and the interaction term was not

a significant predictor of social value ($t = 1.054$; $p = .293$). This indicated that self-perceived employability did not moderate the relationship between social value and lifestyle career orientation.

For the eleventh model (managerial career orientation and social value), the first step was significant ($F_{(2,190)} = 8.558$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 6.009$; $p = .001$). The change between the two equations was not significant ($\Delta r^2 = .004$; $p = .339$) and the interaction term was not a significant predictor of social value ($t = 0.959$; $p = .339$). This indicated that self-perceived employability did not moderate the relationship between social value and managerial career orientation.

For the twelfth model (technical/functional career orientation and social value), the first step was significant ($F_{(2,190)} = 10.280$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 6.997$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .002$; $p = .487$) and the interaction term was not a significant predictor of social value ($t = 0.697$; $p = .487$). This indicated that self-perceived employability did not moderate the relationship between social value and technical/functional career orientation.

Interest value

For the thirteenth model (entrepreneurial creativity career orientation and interest value), the first step was significant ($F_{(2,190)} = 27.411$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 18.184$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .902$) and the interaction term was not a significant predictor of interest value ($t = -0.124$; $p = .902$). This indicated that self-perceived employability did not moderate the relationship between interest value and entrepreneurial creativity career orientation.

For the fourteenth model (service to a cause career orientation and interest value), the first step was significant ($F_{(2,190)} = 24.033$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 16.094$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .007$; $p = .235$) and the interaction term was not a significant predictor of interest value ($t = 0.599$; $p = .577$). This indicated

that self-perceived employability did not moderate the relationship between interest value and service to a cause.

For the fifteenth model (lifestyle career orientation and interest value), the first step was significant ($F_{(2,190)} = 11.371; p = .000$) and the second step was significant as well ($F_{(3,189)} = 7.657; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .001; p = .577$) and the interaction term was not a significant predictor of interest value ($t = 0.959; p = .339$). This indicated that self-perceived employability did not moderate the relationship between interest value and lifestyle career orientation.

For the sixteenth model (managerial career orientation and interest value), the first step was significant ($F_{(2,190)} = 11.590; p = .000$) and the second step was significant as well ($F_{(3,189)} = 8.069; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .005; p = .313$) and the interaction term was not a significant predictor of interest value ($t = 1.012; p = 0.313$). This indicated that self-perceived employability did not moderate the relationship between interest value and managerial orientation.

For the seventeenth model (technical/functional career orientation and interest value), the first step was significant ($F_{(2,190)} = 12.107; p = .000$) and the second step was significant as well ($F_{(3,189)} = 8.030; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000; p = .952$) and the interaction term was not a significant predictor of interest value ($t = -0.060; p = .952$). This indicated that self-perceived employability did not moderate the relationship between social value and technical/ functional career orientation.

For the eighteenth model (security career orientation and interest value), the first step was significant ($F_{(2,190)} = 3.994; p = .020$) and the second step was significant as well ($F_{(2,190)} = 3.142; p = .026$). The change between the two equations was not significant ($\Delta r^2 = .020; p = .235$) and the interaction term was not a significant predictor of interest value ($t = 1.192; p = 0.235$). This indicated that self-perceived employability did not moderate the relationship between interest value and security career orientation.

Application value

For the nineteenth model (entrepreneurial creativity career orientation and application value), the first step was significant ($F_{(2,190)} = 16.371; p = .000$) and the second step was significant as well ($F_{(3,189)} = 11.472; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .007; p = .212$) and the interaction term was not a significant predictor of application value ($t = 1.251; p = .212$). This indicated that self-perceived employability did not moderate the relationship between application value and entrepreneurial creativity career orientation.

For the twentieth model (security career orientation and application value), the first step was significant ($F_{(2,190)} = 12.669; p = .000$) and the second step was significant as well ($F_{(3,189)} = 9.068; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .008; p = .186$) and the interaction term was not a significant predictor of application value ($t = -1.328; p = .186$). This indicated that self-perceived employability did not moderate the relationship between application value and security career orientation.

For the twenty-first model (service to a cause career orientation and application value), the first step was significant ($F_{(2,190)} = 28.589; p = .000$) and the second step was significant as well ($F_{(3,189)} = 19.011; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000; p = .729$) and the interaction term was not a significant predictor of application value ($t = 0.347; p = .729$). This indicated that self-perceived employability did not moderate the relationship between application value and service to a cause career orientation.

For the twenty-second model (lifestyle career orientation and application value), the first step was significant ($F_{(2,190)} = 13.472; p = .000$) and the second step was significant as well ($F_{(3,189)} = 8.993; p = .000$). The change between the two equations was not significant ($\Delta r^2 = .001; p = .695$) and the interaction term was not a significant predictor of application value ($t = 0.393; p = .695$). This indicated that self-perceived employability did not moderate the relationship between application value and lifestyle career orientation.

For the twenty-third model (managerial career orientation and application value), the first step was significant ($F_{(2,190)} = 4.642$; $p = .011$) and the second step was significant as well ($F_{(3,189)} = 3.210$; $p = .024$). The change between the two equations was not significant ($\Delta r^2 = .002$; $p = .540$) and the interaction term was not a significant predictor of application value ($t = 0.613$; $p = .540$). This indicated that self-perceived employability did not moderate the relationship between application value and managerial orientation.

For the twenty-fourth model (technical/ functional career orientation and application value), the first step was significant ($F_{(2,190)} = 8.447$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 5.731$; $p = .001$). The change between the two equations was not significant ($\Delta r^2 = .002$; $p = .550$) and the interaction term was not a significant predictor of application value ($t = 0.598$; $p = .550$). This indicated that self-perceived employability did not moderate the relationship between application value and technical/ functional career orientation.

Economic value

For the twenty-fifth model (entrepreneurial creativity career orientation and economic value), the first step was significant ($F_{(2,190)} = 5.674$; $p = .004$) and the second step was significant as well ($F_{(3,189)} = 3.772$; $p = .012$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .874$) and the interaction term was not a significant predictor of economic value ($t = 0.159$; $p = .874$). This indicated that self-perceived employability did not moderate the relationship between economic value and entrepreneurial creativity career orientation.

For the twenty-sixth model (security career orientation and economic value), the first step was significant ($F_{(2,190)} = 63.748$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 43.496$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .007$; $p = .140$) and the interaction term was not a significant predictor of economic value ($t = -1.481$; $p = .140$). This indicated that self-perceived employability did not moderate the relationship between economic value and security orientation.

For the twenty-seventh model (lifestyle career orientation and economic value), the first step was significant ($F_{(2,190)} = 30.120$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 21.591$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .015$; $p = .056$) and the interaction term was not a significant predictor of economic value ($t = -1.381$; $p = .056$). This indicated that self-perceived employability did not moderate the relationship between economic value and lifestyle career orientation.

For the twenty-eighth model (managerial career orientation and economic value), the first step was significant ($F_{(2,190)} = 20.312$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 13.472$, $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .946$) and the interaction term was not a significant predictor of economic value ($t = 0.068$, $p = .946$). This indicated that self-perceived employability did not moderate the relationship between economic value and managerial career orientation.

For the twenty-ninth model (technical/ functional career orientation and economic value) the first step was significant ($F_{(2,190)} = 10.959$; $p = .000$) and the second step was significant as well ($F_{(3,189)} = 7.269$; $p = .000$). The change between the two equations was not significant ($\Delta r^2 = .000$; $p = .946$) and the interaction term was not a significant predictor of economic value ($t = .068$, $p = .946$). This indicated that self-perceived employability did not moderate the relationship between economic value and technical/ functional orientation.

Chapter 4: Discussion

A substantial amount of research has been conducted on employer attractiveness and self-perceived employability separately, however relatively little work has been carried out on career orientation thus far as it is a relatively new construct. Furthermore, in terms of the literature there appears to be relatively little to no empirical research that has been conducted regarding the links between the different aspects of employer attractiveness and the various career orientations as well as whether self-perceived employability moderates the relationships between these variables, particularly within the South African context.

As such, the primary aim of this study was to establish whether there were relationships between the different aspects of employer attractiveness and the various career orientations in a sample of 193 soon-to-be-graduate students from the University of the Witwatersrand, as well as the nature of these relationships. Moreover, this study aimed to determine which career orientations, if any, predicted different aspects of employer attractiveness; and to establish if any of the relationships between career orientation and employer attractiveness were moderated by self-perceived employability. This chapter will discuss the results of the analyses with reference to relevant literature, highlight the strengths and limitations of the study, and lastly offer possible directions for future research.

4.1. Relationships between employer attractiveness and career orientation

One of the primary aims of this study was to investigate the nature of the relationships between different aspects of employer attractiveness (development value, social value, interest value, application value, and economic value) and the various career orientations (entrepreneurial creativity, security, service to a cause, lifestyle, management, and technical/ functional). As stated previously, there appears to be no empirical work available that directly addresses the nature of these relationships, however the theory used to explain these concepts suggests that they may be related (Berthon et al., 2005; Bravo et al., 2015). Based on the existing theory, it was hypothesised that higher scores for the various career orientations would be positively related to higher scores for certain aspects of employer attractiveness.

This results of this study provided empirical evidence to support this proposition, as they clearly indicated that there were significant, positive relationships between the different career orientations and various aspects of employer attractiveness, as follows:

Development value (attraction towards a potential employer based on recognition and opportunities for training and development) was significantly and positively related to all six of the career orientations (Berthon et al., 2005). This was consistent with what was expected for the entrepreneurial creativity, managerial, and technical/ functional career orientations, as these three orientations all include achieving goals, extending one's skills, and working independently (Bravo et al., 2015). This was less expected for the security, lifestyle, and service to a cause career orientations, as these orientations focus more on economic security, work-family balance, and helping society (Bravo et al., 2015). It is, however, possible that opportunities for training and improving one's skills are seen as contributing to these goals as well; for example, improving one's skills could lead to better employment opportunities, which could increase one's salary and enable one to make more of a difference (Bravo et al., 2015).

Social value (attraction towards a potential employer based on possible interactions with other employees and as part of a team), was significantly and positively related to all six career orientations as well (Berthon et al., 2005). This was expected for the lifestyle and service to a cause career orientations, as these orientations focus on integrating life, values, and society with one's career and the focus is on interacting, strengthening bonds, and helping each other (Bravo et al., 2015). This was less expected for the security, managerial, technical/ functional, and entrepreneurial creativity career orientations, as these orientations focus on being creative, financial and job stability, power, and developing skills and knowledge (Bravo et al., 2015). It is, however, possible that social value could be seen as contributing to these goals as well; for example, having better relationships with colleagues could help to create networks, gain support, and lead to promotions (Bravo et al., 2015).

Interest value (attraction towards a potential employer based on opportunities to be creative and engage in exciting work) was also significantly and positively related to all six career orientations (Berthon et al., 2005). This was expected for the technical/functional, entrepreneurial creativity, and

service to a cause career orientations, as these orientations focus on developing skills and knowledge, creating something from the start, and aligning work and values; they also involve learning and growing, being creative, and doing work that is new and exciting (Bravo et al., 2015). This was less expected for the security, managerial, and lifestyle career orientations, as these orientations focus on money, power, and integrating one's personal life with one's career (Bravo et al., 2015).

Application value (attraction towards a potential employer based on opportunities to apply what has been learnt previously) was significantly and positively related to all six career orientations as well (Berthon et al., 2005). This was expected for the technical/ functional, entrepreneurial creativity, and service to a cause career orientations, as these orientations focus on developing skills and knowledge, creating something from the start and adding to one's knowledge base, and aligning one's work and one's values (Bravo et al., 2015). This was less expected for the security, managerial, and lifestyle orientations, as these orientations focus on money, power, and integrating one's personal life and work; thus they are not directly about applying what one has learnt (Bravo et al., 2015).

Lastly, economic value (attraction towards an employer based on potential salary, benefits, and job security) was significantly and positively associated with five of the six career orientations (entrepreneurial creativity, lifestyle, managerial, technical/functional, and security) however it was not significantly associated with the service to a cause career orientation (Berthon et al., 2005). This was expected for the security, managerial, and lifestyle career orientations, as these orientations focus on money, benefits, opportunities for promotion leading to higher pay, job security, and integrating one's work and personal life (Bravo et al., 2015). In addition, it should be noted that economic value and the service to a cause career orientation had a non-significant association which was expected as this orientation focuses on helping the environment and society rather than on financial rewards (Bravo et al., 2015). It was less expected that the entrepreneurial creativity and technical/ functional career orientations would be related to economic value as these orientations focus on power, creating something from the start, and developing skills instead of focusing on salary and benefits (Bravo et al., 2015). It is, however, possible that having opportunities to develop one's skills and build a

reputation for talent is seen as linked to improving one's job security and increasing opportunities for higher pay and benefits (Bravo et al., 2015).

In addition to the links between career orientation and employer attractiveness, the relationships between each of these and self-perceived employability were analysed as well. Self-perceived employability refers to an individual's belief about how likely they are to be employed and remain employed (Rothwell et al., 2008).

Self-perceived employability was significantly and positively related to development value, interest value, economic value, and overall employer attractiveness. If the individual believes that they are more likely to be employed, then it is logical to assume that they would be attracted to organisations that offer more opportunities for exciting and innovative work, good salaries, promotion, and training, as they are likely to believe that they are more capable and can benefit from this type of work environment (Benabou & Tirole, 2001). They are also likely to indicate more attraction to potential employers overall, as they are more confident about their creativity, security, managerial, and technical/functional career orientations, as well as with the overall career orientation score.

Furthermore, self-perceived employability was significantly and positively correlated with the entrepreneurial creativity, security, managerial, lifestyle, and technical/functional career orientations, as well as with the overall career orientation score. Thus individuals who believed that they were more likely to gain employment were also more strongly oriented towards obtaining opportunities for creative work and development, financial security, promotion and management positions, and personal skills development (Bravo et al., 2015; Rothwell et al., 2008). This was expected as employees make decisions based on their level of self-perception instead of their actual abilities (Bandura, 1997; Pool & Qualter, 2013). Thus if employees believe in themselves they could be more likely to set high expectations, follow their dreams, set goals, and look to work for an organisation that they are attracted to and that offers what they are looking for (Qenani et al., 2014).

4.2. Career orientations predicting employer attractiveness

A second aim of the present study was to determine whether career orientation predicted employer attractiveness and which particular career orientations predicted which aspects of employer attractiveness. In order to examine this, multiple regression models were created that included each aspect of employer attractiveness as the criterion variable and the different career orientations as the predictor variables. All of the models created were significant; the individual predictors identified are discussed below.

Although development value was significantly related to all six of the career orientations, it was only significantly predicted by the security and technical/functional career orientations. The security career orientation is about being drawn to opportunities for pay and promotion and the technical/ functional career orientation focuses on opportunities for individual skills development (Bravo et al., 2015).

Both of these would therefore be likely to attract an individual to an organisation offering opportunities to develop oneself and one's skills (Berthon et al., 2005).

Although social value was significantly related to all six of the career orientations, it was only significantly predicted by the entrepreneurial creativity, service to a cause, lifestyle, and technical/ functional career orientations. This was unexpected for the entrepreneurial creativity and technical/ functional career orientations as the focus of these orientations is on skills development and opportunities for growth rather than social relationships and bonds in the organisation (Berthon et al, 2005; Bravo et al., 2015). However this was expected for the service to a cause and lifestyle career orientations as these both have social aspects and would be likely to attract an individual to an organisation encouraging relationships and bonds with other employees (Berthon et al., 2005; Bravo et al., 2015).

Although interest value was significantly related to all six of the career orientations, it was only significantly predicted by the entrepreneurial creativity, service to a cause, and technical/ functional career orientations. This was unexpected for the service to a cause and technical/ functional career orientations as these focus on helping society and developing one's skills rather than on having

opportunities to engage in exciting work (Berthon et al, 2005; Bravo et al., 2015). This was expected for the entrepreneurial creativity career orientation as this focuses on creativity and growth and thus an individual with this orientation would be likely to be attracted to an organisation which encourages innovation and exciting work (Berthon et al., 2005; Bravo et al., 2015).

Although application value was related to all six of the career orientations, it was only significantly predicted by the entrepreneurial creativity, service to a cause, security, and technical/ functional career orientations. This was unexpected for the service to a cause and security career orientations as these focus on helping others and economic security rather than on applying previous learning (Berthon et al., 2005; Bravo et al., 2015). This was expected for the entrepreneurial creativity and technical/functional career orientations as these focus on developing skills and knowledge and opportunities to build on what has been previously learnt (Bravo et al., 2015). Thus an individual would be likely to be attracted to an organisation that encourages learning, growth, and applying and expanding current knowledge (Berthon et al., 2005).

Although economic value was related to five of the career orientations (entrepreneurial creativity, lifestyle, managerial, technical/ functional), it was only significantly predicted by the entrepreneurial creativity, lifestyle, managerial, and security career orientations. This was fully expected for the security career orientation as the focus of this orientation is on opportunities for pay and promotion and stability within the job (Bravo et al., 2015). This was also somewhat expected for the entrepreneurial creativity, lifestyle, and managerial career orientations as these focus on opportunities for growth, work-family balance, and achieving power; these are typically associated with obtaining higher positions in an organisation which lead to increased pay and security (Bravo et al., 2015). Thus these orientations would be likely to attract an individual to an organisation which gives employees a good salary and benefits as well as good promotional opportunities (Berthon et al., 2005).

These findings are not only useful but relevant and are needed in today's changing working environment as a guide for how employers can attract and retain high quality employees. Potential employees need to be aware of what they want and what they have to offer in order to make career

decisions and organisations can use this information to focus on attracting specific types of potential employees and marketing themselves effectively (Berthon et al., 2005).

4.3. Self-perceived employability as a moderator

The final aim of the present study was to determine whether self-perceived employability moderated any of the relationships between employer attractiveness and career orientation. The theory suggested that an individual's values, needs, and goals might predict what they find attractive in an employer and also that an individual's feelings about their self-perceived employability might change the nature of these relationships between employer attractiveness and career orientation (Berthon et al., 2005; Bravo et al., 2015; Rothwell et al., 2008). However there appeared to be no previous empirical literature to indicate whether this proposition was supported empirically or not.

The results of the current study clearly indicated that although self-perceived employability was related independently to various career orientations and aspects of employer attractiveness, it did not moderate any of the relationships observed between the different aspects of employer attractiveness and the various career orientations in the sample. This does not mean that self-perceived employability could never moderate the relationships between employer attractiveness and career orientation in every sample; however these results indicate that for this study and with this sample, self-perceived employability was not a significant moderator.

This was unexpected based on the theory as it was sensible to propose that the nature of the links between career orientation and employer attractiveness might differ based on the extent to which the person felt they would be likely to gain employment (Rothwell et al., 2008). For example, if a person had a higher level of self-perceived employability, then they might focus less on economic value and more on development, application, social, or interest value and might feel that it would be easy to find other employment and thus be less drawn to an organisation based on financial incentives and security (Berthon et al., 2005; Rothwell et al., 2008). However, the results of the current study seem to indicate that the links between what a potential employee values in a potential employer and their goals and

ambitions for the direction of their future career are not changed by the extent to which they feel they are likely to gain employment.

In order to identify if these results are true for different samples, more studies need to be carried out. In addition, more theory needs to be developed about the links between self-perceived employability, employer attractiveness, and career orientation and the roles these variables play in relation to one another.

4.4. Conclusion

The current research undertook to explore the relationships between various aspects of employer attractiveness and different career orientations and whether self-perceived employability moderated these relationships. This results of this study showed the following:

Development value, social value, application value, and interest value were correlated to all of the career orientations. Economic value was correlated with the entrepreneurial creativity, security, lifestyle, managerial, and technical/ functional career orientations but not with the service to a cause career orientation. Overall employer attractiveness as well as development value, interest value, and economic value were correlated with self-perceived employability; and the entrepreneurial creativity, security, managerial, lifestyle, and technical/functional career orientations were also correlated with self-perceived employability. However, self-perceived perceived employability did not moderate any of the relationships between employer attractiveness and career orientation.

The security and technical/ functional career orientations significantly predicted attraction to an organisation offering opportunities for development and growth (development value). The entrepreneurial creativity, service to a cause, lifestyle, and technical/ functional career orientations significantly predicted attraction to an organisation offering opportunities for social interactions (social value). The entrepreneurial creativity, service to a cause, and technical/ functional career orientations significantly predicted attraction to an organisation offering opportunities for exciting work (interest value). The entrepreneurial creativity, service to a cause, security, and technical/ functional career orientations significantly predicted attraction to an organisation offering

opportunities to apply previous knowledge (application value). Lastly, the entrepreneurial creativity, lifestyle, managerial, and security career orientations significantly predicted attraction to an organisation offering good pay and promotion opportunities (economic value).

These findings have practical implications for organisations and universities. They can be used to inform recruitment practice and help companies to tailor their strategies to attract and retain high quality potential employees. In South Africa, there is not only a war for talent and skills shortages but there is also a high unemployment level thus matching potential employees with suitable employers has become increasingly important (Beechler & Woodward, 2009). The recruitment strategies used by employers are often traditional based on theories developed in Western countries thus new studies and theories need to be created for the modern, boundary-less working environment (Bravo et al., 2015). In addition, guidance is needed for university students in South Africa who are going into this dynamic, difficult working environment.

This study appears to be first that has combined and explored the links between employer attractiveness, career orientation, and self-perceived employability. It is thus very useful and necessary as it adds to a growing understanding of the connections between these variables and provides a base for future studies.

4.5. Strengths and limitations of the study

The research design used in the current study was cross-sectional, correlational, and non-experimental (Smith & Mackie, 2009; Stangor, 2011; Whitley et al., 2012). Santrock (2005) states that “non-experimental research methods (descriptive and correlational research) cannot establish cause and effect because they do not involve manipulating factors in a controlled way” (p.56). Thus no causal conclusions could be drawn and this study was limited in only being able to describe the relationships between the variables. In addition, because of the cross-sectional nature of the design it did not account for changes in career orientation and employer attractiveness over time (Levin, 2006).

A strength of this study was that the focus was on soon-to-be-graduate students from the University of Witwatersrand which helped in terms of accessibility and gaining a large sample size from a range of

faculties. However, this was also a disadvantage as the students came from only one university thus the representation was somewhat limited. The sample size might have been a lot bigger if more than one university was used; this may have given more accurate results. The sample was also further limited as these students were all at the same particular life stage consequentially the findings might not apply to individuals who have already graduated or who do not attend a university.

The use of non-probability, convenience sampling meant that not everyone in the target population had an equal chance of participating in the study which further limits the generalizability of the findings (Leedy, 1989). In addition, the participants were all volunteers thus volunteer bias could arise although this was important to ensure that the study was ethical (Salkind, 2010b).

In terms of the scales used, the self-perceived employability scale was developed to assess future-based perceptions and expectations which is suitable because the study used a non-working student sample (Rothwell et al., 2008). However, although the career orientation scale showed good reliability in the sample it is new thus there is not a lot of previous information available about the measure and the theory and previous research about the concept is very limited (Bravo et al., 2015).

In terms of the multiple moderated regression, larger sample sizes reduce the standard error, thus increasing the possibility of finding a significant association (Miles & Shevlin, 2001). Cohen and Cohen (1983) state that a minimum sample size of 100 participants is required for moderated multiple regression and even though this study met the minimum standard size it nevertheless would have been ideal to have a larger sample to avoid non-significance due to technical issues. This could affect the statistical conclusion validity of the study (Garcia-Perez, 2012).

Overall, although there are strengths and weaknesses in the type of design, sample, scales, and multiple moderated regression; there is a major strength of the study. The study applied the correct techniques and was novel in that the links between the variables had not been looked at before in the South African context.

4.6. Directions for future research

Firstly, future research that aims to examine these relationships and the moderation further should ideally utilise a larger sample that is more representative of the student population; this would increase generalisability within the South African context. Increasing the sample size could also reveal further significant results that may have been hidden if the current sample size was too small. Along with this, the sample could be improved by having students from a variety of universities, by focusing on graduates as well as students still completing their degrees, and by drawing on samples from particular industries to better understand how the relationship plays out in a particular field.

Additionally, due to scope, this study did not explore the potential impact of demographic differences. It would be useful for future research to explore the potential roles variables such as socioeconomic status, parents/ guardians' level of education and occupation, field of study, and schooling environment might play in determining career orientation, employer attractiveness, self-perceived employability, and the relationships between these. Employer attractiveness, career orientation, and self-perceived employability are also subjective thus the relative roles played by individual factors and family and environment factors could be interesting to explore as well.

In order to gain a deeper understanding, it might be useful to conduct qualitative studies in addition to quantitative research (Johnson & Christensen, 2008; Lichtman, 2006). Qualitative analysis allows for discovering, describing, and subjectivity; what individuals find attractive in an employer, their self-perceived values, interests, experiences, skills, and abilities, and what they believe their chances of success are, are very subjective concepts (Johnson & Christensen, 2008; Lichtman, 2006). Future studies should thus not only continue to add quantitative data on the topic but should explore the topic qualitatively as well. In addition, a longitudinal study could be used to see whether the relationship between the variables changes if individuals are seeking employment or working as actual employees.

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Appendix A: Demographic characteristics

Table 1: Demographic characteristics of the sample

		N	Percentage
Gender	Male	56	29.0%
	Female	136	70.5%
	Missing	1	0.5%
Race	Asian	4	2.1%
	Black	84	43.3%
	Coloured	7	3.6%
	Indian	23	11.9%
	White	69	35.8%
	Other	6	3.1%
Home Language	isiZulu	25	13%
	isiXhosa	9	4.64%
	English	97	50%
	Sesotho sa leboa	9	4.64%
	Afrikaans	7	3.6%
	Setswana	8	4.1%
	Sesotho	8	4.1%
	Xitsonga	4	2.1%
	Sitswati	4	2.1%
	Tshivenda	2	1.0%
	isiNdebele	4	2.1%
	Other	15	7.7%
	Missing	1	0.5%
Year of Study	3rd year	108	55.7%
	Honours	36	18.7%
	Masters	37	19.17%

	PhD	3	1.55%
	Other	9	4.66%
<i>Degree</i>			
Commerce, Law & Management	Accounting science	19	9.84%
	BCom	8	4.15%
	Developmental theory, policy and planning	6	3.11%
	Information Systems	1	0.5%
	Triple major	1	0.5%
	Economics	1	0.5%
	Finance	1	0.5%
	HR & management	1	0.5%
	Marketing & management	1	0.5%
	Bachelor of Science	10	5.18%
Social and Health science	Actuarial science	8	4.15%
	Occupational therapy	5	2.59%
	Urban & regional planning	4	2.07%
	Biological science	2	1%
	Biochemistry & micro science	1	0.5%
	BAS	1	0.5%
	BSC (math major)	1	0.5%
	Architecture	10	5.18%
	Sustainable & energy efficient cities	2	1%
	Built environment in housing	1	0.5%
Engineering and built environment	Housing	1	0.5%
	LLB	6	3.11%
Law			

Humanities	Law	7	3.63%
	LLB & BA	1	0.5%
	LLM	1	0.5%
	Law (pension)	1	0.5%
	Law (Psychology & Anthropology)	1	0.5%
	Organisational Psychology	10	5.18%
	Psychology	10	5.18%
	Social work	5	2.59%
	Psychology & English	4	2.07%
	Translation and interpreting studies	4	2.07%
	Digital arts	3	1.5%
	BA (Hons) in Psychology	2	1%
	Social and Psychological research	2	1%
	Music	2	1%
	Drama therapy	2	1%
	BA Humanities	2	1%
	Speech, pathology & audiology	2	1%
	Psychology & International Relations	1	0.5%
	Psychology & HR	1	0.5%
	Industrial psychology & Economic science	1	0.5%
	Psychology and Economics	1	0.5%
	English	1	0.5%
	Applied drama	1	0.5%

Non specific	Film & television	1	0.5%
	Politics	1	0.5%
	BA General	22	11.40%
	BA	11	5.70%
	Masters	2	1%

Appendix B: Demographic Questionnaire

Dear participant,

The following information is requested for descriptive and statistical purposes only.

Age: _____

Gender:

Male

Female

Other

Race:

Asian

Black

Coloured

Indian

White

Other:

**Home
Language:**

Zulu

Xhosa

English

SeSotho sa
Leboa

Afrikaans

Setswana

Sesotho

Xitsonga

siSwazi

Tshivenda

isiNdebele

Other:

Year of study:

Third year

Honours

Masters

PhD

Degree: _____

Please give your parent/s' or guardian's occupation. Fill in whichever is applicable to you:

Father _____

Mother _____

Guardian _____

Please give the highest level of education completed by your parents. Fill in whichever is applicable to you

Father _____

Mother _____

Guardian _____

Please list five factors that would be most important to you when choosing an employer/ organization to work for. Please rate these from 1 to 5, with 1 being most important and 5 being the least important.

1. _____
2. _____
3. _____
4. _____
5. _____

Appendix C: Employer Attractiveness

How important are the following to you when considering potential employers?

	To a very little extent	To a little extent	To a small extent	To a moderate extent	To a large extent	To a great extent	To a very great extent
1. Recognition/ appreciation from management.							
2. A fun working environment.							
3. A springboard for future employment.							
4. Feeling good about yourself as a result of working for a particular organisation.							
5. Feeling more self-confident as a result of working for a particular organisation.							
6. Gaining career-enhancing experience.							
7. Having a good relationship with your superiors.							
8. Having a good relationship with your colleagues.							
9. Supportive and encouraging colleagues.							
10. Working in an exciting environment.							
11. Innovative employer-novel work practice/ forward-thinking.							
12. The organisation both values and makes use of your creativity.							

	To a very little extent	To a little extent	To a small extent	To a moderate extent	To a large extent	To a great extent	To a very great extent
13. The organisation produces high-quality products and services.							
14. The organisation produces innovative products and services							
15. Good promotion opportunities within the organisation.							
16. Humanitarian organisation-gives back to society.							
17. Opportunity to apply what was learned at a tertiary institution.							
18. Opportunity to teach others what you have learned.							
19. Acceptance and belonging.							
20. The organisation is customer-orientated.							
21. Job security within the organisation.							
22. Hands-on inter-departmental experience.							
23. Happy work environment.							
24. An above average basic salary.							
25. An attractive overall compensation package.							

Appendix D: Career Orientation

	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
1. I am very good at developing innovative new procedures, products, or services.							
2. I find work most interesting when I am working on the development of a new product, service, or work process.							
3. I enjoy work that involves building or creating something that is entirely new.							
4. One of my greatest strengths is developing, creating, and launching new products or services.							
5. I have the kinds of skills and abilities required to be a successful entrepreneur.							
6. Employment security is important to me.							
7. It is important that my organization provides me with job security.							
8. I would value working at an organization that offers long-term job security.							
9. Financial security is important to me.							

	Strongly disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly agree
10. Organizations should strive to provide job security for their employees.							
11. It is important to me to have a job that helps society in some way.							
12. Contributing positively to society through work is important to me.							
13. It is important to me to have a job that is compatible with my desire to improve the world.							
14. I will feel successful in my career only if I am making a real contribution to the welfare of society.							
15. It is important to me that I have a job that provides “family-friendly” benefits so that I can balance my work and home life.							
16. Balancing my work and personal needs is important to me.							
17. An ideal organization to me is one that allows employees the time they need to be with their families.							
18. My career must provide me with good work-life balance.							
19. It is important that I work for an organization that values family/ personal life.							

20. I would like a position with a great deal of managerial responsibility.							
21. I have the skills and abilities to eventually rise to a high managerial level.							
22. I would like to manage an entire organizational division or profit-centre someday.							
23. I have the kind of skills and abilities that make one an effective general manager.							
24. I have the dedication required to rise to a high managerial level.							
25. I would pursue a position that would allow me to become more proficient in my technical/functional specialty.							
26. I prefer work that challenges my technical or specialized skills and abilities.							
27. I prefer having a job in which I can fully utilize my technical/ functional expertise.							
28. If given the choice, I would prefer an advancement that allows me to continue to use my specialized technical skills.							
29. I enjoy work that allows me to learn something new in area of specialization.							

Appendix E: Self-perceived Employability

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
1. I achieve high grades in relation to my studies					
2. I regard my academic work as top priority					
3. Employers are eager to employ graduates from my university					
4. The status of this university is a significant asset to me in job seeking					
5. Employers specifically target this university in order to recruit individuals from my subject area(s)					
6. My university has an outstanding reputation in my field(s) of study					
7. A lot more people apply for my degree than there are places available					
8. My chosen subject(s) rank(s) highly in terms of social status					
9. People in the career I am aiming for are in high demand in the external labour market					
10. My degree is seen as leading to a specific career that is generally perceived as highly desirable					
11. There is generally a strong demand for graduates at the present time					
12. There are plenty of job vacancies in the geographical area where I am looking					
13. I can easily find out about opportunities in my chosen field					
14. The skills and abilities that I possess are what employers are looking for.					
15. I am generally confident of success in job Interviews and selection events.					
16. I feel I could get any job so long as my skills and experience and reasonably relevant.					

Appendix F: Ethics clearance certificate

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG

HUMAN RESEARCH ETHICS COMMITTEE (SCHOOL OF HUMAN & COMMUNITY DEVELOPMENT)

CLEARANCE CERTIFICATE

PROTOCOL NUMBER: MORG/18/005 IH

PROJECT TITLE:

Employer attractiveness, career orientation and self-perceived employability

INVESTIGATORS

Meehan Lauren

DEPARTMENT

Psychology

DATE CONSIDERED

28/06/18

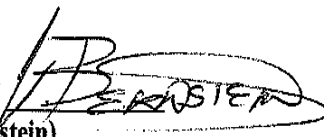
DECISION OF COMMITTEE*

Approved

This ethical clearance is valid for 2 years and may be renewed upon application

DATE: 28 June 2018

CHAIRPERSON
(Dr Colleen Bernstein)



cc Supervisor:

Ms Nicky Israel
Psychology

DECLARATION OF INVESTIGATOR (S)

To be completed in duplicate and **one copy** returned to the Secretary, Room 100015, 10th floor, Senate House, University.

I/we fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure be contemplated from the research procedure, as approved, I/we undertake to submit a revised protocol to the Committee.

This ethical clearance will expire on 31 December 2020

Appendix G: Access Request Letter for Heads of Department, course co-ordinators and lecturers



Psychology
School of Human & Community
Development
University of the Witwatersrand
Private Bag 3, Wits, 2050
Tel: 011 717 4503 Fax: 011 717 4559



To [relevant title/ name to be inserted]

My name is Lauren Kate Meehan, and I am conducting research at the University of the Witwatersrand in partial fulfilment of the requirements to obtain a Master's degree in Organisational Psychology. My research aims to explore the relationships between employer attractiveness, career orientation and self-perceived employability.

I am requesting permission to please be allowed to approach students registered for [name of relevant courses/ modules to be inserted] to ask them to participate in my research study. I am also requesting that you please send out an invitation with a link to an online survey and a participant information sheet attached either on SAKAI or via an email to the class. The link will take the students to an online platform that will contain the participant information sheet and questionnaires to be completed. The questionnaires should take approximately 20 – 30 minutes to complete and participants will be asked to submit their responses online within two to three weeks of receiving the invitation.

If very few students volunteer to participate, or if it is preferred, I would also like to ask for permission to approach the students in person at the start or end of a class for five minutes to inform them about the research and possibly hand out paper-based copies of the questionnaire. If students choose to complete the paper-based questionnaire, they will be asked to complete it in their own time within two to three weeks of receiving it, and will be asked to return it to a sealed box in a central location.

Participation is completely voluntary and will not advantage or disadvantage students in any way whether they choose to complete the questionnaire or not. There are also no direct benefits or foreseeable risks for participating in the study. Submission of the completed questionnaire will be regarded as consent to participate in the study. No identifying information, such as names or student numbers, will be asked for and participants will therefore remain completely anonymous and the data they provide will not be linked to them as individuals in any way. Participants will be able to obtain feedback for the study in the form of a summary of general results; individual feedback will not be possible as the data is anonymous. Participants will also be asked for permission to store their data in anonymous electronic form and to use this for future research. The research and research supervisor's contact details will be provided in the participant information sheet.

This research will help to better understand the relationship between employer attractiveness, career orientation, and self-perceived employability; which may inform practice, and help companies to attract and retain employees. If you choose to allow me to approach students for their participation, it would therefore be greatly appreciated. If you have any questions or concerns, please feel free to contact me or my supervisor as per the details below.

Kind Regards
Lauren Kate Meehan
(072) 588 1546
Lalameehan3@gmail.com

Supervisor: Nicky Israel
(011) 717 4557
Nicky.Israel@wits.ac.za

Course Co-ordinator:
Colleen Bernstein
Colleen.Bernstein@wits.ac.za

Appendix H: Invitation to students

Hi,

My name is Lauren Meehan and I am an Organisational Psychology Masters student. I am doing a study to explore relationship between employer attractiveness, career orientation, and self- perceived employability. In order to get data for the study, I am asking third-year and postgraduate students registered at the University of the Witswatersrand to please fill out some questionnaires (either online or paper-based).

I would really appreciate if you would consider participating in my study!

Please follow the link below which will take you to an online survey with the participant information sheet and questionnaires.

<https://www.surveymonkey.com/r/7GCRPNV>

If you know of anyone else who would fit in the sample, please pass this invitation on to them as well.

Thank you so much!!

Lauren

Lauren Kate Meehan
Lalamehan3@gmail.com

Supervisor: Nicky Israel
Nicky.Israel@wits.ac.za

Appendix I: Participant Information Sheet (Electronic version)



Psychology
School of Human & Community
Development
University of the Witwatersrand
Private Bag 3, Wits, 2050
Tel: 011 717 4503 Fax: 011 717 4559



Date:

Hello.

My name is Lauren Kate Meehan and I am a student currently completing my Masters in Organisational Psychology at the University of the Witwatersrand. As part of the requirements for my degree, I am conducting research. My research aims to explore the relationships between employer attractiveness, career orientation, and self- perceived employability. I will be using data obtained from third year and postgraduate students over the age of 18 registered at the University of the Witwatersrand in order to answer the research questions.

If you meet these criteria, I would like to ask you to please consider participating in my study. Participating will require you to access and complete a set of online questionnaires at a convenient time for you. These questionnaires should take approximately 20 – 30 minutes to complete and you are asked to do this within the next two to three weeks. Once you have answered the questionnaires, you can submit the completed answers online.

Participation is completely voluntary and you will not be advantaged or disadvantaged in any way whether you choose to complete the questionnaire or not. There are also no direct benefits or foreseeable risks for participating in the study. Submission of the completed questionnaire will be regarded as consent to participate in the study. No identifying information, such as your name or student number, will be asked for and you will therefore be completely anonymous. Your responses will remain confidential and your anonymity is guaranteed as no identifying information or IP addresses will be recorded.

You will be able to obtain feedback for the study in the form of a summary of the general results; individual feedback will not be possible as the data is anonymous. With your permission, we would also like to store your responses permanently in anonymous, electronic form and to possibly use this for future research projects.

This research will help to better understand the relationship between employer attractiveness, career orientation, and self- perceived employability; which may inform practice and help companies to attract and retain employees. If you choose to participate, it would therefore be greatly appreciated. If you have any questions or concerns, please feel free to contact me or my supervisor as per the details below. Ethical queries can also be directed to the course co-ordinator Colleen Bernstein at Coleen.Bernstein@wits.ac.za.

I have read the details of this study and consent to participate in the study on a voluntary basis. I also understand that I may withdraw at any point up to submission.

Yes	No
-----	----

Lauren Meehan
Lalameehan3@gmail.com

Nicky Israel
Nicky.Israel@wits.ac.za

Appendix J: Participant Information Sheet (Hard copy version)



Psychology
School of Human & Community
Development
University of the Witwatersrand
Private Bag 3, Wits, 2050
Tel: 011 717 4503 Fax: 011 717 4559



Date:

Hello.

My name is Lauren Kate Meehan and I am a student currently completing my Masters in Organisational Psychology at the University of the Witwatersrand. As part of the requirements for my degree, I am conducting research. My research aims to explore the relationship, if any, between employer attractiveness, career orientation, and self- perceived employability. I will be using data obtained from third year and postgraduate students over the age of 18 registered at the University of the Witwatersrand in order to answer the research questions.

If you meet these criteria, I would like to ask you to please consider participating in my study. Participating will require you to complete the set of questionnaires attached to this letter at a convenient time for you. These questionnaires should take approximately 20 – 30 minutes to complete and you are asked to do this within the next two to three weeks. Once you have answered the questionnaires, you can submit the completed questionnaires in a sealed box located at [relevant central location to be inserted].

Participation is completely voluntary and you will not be advantaged or disadvantaged in any way whether you choose to complete the questionnaire or not. There are also no direct benefits or foreseeable risks for participating in the study. Submission of the completed questionnaire will be regarded as consent to participate in the study. No identifying information, such as your name or student number, will be asked for and you will therefore be completely anonymous. Your responses will remain confidential and your anonymity is guaranteed as no identifying information will be recorded.

You will be able to obtain feedback for the study in the form of a summary of the general results; individual feedback will not be possible as the data is anonymous. With your permission, we would also like to store your responses permanently in anonymous, electronic form and to possibly use this for future research projects.

This research will help to better understand the relationship between employer attractiveness, career orientation, and self- perceived employability; which may inform practice and help companies to attract and retain employees. If you choose to participate, it would therefore be greatly appreciated. If you have any questions or concerns, please feel free to contact me or my supervisor as per the details below. Please detach and keep this participant information sheet.

I have read the details of this study and consent to participate in the study on a voluntary basis. I also understand that I may withdraw at any point up to submission.

Yes	No
-----	----

Lauren Meehan
Lalameehan3@gmail.com

Supervisor: Nicky Israel
Nicky.Israel@Wits.ac.za

Ethical queries can be directed to:
Course Co-ordinator:
Colleen Bernstein
Colleen.Bernstein@wits.ac.za

Appendix K: Histograms for the main variables

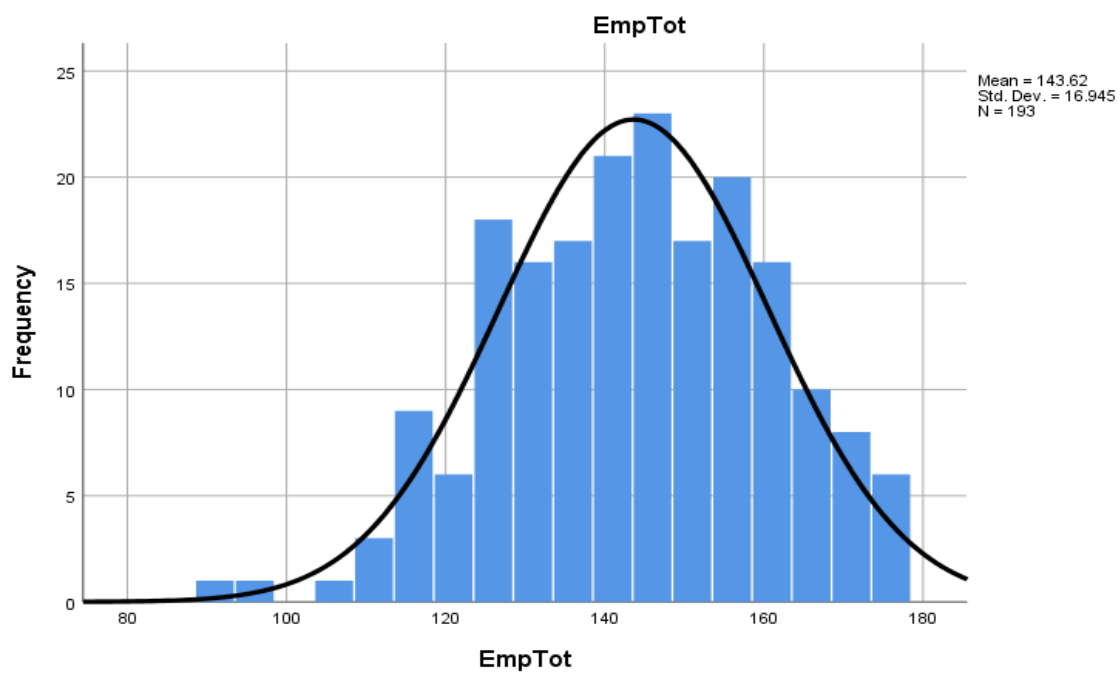


Figure 1

Distribution of Employer Attractiveness total scores

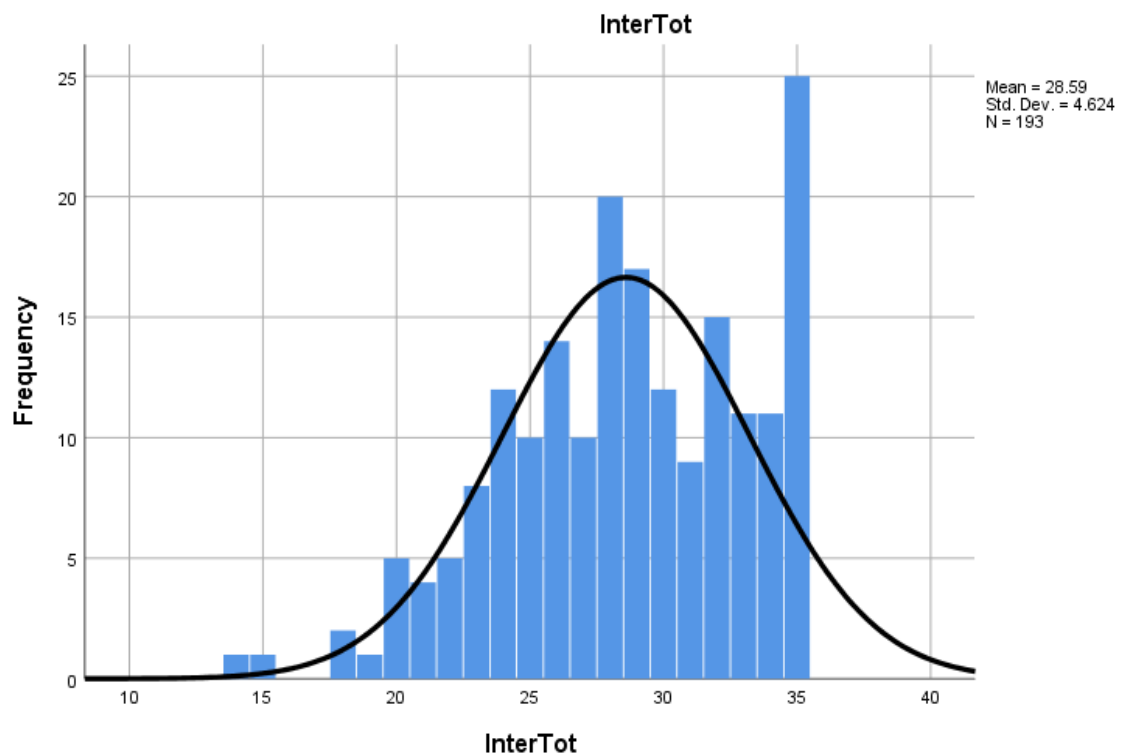


Figure 2

Distribution of interest value

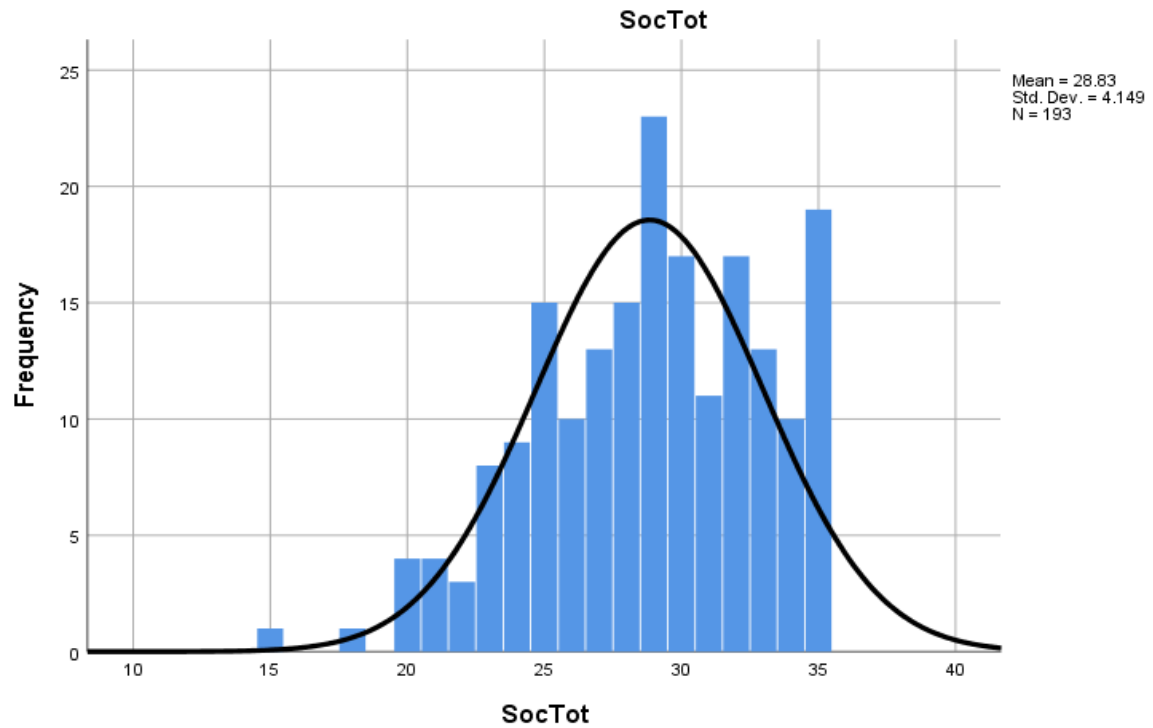


Figure 3

Distribution of social value

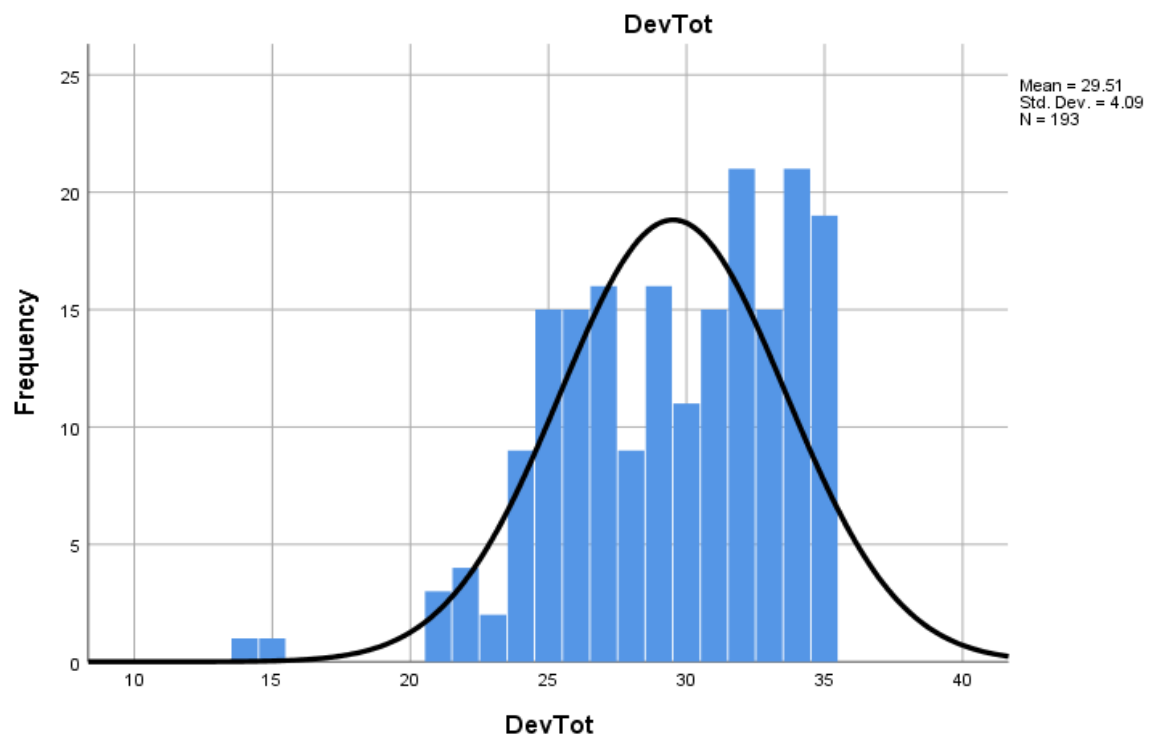


Figure 4

Distribution of development value

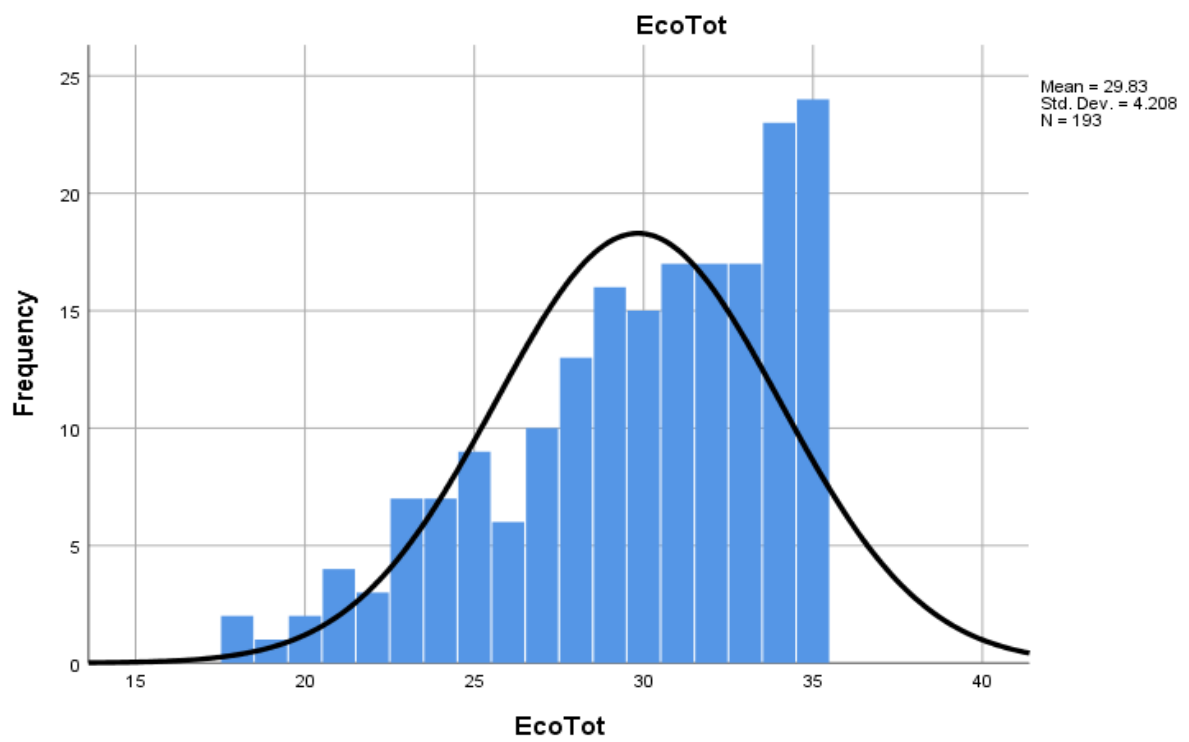


Figure 5
Distribution of economic value

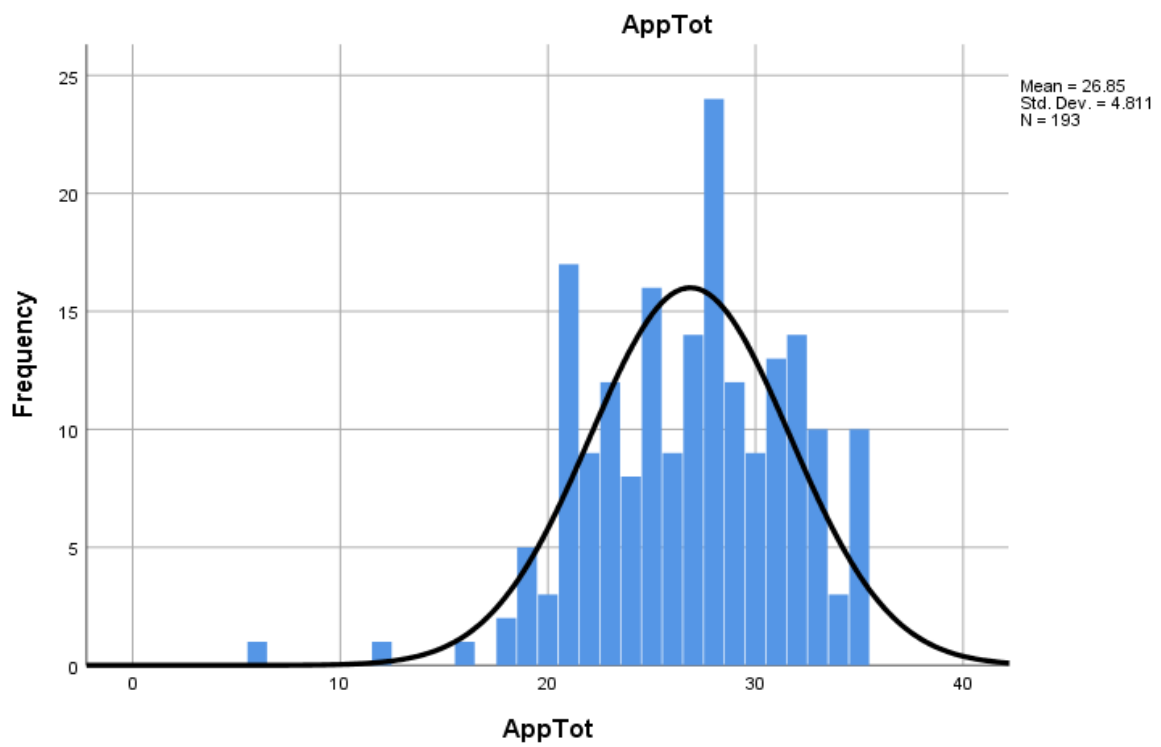


Figure 6
Distribution of application value

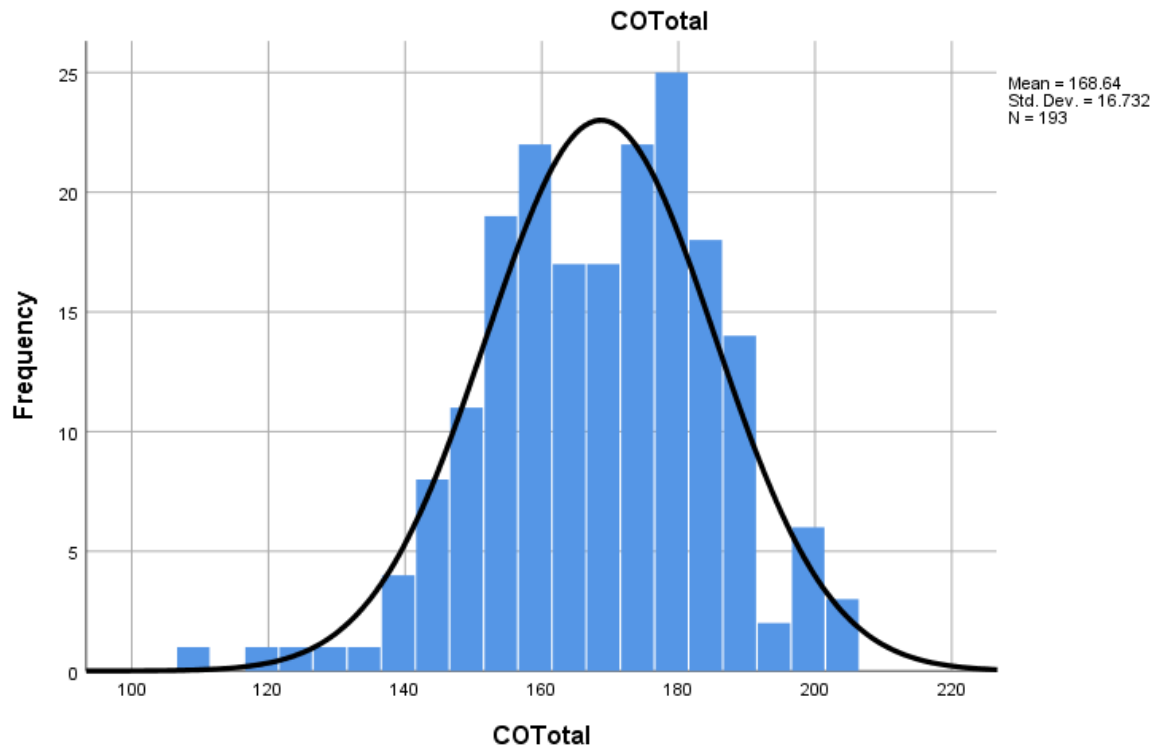


Figure 7
Distribution of Career orientation total scores

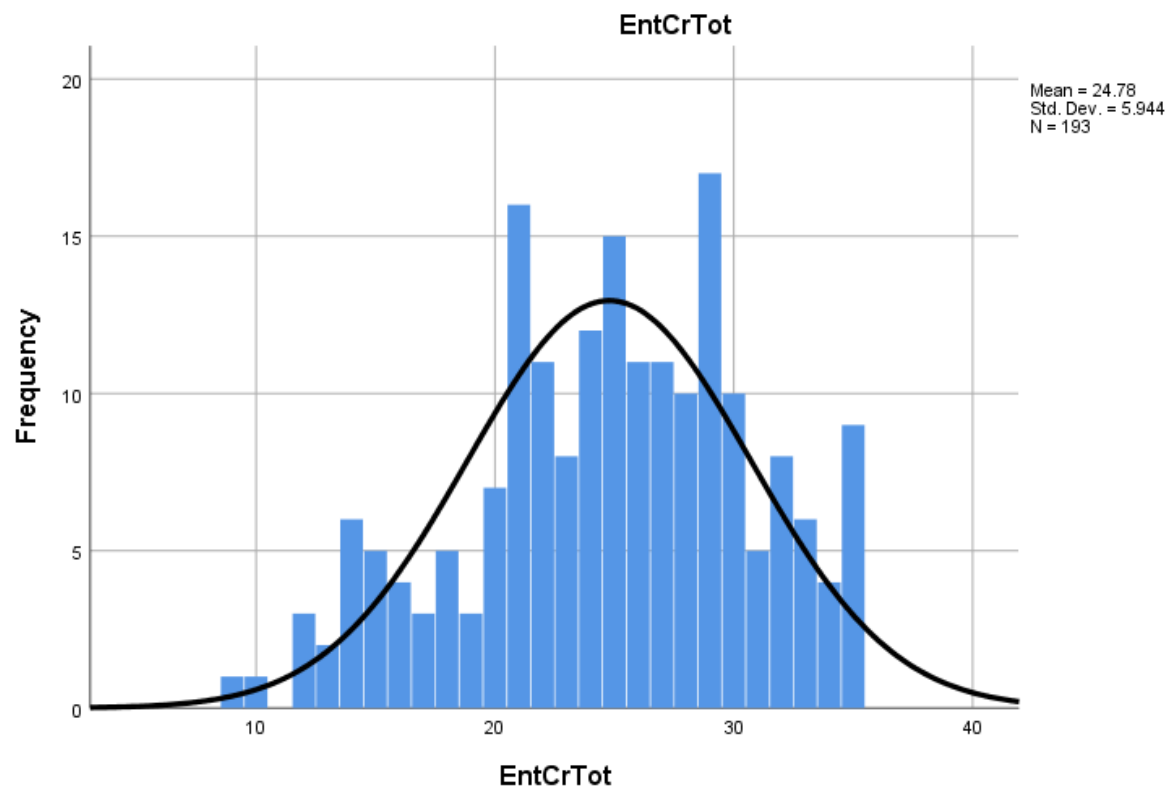


Figure 8
Distribution of entrepreneurial creativity orientation

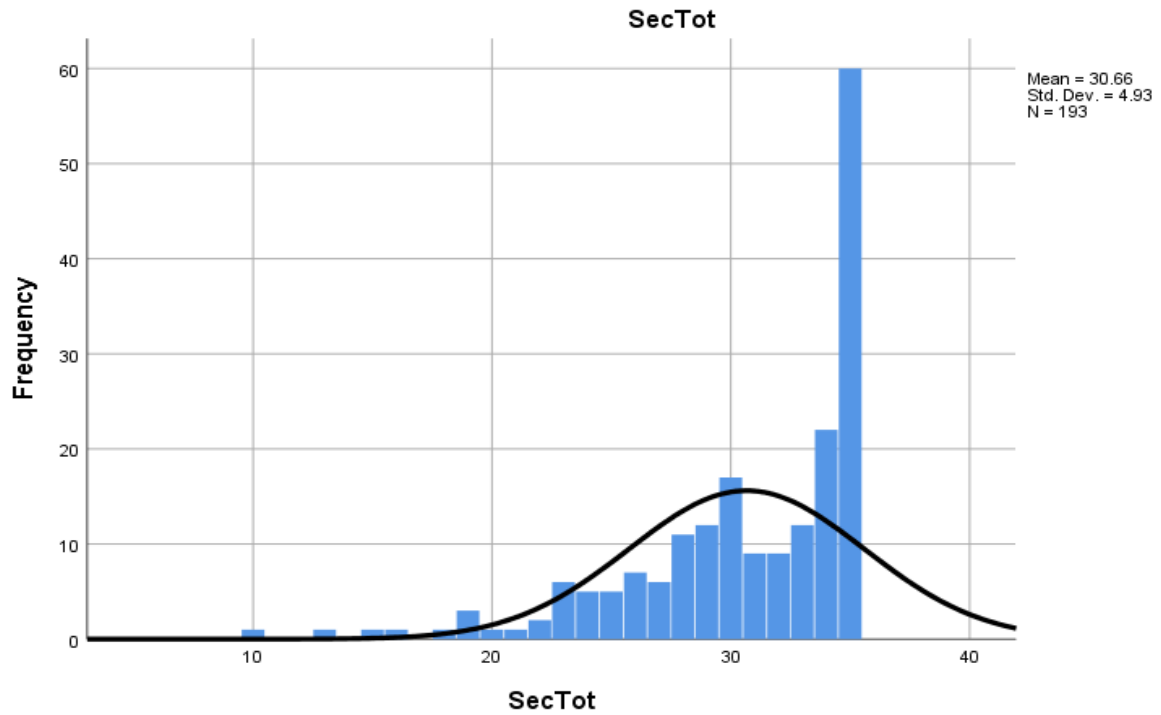


Figure 9
Distribution of security orientation

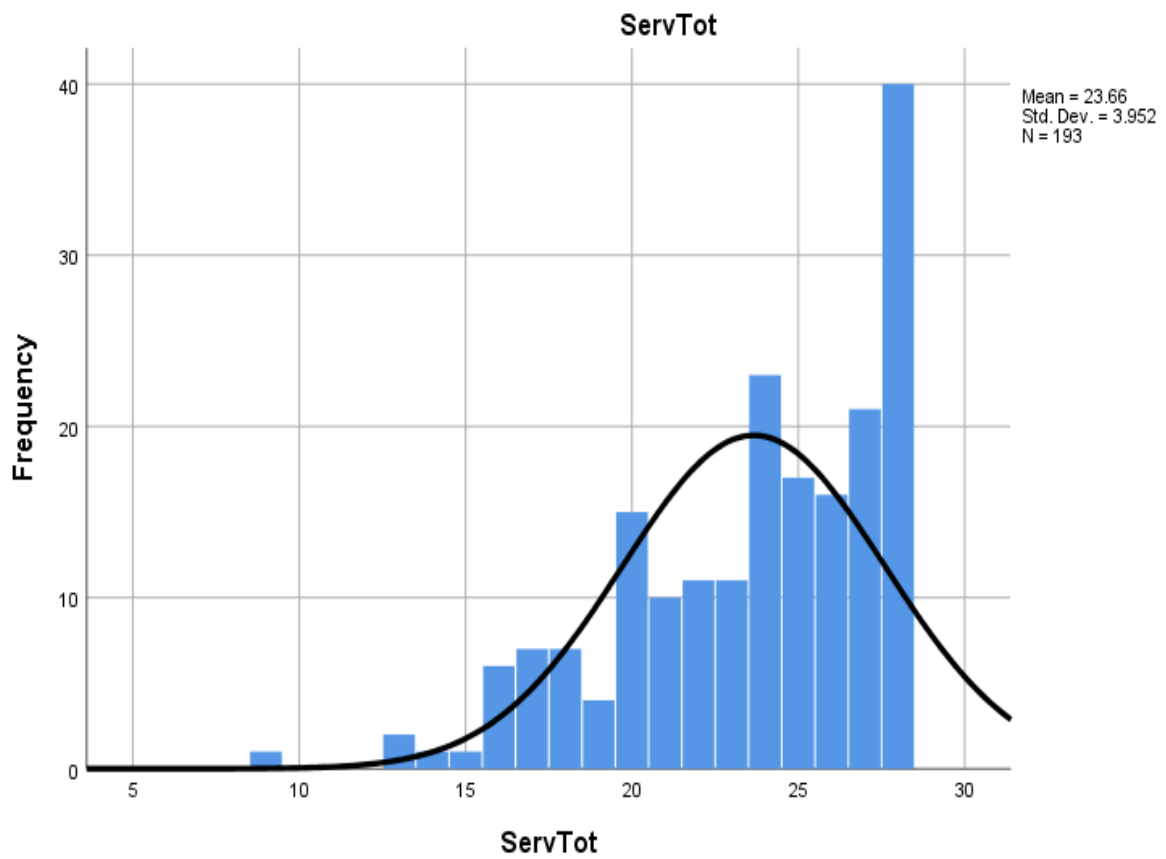


Figure 10
Distribution of service to cause orientation

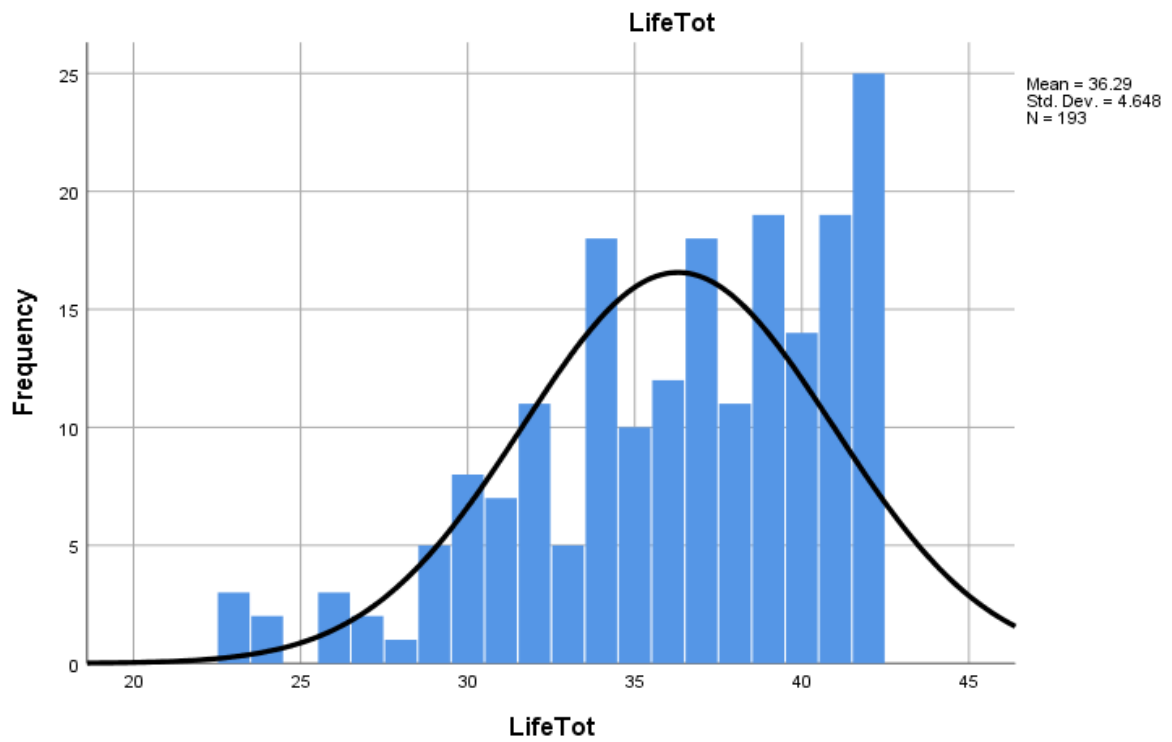


Figure 11

Distribution of lifestyle orientation

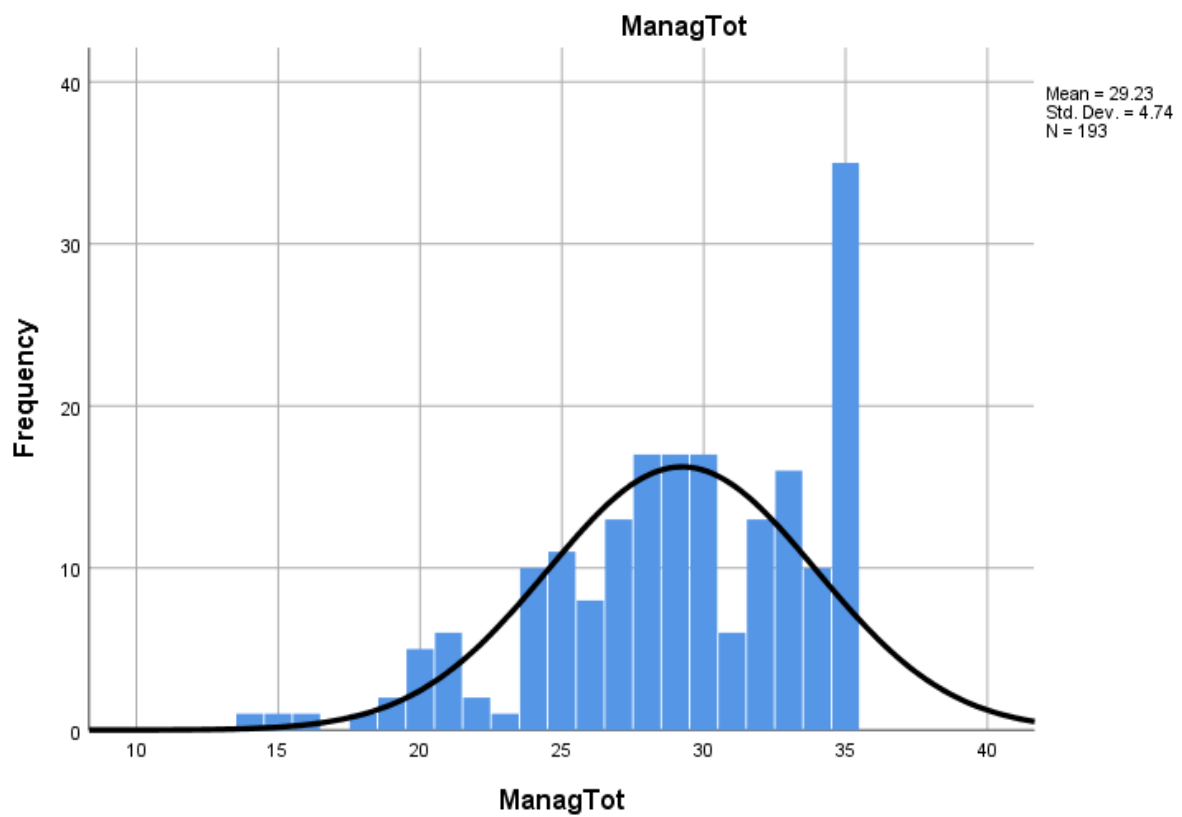


Figure 12

Distribution of managerial orientation

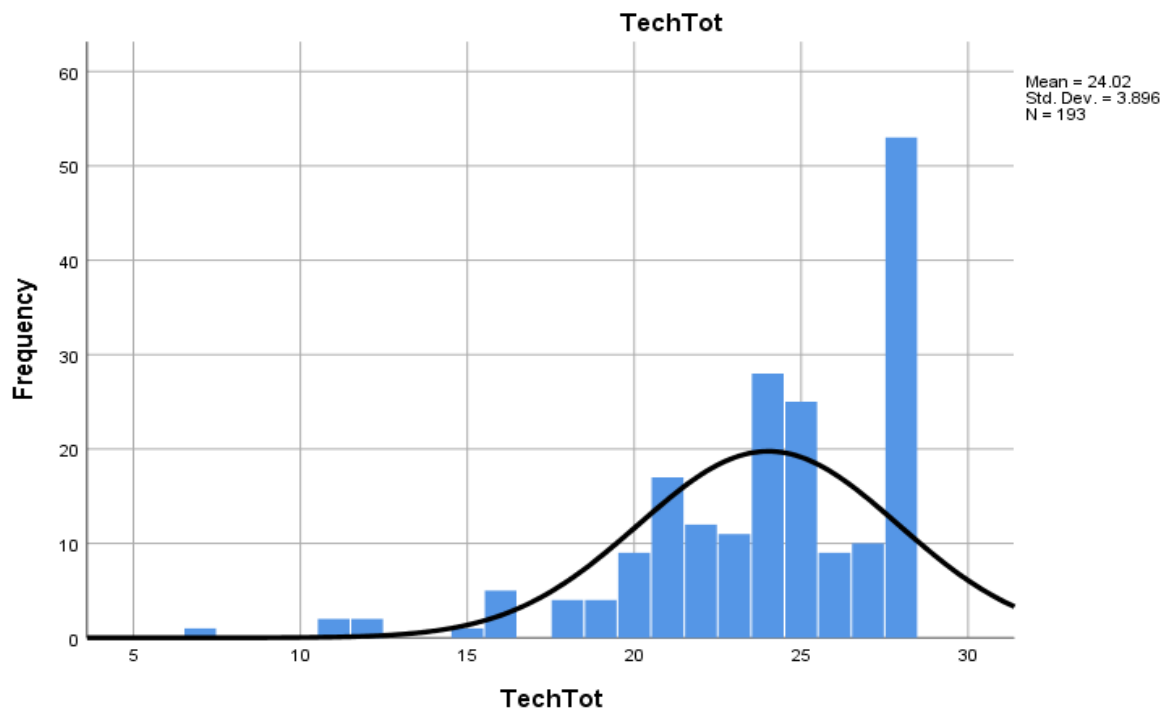


Figure 13

Distribution of technical orientation

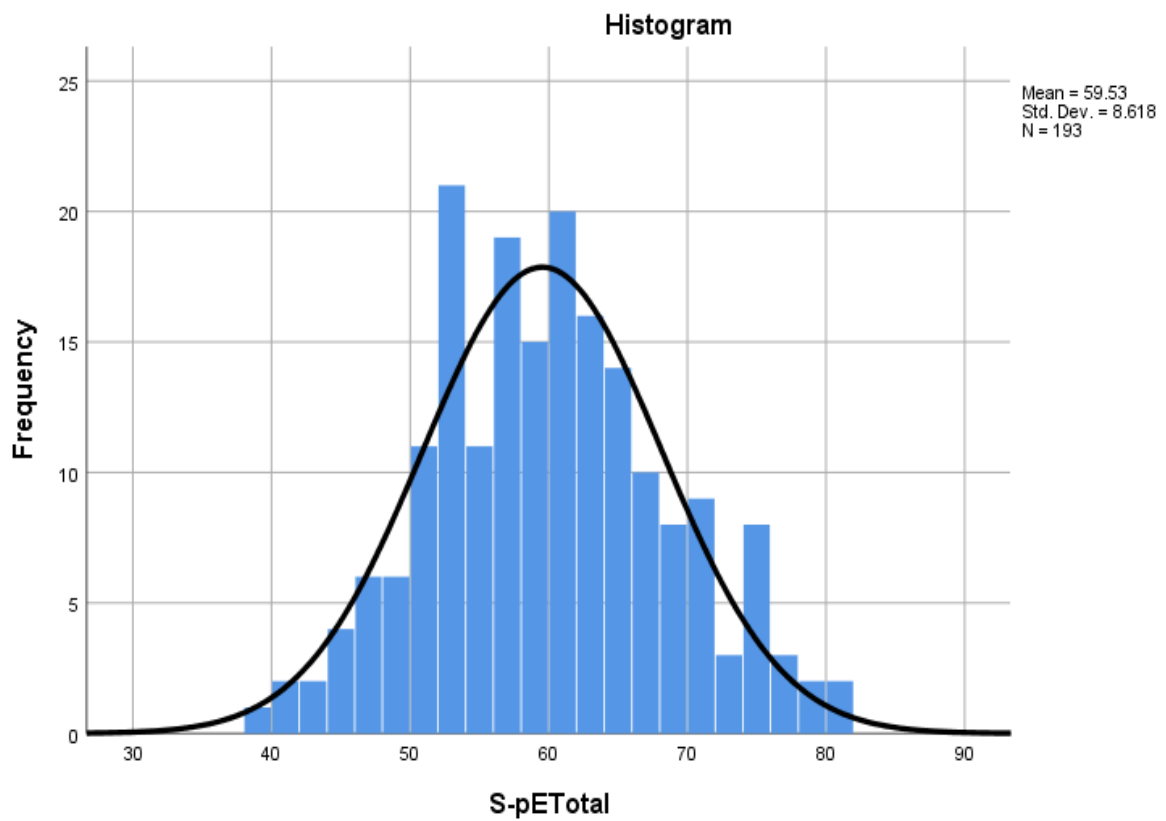


Figure 14

Distribution of self-perceived employability

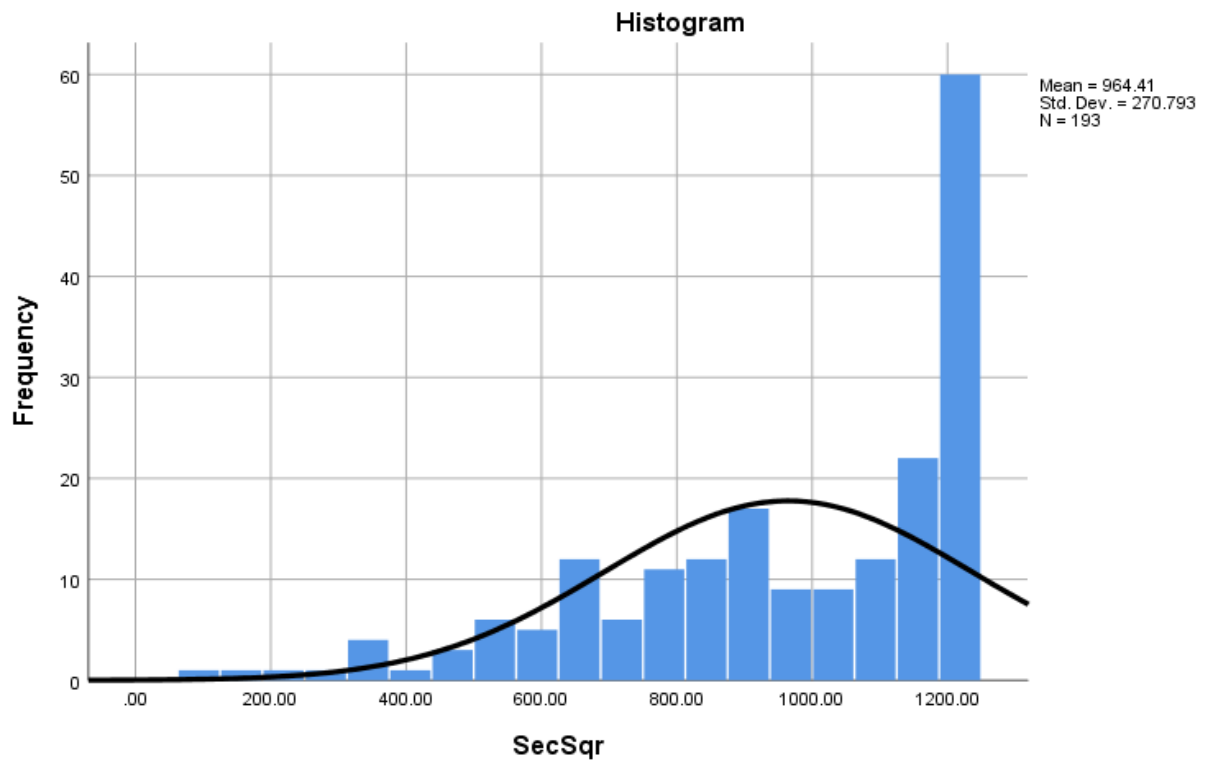


Figure 15

Distribution of transformed security orientation

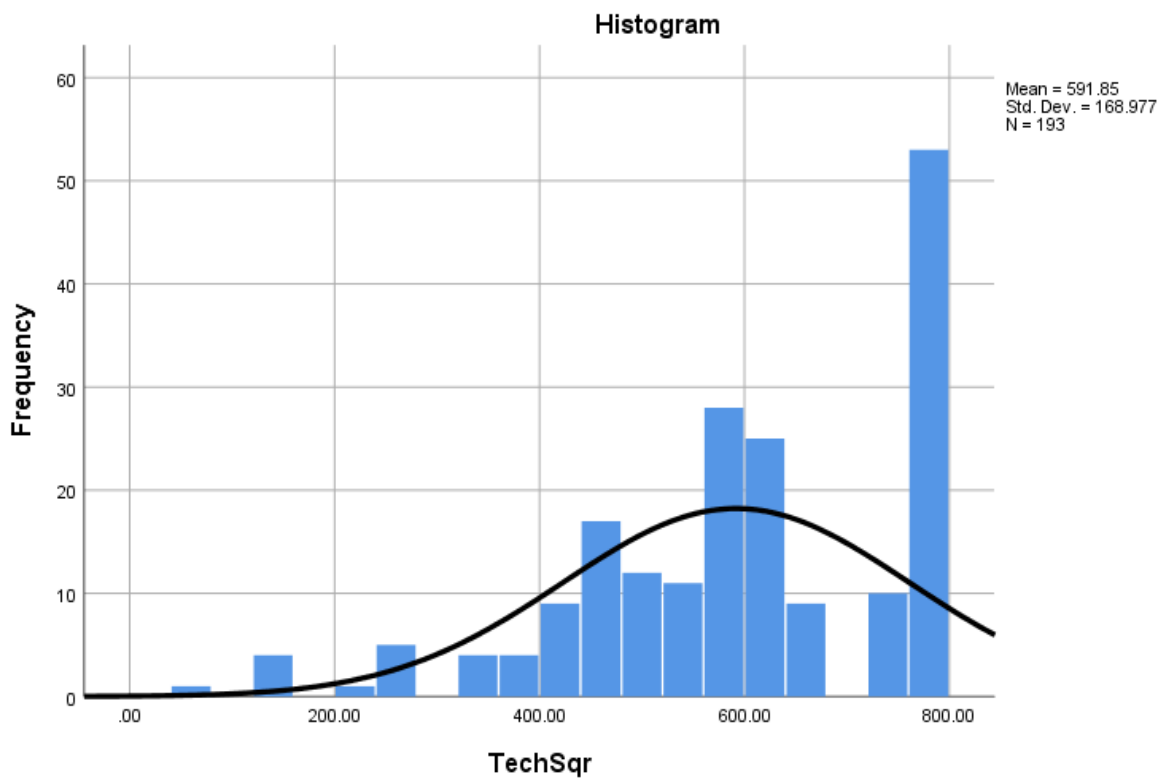


Figure 16

Distribution of transformed technical orientation

Appendix L: Moderation tables

Development value

Table 17

Model summary and coefficients for model 1

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	16.426	9.728		1.688	.093	-2.764	35.615	.193	.037	.037	.027
EntCrTot	.376	.380	.546	.989	.324	-.374	1.126				
S-pETotal	.183	.161	.386	1.136	.257	-.135	.501				
EntCrTot* S-pETotal	-.005	.006	-.530	-.771	.441	-.017	.007	.200	.040	.003	.441

Table 18

Model summary and coefficients for Model 2

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	26.708	7.694		3.471	.001	11.530	41.885	.341	.116	.116	.000
SecSqr	-4.194E-5	.008	-.003	-.006	.996	-.015	.015				
S-pETotal	-.032	.134	-.067	-.238	.812	-.295	.232				
SecSqr*S-pETotal	8.204E-5	.000	.380	.636	.532	.000	.000	.343	.118	.002	.532

Table 19

Model summary and coefficients for Model 3

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R ²	R ² Change	Sig. Change
(Constant)	21.589	13.553		1.593	.113	-5.146	48.324	.248	.062	.062	.002
ServTot	.162	.561	.156	.288	.773	-.945	1.268				
S-pETotal	.052	.221	.109	.234	.815	-.384	.487				
ServTot*S-pETotal	.001	.009	.057	.079	.937	-.017	.019	.248	.062	.000	.937

Table 20

Model summary and coefficients for Model 4

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R ²	R ² Change	Sig. Change
(Constant)	20.098	15.996		1.256	.211	-11.457	51.653	.319	.101	.101	.000
LifeTot	.175	.428	.199	.409	.683	-.670	1.019				
S-pETotal	.005	.269	.011	.020	.984	-.525	.536				
LifeTot*S-pETotal	.001	.007	.140	.177	.859	-.013	.015	.319	.102	.000	.859

Table 21

Model summary and coefficients for Model 5

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R ²	R ² Change	Sig. Change
(Constant)	39.228	12.937		3.032	.003	13.708	64.748	.293	.062	.086	.000
ManagTo t	-.373	.422	-.432	-.883	.378	-1.205	.459				
S-pETotal	-.385	.223	-.601	-1.277	.203	-.726	.155				
ManagTo t*S-pETotal	.010	.007	1.107	1.441	.151	-.004	.025	.309	.062	.010	.151

Table 22

Model summary and coefficients for Model 6

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	26.903	8.765		3.069	.002	9.613	44.193	.397	.158	.158	.000
TechSq	.003	.014	.133	.235	.815	-.347	.246				
S-pETotal	-.050	.150	-.106	-.335	.738	-.024	.030				
TechSqr*S- pETotal	.000	.000	.325	.451	.652	.000	.001	.398	.159	.001	.652

Social value

Table 23

Model summary and coefficients for Model 7

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	22.482	9.226		2.437	.016	4.283	40.682	.401	.161	.161	.000
EntCrTot	.226	.361	.324	.627	.532	-.485	.937				
S-pETotal	-.008	.153	-.017	-.053	.958	-.310	.293				
EntCrTot*S- pETotal	.001	.006	.091	.141	.888	-.011	.013	.401	.161	.000	.888

Table 24

Model summary and coefficients for Model 8

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	25.573	8.111		3.153	.002	9.573	41.572	.217	.047	.047	.010
SecSqr	.002	.008	.109	.208	.835	-.014	.017				
S-pETotal	.004	.141	.009	.030	.976	-.274	.282				
SecSqr*S- pETotal	2.430E- 5	.000	.111	.176	.861	.000	.000	.217	.047	.000	.861

Table 25

Model summary and coefficients for Model 9

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	26.143	13.365		1.956	.052	-.221	52.507	.334	.111	.111	.000
ServTot	.018	.553	.017	.032	.974	-1.073	1.109				
S-pETotal	-.086	.218	- .179	-.396	.692	-.516	.343				
ServTot*S- pETotal	.005	.009	.407	.584	.560	-.012	.023	.336	.113	.002	.560

Table 26

Model summary and coefficients for Model 10

Model	B	Std. Error	Std. Beta	t	Sig.	Lower r CI	Upper r CI	R	R²	R² Change	Sig. Change
(Constant)	33.107	15.981		2.072	.040	1.584	64.630	.351	.123	.123	.000
LifeTot	-.140	.428	-.157	-.327	.744	-.984	.704				
S-pETotal	-.261	.269	-.542	-.971	.333	-.791	.269				
EntCrTot* S-pETotal	.008	.007	.821	1.054	.293	-.007	.022	.358	.128	.005	.293

Table 27

Model summary and coefficients for Model 11

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	33.897	13.185		2.571	.011	7.889	59.906	.287	.083	.083	.000
ManagTot	-.156	.430	-.178	-.363	.717	-1.004	.692				
S-pETotal	-.215	.228	-.447	-.945	.346	-.664	.234				
ManagTot*S- pETotal	.007	.007	.740	.959	.339	-.007	.021	.295	.087	.004	.339

Table 28

Model summary and coefficients for Model 12

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	30.704	9.195		3.339	.001	12.567	48.842	.312	.098	.098	.000
TechSqr	-.002	.014	-.090	-.154	.878	-.031	.026				
S-pETotal	-.110	.158	-.229	-.700	.485	-.421	.201				
TechSq*S-pETotal	.000	.000	.519	.697	.487	.000	.001	.316	.100	.002	.487

Interest value

Table 29

Model summary and coefficients for Model 13

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	15.791	9.888		1.597	.112	-3.714	45.296	.473	.224	.224	.000
EntCrTot	.398	.386	.511	1.030	.305	-.364	1.160				
S-pETotal	.069	.164	.129	.421	.674	-.254	.392				
EntCrTot*S-pETotal	-.001	.006	-.076	-.124	.902	-.013	.012	.473	.224	.000	.902

Table 30

Model summary and coefficients for Model 14

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	3.621	14.116		.257	.798	-24.224	31.467	.449	.202	.202	.000
ServTot	.845	.584	.722	1.446	.150	-.308	1.997				
S-pETotal	.221	.230	.412	.961	.338	-.233	.675				
ServTot*S- pETotal	-.006	.010	- .403	-.611	.542	-.025	.013	.451	.203	.002	.542

Table 31

Model summary and coefficients for Model 15

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	24.230	18.014		1.345	.180	- 11.305	59.765	.327	.107	.107	.000
LifeTot	.019	.482	.019	.039	.969	-.932	.970				
S-pETotal	-.102	.303	- .191	-.338	.736	-.699	.495				
LifeTot*S- pETotal	.005	.008	.440	.559	.577	-.011	.020	.329	.108	.001	.577

Table 32

Model summary and coefficients for Model 16

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	32.176	14.480		2.222	.027	3.613	60.739	.330	.109	.109	.000
ManagTot	-.178	.472	-.182	-.377	.707	-1.109	.753				
S-pETotal	-.213	.250	-.396	-.851	.396	-.706	.280				
ManagTot*S-pETotal	.008	.008	.770	1.012	.313	-.008	.024	.337	.114	.005	.313

Table 33

Model summary and coefficients for Model 17

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	20.812	10.172		2.046	.042	.746	40.878	.336	.113	.113	.000
TechSqr	.009	.016	.344	.593	.554	-.022	.041				
S-pETotal	.047	.174	.087	.268	.789	-.297	.391				
TechSqr*S-pETotal	-1.607E-5	.000	-.044	-.060	.952	-.001	.001	.336	.113	.000	.952

Table 34

Model summary and coefficients for Model 18

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	11.646	9.037		1.289	.199	-6.180	29.473	.201	.040	.040	.020
SecSqr	.013	.009	.740	1.413	.150	-.005	.030				
S-pETotal	.258	.157	.481	1.645	.102	-.051	.567				
SecSqr*S- pETotal	.000	.000	-. .751	-. 1.192	.235	.000	.000	.218	.048	.007	.235

Application value

Table 35

Model summary and coefficients for Model 19

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	31.840	10.742		2.964	.003	10.650	53.029	.383	.147	.147	.000
EntCrTot	-.212	.420	-. .262	-.506	.614	-1.040	.616				
S-pETotal	-.210	.178	-. .376	-. 1.180	.239	-.561	.141				
EntCrTot*S- pETotal	.009	.007	.806	1.251	.212	-.005	.022	.392	.154	.007	.212

Table 36

Model summary and coefficients for Model 20

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	8.772	9.008		.974	.331	-8.998	26.542	.343	.118	.118	.000
SecSqr	.018	.009	.998	1.991	.048	.000	.035				
S-pETotal	.214	.156	.383	1.369	.178	-.094	.523				
SecSqr*S- pETotal	.000	.000	- .801	- 1.328	.186	-.001	.000	.355	.126	.008	.186

Table 37

Model summary and coefficients for Model 21

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	15.941	14.424		1.105	.270	- 12.512	44.394	.481	.231	.231	.000
ServTot	.374	.597	.307	.626	.532	-.804	1.551				
S-pETotal	-.045	.235	- .080	-.191	.849	-.508	.419				
ServTot*S- pETotal	.003	.010	.225	.347	.729	-.016	.023	.481	.232	.000	.729

Table 38

Model summary and coefficients for Model 22

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	20.119	18.569		1.083	.280	- 16.511	56.749	.352	.124	.124	.000
LifeTot	.167	.497	.161	-.336	.737	-.814	1.147				
S-pETotal	-.107	.312	- .193	-.344	.731	-.723	.508				
LifeTot*S- pETotal	.003	.008	.307	.393	.695	-.013	.020	.353	.125	.001	.695

Table 39

Model summary and coefficients for Model 23

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	29.686	15.610		1.902	.059	-1.105	60.478	.216	.047	.047	.011
ManagTot	-.092	.509	- .091	-.181	.857	-1.069	.912				
S-pETotal	-.159	.270	- .285	-.590	.556	-.691	.373				
ManagTot *S-pETotal	.005	.009	.483	.613	.540	-.012	.022	.220	.048	.002	.540

Table 40

Model summary and coefficients for Model 24

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	28.737	10.760		2.671	.008	7.511	49.962	.286	.082	.082	.000
TechSqr	-.002	.017	-.060	-.103	.918	-.035	.031				
S-pETotal	-.116	.184	-.207	-.628	.531	-.480	.248				
TechSqr*S-pETotal	.000	.000	.450	.598	.550	.000	.001	.289	.083	.002	.550

Economic value

Table 41

Model summary and coefficients for Model 25

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	24.068	9.922		2.426	.061	4.496	43.640	.237	.056	.056	.004
EntCrTot	.049	.388	.069	.125	.900	-.716	.813				
S-pETotal	.051	.164	.105	.312	.755	-.273	.376				
EntCrTot*S-pETotal	.001	.006	.108	.159	.874	-.012	.014	.238	.056	.000	.874

Table 42

Model summary and coefficients for Model 26

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	8.720	6.481		1.345	.180	-4.065	21.505	.634	.402	.402	.001
SecSqr	.091	.006	1.219	2.955	.004	.006	.032				
S-pETotal	.206	.113	.423	1.834	.068	-.016	.428				
SeqSqr*S- pETotal	.000	.000	-.735	- 1.481	.140	.000	.000	.639	.408	.007	.140

Table 43

Model summary and coefficients for Model 27

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	- 17.083	14.983		- 1.140	.256	- 46.639	12.472	.419	.241	.241	.000
LifeTot	1.178	.401	1.301	2.938	.004	.387	1.969				
S-pETotal	.538	.252	1.102	2.137	.034	.041	1.035				
LifeTot*S- pETotal	-.013	.007	- 1.381	- 1.919	.056	-.026	.000	.505	.255	.015	.056

Table 44

Model summary and coefficients for Model 28

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	18.591	12.703		1.464	.145	-6.467	43.650	.420	.176	.176	.000
ManagTot	.325	.414	.366	.784	.434	-.492	1.143				
S-pETotal	.015	.219	.031	.069	.945	-.417	.448				
ManagTot*S- pETotal	.000	.007	.050	.068	.946	-.013	.014	.420	.176	.000	.946

Table 45

Model summary and coefficients for Model 29

Model	B	Std. Error	Std. Beta	t	Sig.	Lower CI	Upper CI	R	R²	R² Change	Sig. Change
(Constant)	23.501	9.307		2.525	.012	5.142	41.861	.322	.103	.103	.000
TechSqr	.006	.015	.239	.409	.683	-.023	.035				
S-pETotal	.037	.160	.076	.233	.816	-.278	.352				
TechSqr*S- pETotal	1.668E- 5	.000	.051	.068	.946	.000	.000	.322	.000	.000	.946