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UNIVERSITY OF CAPE TOWN
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**STUDENT VOLUNTEERING AND GRADUATE EMPLOYABILITY:
A STUDY OF THE STRUCTURAL AND MOTIVATIONAL ASPECTS OF
VOLUNTEERING AND THEIR INFLUENCE ON GRADUATE
EMPLOYABILITY**

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CPRGIN001

A dissertation submitted in partial fulfilment of the requirements for the award of the
Degree of Master of Commerce in Organisational Psychology

Faculty of Commerce

University of Cape Town

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COMPULSORY DECLARATION

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works of other people has been attributed, and has been cited and referenced.

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ABSTRACT

This study examined the impact of volunteering on the development of perceived graduate employability amongst student and graduate volunteers at the University of Cape Town ($N = 279$). Path analysis revealed significant relationships between volunteerism and graduate employability, when facilitated through the development of graduate competencies. It furthermore highlighted the importance of seniority within a volunteer organisation as well as the impact which motivation to volunteer has in developing graduate competencies and perceived employability. The research findings provide a basis for future research into volunteering as an antecedent of employability as well as implications for universities, students and employers.

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CHAPTER 1: INTRODUCTION

“The phenomenon of unemployed graduates, who are without the abilities to self-employ and self-determine, after spending three to four years of post-secondary education is an indication to all of us of the challenge in our education at a tertiary level” (Mlambo-Ngcuka, 2006, p.3).

Graduate employability is a topic which is gaining momentum worldwide, and South Africa is no exception (Coetzee, 2012; Cranmer, 2006; Griesel & Parker, 2009; Hesketh, 2000; Mason, Williams & Cranmer; 2006; Yorke & Knight, 2004). There is an increasing demand for students to enter the world of work with skills which make them not only employable, but also able to function competitively within the workplace (Chetty, 2012; Coetzee, 2009; Fallow & Steven, 2000; Gracia, 2000). Having a qualification is no longer sufficient to ensure employability as the current economic situation requires that employees, at all levels, contribute to the prosperity and development of organisations (Chetty, 2012; Mason et al., 2006). Employers are, consequently, demanding students who are able to contribute immediately upon commencement of employment (Hinchliffe & Jolly, 2010). This is achieved through first having a deep understanding of academic content and educational expertise. Secondly, and most importantly, possessing the necessary professional skills and ability for personal growth to becoming immediately acclimatised into organisations (Andrew & Higson, 2008; Coetzee, 2011; Fallow & Steven, 2000; Griesel & Parker, 2009; Yorke & Knight, 2004).

Employers' expectation is that these skills and abilities will be developed during a student's higher education process at university and that they would be equipped with the necessary interpersonal and academic abilities on completion of their studies (Griesel & Parker, 2009; Hinchliffe & Jolly, 2010). It appears, however, that higher education may not be able to immediately meet the labour markets' demands as they grapple with the ability to develop the graduate skills required for the growth of the economy (Bernstein & Osman, 2012; Cranmer, 2006; Hesketh, 2000; Mason et al.,

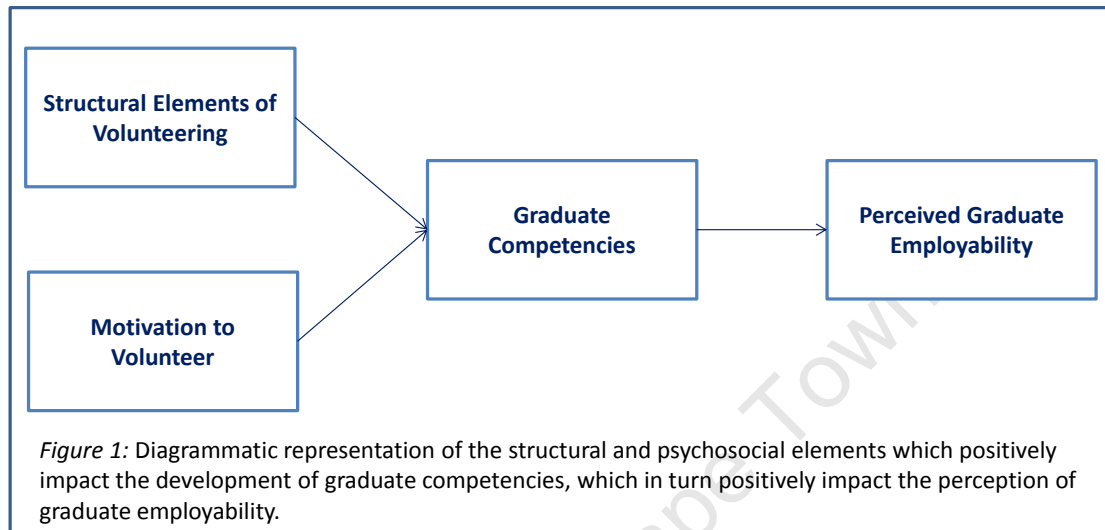
2006; Rae, 2007). Whilst some universities are attempting to bridge this divide with programs such as Community Based Research (Lichenstein, Thorne, Cutforth, & Tombari, 2011), Service Learning (Astin & Sax, 1998) and embedding graduateness into course curriculum (Bernstein & Osman, 2012; Chetty, 2012), the focus on this is relatively new within South African universities and has only recently begun to gain attention (Coetzee, Botha, Eccles, Nienaber & Holtzhausen, 2012; Favish & McMillan, 2009; Favish et al., 2012). Students, therefore, have limited options to address their employability necessity. They are consequently forced to take greater responsibility for their own employability through seeking opportunities which develop the skills and abilities necessary to be effective in a work environment (De La Harpe, Radloff & Wyber's, 2000; Holmes, 2006). These opportunities usually take the form of extra-curricular activities. Research suggests that volunteerism is one of the possible avenues for students to develop graduate competencies (Handy, et al., 2010; Holdsworth, 2010; Holdsworth & Quinn, 2010; Hustinx, Cnaan & Handy, 2010). Volunteerism creates a context for more than solely contributing to community as it creates an environment which assists students by embedding academic content and equipping them interpersonally (Handy, et al., 2010; Holdsworth & Quinn, 2010; Hustinx, Cnaan & Handy, 2010). There is, however, limited international or local evidence to prove that volunteering positively impacts employability (Holdsworth & Quinn, 2010).

The constructs related to volunteering and graduate employability are complex in nature and required in-depth understanding in order to define. Therefore, this explanation is covered in chapter two of the research paper.

Aims of the Research

Given the assumption that volunteering could be a platform for the development of graduate competencies which lead to employability, as well as the lack of research in linking volunteerism and graduate employability, this study aims to answer the primary research question: *To what extent does volunteering contribute to the*

perception of graduate employability. This is illustrated in figure 1 and is supported by two additional questions: *First, to what extent do the structural elements of volunteering and psychosocial motivators to volunteer increase the development of graduate competencies. Secondly, to what extent to these graduate competencies increase perception of graduate employability.*



This study aims to assess the model depicted in figure 1 with the intention of contributing useful data which could be utilised by universities, employers and students. Such findings could benefit organisations by assisting them in recruiting the desired graduates from tertiary institutions by providing additional insight into the skills which are being developed through volunteer activities and thus which students to target in their recruitment endeavours. It will also support the discourse around graduate employability through providing empirical evidence about what graduate employability is and an avenue in which it is developed. It could, therefore, provide students with information to assist them in the development of their graduate competencies. Moreover, it could assist higher education institutions that offer opportunities for volunteerism with information to support and potentially improve this offering. Furthermore, it could assist universities which do not have this offering with a possible avenue to improve their graduate employability outputs and increase their marketability to prospective students.

Structure of the Dissertation

This chapter provides an introduction into the research topic, insight into the aims of the research as well as the outline of the dissertation. Chapter two presents a review of the literature concerning graduate employability, graduate competencies, volunteering as well as people's motivations to volunteer and the structural elements of volunteering which impact volunteer outcomes. The research hypotheses will be presented here. Chapter three describes the research method used to investigate the research hypotheses. It specifically defines the research design, the measurement scales, the research context, the sampling and data collection procedure, the participants and the data analysis techniques used within this study. The results of the statistical data analysis are presented in chapter four and include reliability analysis, factor analysis, descriptive analysis, correlations and finally path analysis. In chapter five, the main results are interpreted and discussed with reference to the research and existing literature. Furthermore, chapter five presents implications for organisations, students and universities in addition to recommendations for future research.

CHAPTER 2: LITERATURE REVIEW

In order to fully understand volunteerism and its relationship with graduate employability, this chapter reports on an in-depth and exhaustive search and literature review into the skills and attributes which are associated with graduate employability. It also presents an analysis of the relevant literature on volunteering and the structural and motivational elements which lead to the development of skills through participation in volunteer work. Figure 1 places volunteerism as the first concept within the model as an antecedent of graduate competencies, which in turn leads to employability. This study aims to provide insight into whether volunteer activities assist in equipping students with the skills required in the labour market. In order to achieve this, insight is firstly required into what those competencies are and therefore whether volunteering is an avenue for this. Consequently, graduate employability is the context in which volunteering is located and requires in-depth analysis before volunteering can be assessed as a possible antecedent. The review focuses first on graduate employability, the skills and attributes which are encapsulated within this concept and subsequently on volunteerism and the motivational and structural elements which impact graduate competencies. Before this occurs, however, the literature search procedure is presented.

Literature Search Procedure

The collection of information was conducted through two separate procedures. The first was an exhaustive review of the literature available through electronic research platforms. These included Google Scholar, PsychInfo, EBSCO Host, Emerald, Gale Cengage and JSTOR. This was undertaken through Boolean keyword searches using multiple combinations of the keywords: graduate employability, employability, graduate competencies, volunteer and the benefits or outcomes of volunteering. This search was conducted monthly between February 2012 and November 2012. It additionally included a review of the discourse in both local and international media. This occurred on a weekly basis over the period of the research study and was

facilitated through the South African Graduate Recruitment Association (SAGRA) which collates and disseminates all media relevant to occurrences within the graduate market. The second procedure which was conducted was engagement with people within the University of Cape Town who had expert topical knowledge and were able to provide insight as well as presentations and unpublished reports concerning both graduate employability and volunteering. The database searches and gathering of expert knowledge, confirmed that graduate employability was a growing concern within South Africa and that there was limited insight into volunteering as a possible solution. Moreover, this process demonstrated the paucity of peer reviewed literature and thus, the review contains both empirical research as well as general discourse.

Understanding Graduate Competencies and Employability

Recent research on the changing nature of work shows that graduates entering the world of work today are encountering a workplace with organizational structures which differ greatly from previous generations (Andrews & Higson, 2008; Brevis-Landsberg, 2012; Chetty, 2012). Modern economies in the 21st century are rapidly evolving and this leads to a corresponding change, and increase, in the demand for high-qualified, highly skilled employees. The new employee needs to be equipped to deal with the nature, scope and skill requirements vital for this fast paced, dynamic and demanding labour market (Brown & Lauder, 1992; Chetty, 2012; Gracia, 2009). With a stable career path no longer a reality graduates can rely on and educational qualifications no longer sufficient to guarantee success within the workplace (Chetty, 2012; Cranmer, 2006; Hesketh, 2000; Mason et al., 2006) the focus of graduates needs to shift to what former Prime Minister of the United Kingdom, Gordon Brown calls employability for life (Moreau & Leathwood, 2006). Embedding employability which lasts a lifetime hinges on the ability to develop skills and attributes needed within industry and much of this is formed during university years (Yorke, 2004; Yorke, 2006). The perspective of many employers', however, is that graduates are not leaving higher education with the necessary skills to impress within the workplace (Cranmer, 2006; Green, Hammer & Star, 2009; Griesel & Parker, 2009; Hesketh, 2000; Tate & Thompson, 1994) and globally there is a concern that there is a divide

between the teaching in higher education institutions and organisational demands needed to obtain a competitive advantage (Andrew & Higson, 2008; Gracia, 2009; Green et al., 2009; National Committee of Inquiry into Higher Education; 1997). In order to better comprehend this divide and, therefore, how it can be overcome, a review of the literature was conducted in order to understand what graduate employability is as well as the competencies which underpin the concept.

Defining graduate employability

There is still much debate as to the definition of graduate employability. Much of the discussion is focused on the fact that this concept has been subjected to a minimal amount of conceptual examination and that more is needed to empirically understand this concept (Andrew & Higson, 2008; Brown, 2003; Brown, Hesketh & Williams, 2003; Gracia, 2009; Green et al., 2009). Despite this debate, a comprehensive review of the literature indicated that there may be more similarities in defining the concept than previously thought and two predominant schools of thought emerged.

The first school of thought is based on the ground-breaking work in the area of graduate employability that was conducted by Hillage and Pollard (1998). They defined employability as “having the capability to gain initial employment, maintain employment and obtain new employment if required’ (p1). The definition included four main elements: (1) employability assets, which takes into account knowledge, skills and attitudes; (2) deployment, which refers to career management skills; (3) presentation, which is explained as the ability to present oneself in order to find employment and finally (4) personal circumstances and external factors which takes into account individual situational impacts as well as the level of opportunities which are currently found in the labour market (Hillage & Pollard, 1998). A significant amount of the recent work (Pool & Sewell, 2007; Yorke, 2004) has utilised this concept as a foundation for defining the concept of graduate employability. One such researcher is Yorke who rose to prominence based on his extensive work which impacted government legislature and hence the workplace within England. He has

since been referenced in numerous international studies (Andrews & Higson, 2008; Bernstein & Osman, 2012; Bridgestock, 2009; Chetty, 2012; Gracia, 2009; Griesel & Parker, 2009; Hinchliffe & Jolly, 2010; Moreau & Leathwood, 2006; Moreland, 2004; Pegg, Waldoock, Hendy-Isaac & Ruth, 2012). Yorke (2004) defines graduate employability as “ a set of achievements – skills, understandings and personal attributes – that make graduates more likely to gain employment and be successful in their chosen occupations, which benefits themselves, the workforce, the community and the economy” (p. 8). This definition has been widely considered to be an appropriate foundation when considering this topic and is similar to other definitions which relate employability to work readiness. A possible reason for this is that employability is more than gaining a job, but is also the possession of the skills, personal motivation and business reasoning that lead graduates to make an immediate contribution to productivity and organisational objectives (Mason et al., 2006)

The second school of thought explains the concept of graduate employability with slightly divergent viewpoint to the first. The premise of this school of thought is that gradueness and employability are not a single concept but are separate in nature and therefore definition (Coetzee, 2012; Glover, Law & Youngman, 2002). Glover et al., (2002) detached the concepts of gradueness and employability and viewed the separate concepts as having an impactful relationship with each other. They maintain that gradueness is the effect which completing a higher education qualification has on an individuals’ skills, knowledge and attitudes. Separate to this is employability, which is viewed as the enhanced capacity to secure employment (Glover et al., 2002). Therefore, in their view, graduate employability is the acquisition of general transferable skills which, once gathered, requires assimilation into national and international employment (Glover et al., 2002). This is similar to the stance taken by Coetzee (2012), who maintains that the meta-skills and personal attributes underlying a students’ gradueness facilitate the transition to employability but are not the same concept. Rather gradueness is seen as “the inherent characteristics (transferable meta-skills and personal attributes) of graduates... that differentiate them as responsible, accountable, relevant, ethical (RARE) and enterprising citizens, and employees of choice in the workplace” (Coetzee, 2012, p.121) and employability as career-related attributes which promote adaptive cognition, behaviour and affect and

enhance a graduate's suitability for sustained employment (Coetzee, 2012). It therefore stands to reason that graduates need to obtain competencies which increase their likelihood of obtaining employment. These concepts are distinct yet related. The current study, as seen in figure 1, assumes that the graduate competencies are separate from employability and students will need to gather a set of transferable skills, attributes and knowledge during their years preceding employment (Hillage & Pollard, 1998; Pool & Sewell, 2007) This is necessary if they want to enter the workplace at a level which not only ensures them entry into the workplace but equips them with employability for life (Gracia, 2009; Griesel & Parker, 2009; Hesketh, 2000; Yorke, 2004). The next section of the literature review explores the skills and attributes required for graduates' to secure and maintain employment.

Conceptualising graduate competencies which lead to employability

Conceptualising the competencies which employers' desire from graduates has been extensively researched over the past ten years with findings ranging from educational expertise (Coetzee, 2012; De La Harpe, Radloff & Wyber, 2000) to the interpersonal skills needed to interact with other people (Hillage & Pollard, 1998; Holmes, 2001) and the ability to grow and develop as a person (Pool & Sewell, 2007). Studies have varied in their focus, ranging from students' or graduates' perspective (Hillage & Pollard, 1998; Andrews & Higson, 2008) to that of the employers' viewpoint (Brevis-Landsberg, 2012; Griesel & Parker, 2009; Hinchliffe & Jolly, 2011). The results from both groups of participants provide similar findings and are presented in this review.

Students' perspective on graduate competencies

The first perspective on graduate employability which is reported in this review is the viewpoint of students or recent graduates. The findings are summarised in table 1.

Table 1*Review of Research Defining Graduate Competencies Needed for Employability*

Author	Date	Research Conducted	Graduate Employability Competencies
Hillage and Pollard	1998	Department for Education and Employment (DfEE) commissioned a study to create an employment framework through literature review and qualitative interviews with DfEE officials and universities	Employability assets – knowledge, skills and abilities. deployment – career management skills, presentation – ability to present oneself in an interview and personal circumstances
Yorke and Knight	2004	Utilised previous research and interviewed 200 students and graduates around their perceptions of graduate employability skills. Through this created the USEM Model	Understanding of academic field, skilful practice – processing and core elements, efficacy beliefs – personal belief and metacognition – psychological conditions
Moreau and Leathwood	2006	310 students from London completed a questionnaire and had interviews and focus groups over a four year period	Personal skills and attitudes; technical ability and academic expertise
Pool and Sewell	2007	Based on literature review, new model developed based on the USEM Model (Knight & Yorke, 2004).	Understanding of academic field, skilful practice, efficacy beliefs, metacognition, emotional intelligence and development learning and experience
Andrews and Higson	2008	Conducted 50 semi- structured interviews in 4 countries (United Kingdom, Slovenia, Austria and Romania) with 30 graduates and 20 employers.	Hard business related skills; soft interpersonal skills and work based learning or experience.
Coetzee	2012	Random sample of 272 students from UNISA completed a questionnaire assessing their perception of gradueness	Interactive skills; problem-solving and decision-making skills; continuous learning orientation; enterprising skills; presenting and applying information skills; goal-directed behaviour; ethical and responsible behaviour and analytical thinking skills

Knight and Yorke (2004) utilised the seminal work conducted by Hillage and Pollard (1998) as a basis for suggesting ways of incorporating the skills development needed for employability into higher education within the United Kingdom. Through interviews with 200 graduates and recently hired employees, they identified the ability to have practical intelligence as the best predictor of success at a job, with four main constructs leading to employability (Knight & Yorke, 2004). From these findings they developed the USEM Account of Employability Model which has been viewed as one of the preeminent employability models (Pool & Sewell, 2007). The USEM Model focuses on the importance of gaining understanding within the core subjects which a student is studying; skills which incorporates processing elements (teamwork, negotiating, conflict resolution and problem solving) and core elements (including critical analysis, creativity and self-management) as well as metacognition which focuses on the students' ability to reflect on actions taken (Knight & Yorke, 2004). It further highlights the importance of the psychological conditions which underpins a person's performance.

Pool and Sewell (2007) adopted the USEM Model (Yorke & Knight, 2004) as foundational for their explanation of graduate employability. They maintained, however, that it lacked key elements of development learning, experience and emotional intelligence which further embed academic learning. Pool and Sewell (2007), therefore, expanded the model to include a greater focus on the importance of reflection and evaluation as a technique which leads to self-efficacy, self-awareness and self-confidence. Subsequently, these three self-reflective concepts increase the likelihood of graduate employability. Whilst there is value in this model as a contribution to the discourse around graduate employability, it has been developed based on literature generated from previous research and therefore there is little evidence of research conducted to test its validity and reliability. It does, however, corroborate that academic skills, personal reflection and professional skills are critical in the development of graduate employability and has been utilised in subsequent studies (Coetzee, 2012). This was further substantiated by the research conducted by Andrew and Higson (2010) who conducted thirty interviews with business graduates from four European countries to explore the concept of graduate employability. In the same way, they found that students perceived themselves as employable through hard

skills which referred to proper engagement with their course material and therefore led to an understanding of their subject as well as being able to adapt the information and apply it within a work context. In addition to this, they found that students believed that interpersonal skills and communication, known as soft skills, were critical in their ability to secure employment and maintain it (Andrews & Higson, 2008). Whilst the sample size in this study was small, the research was robust and has been referenced in other research papers (Chetty, 2012; Pegg, 2012). It furthermore validated the consistent pattern of findings relating to graduate competencies. .

The consistency in the findings reported above by Andrew and Higson (2010), Hillage and Pollard, (1998), Knight and Yorke (2004) and Pool and Sewell (2007) relating to graduate competencies was embedded by the research conducted by Moreau and Leathwood (2006). They were attempting to disprove the common theory that skills, attributes and academic advancement increased students' employability. They proposed that employability was not a result of personal characteristics but was based on social class, gender, ethnicity, age and the attended university (Moreau & Leathwood, 2006). They conducted a longitudinal study design incorporating a questionnaire, interviews and focus groups over a four year period in London. With a sample of 310 students who completed the initial questionnaire and 194 students from this group who attended focus groups or interviews, their findings differed from their original assumptions (Moreau & Leathwood, 2006). The majority of graduates did not adhere to the principle of societal impact on their employability. Rather, they placed a great deal of emphasis on the growth of their individual aptitudes and skills, as well as the utilisation of technical abilities (academic learning) gained whilst at university. They felt that these skills, in addition to what they gained from their educational experience, were instrumental in increasing their perception of their own graduate employability (Moreau & Leathwood, 2006).

The assumption that research conducted outside of South Africa is directly relevant within the local context cannot be accurately made given our unique socio-economic and political situation. Yet, with regard to this topic, the limited studies conducted within a South African context produced similar findings to those reported

internationally. Coetzee (2012) conducted research within the University of South Africa (UNISA) by asking a random sample of students ($N = 272$) about their opinions on their graduateness. The survey was compiled through a comprehensive literature review as well as input from academics in a number of disciplines. The findings revealed that there were eight dimensions of internal graduateness which included: (1) interactive skills; (2) problem-solving and decision-making skills; (3) continuous learning orientation; (4) enterprising skills; (5) presenting and applying information skills; (6) goal-directed behaviour; (7) ethical and responsible behaviour and (8) analytical thinking skills (Coetzee, 2012). These findings require additional investigation and are currently on the universities research agenda, yet they do align with global conclusions that students require a combination of technical skills and interpersonal skills in order to have perceived graduateness.

Employers' perspective on graduate competencies

The second perspective from which graduate employability is measured is that of the employers. Whilst there is much rhetoric around employers' dissatisfaction with students leaving university (Altbach, 2012; Clark, 2012; Li, 2012; Salutin, 2012; Thebyane, 2012; Worstall, 2012), there are limited journal based publications on this topic. Most of the current research is commissioned through the labour market and these studies report consistent findings: employers maintain that professional skills are the most significant requirement for successful graduates (De La Harpe, Radloff & Wyber, 2000; Hesketh, 2000; Yorke, 2006). Evidence of this was reported in the study conducted by Archer and Davison (2008) for The Council for Industry and Higher Education (CIHE).

Archer and Davison (2008) conducted survey based research of 233 organisations across England to investigate what their most important criteria were when recruiting students. The findings showed that soft skills such as interpersonal attributes, communication and team work were the most critical demands from organisations, followed closely by literacy numeracy and analytical ability (Archer and Davison, 2008). A similar study was replicated by Litchfield, Frawley and Nettleton (2010)

which surveyed employers across Australia by engaging with professional societies from a number of different disciplines. They found that technical skills were a necessity when recruiting graduates but of more importance were the softer skills which included communication, teamwork, planning and organising, technology, problem solving, lifelong learning, self-management and initiative and enterprise (Litchfield et al., 2010). This was further corroborated by a study conducted in England which sort to investigate employers' expectation of graduates (Hinchliffe & Jolly, 2010). They were asked to rate their expectations along four employment aspects: performance with the organisation, team membership, individual performance and personal attributes. Of the 105 employers who responded to the survey, the vast majority indicated that they expected graduates to commence employment with personal attributes developed (Hinchliffe & Jolly, 2010). They reported that technical skills and performance could be developed within the first year of work but interpersonal skills and communication were recruitment requirements. This emphasises the necessity for students to develop their professional skills before embarking on a new job.

Similar to students' perceptions within South Africa, employers within the country report that they desire students who are equipped with professional and personal skills and have knowledge gained through their educational experience (Bernstein & Osman, 2012; Chetty, 2012; Griesel & Parker, 2009). In order to understand the current situation between higher education and employers' requirements of graduates, Higher Education South Africa (HESA) and South African Qualifications Authority (SAQA) commissioned a study, which was conducted by Griesel and Parker and published in 2009. They surveyed 99 organisations in order to understand their perspective on higher education graduates. They divided their research into four main areas which included basic skills, knowledge and intellectual ability, workplace skills and applied knowledge as well as interactive and personal skills. In all four of these areas there was disparity between what employers' expected from the graduates joining their organisation and the graduates who actually joined (Griesel and Parker; 2009). There was a particular concern relating to basic skills such as communication ability as well as the integration of academic learning into a work context (Griesel and Parker; 2009).

Summary of factors which constitute graduate competencies

In summary of the above, it becomes evident that graduate employability is more than the number of graduates who find employment on completion of their qualifications or the time it takes for this to happen (Andrews & Higson, 2008; Moreau & Leathwood, 2006). It appears that students and employers postulate that graduate employability can be summarised into four main concepts. This information is summarised in table 2 (on page 16).

Further to the summation of findings in table 2, the four competencies are defined as follows: (1) *academic skills*, is the cognitive outcomes of a students' coursework and is focused on the individuals' technical ability and knowledge in their core discipline; (2) this is achieved through engagement with the course content and a framework of continuous learning and can be referred to as *educational engagement*; (3) *professional skills*, which is the culmination of skills, behaviours and dispositions which enhance efficacy within the work environment and (4) *personal growth*, which is the affective outcomes of knowing oneself through the ability for self-reflection and individual development which allows for the development of professional skills. It is evident from the literature that both students and employers believe that the development of graduate competencies is foundational in the transition from university to the work environment (Coetzee, 2012; Griesel & Parker, 2009). Thus, this research proposes that the development of graduate competencies increases the likelihood of graduate employability.

Hypothesis 1: *The development of graduate competencies positively impacts the perception of graduate employability*

Table 2*Summary of Graduate Competencies*

Author	Year	Finding
Educational Engagement		
Andrew and Higson	2010	Ability to engage with university work and to embed this into development
Coetzee	2012	Continuous learning orientation
Moreau and Leathwood	2006	Time spent at university and the amount of engagement with course content increased employability
Academic Skills		
Andrew and Higson	2010	Learning taken from completed degree
Archer and Davison	2008	Hard skills which include literacy, numeracy and analytical ability
Coetzee	2012	Analytical skills
Griesel and Parker	2009	Knowledge and intellectual ability
Knight and Yorke	2004	Understanding of core academic subject being studied
Moreau and Leathwood	2006	Technical ability learnt through academic studies
Pool and Sewell	2007	Understanding of core academic skills
Professional Skills		
Andrew and Higson	2010	Soft skills which include interpersonal skills and communication
Archer and Davison	2008	Soft skills which include interpersonal skills and communication
Coetzee	2012	Interactive skills which is the ability to communicate, problem-solving and decision-making skills as well as ethical and responsible behaviour
Griesel and Parker	2009	Workplace skills and applied knowledge and interactive and personal skills
Hinchliffe and Jolly	2010	Interpersonal skills and communication
Knight and Yorke	2004	Processing and core skills which include team integration, conflict resolution, critical analysis and self-management
Personal Growth		
Knight and Yorke	2004	Meta-cognition and the ability to reflect on actions taken
Pool and Sewell	2007	Ability to reflect on actions, self-management and personal growth
Coetzee	2012	Continuous learning orientation and goal-directed behaviour

Based on the themes emanating from the available literature, four clear graduate competencies for employability have been identified. However, the lack of international agreement on the definition of employability and what encapsulates it has resulted in limited development of scales to measure these concepts. It is therefore problematic to locate appropriate measures for this. Despite this, the subsequent section investigates measures for graduate competencies and graduate employability.

Measuring graduate competencies and employability

The level of media speculation and political agenda (Altbach, 2012; Clark, 2012; Li, 2012; Salutin, 2012; Thebyane, 2012; Worstall, 2012) in many countries concerning the concept of graduate competencies and employability would suggest that research would be focused on the creation of measurement tools. Surprisingly, however, there is limited published work in this area which thus makes it difficult to obtain quantitative scales (Gracia, 2009; Harvey, 2001). The succeeding subsections discuss the different reviews of the two areas.

Measuring graduate competencies

The predominant difficulty in measuring graduate competencies to date is that it is largely conducted through exploratory qualitative research and not through quantitative analysis. This is seen in the interviews and qualitative approaches by the likes of Brown et al, (2003); Andrew and Higson (2008), Knight and Yorke (2004) and Moreau and Leathwood (2006). It is consequently necessary for measurement instruments to be obtained from activities which are similar to those of volunteering. The acknowledgement from many universities that graduates require interpersonal and professional development has lead towards more formalised integration of experiential learning into curriculum and with this is the development of scales to measure these programmes.

One such study is an analysis of Community Based Research (CBR) completed by Lichtenstein, Thorne, Cutforth & Tombari, (2011). It was decided that this measure would be utilised as the scale to measure graduate competencies as it is aligned with the literature review findings in terms of the required competencies. In addition to this, it was developed within a volunteering context. Volunteerism will be reviewed in more depth in the following section; yet, the measure for graduate competencies will be reviewed now as it is related to this section. CBR is form of service learning and is a response to the shortfall in universities to address the demand for development of graduate competencies. Universities which are embracing this concept postulate that volunteerism is an effective way of developing graduate competencies and therefore embed volunteering into the core curriculum (Lichtenstein et al., 2011). It differs from traditional volunteerism in that it is discipline focused and requires reflection on the learning gained from participation. It focuses on this as it is grounded in the desire to develop graduates to meet the demands of the working world. Lichtenstein et al. (2011) found that CBR could address the need for the development of graduate competencies and therefore hypothesised that this would increase graduate employability.

A measure was developed to test the outcomes of CBR through a survey which was completed by 166 students from universities which had implemented CBR in the United States of America. The outcomes which were identified included: (1) academic skills ($\alpha = .91$); (2) educational experience ($\alpha = .87$); (3) civic engagement ($\alpha = .86$), (4), personal growth ($\alpha = .94$) and (5) professional skills ($\alpha = .91$) (Lichtenstein et al., 2011). With the exception of civic engagement, the skills and attributes found to be important in CBR are similar to those found in the literature around graduate employability (Hillage & Pollard, 1998; Knight & Yorke, 2004; Pool & Sewell, 2007; Griesel & Parker, 2010). This further substantiated the findings that graduate competencies are increasingly important in the world of work and provided a scale from which to measure these. In addition to this, CBR utilises volunteering as a foundation of their programme and therefore is appropriate for this study.

Measuring graduate employability

At present, there are limited answers to the question as to whether a graduate is employable or not due to the existence of limited measurement criteria. A comprehensive review of the available research found little in the way of concrete and agreed upon measurement scales. The predominate reason for this is that supposition varies between employability being defined as the ability to secure a job to the perception that a person is equipped with the necessary skills and attributes to successfully achieve in a role (Harvey, 2001; Yorke, 2004). Merely securing employment seems futile in conception as a graduate doctor working as a receptionist may not perceive themselves as being gainfully employed. In addition to this, it is evident from the review above, that students, employers and universities acknowledge that it is more than merely obtaining a job and this study supports this assumption (Andrew & Higson, 2008; Brown, 2003; Brown, Hesketh & Williams, 2003; Gracia, 2009 Green et al., 2009). The question is then how to measure this concept.

In South Africa, there is paucity on published measures of graduate employability yet it appears as though research is currently being conducted into this area. Reference is made by Coetzee (2012) to a graduateness and employability scale which has been developed within UNISA but is not as yet published. Unexpectedly, however, the international arena is no different, with limited information being available around measurement and the research community still vacillating between measurement of obtaining employment and that of graduate competencies (Harvey, 2001; Yorke, 2004). Based on this literature review, the ascertain is that graduate employability needs to be measured based on ability to secure a job, maintain a job and find other employment when necessary through being equipped with the appropriate skills and attributes (Coetzee, 2012; Hillage & Pollard, 1998, Mason et al., 2006; Yorke, 2004). Data from the literature review revealed that there is one set of authors who are focused on the creation of measures. Rothwell and Arnold (2007) and Rothwell, Herbert and Rothwell (2008) are based in England and due to the governmental focus on graduate employability as well as their educational role within universities viewed

the measurement of this construct as critical. Their scales are discussed in the ensuing paragraph.

Rothwell and Arnold (2007) developed a measure for self-perceived employability based on the findings of Hillage and Pollard (1998) and Knight and Yorke (2004). They hypothesised that employability was related to an individuals' discernment of their skills and abilities and how they perceived an organisation would react to them as individuals with varying characteristics and attributes. Based on this they found that self-perceived employability could be a unitary construct or one with two components (Rothwell & Arnold, 2007). The measure was constructed of 11 items with an internal consistency of .83, indicating that it was a reliable measure for that study. Based the significance of their findings, Rothwell, Herbert and Rothwell (2008) expanded the theoretical concept to relate specifically to students and their perception of their ability to find employment post completion of their studies. In a study which assessed 344 students from 3 universities in England, it was found to a consistent measure ($\alpha = .75$) of the construct of graduate employability and similarly assessed the perception of skillsets within the marketplace (Rothwell et al., 2008). Whilst these measures are theoretically aligned to this research opinion, there is limited evidence to demonstrate whether this measure has been utilised in other contexts. This raises concern around the measure of employability in general and an outcome of this research is to test the reliability and validity of these measures within the context of this study and South Africa.

Concern about the measurement of this construct is important. The predominant concern, however, is the reality that students' need to assume responsibility for their employability. The literature review revealed the importance of increasing students' educational engagement, academic skills, personal growth and professional skills in order to increase employment opportunities (Andrews & Higson, 2008; Coetzee, 2012; Hillage & Pollard, 1998; Moreau & Leathwood, 2006). Since there is acknowledgement that there is a need for these attributes, it then becomes pertinent as to where these could be developed. Whilst a number of avenues exist (Valentine, Cooper, Bettencourt, & DuBois; 2011), this research focuses on volunteerism as a

context for the development of graduate competencies. The next sections will explore volunteerism as a context for the development of graduate employability as well as the structural and psychosocial aspects of volunteerism.

Volunteerism as an Antecedent of Graduate Employability

When it comes to the development of graduate competencies and equipping students for employment, higher education globally has had varying degrees of success. There are also different two predominant theoretical standpoints (Cranmer, 2006; Mason, Williams & Cranmer, 2009; Morley, 2001; Rae, 2007). The first school of thought is that although higher education is attempting to develop employability skills, it is not necessarily achieving its goals as the role of higher education is not the transfer of skills but the transfer of knowledge regarding a particular subject (Cranmer, 2006; De La Harpe et al., 2000; Harvey, 2000; Holmes, 2006; Mason et al., 2009; Rae, 2007). It therefore requires additional time, energy and focus in order to ensure that the transition is effectively accomplished. The second school of thought is that the learning of graduate employability skills may well be unachievable within a classroom setting as students absorb deeper learning from context based situations and require engagement with practical experiences (Cranmer, 2006; Hesketh, 2000; Mason et al., 2009). Both of these, however, are problematic due to the time delay experienced between universities' ability to change the traditional structures to accommodate competency development and the immediacy of organisational demand (Griesel & Parker, 2007; Rae, 2007; Teichler, 1999). The expectation that graduate competencies should be developed during a student's years at university may consequently not be achieved (Cranmer, 2006; Mason et al., 2009; Morley, 2001; Watson, 2002).

The transition from purely knowledge-based educational institutions to establishments which incorporate skill attainment and graduateness into their curriculum will inevitably be slow process (Millican & Bourner, 2011; Teichler, 1999). Additionally, the will to impart graduate attributes to students is be evident, yet it may not be fully

achievable thus leaving students in a similar predicament of not having the right skills for the labour market (Cranmer, 2006; Hesketh, 2000; Mason et al., 2009). It is therefore of critical importance that students increasingly assume responsibility for their own development and limit the amount of reliance on higher education for their personal growth until such time as structural changes are effected (Raybould, 2005; Teichler, 1999). In addition to this, graduates, and not the university, are responsible for their own identity and therefore ability to obtain employment (Hinchliffe & Jolly, 2010; Holmes, 2006). Research indicates that there are a number of different activities which could assist in the creation of these skills (Valentine et al., 2011); one of these is volunteering. Volunteering allows students to interact with people from diverse groups, to place themselves in unfamiliar situations and to be instrumental in the organisation of projects (Planty, Bozick & Regnier, 2006). These situations and functions have been shown to assist in the creation of core personal and academic skills (Handy et al., 2010; Holdsworth, 2010; Holdsworth & Quinn, 2010). In fact, research has shown that engagement in community activities may well be a more robust learning environment for educational and personal development and that volunteering founded on mutual reciprocity is beneficial for student attributes (Mason O'Connor, Lynch & Owen, 2011). Whilst the studies which are conducted report robust findings, empirically published papers on this are limited. This study is, consequently, focused on empirically investigating the rhetoric that volunteering lends itself to the development of graduate competencies and therefore graduate employability.

Defining Volunteerism

Volunteering was traditionally an activity which was done to add value to society or from a religious sense to “do something good” (MacDuff, 2010; Smith, Holmes, Haski-Leventhal, Cnaan, Handy & Brudney, 2010). As students acknowledge that pressure of a competitive graduate labour market there is a move to bolster one’s CV through engagement in volunteer work (Handy et al., 2010; Holdsworth, 2010). The seminal work conducted by Astin, Sax and Avalos (1999) was aimed at understanding the lasting impact of volunteering on students. From a sample of 279 985 from 546

university across the United States of America, they found that students who have volunteered during their tertiary education developed important life-skills which included leadership, self-confidence, critical thinking and increased academic development (Astin et al., 1999). They also found that volunteering better prepared students for work. In other words, they became more economically employable (Freeman, 1997). Furthermore, there is research which suggests that employers value volunteer experience when assessing a student for a position within their organisations (Hinchliffe & Jolly, 2011). Some authors raise a concern, though, that volunteering may be seen as a line item on a CV and not necessarily contributing to the advancement of the students' core skills and personal characteristics identified by students and employers alike (Gronlund et al., 2011; Holdsworth & Quinn, 2010). What is of interest to this study is what elements of volunteering contribute to graduate competencies and increase the likelihood of perceived graduate employability. The first one examined is the structural components of volunteering and the second is the psychosocial motivators.

Structural Components of Volunteering

The very nature of volunteering is changing. There appears to be a move from the traditional regular forms of volunteering to that which is more episodic in nature allowing for flexibility and control in a world which demands this (Cnaan & Handy, 2005; Hustinx & Lammertyn, 2003). The move to measure volunteerism along a time continuum is becoming a reality for a society which has volunteer involvement as just one of the many elements of life (Cnaan & Handy, 2005; MacDuff, 2005). The question which researchers are beginning to ask is whether the frequency of time spent has an influencing factor on the benefits or outcomes of volunteering and whether the role within the organisation plays a developmental role (Cnaan & Handy, 2005; Handy et al., 2010; Hustinx & Lammertyn, 2003; MacDuff, 2005). The frequency of involvement is addressed first, with role within the organisation being reviewed subsequently.

Frequency of involvement in volunteering

Smith, Holmes, Haski-Leventhal, Cnaan and Brudney (2010) conducted a study to better understand the profile of people who engage in volunteer activities. Four thousand and eighty one participants were surveyed from across 5 countries (United States of America, United Kingdom, Canada, Australia and New Zealand) and asked about their motivations to volunteer, the apparent benefits, as well as the structural elements associated with their involvement (Smith et al., 2010). The relevant finding of their research for this section of the study was that students who had a higher involvement in volunteering perceived themselves to have obtained more personal benefit and development. Regular involvement was critical to the growth of professional attributes and academic engagement and was defined as volunteering on a continuous basis, measured weekly and monthly in hours.

These findings were substantiated by research conducted across 12 countries by Handy et al. (2010) who found that the frequency of time spent volunteering had a direct impact on the experience gained from the activity and the perception of benefits obtained. Handy et al. (2010) conducted a survey within the United States of America, Canada, Belgium, China, Croatia, England, Finland, Israel, India, Japan, Korea and the Netherlands in an attempt to understand whether students volunteered in order to bolster their CVs. Of the 9482 students who responded, they maintained that the number of hours of volunteer work per year as well as the occurrence of volunteering had a direct impact on the achievement of desired benefits (Handy et al., 2010). Based on these findings, this study postulates that the higher the frequency of time engaging in volunteer work, the more impact volunteerism will have on the development of graduate competencies. It therefore seeks to understand the intensity (the number of hours spent) and the frequency (how often) of volunteer engagement.

Hypothesis 2a: More hours spent engaging in volunteer activities is positively related to the development of graduate competencies.

Hypothesis 2b: *Increased frequency of volunteer activities is positively related to the development of graduate competencies.*

Role within volunteering

In addition to the intensity of time commitment, the nature of change within society impacts the structure of volunteer opportunities (Hustinx & Lammertyn, 2003). This is resulting in people assuming differing roles based on trends, indicating that when people volunteer, they are spending a decreasing amount of time engaged in these activities (Hustinx & Lammertyn, 2003; Macduff, 2005). This is not necessarily positive for volunteer organisations, which rely on entrenched individuals to form a lasting relationship with the organisation through higher involvement and greater investment (Cnaan & Handy, 2005). It is postulated that volunteers who invest more time become involved in operational elements which results in leadership roles within organisational structures. They are given the more appealing work and are driven to create a team environment (Cnaan & Handy, 2005; Macduff, 2005). These findings were substantiated through research conducted amongst 39 volunteer organisations in the United States of America (Edwards, Mooney & Heald, 2001). Directors of these volunteer institutions were surveyed and interviewed and reported that the role of students within organisations is largely underestimated. The predominance of this lay in the findings that students are traditionally exposed to more menial tasks and thus do not achieve the benefits of experience with operations which increase personal advancement (Edwards et al., 2001). They did not directly assess for this and therefore there is a limitation on subsequent studies in this regard. A supplementary question which is then raised is whether the assumed role within the organisation has any impact on individual outcomes of volunteering. There is much supposition on this but is augmented with limited empirical research. This study, therefore, maintains that as the role which a student assumes within the volunteer organisation increases so does the benefit which people acquire from it.

Hypothesis 2c: *The seniority of role within a volunteer organisation is positively related to the development of graduate competencies.*

Psychosocial Motivators of Volunteering

In addition to the themes identified above, there has been an immense amount of research relating to what motivates students to volunteer (Gronlund et al., 2011; Handy et al., 2010; Holdsworth, 2010; Smith et al., 2010). Students volunteer for a number of different reasons and as the generations have changed and the demand for employability skills has become a relevant topic, some researchers believed that students would be motivated to volunteer in order to progress their careers (Handy et al., 2010; Smith et al., 2010). The premise is that they would be able to add this to their CV and therefore enjoy the benefit of increased employer acceptance. Conversely, research has found that the majority of students are not necessarily volunteering based on career drivers, but have more of an altruistic impetus to volunteer (Clary, Snyder, Ridge, Copeland, Stukas, Haugen & Miene, 1998; Hwang, Grabb & Curtis, 2005). Correspondingly, they have found that students who volunteer in order to add value to society perceive an increase in beneficial outcomes from the experience (Handy et al., 2010; Smith et al., 2010).

Handy et al. (2010) investigated whether student volunteering was primarily driven by resume building and hypothesized that if it was driven by CV building that students would be less motivated to invest significant amounts of time into volunteer work and would therefore have limited benefit from the experience. Not only was their hypothesis not supported by the data but it was found that altruistic motivations significantly drove students to volunteer (Handy et al., 2010). The students, who volunteered based on altruistic drivers, viewed CV building as a personal benefit achieved through the experience but was not their primary motivator (Handy et al., 2010).

The research conducted by Handy et al. (2010) was somewhat disparate to the research conducted by Holdsworth (2010). She investigated the motivation for student volunteering in England. Through a process of 18 in-depth interviews, Holdsworth (2010) developed survey which was distributed amongst 6 universities throughout the country. The 3083 valid responses highlighted that students were motivated to volunteer based on drive to increase their employability. Although there was a bias towards career motivation, there was also a high level agreement across a number of motivators with students suggesting that the act of volunteering was viewed as a positive tool to aid them in the transition to adulthood (Holdsworth, 2010). They also saw it contributing to the development of their self-confidence, ability to interact with others and capacity to circumnavigate difficult situations (Holdsworth, 2010). Of interest to this study is that those who were driven by the desire to give back experienced these benefits more than the career focused students. Correspondingly, Smith et al. (2010) found that students were motivated to volunteer by a combination of career, social and altruistic drivers. Still, the students who volunteered based on value drivers, spent more time but in addition to this experienced more benefits. The criticism of this research is that it is not clearly defined as to what the benefits entail. This leaves a gap in the literature which this research attempts to formalise through bridging the gap between motivation to volunteer and the development of graduate competencies.

Hypothesis 3a: *Altruistic motivation to volunteer is positively related to the development of graduate competencies.*

Hypothesis 3b: *Career motivation to volunteer is negatively related to the development of graduate competencies.*

Research in this areas suggests that there are many more motivations to volunteer than the desire to give back to the world or the desire to progressive ones' own career (Clary et al., 1998; Handy et al., 2010; Smith et al., 2010). There is, however, limited insight into whether these concepts impact the acquirement of additional skills and abilities. One area which is gaining attention is that of the social or ego protective

motivation as people are increasingly driven by self-oriented reasons (Hwang et al., 2005). Clary et al. (2010) viewed these as two separate concepts: (1) social motivation is driven out of the desire to be with friends or pressure to engage in activities favoured by importantly viewed people; (2) protective motivation is the ego defensive response to supplement feelings of inadequacy, to cover up emotional attachment to personal problems or to reduce guilt over being more fortunate than others. Handy et al., (2010) combined social and ego into a single concept and found that if people volunteered based on a social imperative they were as likely to engage in volunteering as the career and altruistic motivations but that they would experience less beneficial outcomes. In addition, Smith et al., (2010) combined this concept but measured it in items which focused on social and ego separately. The desire to make friends accounted for 53% of the reason for volunteering, with the need to protect ones' ego being reported at 28.5% of the motivational reason. They found, however, that students volunteering based on these reasons reported marginally less beneficial outcomes through their volunteer activity. This is substantiated by Holdsworth (2010) who found that students who volunteered for social reasons did not report benefits as readily as those for other motivations. As the self-oriented desire is becoming more prevalent and there is minimal research to indicate differences may exist two additional hypotheses were investigated:

Hypothesis 3c: *Social motivation to volunteer is negatively related to the development of graduate competencies.*

Hypothesis 3d: *Ego motivation to volunteer is positively related to the development of graduate competencies.*

Literature Review Summation

This chapter has attempted to provide an overview of the literature focused on graduate competencies which are required for students to ensure employment on completion of their qualifications. It has presented this in context of volunteering

which has been found to be one of the vehicles for the advancement of the needed competencies. The upsurge in literature around both of these areas is significant, yet, there is still limited empirical research which explores the extent to which volunteering impacts skills development in students and therefore assists in employability. It thus warrants further exploration in generating critical insight into the relationship between volunteerism, graduate competencies and in turn graduate employability.

University of Cape Town

CHAPTER 3: METHODS

The focus of this research is to explore volunteering and graduate competencies and whether these assist in the perception of graduate employability. This chapter presents the method utilised to achieve this. It is divided into five sections, which describe the research design, measures, procedure, participants and the data analysis techniques used in this study.

Research Design

The research design was guided by the research questions and therefore was descriptive in nature as it aimed to establish the extent to which the variables were related (Hair et al., 2003). This allowed for the interpretations about the degree to which volunteering impacted graduate competencies and in turn employability but would not imply causality (Burns & Burns, 2008). Furthermore, it tested the hypotheses in order to gain insight into the limited theory related to the variables within the South African context.

Due to the nature of the master's dissertation, which is constrained by time, a cross-sectional research design was implemented. This approach allowed for data to be collected at a single point in time and for inferences to be made about the sample group (Hair, Babin, Money, & Samouel, 2003). Moreover, a quantitative data collection method was utilised. This took the form of an online, self-report questionnaire to allow for the data to be statistically analysed and for associations to be made between variables (Neuman, 2000). The design was chosen in order to test the validity and reliability of the observations and the representativeness of the sample (Terre Blanche & Durrheim, 2002).

Measures

Once the research design was finalised, measures were chosen in order to answer the hypotheses. This section provides information about the measures for graduate employability, graduate competencies, motivation to volunteer and level of involvement. It also provides insight into the demographic items which were utilised throughout this study.

Perceived graduate employability. Two separate scales will be utilised to measure graduate employability. The first is a 13-item self-perceived employability scale for students (see appendix A) developed by Rothwell, Herbert and Rothwell (2008). The original measure had 16 items, yet due to an increase in the reliability coefficients, 3 items were removed resulting in a 13 item measure. Internal reliability reporting for this measure is high ($\alpha = .75$). The second, an 11-item scale was developed by Rothwell and Arnold (2007) to measure employability of people currently working (see appendix B). Cronbach alpha reliabilities reported by Rothwell and Arnold (2007) were high: internal employability ($\alpha = .72$), external employability ($\alpha = .79$) and the complete measure ($\alpha = .83$). For both measures, items were rated on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). For participants who indicated that they had graduated but did not have employment were asked two questions around their perceived reasons for unemployment however as we removed these participants from the sample these questions were no longer relevant.

Graduate competencies. There are many scales for measuring graduate competencies but the measure identified for this study contained competencies which mapped with those emerging in the volunteering literature. The 16-item scale (see appendix C) developed by Lichtenstein et al. (2011) will be used to measure the outcomes of Community-Based Research. The scale has five subscales measuring academic skills, educational experience, professional skills, personal growth and civic engagement. The scale is based on the outcomes of volunteer based activities and therefore was applicable to this environment. Civic engagement was not utilised as a subscale as

there is little evidence which relates this as a necessary skill for employability and therefore this measure has 4 subscales. Items were rated on a 5-point Likert scale from 1 (not at all) to 5 (extensively). Cronbach alpha reliabilities reported by Lichtenstein et al. (2011) were high for which component: academic skills ($\alpha = .80$), educational experience ($\alpha = .87$), professional skills ($\alpha = .91$) and personal growth ($\alpha = .94$). The overall Cronbach alpha reported by Lichtenstein was $\alpha = .95$.

Motivation for volunteering. The 30-item scale called the Volunteer Functions Inventory (see appendix D) developed by Clary et al (1998) was used. The scale has six subscales measuring values, understanding, social, career, protective and enhancement. Items were rated on a 5-point Likert scale ranging from 1 (not at all important) to 5 (extremely important). Cronbach alpha reliabilities reporting by Clary et al. (1998) were high for each component: values ($\alpha = .80$), understanding ($\alpha = .81$), social ($\alpha = .83$), career ($\alpha = .89$), protective ($\alpha = .81$) and enhancement ($\alpha = .84$). Due to the purpose of this study and the limited literature pertaining to understanding and enhancement motivation leading to the development of graduate competencies these items were removed from the analysis.

Involvement in volunteering. The measurement of involvement has been conducted in a number of different ways. However, the work conducted by Handy et al. (2010) has been replicated in other studies and has shown reliability and validity in different context. It was thus chosen for this study. The 2-item scale developed by Handy et al., (2010) to measure the level of involvement in volunteering was utilised. It focused on the intensity of volunteering which measured the number of hours participants volunteered per month in the last 12 months as well as the frequency of volunteer work. The number of hours was measured with a single item where respondents were required to write the response in numbers. The frequency worked was categorised by: none (1); occasionally (2); weekly (3); monthly (4) and other (5). Furthermore, involvement in volunteering was categorised and coded based on the nature of the role within volunteering: (1) new volunteer, (2) regular volunteer and (3) leadership.

Demographic variables. Separate single items were used to measure the control variables of gender, age, faculty of study, highest level of degree, current employment status, the types of volunteering and the nature of role assumed whilst volunteering. These control variables were selected as those being likely to influence the dependent variables (Hair et al., 2003). Gender was coded (1) for female and (2) for male. Faculty of study was coded (1) for commerce, (2) for engineering, (3) for humanities, (4) for legal, (5) for medical and (6) for science. Other was originally coded as (7) however, due to the combination of faculties in which participants had studied, other was removed and (7) became a combination of more than one faculty of study. Highest level of degree was coded (1) for undergraduate, (2) for honours, (3) for masters, (4) for doctorate and (5) for other. Current employment status for was coded (1) for student, (2) for a graduate with employment and (3) for graduate without employment. The types of volunteer work were coded (1) for education, (2) for health, (3) for legal and (4) for other. Age was measured with a single item where respondents were required to write the response in numbers.

Open-ended qualitative analysis

The final question in the survey was an open ended item which asked whether participants had anything they would like to add regarding their experience of volunteering, the insights they had gained from volunteering as well as employability in general. This was analysed based on grounded theory and followed a process of clustering ideas and the identification of patterns and themes (Breakwell, Smith & Wright, 2012; Miles & Huberman, 1994). The process was made up of three separate steps: open coding; comparison of data fields and re-coding. This data was used to augment the quantitative analysis. The richness of the data furthermore assisted in providing additional insight into the relations between variables (Breakwell et al., 2012; Miles & Huberman, 1994).

Research Context

The research question called for a sample of people who are or were involved in volunteer activities. In order to access this group of participants a relationship was formed with the Students' Health and Welfare Centres Organisation (SHAWCO). This is a volunteer organisation which is associated with the University of Cape Town and is focused on improving the lives of previously disadvantage communities within the Cape Town metropolitan area. It has over 5000 student volunteers recorded on its database over the last five years and is currently the largest student organisation at the university. Based on the nature of the volunteer activity as well as the number of participants, SHAWCO was an appropriate organisation in which to conduct this research. The primary concern with this, however, is that conducting research at a single organisation limits generalizability of the findings. Nonetheless, a decision was made to conduct the research study at SHAWCO as the research is descriptive in nature and is restricted by the limitations of a master's dissertation. It was thus deemed acceptable to proceed with the research. In addition to this, SHAWCO had expressed interest at being part of research studies in order to better understand their impact on student activities and career progression and therefore allowed for open access to their students and all relevant information.

Procedure

On completion of the research proposal, authorisation to proceed with the study was obtained from the internal departmental Research Committee. Approval for this study to be conducted within SHAWCO was obtained from the Education Section Manager. The Education Section Manager was assured that the study would be anonymous, that the information obtained would remain confidential and that study would be conducted in accordance with the approved research protocol (American Psychological Association, 2009). Further, clearance was obtained from the Commerce Faculty Ethics in Research Committee at the University of Cape Town as well as the Executive Director in the Department of Student Affairs. On approval, the survey

creation procedure and sampling procedure were implemented. These two areas are covered in the remaining sub-section.

Survey creation procedure

An extensive and comprehensive review of literature pertaining to measurement of the various criteria was conducted. Resulting from this, the survey was developed through the amalgamation of measures which focused on motivation for volunteering, graduate competencies as well as graduate employability measures. The seminal work by Clary et al. (1998) on the motivation to volunteer has been found to be a reliable and valid measure across a number of different sample groups and was therefore utilised within this study. A wide-ranging search for scales measuring the outcomes of volunteering as well as graduate employability was conducted. Lichtenstein et al. (2011) had recently developed a valid and reliable scale for the outcomes of Community Based Research, a type of volunteering, and based on research in this area the scale was considered applicable. In addition, a comprehensive search was conducted for a reliable local scale measuring graduate employability. Despite the finding that considerable work is being undertaken within this area, it was evident that a measurement scale had not, as yet, been published. During the creation of the questionnaire this was of some concern, with a final decision being made to utilise the international scales developed by Rothwell, Herbert and Rothwell (2008) and Rothwell and Arnold (2007). These scales measure the perception of graduate employability from the perspective of a student as well as a graduate. Although the reliability and validity measures reported were significant, there was concern around the manner in which they conceptualise the concept of employability. However, a decision was taken to utilise this scale within this sample group.

Once the survey was finalised, a pilot study was conducted with six participants who were currently involved in volunteer work or had been so in the past. It also included participants from various volunteer roles. The number of people within the pilot study was intentionally limited so as not to impact the response rate whilst still gaining

sufficient feedback in order to meet the pilot study objectives. These included testing for face validity of the questionnaire as a successful means to gather the necessary data, assessing the appropriateness of the various items as well as evaluating the structural setup of the questionnaire. Based on the findings, changes were made in the grammatical structure of certain items. This was to account for the people who were currently participating in volunteer work and those who had previously volunteered but were not currently involved. The same items were utilised, however, the tenses were changed in order to cater for this. Furthermore, amendments were made to the instructions of the graduate employability scales as well as the outcomes scales to increase their clarity. There were also concerns around the length of the questionnaire. This was taken into consideration yet the necessity to gather all relevant information outweighed these concerns and therefore all items were included. The financial incentive was initially positioned at five hundred rand but was increased to one thousand rand in order to encourage a higher response rate along with a higher completion rate.

The electronic questionnaire was created on Survey Monkey, with the link being distributed via email. This process was chosen in order to access the diversely located sample group. Survey Monkey is a privately owned company, which is the largest survey organisation in the world. It allows for flexibility in construction of surveys as well as coding and extraction of data. One of the benefits of this survey package is that the data can be directly transferred into Statistical Package for Social Sciences (SPSS). Survey Monkey was utilised based on these benefits as well as the ability to reach the proportion of people who had completed their higher education and therefore were no longer actively participating at SHAWCO. In addition to this, authorisation by the researcher's employer to utilise their premium contract was given and therefore ensured that access was obtained to the full functionality.

The survey was made up of 85 or 83 items for students or graduates respectively. The initial item in the questionnaire asked whether the participant was volunteering, had volunteered in the past or had no volunteer experience. If the participant had not engaged with volunteer work they were unable to continue with the questionnaire.

Two (0.6%) of the respondents had not volunteered previously and therefore their responses were removed from the analysis. On the email and cover letter (see appendix E), an explanation of the objectives was provided as well as information relating to the anonymous nature of the research. In addition, it required that people acknowledge informed consent to participate in the survey. The questionnaire took between 15 and 20 minutes to complete.

Sampling procedure

A non-probability sampling approach was employed, as the sample was selected based on accessibility as well as the needs of the research (Neuman, 2000). The sampling procedure required participants to have engaged in volunteer activities either currently or in the past and was concerned with the relationships between the variables rather than estimating population values. It therefore allowed for a conveniently accessible sample group and for questionnaires to be distributed to a large number of participants quickly and cost effectively. Although this may have limited generalizability, the hypotheses were generated from existing research and require initial descriptive testing before a causal study is conducted. Due to time constraints, all participations who had volunteered between 2008 and 2012 were invited to participate in the study. Over the five years, SHAWCO had 5274 student volunteers.

Due to the integrity of the data within the SHAWCO database as well as the electronic tracing of emails as spam, only 3639 surveys were successfully distributed via email. Of the 3969, 327 participants responded, with 273 of the surveys being completed. In order to overcome these limitations and increase the response rate, the survey was personally distributed by hand before the start of daily volunteer activities, with completed copies being placed in sealed boxes to ensure anonymity. This increased the sample by 17 participants which was less than expected. It was found, however, that the majority of students who were actively engaged in volunteer work had already

completed the survey online. The combined collection techniques yielded 290 responses with a response rate of 8%.

Participants

The survey link was emailed to both current and past SHAWCO volunteers and therefore the participants were more diverse than just those currently studying. The final sample had a total of 279 participants and was made up of 242 students (83.4%), 37 recent graduates with employment (12.8%) and 11 graduates without employment (3.8%). The number of graduates without employment was low and as they had received different set of questions relating to graduate employability it led to an inability to conduct meaningful statistical analysis. Thus, they were removed from the sample.

The participants were predominantly female (69%) with the remaining 31% being male. The average age of participants ranged from 18 to 55 ($M = 22.59$; $SD = 4.1$). Whilst the spread of ages was vast, the age distribution between 19 and 25 accounted for 81.7% of the participants which was expected due to the target sample group. In addition to this, they came from a variety of faculties and education levels as see in Table 3 on page 39.

In addition to the demographical information, the volunteer role, area of volunteering as well as time spent engaged in this activity is relevant to this sample group. Volunteers who participated in this study spent an average of 14 hours volunteering a month ($SD = 13.77$), with the range being between 1 and 120 hours. The most frequently reported number of hours spent volunteering per month was 12.

Table 3*Demographic Frequencies of the Sample*

Demographic	Category	Frequency	Percentage
Sample	Total Number	277	100
Gender	Female	175	69
	Male	77	31
Faculty of Study	Commerce	62	24.8
	Engineering	23	9.2
	Humanities	88	35.2
	Legal	9	3.6
	Medical	24	9.6
	Science	25	10.0
	Combination of 2 or more faculties	19	7.6
	Level of Education	Undergraduate	187
	Honours	32	12.7
	Masters	25	9.9
	Doctorate	5	2.0
	Other	3	1.2

Role within the organisation was split between new volunteers (43.5%), regular volunteers (32.7%) and those who had played a leadership role within the volunteer organisation (23.7%). In addition to this, participants spent a varying number of years volunteering as well as differing categorisation of volunteering frequency as seen in table 4.

Table 4*Volunteer Involvement Frequencies of the Sample*

Volunteer Measurement	Category	Frequency	Percentage
Years of involvement	0 – 1 year	75	26.9
	1 – 2 years	59	21.1
	2 – 3 years	49	17.6
	3 – 4 years	33	11.8
	More than 4 years	63	22.6
Volunteering Frequency	Occasionally	45	16.1
	Weekly	204	73.1
	Monthly	13	4.7
	Other	17	6.1

Participation was further measured through ascertaining the sector or area in which the sample group had volunteered: education (75.6%), health (9.7%), legal (2.5%), other (4.7%) and a combination of two or more areas (7.5%). The participants, who indicated that they volunteered in more than one area or sector, were involved in the area of education as well as an additional area which was predominantly outside of the volunteer offerings which SHAWCO provided for.

Data Analysis Techniques

Data preparation required cleaning and coding the data from the online survey. It also included cleaning, coding and capturing the data from the paper based questionnaires. SPSS (version 20) was used to reduce and analyse it so that reliable findings could be produced. The quantitative data collected was statistically analysed using descriptive statistics, reliability and factor analysis as well as correlation analysis. In addition to this, Amos (version 20) was utilised for multivariate path analysis.

CHAPTER 4: RESULTS

This chapter is divided into five sections according to the relevant statistical analyses performed. Section one presents the factor analysis which was utilised to determine the variables within this dataset. Subsequently, section two explores the reliability of the newly determined variables. A descriptive analysis of the scales and relevant factors is presented in section three. Section four speaks to the research hypotheses by examining the correlations between the independent and dependent variables. The final section investigates the causal relationships through path analysis.

Exploratory Factor Analysis

Exploratory factor analysis was used to identify the underlying latent variables present in the patterns of correlation among the set of measures and to therefore identify the underlying factor structure (Burns & Burns, 2008). Principal-axis factor analysis was conducted as this is recommended for data structuring (Thompson, 2004). The items were rotated with direct oblimin rotation with Kaiser normalisation to reveal the composite factors while accounting for the maximum variance in the original set of variables (Hair, Black, Babin & Anderson, 2010). The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy was assessed in order to understand the portion of variance which may be caused by underlying factors (Hair et al., 2010). Results of 0.5 and less were not utilised as this is recommended as the acceptable level of sampling adequacy (Burns & Burns, 2008). In addition, Bartlett's test of sphericity was reviewed as a means to indicate whether variables were unrelated and therefore suitable for factor analysis (Burns & Burns, 2008). Associated probabilities of less than .05 were accepted as it indicated that the factor analysis was appropriate for the data (Burns & Burns, 2008). Oblimin, as a form of oblique rotation, was chosen as there was no theoretical reason to assume that the factors would not be uncorrelated and it would thus provide a more realistic representation of the factors (Hair et al., 2010). According to Hair et al. (2010), the minimal factor loading for sample of 250 is

.35 for a significance level of .05. Therefore, factor loadings of .35 or more were considered as relevant within this study.

Motivation to volunteer scale

Principal axis extraction with oblimin rotation showed four significant factors which was determined with Kaiser normalisation. Both the Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity produced criteria that supported the factor analysis (KMO = .88; Bartlett's test of sphericity - $\chi^2(190) = 2113.118, p = .00$). However, the protective motivation item three had a factor loading of .31, which was less than the stipulated .35. This item was therefore removed. The remaining items loading onto four factors with eigen values greater than 1.0, accounting for 63.43% of the cumulative variance. Table 5 reports the variance of the four factors as well as the subsequent factor loadings

The five career factors loaded onto factor 1 with factor loadings ranging from .592 to .780 and accounting for 29.58% of variance. The five value items loaded onto factor 2 (factor loading from .60 to .81) and this factor was renamed altruism. In addition to this, the five social items loaded onto factor 3 (factor loadings ranging from .68 to .75). Finally, the protective items were negatively correlated to the factor but had factor loadings which varied between -.620 and -.791. It was interesting to note that the measures were consistent within the South African context given that there are often discrepancies reported when utilising internationally developed scales.

Table 5*Factor Analysis for the Motivation to Volunteer Scale*

Variable	Factor 1	Factor 2	Factor 3	Factor 4
Career 1	.695			
Career 2	.780			
Career 3	.539			
Career 4	.597			
Career 5	.648			
Values 1		.791		
Values 2		.604		
Values 3		.751		
Values 4		.810		
Values 5		.610		
Social 1			.706	
Social 2			.708	
Social 3			.751	
Social 4			.682	
Social 5			.712	
Protective 1				-.791
Protective 2				-.620
Protective 4				-.731
Protective 5				-.750
Eigenvalues	5.62	3.19	1.89	1.34
Individual total variance	29.58	16.83	9.94	7.08
Cumulative total variance	29.58	46.41	56.35	63.43

Notes: Extraction method is principal axis factoring. Rotation method is Oblimin with Kaiser Normalisation. Only loadings of greater than .30 are shown.

Graduate competencies scale

The outcomes of volunteering scale did not yield the expected four factors reported in the exploratory study conducted by Lichtenstein et al. (2008). Extraction using

principal axis-factoring with direct oblimin rotation and Kaiser normalisation indicated two significant factors with eigen values greater than 1.0, accounting for 45% and 12% of the total variance respectively. The KMO and Bartlett's test produced criteria that supported the application of principal axis-factoring (KMO = .863; Bartlett's test of sphericity: $\chi^2(120) = 2302.836, p = .00$). The factor loadings onto the two factors are represented in Table 6.

Table 6

Factor Analysis for the Graduate Competencies Scale

Variable	Item	Factor 1	Factor 2
ACASKILLS1	Strengthened my analytical skills	.474	
ACASKILLS2	Improved my academic writing skills	.757	
ACASKILLS3	Improved my research skills	.757	
ACASKILLS4	Enhanced my understanding of academic content	.744	
EDUEXP1	Increased my interaction with the faculty in which I am studying	.826	
EDUEXP2	Increased my interest in my major	.782	
EDUEXP3	Improved my interest in my university	.598	
EDUEXP4	Clarified my career path	.586	
PROFSKILLS1	Improved my skills with conflict resolution		.533
PROFSKILLS2	Improved my ability to run meetings		.453
PROFSKILLS3	Improved my ability to delegate		.434
PROFSKILLS4	Improved my ability to listen to others		.899
PROFSKILLS5	Improved my ability to work as part of a team		.754
PERGROWTH1	Helped improve my personal qualities		.719
PERGROWTH2	Improved my ability to consider others perspectives		.773
PERGROWTH3	Deepened my understanding of myself		.571
Eigenvalues		7.2	1.9
Individual total variance (percentage)		45.08%	12.32%
Cumulative total variance (percentage)		45.08%	57.40%

Notes: Extraction method is principal axis factoring. Rotation method is Oblimin with Kaiser Normalisation. Only loadings of greater than .30 are shown.

Academic skills and educational experience items loaded onto Factor 1 (loadings varying between .47 and .82). The items within this factor related to development of academic skills such as writing, analysis and research as well as development of engagement with the course content. This factor was thus, renamed academic development as it is focused on a students' absorption of knowledge as well as their ability to engage with the learning process. Items for professional skills and personal growth loaded onto factor 2, with loadings varying between .43 and .89. Based on the items within this factor, the variable was classified as professional and personal development as it incorporated skills which were both professionally and personally relevant, such as the ability to listen, the ability to work as part of a team as well as introspective understanding. This was aligned with the review of the literature and meant that no items needed to be removed.

Graduate employability scale

As performed on the scales for motivation to volunteer and the outcomes of volunteering, principle axis extraction with oblimin rotation and Kaiser normalisation was utilised for factor analysis for the two graduate employability scales. One measured graduate employability based on students' perception and the other based on perceived employability from an employed graduate's perspective.

Graduate employability scale for students

The measure for graduate employability amongst students had low communalities for three of the items. Item one, two and seven had communalities of .04, .10 and .11 respectively. These items did not represent an acceptable amount of variance for the measure and were therefore removed from the analysis (Hair et al., 2010). Principal-axis extraction with oblimin rotation led to two factors with eigen values of 3.9 and 1.6 accounting for 40% and 16% of the variance. Both the Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity produced criteria that supported the factor

analysis (KMO = .78; Barlett's test of sphericity - $\chi^2 (45) = 787.81, p = .00$). The factor loadings and variance is presented in table 7.

Table 7

Factor Analysis for the Graduate Employability Scale for Students

Variable	Item	Factor 1	Factor 2
GRADEMP3	Employers are eager to employ graduates from my university		.755
GRADEMP4	The status of my university is a significant asset to me in job seeking		.785
GRADEMP5	Employers specifically target this university in order to recruit individuals from my subject area (s)	.437	
GRADEMP6	My university has an outstanding reputation in my field of study	.399	
GRADEMP8	My chosen subject(s) rank(s) highly in terms of social status	.801	
GRADEMP9	People in the career I am aiming for are in high demand in the external labour market	.758	
GRADEMP10	My degree is seen as leading to a specific career that is generally perceived as highly desirable	.864	
GRADEMP11	There is generally a strong demand for graduates at the present time	.519	
GRADEMP12	The skills and abilities that I possess are what employers are looking for		.448
GRADEMP13	I am generally confident of success in job interviews and selection events		.472
Eigenvalues		3.96	1.60
Individual total variance (percentage)		39.65%	16.09%
Cumulative total variance (percentage)		39.65%	

Notes: Extraction method is principal axis factoring. Rotation method is Oblimin with Kaiser Normalisation. Only loadings of greater than .30 are shown.

Factor one was made up of six items which all related to external employability. It was therefore categorised as such. Conversely, factor two did not demonstrate clear theoretical explanation. Three of the four items related to internal employability however item 3 was related to employers and their view of the university and therefore should be categorised as external employability.

Graduate employability scale for graduates

Similarly to the graduate employability measure for students, the measure utilised for graduates had low communalities for two of the items. Item five and seven had communalities of .19 and .25 respectively and were therefore removed from the analysis. After removal of these two items, the factor analysis was rerun. Both the Kaiser-Meyer-Olkin (KMO) and the Bartlett's test of sphericity produced criteria that supported the factor analysis (KMO = .66; Bartlett's test of sphericity - $\chi^2(36) = 122.323, p = .00$). Extraction utilised was principal-axis factoring with Kaiser normalisation and oblimin rotation which resulted in two factors. The loadings for factor one were high and ranged from .61 to .83. Similarly factor two had high loadings which ranged from .41 to .87. Table 8 (on page 48) represents the factor loadings and variance.

Items loaded onto factor one related to external employability, with the exception of SPEMP1. This item related to downsizing within the current organisation and belief that the participant would be retained. This could therefore theoretically relate to both external and internal employability. The loadings for factor two are comparable to that of the initial research conducted by Rothwell and Arnold (2007) with the exception of SPEMP4. This item related to skills gained within the current employment relationship and therefore could theoretically be incorporated into the variable of internal employability.

Table 8*Factor Analysis for the Graduate Employability Scale for Graduates*

Variable	Item	Factor 1	Factor 2
SPEMP1	Even if there was downsizing in this organisation I am confident that I would be retained	.611	
SPEMP2	My personal networks in this organisation help me in my career		.876
SPEMP3	I am aware of the opportunities arising in this organisation even if they are different to what I do now		.692
SPEMP4	The skills I have gained in my present job are transferable to other occupations outside this organisation		.447
SPEMP6	I have a good knowledge of opportunities for me outside of this organisation even if they are quite different to what I do now	.626	
SPEMP8	If I needed to, I could easily get another job like mine in a similar organisation	.651	
SPEMP9	I could easily get a similar job to mine in almost any organisation	.829	
SPEMP10	Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers	.833	
SPEMP11	I could get any job, anywhere, so long as my skills and experience were reasonably relevant	.795	
Eigenvalues		3.84	1.89
Individual total variance (percentage)		42.64%	20.96
Cumulative total variance (percentage)		42.64%	63.61%

Notes: Extraction method is principal axis factoring. Rotation method is Oblimin with Kaiser Normalisation. Only loadings of greater than .30 are shown.

Reliability Analysis

On determination of the factors, reliability was assessed using Cronbach's coefficient alpha (α). Alpha values greater than .70 were considered an acceptable level of reliability, with high values indicating a high level of internal consistency among the items (Burns & Burns, 2008). As the value of alpha is increased by the number of items in the scale (Hair, et al., 2010), a minimum of four items were included in each

subscale, with the exception of internal employability for graduates. The coefficient alphas are shown in table 9 and for this study ranged between .687 and .890.

Table 9

Items, Sample Size and Coefficient Alphas for New Variables

Variable	Items	N*	Cronbach Alpha
Motivation			
Career	5	270	.798
Altruism	5	269	.831
Social	5	267	.839
Ego	4	266	.831
Graduate Competencies			
Academic Development	8	250	.890
Professional and Personal Development	8	250	.886
Graduate Employability - Student			
External Employability	6	217	.828
Internal Employability	4	216	.719
Graduate Employability - Graduate			
External Employability	6	33	.866
Internal Employability	3	32	.687

Notes: List deletion based on all variables in the procedure

Of concern was the coefficient alpha for internal employability of the graduate employability measure for graduates ($\alpha = .687$) as the desired cut-off for this research was .70 (Burns & Burns, 2008). However, Hair et al., (2010) state that .60 is deemed the lower limit of acceptability and therefore the decision was made to retain this variable. By deleting SPEMP4 the coefficient alpha for internal employability would have increased to .77. Good practice, however, indicates that a minimum of three or four items are preferable in order to provide coverage of the construct's theoretical domain (Hair et al., 2010) and therefore a decision was made to retain SPEMP4.

Descriptive Analysis

Once the reliability of the new variables was identified, a comprehensive descriptive analysis was conducted in order to investigate the distribution of the scores (Terre Blanche & Durrheim, 2002). This did not include the structural components as the descriptive statistics of these were reported in the analysis of participants. The means (*M*) and standard deviations (*SD*) were computed. In addition to this the median was calculated and is reported in table 10 due to the data not being normally distributed.

Table 10

Descriptive Statistics for New Variables

Variable	<i>N</i>	<i>Median</i>	<i>M</i>	<i>SD</i>	<i>SE</i>
Motivation					
Career	277	2.4	2.52	.93	.05
Altruism	277	4.0	4.01	.55	.04
Social	277	2.0	2.08	.84	.05
Ego	277	2.0	2.15	.95	.05
Graduate Competencies					
Academic Development	257	3.0	2.84	1.01	.06
Professional and Personal Development	257	4.0	3.82	.81	.05
Graduate Employability - Student					
External Employability	220	3.6	3.64	.75	.05
Internal Employability	220	4.0	4.07	.58	.03
Graduate Employability – Graduate					
External Employability	34	3.8	3.72	.78	.13
Internal Employability	33	4.0	3.96	.70	.12

Notes: *N* = Number of respondents after casewise deletion of missing data; *M* = mean; *SD* = standard deviation; *SE* = standard error of mean

Reported levels for the outcomes for motivation have means ranging between 2.08 and 4.01 (range of $SD = .55$ and $.95$). Careers, social and ego motivators had moderate averages. However, the altruistic factor of motivation reported a mean of 4.01 ($SD = .55$). This is high when reported on a five point scale (Burns & Burns, 2008) and indicates that most people within the sample volunteer based on the intention to add value to society. The reported level for outcome of academic development was relatively high with a mean of 2.84 ($SD = 1.01$). The reported levels for professional and personal development were even higher with a mean of 3.82 ($SD = .81$). This dataset however, produced higher than expected means across many variables as seen in reported levels for the measures of graduate employability below.

The four factors of graduate employability (external employability for students; internal employability for students; external employability for graduates; internal employability for graduates) have mean scores of 3.64 ($SD = .75$), 4.07 ($SD = .58$), 3.72 ($SD = .78$) and 3.96 ($SD = .70$) respectively. This indicating that the majority of students and graduates who perceive themselves as being employable. The standard error of measure for Grad Employ Graduate 1 ($SE = .13$) and Grad Employ Graduate 2 ($SE = .12$) is of concern as it could imply that the sample mean will be less efficient as an estimate of the population mean (Burns & Burns, 2008). This was expected based on the small sample size for the group of participants within the study as well as the research design however this would be of significance for future research and is reported in the subsequent discussion chapter.

Correlation Analysis

After finalising the reliabilities for the new variables and conducting the descriptive analysis, correlation analysis with casewise deletion of missing data was conducted. This was done to measure the extent to which structural components as well as motivation to volunteer were related to academic development and professional and personal development. These two variables were in turn correlated with external and internal employability for both students and graduates. Spearman correlation was

utilised as the data was not normally distributed and utilising Pearson's correlation would have resulted in inflated results. In addition to this, Likert type scales cannot produce equal intervals and therefore non-parametric analysis was required (Burns & Burns, 2008). In order to interpret the findings of the correlations, .20 to .40 was considered as a weak relationship and .40 to .70 as a moderate relationship (Burns & Burns, 2008).

Structural components of volunteering and graduate competencies

A set of Spearman correlations were computed to determine if there were any significant relationships between the three structural components of volunteering and the development of graduate competencies.

Hours worked had a weak positive correlation with both academic development ($r = .154, p < .005$) and professional and personal development ($r = .214, p < .001$). This indicated that although a significant relationship exists, number of hours worked did not explain sufficient amounts of the variability in order to be practically significant. Therefore, hypothesis 2a which states that the more hours spent engaging with volunteer work is positively related to the development of graduate competencies is accepted, but the strength of the relationship suggests that other factors have a greater influence in advancing graduate competencies. Hypothesis 2b postulated that the frequency of volunteer involvement positively impacts the development of graduate competencies. The correlation between the frequency of volunteering and academic development is .069; this is not significant and indicates a lack of a systematic relationship (Burns & Burns, 2008). Similarly, the correlation between frequency of volunteering and professional and personal development was reported as .132 at a 5% significance level. Thus, there is no evidence to suggest that the frequency of volunteer activity has any impact on academic development and although significant does not provide sufficient support for hypothesis 2b.

Finally, role within the volunteer organisation was examined. A Spearman correlation of .224 and .405 with a significance of 0.01 was recorded for academic development and professional and personal development respectively. Thus, hypothesis 2c which postulates that role within the organisation positively impacts graduate competencies is accepted as this relationship is significant and explains a moderate proportion of variability. It was postulated that the structural elements of volunteering – hours spent, frequency of involvement and role within the volunteer organisation – would be positively related to the development of graduate competencies. Statistically significant relationships exist within this dataset yet do not explain enough of the variability in order to have practical significance.

Motivation to volunteer and graduate competencies

In the same way that the structural components and graduate competencies were analysed through Spearman's correlation, so too was the motivation to volunteer. These results are reported in table 11.

A set of Spearman correlations indicated that altruistic motivation is positively related to academic development ($r = .233, p < .001$) and professional and personal development ($r = .280, p < .001$). Hypothesis 3a which suggests that altruistic motivation is positively related to advancement of graduate competencies is accepted and the null hypothesis rejected. The relationship, however, is weak and therefore accounts for a small portion of the variability suggesting the existence of other factors in the development of these competencies or it accounts for error in measurement. Similarly, social motivation is found to have a weak, positive relationship with academic development ($r = .255, p < .001$) and professional and personal development ($r = .259, p < .001$). Hypothesis 3c hypothesised that social motivation would have an inverse relationship with the development of graduate competencies and thus the null hypothesis is rejected. In the same way which altruism accounts for limited variability within the competencies, so too does social motivation and therefore there is insufficient evidence to explain the relationship of these constructs.

Table 11*Correlation Matrix for Motivation to Volunteer and Graduate Competencies*

Variables	1	2	3	4	5	6
1. Academic Development		.612**	.562**	.255**	.233**	.322**
2. Professional and Personal Development	.612**		.332**	.259**	.280**	.419**
3. Career Motivation	.562**	.332**		.343**	.072	.359**
4. Social Motivation	.255**	.259**	.343**		.053	.340**
5. Altruistic Motivation	.233**	.280**	.072	.053		.315**
6. Ego Motivation	.322**	.419**	.359**	.340**	.315**	

Notes: *N* = 257 after listwise deletion of missing data, ***p* ≤ 001.

Finally, ego motivation is weakly positively related to academic development ($r = .322, p < .001$). Although significant, the amount of variability explained was not sufficient to indicate a strong relationship suggesting the existence of other factors influencing academic development. The correlation between ego motivation and professional and personal development, however, was .419; this is significant at .01. It thus suggests that ego motivation appears to provide a moderate guide in this competency as students volunteering in order to protect their egos perceive themselves as having developed both personally and professionally. Thus, hypothesis 3d which states that ego motivation is positively related to graduate competencies is accepted and the null hypothesis rejected.

These two sets of correlations investigated the relationship between structural and motivation components of volunteering and their impact on graduate competencies. The subsequent set of correlations explored the interaction between graduate competencies and graduate employability.

Graduate competencies and graduate employability

Spearman correlations which were conducted for graduate competencies and employability produced varying results for students and graduates.

Student perception of graduate competencies and graduate employability

The correlations for academic development indicated a significant yet weak relationship with external ($r = .161, p < .005$) and internal ($r = .145, p < .005$) graduate employability for students. Thus, we reject the null hypothesis and assume that for students' hypothesis 1 which indicates that there is a positive relationship between graduate competencies and employability is accepted. The correlation suggests that although a relationship exists, it is not strong enough to explain the

perception of graduate employability from the students' perspective and other factors not measured must explain more of the relationship. This is further substantiated by the findings of the second graduate competencies variable. Professional and personal development is weakly positively correlated with internal graduate employability ($r = .216, p < .001$). This again provided support for a relationship but one which is not sufficient enough to explain the competency. In addition to this, the correlation between professional and personal development and external graduate employability is .091; this is not significant and indicated a random relationship. There is thus no evidence to suggest that professional and personal development leads to a perception of graduate employability.

Graduate perception of graduate competencies and graduate employability

The set of Spearman correlations based on graduates perception of their competencies and employability produced interesting results and is presented in table 12.

Table 12

Correlations between Graduate Competencies and Graduate Employability

Variable	Student		Graduate	
	External	Internal	External	Internal
Academic Development	.161*	.145*	-.031	.379*
Professional and Personal Development	.091	.216**	.148	.454**

Notes: $N = 220$ for graduate employability for students and $N = 33$ for graduate employability for graduates after casewise deletion of missing data; * $p \leq .005$, ** $p \leq .001$.

The correlation between external graduate employability and academic development is -.031 and for professional and personal development is .148; both are not significant indicating that there is no evidence of a relationship. In comparison, internal graduate employability for graduates reported a weak positive correlation

with academic development ($r = .379$, $p < .005$) and has a moderate correlation with professional and personal development ($r = .454$, $p < .001$). The weak relationship with academic development indicates that graduates perceive that their academic abilities have some impact on their employability but not a vast amount. In contrast, there is evidence which suggests that their professional and personal competencies are perceived as having a positive relationship with their employability. These findings indicate that the development of graduate competencies are viewed as having a positive impact on internal graduate employability but having no relationship with external graduate employability.

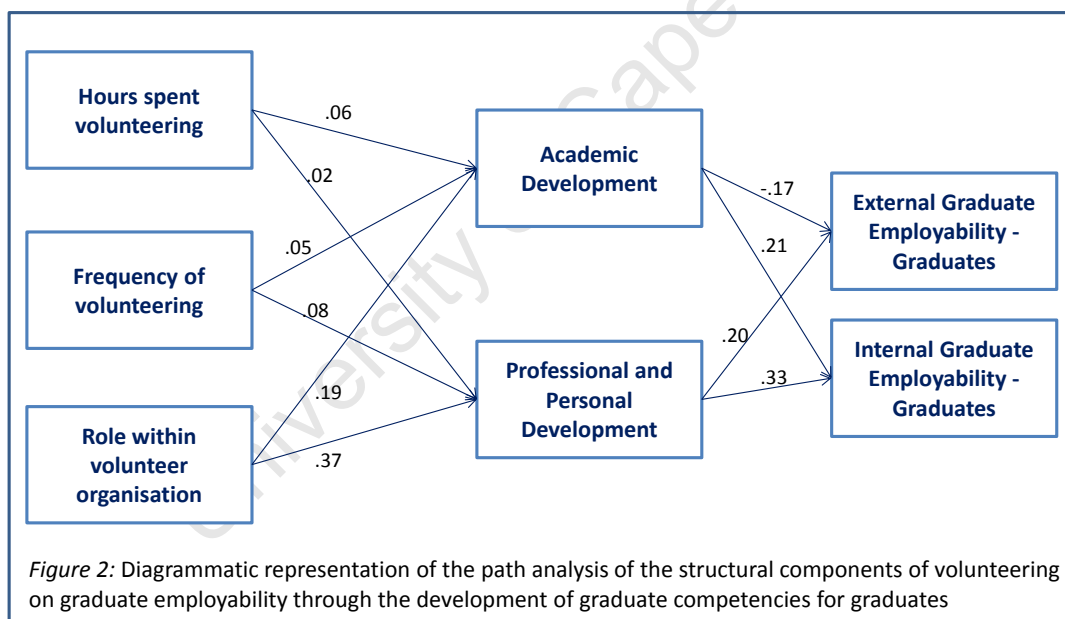
The correlation analysis produced significant insight into the sample's perception of volunteer elements, graduate competencies as well as graduate employability. In order to address the research question and the causal nature of the factors, however, further analysis was required and thus path analyses were conducted.

Path Analyses

In the research design phase of this study, path analysis was chosen based on the research question which proposed to explore whether volunteering leads to graduate competencies and graduate employability. Path analysis is based on bivariate correlations to estimate relationships and determine the strength of depicted paths, similar to multiple regression equations (Hair et al., 2010). As the path analysis is assessing for covariance based on correlations, the weak to moderate correlations reported in this study raised concern that this would not lead to substantial results. Nonetheless four path analyses were run to explore the structural components of volunteering with graduate competencies and employability as well as motivation to volunteer with the same two constructs.

Structural components of volunteering and graduate employability

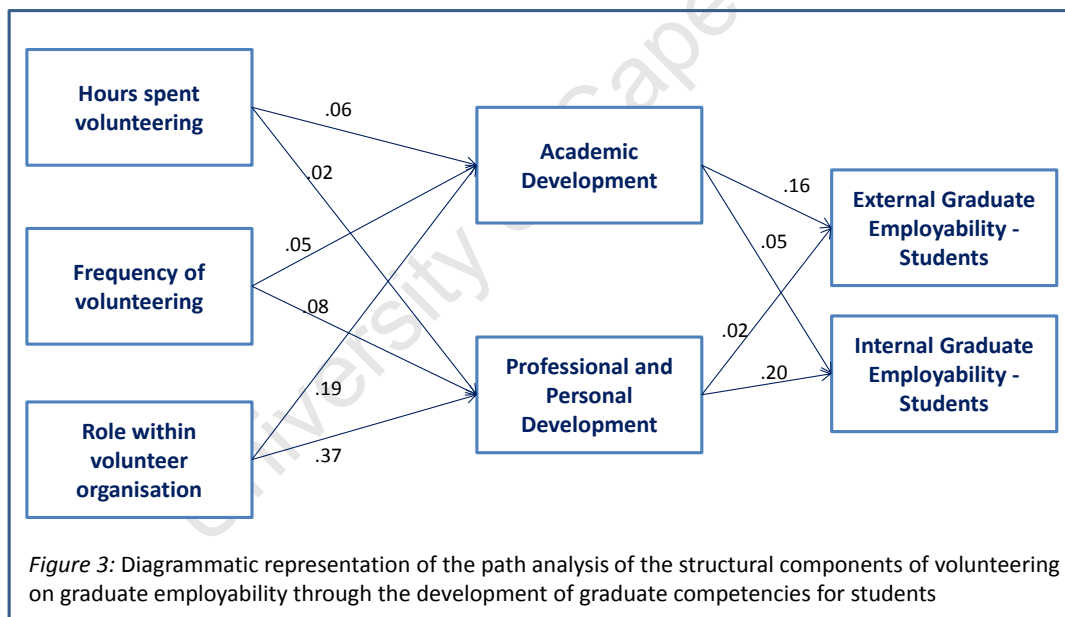
The initial two path analyses had hours worked per month, frequency of volunteering per year and role within the organisation as exogenous variables. Academic development and professional and personal development were endogenous variables, as were the graduate employability variables for each of the separate measures. To examine the first hypothesised model for graduates, the model in figure 2 was tested and represents both the path analysis as well as the standardised regression weights which range from .02 to .37 with significance levels ranging from .003 to .802. In addition to the weak explanation of variability, the model did not provide a good fit for the data as $\chi^2 = 169.775$ (11, $N = 279$), $p = .000$, CFI = .256 and RMSEA = .228.



It is assumed that χ^2 should be small so as to indicate that there is no statistically significant difference between the theoretical model and this dataset (Hair, et al., 2010). In addition to this the comparative fit index (CFI) is a ratio of the difference in the χ^2 value for the fitted model and a null model and thus the higher the ratio is to 1, the better fit the model. Finally, the root mean square error of approximation (RMSEA) is utilised in order to reduce the tendency for the χ^2 value to reject models based sample size and complexity (Hair, et al., 2010). It assesses the estimate of

average difference in the model covariance estimates and the observed estimates. A proposed cutoff value for RMSEA is between .05 and .08. Thus, with a CFI of .256, RMSEA of .228 and χ^2 being reported as 169.775 (11, $N = 279$), the model is not a good fit for this dataset. It did, however, present moderate relationships between role within the organisation and professional and personal development ($\beta = .37, p < .00$) and in turn this factor with internal graduate employability for graduates ($\beta = .33, p < .003$).

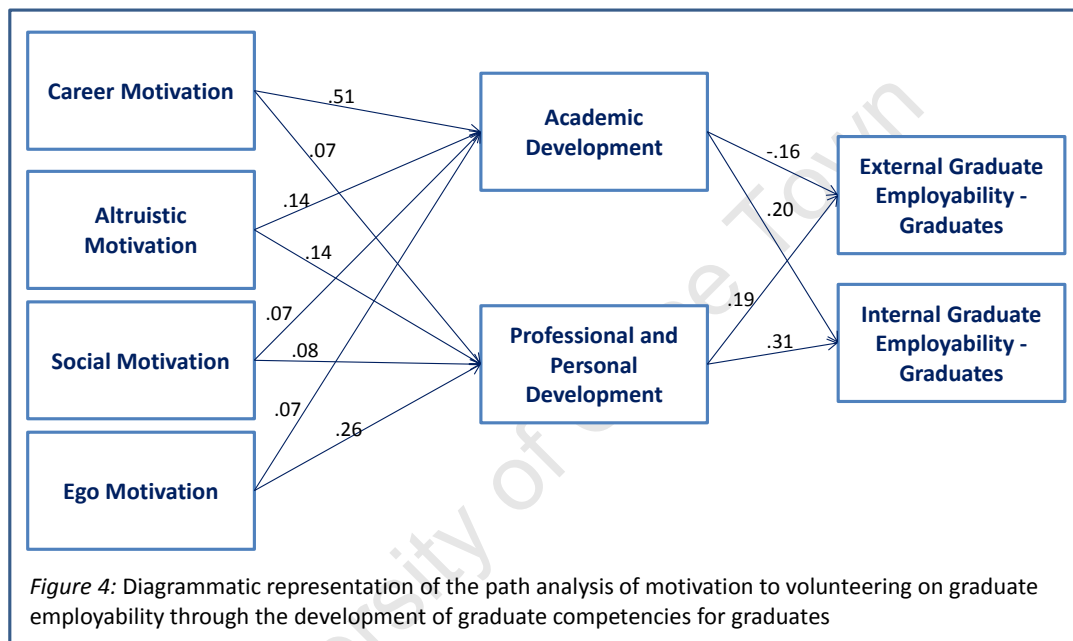
The same model was utilised for the second path analysis with the focus being on students' perception of external and internal graduate employability and is presented in figure 3.



Similarly the second model did not provide a good fit for this dataset as $\chi^2 = 201.76$ (11, $N = 279$), $p = .000$, CFI = .242 and RMSEA = .250. It did however, indicate that role within the organisation has a moderate positive causal relationship with professional and personal development ($\beta = .37, p < .00$). There is however, no clear path to either of the graduate employability factors.

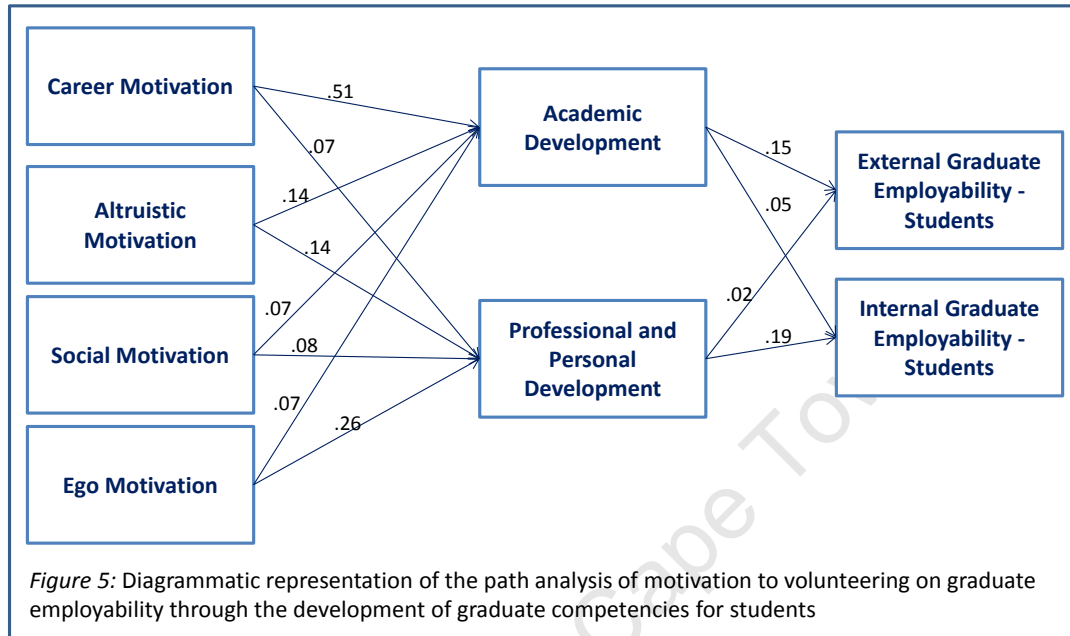
Motivation to volunteer and graduate employability

The four variables within motivation to volunteer replaced the structural components of volunteering and the path analysis was run separately for graduate employability for students and graduates. The path analysis model for graduates is represented in figure 4, including the standardised beta coefficients.



The chi-square reporting for this model is $\chi^2 = 242.814$ (16, $N = 279$), $p = .000$, CFI = .431 and RMSEA = .226. The high χ^2 indicates a poor model fit in addition to this the significance level indicates to reject the null hypothesis of this study, which states that the model is a good fit. When viewed in combination with the RMSEA reported as .226 and the CFI being low, it suggests that this path analysis is not a good fit for the current sample. The beta coefficient for career motivation and academic development was however high ($\beta = .51$, $p < .00$), indicating a strong causal relationship with academic development which in turn reported a partial relationship with internal graduate employability from the graduates' perspective.

Finally, the fourth and final path analysis, was conducted on the students' perceptions of graduate employability. The chi-square reporting for this model is $\chi^2 = 290.901$ (16, $N = 279$), $p = .000$, CFI = .393 and RMSEA = .249 and is shown in figure 5.



Similarly, the beta coefficient for career motivation and academic development was high ($\beta = .51$, $p < .00$), however there was limited support to indicate a causal relationship with either graduate employability factors.

Qualitative Analysis

The open ended question at the end of the survey was intended to provide participants the opportunity to report on information that they felt had not been included in the questionnaire. The response to this question exceeded initial expectations and therefore required analysis aligned with grounded theory in order to identify relevant themes (Breakwell et al., 2012). Eighty two participants provided insight into volunteerism, the competencies they developed as well as their perspectives on graduate employability. The frequencies of these results are reporting in table 13.

Table 13*Qualitative Frequencies of the Sample*

Theme	Frequency	Percentage
Altruistic motivation to volunteer	63	71%
Career benefits from volunteering	39	47%
Enhancement of professional and personal development	38	46%
Enhancement of academic development	10	12%
The role of leadership in personal development	8	8%
No specific category	7	8%
Ego motivation to volunteer	4	5%

Notes: the percentages are not mutually exclusive as the analysis identified responses which were relevant to more than one category.

Three themes were identified as predominant within the qualitative responses. These related to altruistic motivation to volunteer (63 responses), career benefits from volunteering (39 responses) as well as enhancement of professional and personal development (38 responses).

Altruistic motivation to volunteer obtained the most number of responses and highlighted the importance of volunteering in order to give back to the community. Examples of quotes which depict the importance of altruism within volunteering are demonstrated through three examples:

There are two main reasons why I volunteer. First, I have always wanted to help children, learn about them, be a role model to them. It has also helped me understand where my passions lie, and what I want to for the rest of my life. I am aware that many people have others reasons for volunteering (it looks good on a CV). I feel that it is sad that people only do volunteer work so that they have a better chance of being employed.

..... To volunteer just for future opportunities is a bit vile. I don't advertise my volunteer work, because I shouldn't have to. Altruism is its own reward.

Volunteering provides a platform, in which people can give back, can be active in their communities and can help uplift others without really expecting much in return.

This supported the findings evident within the quantitative data.

The second theme which was evident related to students obtaining advantages within their chosen career paths through engaging in volunteer based work. Whilst, it was not the primary motivation for volunteering, the subsequent benefit resulted in career enhancement becoming a motivational factor. The third theme was similar in nature in as students indicated that they observed the enhancement of their own professional and personal development in terms of skills such as leadership whilst participating in volunteer work. This again supported the results obtained through the quantitative analysis.

Each respondent within the total sample was given a number and the answers to the open ended questions were allocated based on this numbering system. These findings are utilised within the discussion section in order to enrich the quantitative analysis.

CHAPTER 5: DISCUSSION

The aim of the present study is to gain insight into whether the structural components of volunteering and the motivation which drives students to engage in these activities assist in the perception of employability, through the development of graduate competencies. This chapter presents a discussion of the results, with specific reference to the hypotheses of the study and the available literature. It discusses each of the hypotheses as reported in the results chapter, with the relevant limitations of the study interspersed throughout the section. It also presents implications for employers, students and universities, as well as suggestions for future research.

The Structural Components of Volunteering and Graduate Competencies

The manner in which volunteer opportunities are structured within organisations is assumed to have an impact on students' personal, professional and academic development (Handy et al., 2010; Smith et al., 2010). This study focuses on three elements for which the results present varying support.

Hours spent and frequency of involvement in volunteering

Participants within this sample indicate that they spent an average of 14 active volunteer hours per month, with the time mostly being distributed on a weekly basis (73%). Correlation analysis does not report a significant relationship between frequency of volunteer activity and academic development, but does with professional and personal development ($r = .135, p < .005$). Additionally, hours worked display weak positive correlations to academic development ($r = .145, p < .005$) and professional and personal development ($r = .214, p < .001$). The results, consequently, indicate that a significant statistical relationship exists but the practical viability of the finding is limited as it does not explain enough of the variability. These findings are

dissimilar to previous research which strongly indicates that regular involvement is critical to the growth of both of the identified graduate competencies (Handy et al., 2010; Smith et al., 2010).

The high frequency of involvement reported in the current study is positive for the local context. This is of particular importance as previous findings indicate that occasional or episodic volunteering is an increasing trend amongst the youth and that this is not only reducing the numbers of hours worked but negatively impacting personal benefits obtained from the volunteer engagement (Cnaan & Handy, 2005; Handy et al., 2010; MacDuff, 2005; Smith et al., 2010). The acknowledgement that students do not fully comprehend the personal impact of volunteering is substantiated by the open ended questions. Respondents indicate that volunteering was not always the first priority in their daily activities and that therefore the time investment is not always positively viewed. Respondent 21 writes the following:

My decision to stop volunteering came at a time when I was struggling with my academics and was thus based upon the misconception that these volunteer activities were taking up too much of my time... I have since realised that while one is required to invest much time to volunteer, the rewards of the experience far outweighs the cost of a few hours a week.

While the findings related to the frequency of volunteer involvement are encouraging, there is concern that this may not be an accurate reflection. One possible explanation for the high frequency of involvement could be based on the skewed profile of the data. This may have occurred due to the sampling procedure which limited participants to students and graduates who were volunteering or had volunteered in the past. The majority of these respondents, by the nature of their volunteer involvement within the SHAWCO structure, report similar hours worked. Thus, the homogeneity of responses may negatively impact the ability to assess variability and consequently limit findings related to hours worked and frequency of involvement. Therefore, whilst hypotheses 2a and 2b are statistically supported, more research on a larger and more varied sample is required in order to gain insight into the impact of frequency of volunteer involvement and its relationship with graduate competency development.

It is therefore suggested that one of the limitations of this study is the size and content of the sample obtained. The size of the sample ($N = 279$) as well as its homogeneousness possibly led to a skewed result. It thus impacts generalizability to a larger population as well as comparisons with non-volunteers. More research is needed in this area with a larger and more diverse sample group.

Role within the volunteer organisation

Correlation analysis reveals that the role that a student volunteer assumes within the organisation has a moderate impact on professional and personal development ($r = .405, p < .001$) and a low yet significant relationship with academic development ($r = .255, p < .001$). The statistical finding that an assumed role within a volunteer organisation has a relationship with professional and personal development is consistent with previous findings (Cnaan & Handy, 2005; Edwards et al., 2001). The practical significance of the relationship between role within the organisation and academic development however needs to be further investigated to the marginal statistical finding as well as the logical practical assumption.

Earlier research indicates that as students take on more significant roles within volunteer organisations, so there is an increase in their personal development (Cnaan & Handy, 2005; Edwards et al., 2001). The commencement of leadership responsibility in volunteering places students in situations which encourage enhancement of communication, interaction and organisation (Cnaan & Handy, 2005; Macduff, 2005). This in turn equips them with the skills needed for the business world. However, it is also apparent that students are traditionally placed in substantive roles which limit leadership responsibilities and therefore limits the transfer of skills (Edwards et al., 2001). Given the findings of this study, the importance of allowing volunteers access to more senior roles is critical to their professional and personal development. This finding is further corroborated as the respondents in this study who assumed volunteer leadership roles acknowledge the personal impact gained. This

finding is illustrated by quotations from respondents 45 and 122 who write the following:

While increasing my employability isn't a deciding factor in choosing to volunteer, I do recognise that it gives me an advantage (especially having been involved in the leadership side of the organisation).

...I think volunteering is only valuable for employment if you are in leadership. Once you have done a few internships or worked part-time the relative value of volunteering on your CV drops markedly.

These findings consequently highlight the positive relationship between a student's role within volunteer organisation and graduate competencies and thus support hypothesis 2c.

Motivation to Volunteer and Graduate Competencies

The second element researched as an antecedent of graduate competencies is motivation to volunteer. In attempting to understand motivational impact on the development of graduate competencies, this discussion first attempts to understand why the sample group is motivated to volunteer. Secondly, the relationship between motivation and graduate competencies is discussed.

Motivation to volunteer

Consistent with recent research (Holdsworth, 2010; Smith et al., 2010), exploratory factor analysis together with descriptive analysis overwhelming indicates that most students' volunteer based on an intrinsic altruistic motivation to give back to the community around them ($M = 4.05$). This is validated by the open ended question where students' portray their emotional stance towards altruistic volunteering in comparison with career motivation. This is illustrated in some of the extracted quotations (Respondents 144 and 90 respectively):

There are two main reasons why I volunteer. First, I have always wanted to help children, learn about them, be a role model to them. It has also helped me understand where my passions lie, and what I want to for the rest of my life. I am aware that many people have others reasons for volunteering (it looks good on a CV). I feel that it is sad that people only do volunteer work so that they have a better chance of being employed.

..... To volunteer just for future opportunities is a bit vile. I don't advertise my volunteer work, because I shouldn't have to. Altruism is its own reward.

The findings in this study corroborate previous research which indicates that altruistic notion to volunteer is entrenched within most volunteer students (Handy et al., 2010; Hwang, 2005; Smith et al., 2010). However, the results show that more than one motive may be relevant. Altruism and career motivation exist simultaneously with altruism reported as stronger than career motivation. This is consistent with previous studies which indicated that motivation to volunteer is not a straightforward concept and that students often volunteer based on more than one motivator (Handy et al., 2010; Holdsworth, 2010; Hwang, 2005; Smith et al., 2010). What is evident from the open ended question, and is supported by prior research, is that although the primary driver to volunteer was altruism, the act of volunteering creates an appreciation for the potential benefits to one's career (Clary et al, 1998; Holdsworth, 2010). This is evidenced by statements of respondent 205 and 99:

Although I don't think that one starts volunteering at a charity because they want it to embellish their CV, I do think that it does help employability.

I volunteer because it helps me grow as a person, but it is also helpful when looking for employment and filling up my CV.

This is a positive finding as students volunteering for altruistic reasons, should also be able to acknowledge the personal benefits which can be achieved (Smith et al., 2010).

Further evidence to indicate that students volunteer for more than one reason is identified through the factor analysis which revealed that students volunteer for ego or social reasons in addition to altruism. This is shown through the descriptive statistics

($M = 2.15$ and 2.08 respectively) which demonstrate that in this sample people volunteered, to a lesser extent, in order to feel better about themselves as well as societal demands from people around them. Such findings are substantiated through thematic analysis which shows the following (respondents 59 and 24 respectively):

It is good for one to feel appreciated, volunteering has given me that privilege.

In the beginning, I joined because someone asked me to, but after I had started, a sense of duty almost obliged me to keep going and help people.

These findings are aligned with research conducted in other countries (Gronlund et al., 2011; Handy et al., 2010; Smith et al., 2010) which finds that while students predominantly volunteer for altruistic notions, they are also driven by a number of different motivators. Even if the overwhelming motivation is altruistic in nature, there are some students who perceive the additional benefit to their careers predominately but also to them socially and in protection of their egos (Gronlund et al., 2011; Handy et al., 2010; Holdsworth, 2010; Smith et al., 2010).

The impact of motivation to volunteer on graduate competencies

The understanding of why students and graduates are motivated to volunteer is used as the basis to examine the relationship between volunteer motivation and graduate competencies.

Altruistic motivation and graduate competencies

The correlation analysis indicates that altruistic motivation has a significant relationship with academic development ($r = .233$, $p < .001$) and personal and professional development ($r = .280$, $p < .001$). Although statistically significant, neither explains sufficient variability to confidently conclude that altruistic motivation assists in the development of graduate competencies. This is contradictory to the

majority of research which reports that students indicate a strong relationship between the desire to give back and the perception of core competencies (Smith et al., 2010). Thus, hypothesis 3a is accepted due to the statistical significance of the relationship but requires additional insight as the explanatory power of this finding is aligned with previous research but is not sufficiently compelling within the South African context. One possible reason for the weak relationships is students could perceive that it is socially unacceptable to admit to volunteering for personal gain due to the very nature of the volunteer activities and the perception that predominate beneficiary is the community (Handy et al., 2010). This is substantiated through the analysis of the open ended question where students report that they are not aware of the benefits they are personally receiving when motivated by the desire to benefit others (respondent 180):

Looking at the two sets of questions that had to be ranked I realized that I did not choose to volunteer for my own personal fulfilment (i.e. clarifying career goals, meeting new friends, lessening loneliness...) but these were the natural outcomes of all the volunteer experiences I have ever had.

Moreover, students who are focused on adding value to other people and communities may not be able to perceive the personal and academic development opportunities as they do not view personal outcomes as a benefit of volunteering, and, instead, view it predominantly as giving back. Previous findings indicate that individuals in countries which hold altruistic values at the core of their social belief system are more likely to volunteer based on desires to improve the society around them instead of any personal gain and therefore view the benefit to others as imperative (Haski-Leventhal et al., 2008; Hwang et al., 2005). Given the unique socio-economic dynamics which exist within South Africa, it is likely that the perspective of giving back to one's community is entrenched into society and thus the perception of personally benefiting from volunteering could be negative.

Through this section it becomes evident that the self-report nature of the scale for graduate competencies is being influenced by respondents' personal opinions and beliefs. This is a limitation of utilising self-report methods to collect data and could result in results which are not a true reflection of the concept under

examination (Burns & Burns, 2008). This highlights the necessity to be able to measure competency attainment in a more concrete manner.

Career motivation and graduate competencies

In contrast to altruism, career motivation within this study shows a strong, positive correlation ($r = .562, p < .001$) with academic development. The relationship with professional and personal development, although significant, is moderate ($r = .332, p < .001$). There are studies which indicate that career motivation leads to the perception of graduate competencies, but the relevant competencies which are reported are skills associated primarily with professional and personal development as opposed to academic development (Holdsworth, 2010; Smith et al., 2010). In addition they find that altruistic motivation will create the perception of benefits over and above career motivation (Clary et al., 1998; Holdsworth, 2010). Thus, it is interesting that hypothesis 3b is not supported and that the opposite is more valid: the current study indicates that career motivation is positively associated with graduate competency development and appears to contribute to a sense of academic achievement.

In the foundational work which was conducted by Clary et al., (1998) they note that the reasons behind volunteering will drive the types of experience which people seek within their volunteer activities. This explanation could possibly clarify why the students who volunteered in order to increase their perceived graduate competencies in order to become employable reported this as having been achieved.

Social motivation and graduate competencies

Hypothesis 3b hypothesises that social motivation is negatively related to the development of graduate competencies. This is due to the predominant driver of

social motivation being either the desire for friends or from pressure from other people to volunteer (Clary et al., 2010; Hwang et al., 2005). Based on this it is proposed that this type of motivation will not lead to a perception of personal benefit. However, the results indicate a positive, although weak, relationship between social motivation and academic development ($r = .225, p < .001$) and professional and personal development ($r = .259, p < .001$). The weak evidence for the relationship between social motivation and competency development could be found in Holdsworth's (2010) research. She found that relationships based on volunteering do not have longevity nor do they extend outside of the volunteer context. Thus leading to a situation where volunteering is potentially not viewed as positive and therefore the beneficial outcomes of the experience will not be achieved. However, it is difficult to propose reasons for the relationship identified in this study as the weak correlation together with the low occurrence of social motivation ($M = 2.08$) limit the ability to make conclusions which are practically relevant.

Ego motivation and graduate competencies

Finally, it is postulated in research hypothesis 3d that ego motivation will positively impact graduate competencies. This is supported by the findings which indicate that ego motivation has a moderate relationship ($r = .419, p < .001$) with professional and personal development. This implies that people who volunteer with an ego protection motivation will be more likely to perceive that they are developing the personal skills which are needed within an employment context. A possible reason for this is perhaps reflected in the following comment (respondent 67):

I did not see the value in volunteering until I tried it and loved how it made me feel to help others. Initially I resisted the idea but have come to see its value and importance, both for myself as well as those I help.

It is similar to the findings of Hwang et al. (2005) who established that people are increasingly driven by self-oriented motivations and would therefore perceive that they are developing necessary skills. This could be a result of increase self-appreciation as people who engage in volunteer work out of a need to feel better about

their problems could utilise volunteering as a proxy to ease their sense of personal reservations and thus perceive that they have developed more professionally and personally (Clary et al., 1998).

The relational findings of motivation and graduate competency development are of significance value as they contribute towards understanding students who volunteer and their development perceptions. However, the limitations of this study should be addressed in future research in order to supplement the research already completed. The predominant limitations mentioned within this section relate to the sampling procedure, the sample obtained as well as the nature of self-report scales and their allowance of personal bias.

The Influence of Graduate Competencies on Graduate Employability

The final element of the correlation analysis is conducted in order to assess hypothesis 1. This hypothesis assesses whether students, once having experienced increased competencies related to volunteering, perceive that they are more employable.

The correlation analysis of external employability with both academic development and professional and personal development are not significant for graduates or students. There is however one exception to the lack of reported significance for external employability. The correlation analysis for students' perception of their academic development and external employability is significant yet weak ($r = .161, p < .005$). While statistically significant, it accounts for a small enough amount of the variability that a non-systematic relationship could be assumed. This is a significant finding however, in terms of understanding the definition of graduate employability as it highlights the perception that employability is about the individual and not external elements. Research conducted by Moreau and Leathwood (2006) finds that the postulation that employability is more than a personal concept and includes elements such as ethnicity and social class was inaccurate as participants reported that it is

predominately a personal concept. The sample in the current study, students and graduates alike, report that employability is the skills, attributes and academic prowess which they, as individuals, possess and disregarded the concept of external employability. This view is not supported by the likes of Brown et al. (2003) who found that skills and attributes are important, but employability is a facet of the labour market, social background, gender and ethnicity. This again highlights the difficulty in defining the concept of graduate employability and therefore the manner in which it is accurately measured (Andrew & Higson, 2008; Brown, 2003; Brown, Hesketh & Williams, 2003; Gracia, 2009; Green et al., 2009). Whilst there is no resolution on this topic, this sample indicates that internal graduate employability – the persons' own skills, attributes, abilities and academic development – is perceived as relevant and thus their relationship with graduate competencies is further examined.

Correlation analysis with internal student perception of graduate employability is positive yet weak for both academic development ($r = .145$, $p < .005$) and professional and personal development ($r = .216$, $p < .001$). The correlation coefficients reported by graduates for internal graduate employability is substantially higher for both of the graduate competencies: academic development ($r = .379$, $p < .005$) and professional and personal development ($r = .454$, $p < .001$). For students, the explanation of variability within the relationship is low enough to limit the practical significance of the finding. For graduates, however, the moderate correlations indicate that they believe that they possess academic, professional and personal competencies and that these assist in their employability. The sample of graduates in this study is small ($N = 37$) in comparison to students ($N = 242$). However, the finding that graduates' perceive a strong relationship between graduate competencies and employability is interesting as graduates have the opportunity to explore the labour market. It would appear that they are then better able to reflect on skills, attributes and knowledge gained which is leading to a deeper appreciation for the development of their competencies. It is thus evident that graduates understand the relationship between employability and their competencies but this is not necessarily so for students. Consequently, there is varied support for hypothesis 1 which may be based on the limitations of this study.

These findings highlighted three limitations within the study. The first was the percentage of respondents who had graduated and were working was a small portion of the total sample. If the sample included additional graduates it could have produced differing results. Additionally, this study does not account for the development of graduate competencies outside of volunteering. Research shows that competency development can be obtained through numerous means (Valentine et al., 2002) and this study does not account for this which could impact the variability in measuring graduate competencies. To account for each of the development opportunities would be difficult however more attention could be paid to controlling for this. Finally, disparity in results for internal and external employability highlight concerns for the graduate employability scale. In attempting to locate an employability measure for South Africa it would appear that, despite the reliability of the scale, it may not be relevant for this context. Therefore, future research is needed on the development of a robust and theoretically sound scale.

The Influence of Volunteerism on Graduate Employability

Media speculation and employer concern (Altbach, 2012; Clark, 2012; Li, 2012; Salutin, 2012; Thebyane, 2012; Worstall, 2012) suggests that graduate employability is a significant problem within the world and that volunteerism is a potential solution to this. Path analyses are chosen as the method to answer the primary research question: *to what extent does volunteering contribute to the perception of graduate employability*. The findings of this study result in four path analyses models which are not a good fit for the current dataset. They do, however, indicate certain causal relationships between the variables and therefore provide partial support for the research question.

Role within the volunteer organisation

Previous research indicates that there is support for the notion that adopting a leadership role within a volunteer organisation increases the likelihood of developing graduate competencies (Cnaan & Handy, 2005; Edwards, et al., 2001; MacDuff, 2005). It therefore proposes that as the seniority in a role increases so does the development of graduate competencies, which would in turn, leads to graduate employability. The regression coefficient ($\beta = .37, p < .00$) explains a significant amount of the variance between role within the organisation and professional and personal development, indicating that as seniority within the volunteer organisation progresses so does the development of professional and personal development. This is consistent with the findings of Edwards et al., (2010) yet progresses the research further to empirically investigate the link to employability. The regression coefficient between professional and personal development and internal graduate employability ($\beta = .33, p < .04$) indicates a significant causal relationship. Therefore, an important finding of this research is that as students become more senior within volunteer organisations, they develop the personal skills which they believe make them more employable. The developmental relationship between role and employability, moderated by competency development is a relatively new finding within the literature and requires additional research to better understand this.

Career motivation to volunteer

The reported significance of career motivation and academic development ($\beta = .51, p < .00$) explains a large proportion of the variability between the two factors. This indicates that students and graduates both believe that if one volunteers in order to progress ones career, academic development will be improved. Based on this, as well as findings relating to career motivation discussed earlier in this chapter, it is evident that if students volunteer based on a need to advance their careers, they subsequently believe that they are increasing their academic expertise (Holdsworth, 2010; Smith et al., 2010). Interestingly, however, there is limited evidence of a significant causal path

which indicates that once academic development is perceived that this leads to the impression of graduate employability for either students or graduates. A possible explanation is that for some students who engage in volunteer activities within their field of study entrench the academic learning with practical experience and may not then have the experience to equate this to their ability to obtain employment. An example of this is evident in the open ended question (respondent 33):

I am a great proponent of SHAWCO and especially SHAWCO Health as it is the arm which I have experienced. I think especially in the medical field it helps one gain valuable experience and proficiency with regards to dealing with patients and clarifying our clinical knowledge. Medicine is one of those degrees where most people have a strong desire to help people, and SHAWCO is one of the perfect ways in which to do this.

The acknowledgement that students want to learn in an applied environment in order to entrench their academic learning lends support for university based experiential learning. These programmes advocate that the likes of service learning and CBR deeply embed knowledge based learning and therefore is a direction which higher education should take in order to improve graduate employability (Astin & Sax, 1998; Lester et al., 2005; Lichtenstein, 2011).

The sample is again identified as a limitation within this study as it may not have been large enough to obtain sufficient results for the path analyses. In addition to this, the correlation analysis reports mainly weak relationships and therefore indicates that the path analysis could not produce substantial findings. This is again due to the variability in the results and supports the previous suggestions that the sample size needs to be 1) increased and 2) diversified to increase the causal relationships. Despite, the limitations to the path analysis, there is sufficient support for volunteering as a robust and legitimate antecedent of graduate employability. The complexity of volunteerism and the world of work notwithstanding, findings of this study such as the impact of role seniority and motivational driver to volunteer should encourage students to partake in volunteering to increase self-development and subsequently equip themselves for future employment. This study, therefore, has

implications for employers, students and universities alike. This is discussed in the subsequent section.

Implications for Employers, Students and Universities

The importance of employable graduates is critical for the progression of South Africa as a country (Chetty, 2012) and therefore has implications for all parties involved: employers, students and universities.

Employers' highlight the necessity in bridging the gap between the academics and skills required and those which are delivered from the higher education institutions (Archer & Davison, 2008; Griesel & Parker, 2009). This study provides a potential means to overcome this divide by demonstrating that volunteerism is not merely a line item on a CV but increases the perception of graduate employability. This, therefore, equips employers with a screening tool within the initial phases of the recruitment process. It also however has a similar impact for students. The acknowledgement from the student body that they are responsible for their own development is increasing in prevalence (De La Harpe et al., 2000; Holmes, 2006). The findings of this study highlight an avenue for academic and skills development. It has particular relevance to the role that students should assume within the organisation as well as the need to be intentional about their acquisition of skills. Although, this research does not advocate a move away from the altruistic intention to volunteer, it does propose that volunteering can be mutually beneficial to beneficiaries and volunteers.

Finally, the predominant implication for universities is that the trend towards experiential learning in addition to knowledge based education is one which is demonstrating positive results (Favish & McMillan, 2009; Merino, 2007). With it being reported that volunteerism is a possible avenue for the development of skills, this is something that universities could embrace in two ways: 1) establishing volunteer organisations which allow for students to engage in volunteer activities and

to assume responsibility for organisational leadership; 2) implementing learning initiatives which adopt the principles of volunteering through the likes of service learning and CBR. Although this is not a new finding it further substantiates the impetus for this and indicates a suggestion for future research. This, and additional suggestions, are provided below.

Suggestions for Future Research

In this study, findings indicate that volunteerism was a potential contributor to the perception of graduate employability. However, there are a number of potential research areas which would increase the robust of relevant knowledge.

The first recommendation for future research relates to the definition of graduate employability. The complexity of the concept is well documented (Andrew & Higson, 2008), yet the lack of empirical researched definition and therefore agreed upon scale, makes it difficult to measure. Although the reliabilities of the scales developed by Rothwell et al., (2008) and Rothwell and Arnold (2007) are acceptable, the conceptualisation of graduate employability may not be appropriate given the conjecture concerning internal and external employability. This study demonstrates that only internal employability was appropriate for students and graduates alike. This however, leads to the acknowledgement that the cross-sectional research design produced findings which are not generalizable despite being consistent with previous findings (Handy et al., 2010; Smith et al., 2010). The results of this study can therefore not claim to indicate causal relationships. Due to this it is suggested that future research is conducted with a longitudinal research design in order to further explore the relationship between volunteerism and graduate employability. Replications of this study across different sample groups would be beneficial to support preliminary findings and to validate causal relationships which can be utilised in the broader population.

When considering different sample groups, future research should focus on extending the study to incorporate a larger sample of student volunteers who have graduated and entered the world of work. Initial findings in this study indicate that graduates had an elevated discernment relating to graduate employability when compared with students' perception. It would thus be of value to the understanding of graduate employability as well as volunteerism as an antecedent if more was known about whether there is a difference in perception on commencement of work. In addition to this, future research should extend the sampling procedure in order to incorporate more students who are not engaged in volunteerism. This could assist in increasing heterogeneity of responses, thereby allowing for more variability in the findings and subsequently providing more robust insight into whether frequency of involvement is an antecedent of graduate competencies and employability. The final sample group which should be considered is employers and their perception of the skills, competencies and academic ability which student volunteers exhibit. This would reduce any bias which is evident within self-report measures and would provide further insight into whether employers' believe that volunteering is developing students.

The final recommendation for future research is to compare the results of volunteering with those of formal higher education service learning initiatives. Volunteering is a means to bridge the skills development gap between higher education and employability and is often viewed as a temporary method (Holdsworth, 2010). More knowledge is therefore required to understand whether service learning or CBR is a preferential means of increasing employability or whether in fact the very nature of volunteering leads to the development of skills over and above what universities are able to provide.

Conclusion

There is much literature on graduate employability as a global and local concern facing countries today (Andrews & Higson, 2010; Chetty, 2012). This study presented

volunteerism as a potential solution to the impending crisis. The findings indicated that volunteering assists in the development of graduate competencies and graduate employability but that it is a complex phenomenon with many structural and motivational nuances.

It was found that the relationship between volunteerism and graduate employability is influenced by structural components of the organisation in which students volunteer, in particular the assumed role. Preliminary findings indicate that seniority within the organisational structure increases the perception of employability. Furthermore, the psychosocial motivational driver to volunteer had an impact on whether the development of graduate competencies was reported or not. Students and graduates indicated that they volunteered due to altruistic reasons but this did not lead to increased perceived employability. Increased competencies and employability was reported for those students who volunteered out of career or ego motivation.

These findings highlighted the importance of volunteering as a means to address the increasing need for skilled graduates. Further empirical studies are needed to supplement this preliminary research. Yet, the initial findings provide a platform from which universities, employers and students can begin to view volunteering in terms of their curricula, recruitment and personal development motivations respectively. Volunteering appears to be an important activity for the development of youth in our country (Cranmer, 2006) and therefore holds important implications for employers and higher education institutions. It provides a potential solution to equip the future workforce of the country, whilst simultaneously providing support for those in need. From this study it is evident that the role of volunteering should be a future focus area for universities, students and employers alike.

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**APPENDIX A: Graduate Employability Measure for Students (adapted from
Rothwell et al., 2008)**

This measure was adapted through the removal of 3 items to increase the reliability coefficient as suggested by Rothwell et al., (2008).

I am confident that...

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 my 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 of study
7. A lot more people apply for my degree than 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. The skills and abilities that I possess are what employers are looking for
13. I am generally confident of success in job interviews and selection events

**APPENDIX B: Graduate Employability Measure for Graduates (developed by
Rothwell and Arnold, 1998)**

I am confident that...

1. Even if there was downsizing in this organisation I am confident that I would be retained
2. My personal networks in this organisation help me in my career
3. I am aware of the opportunities arising in this organisation even if they are different to what I do now
4. The skills I have gained in my present job are transferable to other occupations outside this organisation
5. I could easily retrain to make myself more employable elsewhere
6. I have a good knowledge of opportunities for me outside of this organisation even if they are quite different to what I do now
7. Among the people who do the same job as me, I am well respected in this organisation
8. If I needed to, I could easily get another job like mine in a similar organisation
9. I could easily get a similar job to mine in almost any organisation
10. Anyone with my level of skills and knowledge, and similar job and organisational experience, will be highly sought after by employers
11. I could get any job, anywhere, so long as my skills and experience were reasonably relevant

**APPENDIX C: The Outcomes of Volunteering Measure (adapted from
Lichenstein et al., 2011)**

The 21-item scale was adapted from Lichenstein et al. (2011) to measure the outcomes of volunteering. The measure was originally developed to measure the outcomes of Community Based Research. The outcomes however were found to be similar based on the available literature and was therefore utilised. The items relating to civic engagement were removed leaving 16 relevant items. The tense of these items were changed where necessary to cater for the students who were not currently volunteering but had volunteered in the past.

Each of these statements requires that you examine what benefit you gain from volunteer activities. Please provide an answer to each of these statements by indicating not at all important; minimally; neutral; moderately or extensively.

1. Strengthened my analytical skills
2. Improved my academic writing skills
3. Improved my research skills
4. Enhanced my understanding of academic content
5. Increased my interaction with the faculty in which I am studying
6. Increased my interest in my major
7. Improved my interest in my university
8. Clarified my career path
9. Improved my skills with conflict resolution
10. Improved my ability to run meetings
11. Improved my ability to delegate
12. Improved my ability to listen to others
13. Improved my ability to work as part of a team
14. Helped improve my personal qualities
15. Improved my ability to consider others' perspectives
16. Deepened my understanding of myself

APPENDIX D: Volunteer Functions Inventory (developed by Clary et al., 1998)

This 29-item scale was developed by Clary et al., (1998) to measure why people were motivated to volunteer. All 30 items were utilised within this study. The items were adapted to cater for people who had volunteered in the past (past tense) and were not currently involved in volunteer work.

In order to gather information into your reasons for volunteering, please could you indicate how important each of these 30 statements are in motivating you to volunteer. Each statement requires that you choose one answer.

1. Volunteering can help me to get my foot in the door at a place where I would like to work
2. My friends volunteer
3. I am concerned about those less fortunate than me
4. People I am close to want me to volunteer
5. Volunteering makes me feel important
6. People I know share an interest in community service
7. No matter how bad I've been feeling volunteering helps me to forget about it
8. I am genuinely concerned about the particular group I am serving
9. By volunteering I feel less lonely
10. I can make new contacts that might help my business or career
11. Doing volunteer work relieves me of some of the guilt over being more fortunate than others
12. I can learn more about the cause for which I am working
13. Volunteering increases my self esteem
14. Volunteering allows me to gain a new perspective on things
15. Volunteering allows me to explore different career options
16. I feel compassion toward people in need
17. Others with whom I am close place a high value on community service
18. Volunteering lets me learn things through direct, hands on experience
19. I feel it is important to help others
20. Volunteering helps me to work through my own personal problems

21. Volunteering will help me to succeed in my chosen profession
22. I can do something for a cause that is important to me
23. Volunteering is an important activity to the people I know the best
24. Volunteering is a good escape from my own troubles
25. I can learn how to deal with a variety of people
26. Volunteering makes me feel needed
27. Volunteering makes me feel better about myself
28. Volunteering experience will look good on my resume
29. Volunteering is a way to make new friends
30. I can explore my own strengths

University of Cape Town

APPENDIX E: Covering Letter Utilised for the Dissemination of the Survey

Dear SHAWCO Member,

You are invited to participate in a short online research project.

I am researching the potential impact volunteering has on the development of skills needed to ensure employability within the South African market place. Whilst the study is in fulfilment of my Master's degree in Organisational Psychology, I have partnered with SHAWCO to conduct a piece of applied research that will be of direct benefit to the organisation. The results will assist SHAWCO in gaining insight into how volunteering benefits students and help them fashion an enriched learning experience.

The questionnaire will take you approximately 15 minutes to complete and participation is voluntary and anonymous. In order to enter the draw, you will be asked to provide your email address. This will only be utilised for the purpose of the draw and will be stripped out from your response before the data is pulled for analysis. If you are willing to partake in this study, please click on the link below (*By clicking on the link, you are providing informed consent that you will participate in the study*):

<https://www.surveymonkey.com/s/VOLUNTEERINGSA>

On completion you will be entered into a draw and will stand to win R1000!

Your participation will be greatly valued!

If you have any questions, please don't hesitate to contact me.

Kind Regards,

Ginny