

Personal growth initiative among Industrial Psychology students in a higher education institution in South Africa

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May 2015

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DECLARATION OF AUTHENTICITY OF RESEARCH

DECLARATION

I, Angelique de Jager, hereby declare that the mini-dissertation titled "Personal growth initiative among Industrial Psychology students in a higher education institution in South Africa", is my own work. The views and opinions expressed in this work are those of the author and relevant literature references are shown in the literature references.

I further declare that the content of this manuscript will not be submitted at any other tertiary institution for qualification purposes.

A. de Jager



Date: 23/10/2014

COMMENTS

The reader should bear in mind the following:

The editorial style follows the format prescribed by the Publication Manual (6th edition) of the American Psychological Association (APA). However, a modified version of the format is used in line with the policy of the Programme in Industrial Psychology of the North-West University, Potchefstroom Campus. The format used for the research article is in accordance with the guidelines for authors for the South African Journal of Industrial Psychology (SAJIP).

The revised research proposal forms the first chapter of the mini-dissertation. Hence this chapter is presented in a different voice when compared to subsequent chapters which report on actual results.

The mini-dissertation is submitted in the form of three chapters, which include one research article (Chapter 2). Chapters 1 and 3 have numbered sections according to the formatting followed in the research unit, WorkWell.

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Declaration of the Editor



6 October 2014

I, Ms Cecilia van der Walt, hereby confirm that I took care of the editing of the article of Ms Angelique de Jager titled *Personal growth initiative among Industrial Psychology students in a higher education institution in South Africa.*

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SUMMARY

Title: Personal growth initiative among Industrial Psychology students in a higher education institution in South Africa

Key terms: Personal growth initiative, Industrial psychology/psychologists, students, demographic differences.

Industrial and organisational (I-O) psychology is a profession which entails a broad spectrum of working activities. One of these activities is workplace counselling which forms a significant part of the internship programme. However, interns often lack the necessary skills to provide counselling.

In order to function in a counselling role, the I-O psychologist should have the necessary training to be equipped with counselling skills. It is evident from previous studies that I-O psychology practitioners often feel they lack the ability to counsel individuals sufficiently. Therefore it is important for I-O psychology students to focus on their development to become effective counsellors by focussing on their inter- and intrapersonal skills as part of the skills package as a counsellor. Personal Growth Initiative (PGI) is one way of measuring a person's intrapersonal skills in terms of the individual's intention to change and grow.

The main aim of this study was to measure the prevalence of PGI among I-O psychology students. Participation in this study was limited to I-O psychology students ($N = 568$). The students differed in terms of gender, age, ethnicity, and language. The results provided the researcher with an indication of what the students' intention to grow and develop as an individual entails in order to provide a basis for further research, namely to develop a training programme for I-O psychology students as workplace counsellors.. The PGI of the students were measured by means of the Personal Growth Initiative Scale (PGIS). This is a nine-item instrument with a six-point Likert type scale ranging from 0 (definitely disagree) to 6 (definitely agree).

The results indicated that PGI is prevalent among the I-O psychology students. Furthermore, the study showed that PGI is relevant to all gender and ethnic groups amongst I-O psychology students. Significant differences were found for the different ages and languages. From the results it is recommended that higher education institutions adapt training programmes to foster personal

growth initiative amongst I-O psychology students. Future research can also make use of the PGIS-II to measure PGI as this is the latest version of the construct. In terms of the organisation it is recommended that I-O practitioners should be more growth focussed.

OPSOMMING

Titel: Persoonlikegroeï-inisiatief onder Bedryfsielkunde-studente in 'n hoëronderrwys-instelling in Suid-Afrika

Sleuteltermes: Personal growth initiative, Bedryfsielkunde, sielkundiges, studente, demografiese verskille.

Bedryfsielkunde is 'n professie wat 'n breë spektrum aktiwiteite behels. Berading in die werksplek maak 'n groot deel uit van die internskapprogram wat bedryfsielkunde-studente moet doen, alhoewel hulle voel dat hulle nie oor die nodige vaardighede beskik om in sodanige rol op te tree nie.

Vir 'n Bedryfsielkundige om in 'n beradingsrol te kan funksioneer verg die nodige opleidingsprogram om vir hulle die nodige vaardighede te leer. Vorige navorsing bewys dat Bedryfsielkundiges dikwels voel dat hulle nie oor die vaardighede beskik om op toepaslike wyse vir mense berading te gee. As gevolg hiervan is dit vir Bedryfsielkunde-studente nodig om op hulle ontwikkeling te fokus om as 'n effektiewe berader te kan optree. 'n Belangrike aspek is vir hulle om op hul inter- en intrapersoonlike vaardighede as deel van die vaardighede waaroor 'n goeie berader beskik, te fokus. 'n Persoon se intrapersoonlike vaardighede met betrekking tot sy voorneme om te groei en te verander kan dus gemeet word aan die hand van 'n konsep genaamd Persoonlikegroeï-Inisiatief (PGI).

Die deelnemers in hierdie studie was beperk tot Bedryfsielkunde-studente ($N = 568$). Die studente het van mekaar verskil ten opsigte van hul geslag, ouderdom, ras en taal. Die fokus van hierdie studie was om die teenwoordigheid van PGI onder Bedryfsielkunde-studente te meet. Die resultate het vir die navorser 'n aanduiding gegee van wat 'n student se voorneme is om as persoon te groei en te ontwikkel behels, met die doel om 'n basis te voorsien vir toekomstige navorsing, naamlik om 'n opleidingsprogram te ontwikkel om Bedryfsielkunde-studente mee op te lei om as beraders in die werksplek te funksioneer. Die Persoonlikegroeï-Inisiatief van 'n persoon kan gemeet word aan die hand van die Persoonlikegroeï-Inisiatiefskaal (PGIS). Hierdie skaal bestaan uit 9 items en werk met 'n 6-punt Lykert-tipe skaal wat varieer van 0 (stem definitief nie saam nie) tot 6 (stem definitief saam).

Na aanleiding van die resultate was PGI algemeen te vind onder die deelnemers in hierdie studie. Verder het die resultate aangedui dat PGI min of meer dieselfde was vir Bedryfsielkunde-studente van alle geslags- en rasgroepe. Die resultate het wel aangedui dat die PGI verskillend lyk vir Bedryfsielkunde-studente van verskillende ouderdoms- en taalgroepe. Na aanleiding van die bevindings in hierdie studie kon sekere aanbevelings gemaak word. Daar word dus aanbeveel dat tersiêre instansies hul opleidingsprogramme vir Bedryfsielkunde-studente sodanig moet aanpas dat Persoonlikegroei-Inisiatief onder Bedryfsielkunde-studente aangemoedig word. Toekomstige navorsing kan ook gebruik maak van die PGIS-II om PGI te meet aangesien dit die jongste weergawe van die vraelys is. Ten opsigte van die organisasie word sterk aanbeveel dat Bedryfsielkundiges meer groei-gefokus moet wees.

CHAPTER 1

INTRODUCTION

This mini-dissertation focuses on an assessment of Personal Growth Initiative among I-O psychology students in a higher education institution in South Africa. This chapter consists of a problem statement and a discussion of the research objectives. The general and specific objectives will be set out. In this chapter an explanation of the research method and the chapter division will also receive attention.

1 PROBLEM STATEMENT

The I-O Psychologist

The field of Industrial and Organisational (I-O) psychology mainly concerns the study of human behaviour within the workplace (Van Vuuren, 2010). According to the Health Professions Act (2011) Industrial and Organisational (I-O) psychology deals with work-related issues of well-adjusted adults for the purpose of optimising well-being and effectiveness by applying principles of psychology. The main goal of I-O psychologists is therefore to “plan, develop and apply paradigms, theories, models, constructs and principles of psychology to issues related to the world of work in order to understand, modify and enhance individual, group and organisational behaviour well-being and effectiveness” (HPCSA, 2011, p. 9).

Apart from supporting well-adjusted employees towards a process of growth and optimisation, I-O psychologists should also be able to support employees in distress. Workplace counselling has the potential of changing the perspective of managers regarding personal problems and emotional difficulties that might change the discourse of the workplace (McLeod & Henderson, 2003). Thereby the I-O practitioner addresses the effectiveness of the organisation as a whole, as well as the individuals’ well-being (Rothmann & Cilliers, 2007; Schreuder, 2001) through, amongst others, workplace counselling.

Assisting employees experiencing distresses in the workplace can be a daunting task if the I-O psychologists lack sufficient counselling skills. Recent literature indicates that I-O psychologists do not feel adequately prepared for their role as workplace counsellor (see Barkhuizen, Jorgensen & Brink, 2014; Rothmann & Van Aardt, 2003). In a study conducted amongst I-O psychologists the

participants indicated that I-O psychology students could benefit more from in-depth counselling training and more psychology-focussed training, especially various counselling models, theories and trauma counselling (Barkhuizen *et al.*, 2014).

When I-O psychology interns enter the workplace to start their internships, a significant amount (15%) of the internship includes workplace counselling as part of the career psychology and wellness domain stipulated in Form 218 (HPCSA, 2011). It is expected of the interns to conduct basic counselling, diagnose workplace-related psychopathology (e.g. burnout) and general psychopathology (e.g. psychological trauma). Also to refer appropriately; to assist employees with physical and psychological health challenges that impact on employee wellness/well-being (e.g. HIV-Aids) (HPCSA, 2011). Previous studies indicate that issues for which employees require counselling include over-commitment (Ota *et al.*, 2005), job dissatisfaction (Scott & Judge, 2006), role conflict (Knudsen, Ducharme & Roman, 2007), imbalance (Ota *et al.*, 2009), high job demands (Runeson, Lindgren & Wahlstedt, 2011), job insecurity (Kim *et al.*, 2011), workaholism (Kubota *et al.*, 2010), low job control (Runeson, Lindgren & Wahlstedt, 2011), and poor interpersonal relationships (Nakata *et al.*, 2007). Furthermore, emerging workplace issues I-O psychologists have to deal with include occupational injustice (Elovainio *et al.*, 2009; Kim *et al.*, 2011), workplace bullying (Lallukka, Rahkonen, Lahelma, 2011; Takaki *et al.*, 2010), and violence at work (Eriksen *et al.*, 2008). A major organisational response to the afore-mentioned psychological and mental health problems reported by employees is the provision of workplace counselling services (McLeod, 2010). Since practitioners in the I-O profession deal with employees that face work-related problems that can be very traumatic, such as emotional abuse, victimisation and harassment (Aquino & Thau, 2009), it is important for I-O psychology students to be equipped with knowledge and skills during their professional training to assist these employees.

Research shows that in order to be effectively trained as a facilitator of persons, inter- and intrapersonal skills should form part of the training plan (Rothmann & Van Aardt, 2002). Interpersonal skills are important since facilitators of people should be aware of their feelings, perceptions, and emotions; subsequently the enhanced awareness of the self (as well as own and others' interpersonal relationships) leads to higher levels of emotional maturity and self-actualisation (Cilliers, 2000). Carkhuff (2000) points out that when the helper demonstrates effective interpersonal skills, he/she will be able to relate to the experiences of others. Rothmann and Cilliers (2007) refer to interpersonal skills as facilitation skills. Ivey (2013) describes these as the reflecting skills a counsellor should have, also described as the Micro skills of Ivey which entail

questioning, minimum encouragement, paraphrasing, clarifying, reflecting, summarising, and giving information. Interpersonal skills training generally involves developing these adequate facilitation skills and relations in the workplace (Taylor, Russ-Eft & Chan, 2005). Intrapersonal skills can best be defined as a self-actualising concept as studied over the past years by scholars such as Rogers (1970), Jung (1971), and Allport (1961). Kubica and Sara (2014) refer to intrapersonal skills as an aspect of self-awareness. Rothmann (1996) describes intrapersonal skills as the psychological optimal functioning of an individual. Rogers (1980) mentions that individuals that are intrapersonally aware have constructive interaction with their surroundings while they are in the process of constant growth. Training intrapersonal skills generally involves focussing on the development of the individual's growth initiative, self-actualising and optimal functioning. The development of these intrapersonal skills is crucial since they can be seen as the fundamental drivers of the interpersonal skills (Kubica & Sara, 2014).

Literature indicates that allowing change and growth in oneself forms part of a healthy personality (Allport, 1961; Rogers, 1970). This is needed in healthy relationships and to manage stressors (Robitschek *et al.*, 2012). Corey (2009) mentions that a counsellor is in some way a role model and should be able to model his/her way of living to his/her clients. This is why it is crucial for I-O psychology students to learn how to be open to change and willing to constantly grow as a person in order to promote this process within their clients. Robitschek (1998) views personal growth as the "active, intentional engagement in the process of personal growth which encompasses the cognitive components of self-efficacy, including beliefs, attitudes and values that support personal growth" (p.183). Therefore attention should be given to the level of personal growth initiative of students before they enter a training programme to make sure they have an intention to grow and the motivation to change. Intentional personal growth can be measured by a construct labelled personal growth initiative, an orientation towards change and growth across life domains (Robitschek, 1998).

Personal Growth Initiative

Personal growth initiative refers to the situation in which an individual has the intention to change, and is actively involved in the process of changing, and of developing as a person (Robitschek, 1999). Robitschek (1998) originally investigated two components of personal growth initiative – a behavioural component and a cognitive component. The behavioural component consists of the individual taking the initiative to endorse the change process, while the cognitive component consists of the individual believing that a positive change is possible and knows how to perform this change (Robitschek, 1998). These two components can be viewed as relating to the self-efficacy component of Bandura's theory, however in a much broader sense (Robitschek, 1998). Thoen and

Robitschek (2013) describe the behavioural and cognitive components as a skill set used to work towards self-change. These skills include, readiness to change (preparing for the self-change), planfulness (implementing a plan for the self-change), using resources (using external resources to assist oneself), and intentional behaviour (purposeful engagement with your own behaviour).

According to Robitschek (1999), self-change is an intentional process. In theory, a person with higher levels of personal growth initiative should endorse higher levels of well-being, that is, the feelings expressed when engaging in behaviours aimed at reaching one's full potential (Ryff, 1989). Deci and Ryan (1985) indicate that when a person follows goals that replicate intrinsic motivations aimed at personal growth, higher levels of subjective well-being will be reported than when they follow goals with extrinsic motives (e.g. financial success). This is confirmed by previous studies where personal growth initiative constantly relates to psychological well-being in a positive manner (Robitschek, 1998; Robitschek & Kashubeck, 1999) as well as emotional well-being (Robitschek & Kashubeck, 1999). Furthermore, Weigold, Porfeli and Weigold (2013) indicate that personal growth initiative has consistently shown positive relations with optimal functioning and growth.

What is of particular importance concerning the current study is that personal growth initiative has been recognised as an important antecedent of optimal functioning. Personal growth initiative may favourably influence aspects of the therapeutic process (Robitschek & Hershberger, 2005), which is an important result for I-O psychologists working in a counselling setting. In a study conducted among students, Keyes (2009) found that personal growth initiative might enhance a person's mental health. According to Keyes (2009) a person with high levels of personal growth initiative that might find interpersonal relations difficult, might actively seek ways of enhancing and growing as a person by looking for ways to enhance communication skills and the ability to express concern and care for others. Personal growth initiative would therefore be an asset to I-O psychology students in a process of growth and development, and who one would expect should search for ways to enhance and grow as a person.

Personal Growth Initiative Scale (PGIS)

The Personal Growth Initiative Scale (PGIS) (Robitschek, 2012) is an ideal instrument for assessing the personal growth initiative of I-O students. The PGIS was originally developed by Robitschek (1998) to measure the personal growth of adults experiencing personal or vocational transitions (Robitschek, 1998). The unidimensional Personal Growth Initiative Scale has been proven to be valid and reliable in various studies (see Robitschek *et al.*, 2012). A few studies have investigated demographic differences regarding personal growth initiative, specifically using the PGIS

(Robitschek, 1998; 2001; Robitschek & Keyes, 2009). Whittaker and Robitschek (2001) found similar levels of personal growth initiative among European and American men and women; gender differences were, however, found in the strength of relations-construct among personal growth initiative and other constructs such as internal locus of control. Robitschek *et al.* (2012) report that it is important for future research to look at gender differences in relation to personal growth initiative. This would be supportive of previous gender research on help seeking-field if one finds that women score significantly higher on the Using Resources subscale than men (Addis & Mahalik, 2003). Relating to cultural differences, Robitschek (2003) suggests that personal growth initiative can be relevant across cultures. This is important as this study will include a diverse sample of students in training to become I-O psychologists that will work with a diverse workforce. To date no studies could be found on the differences in language concerning the PGIS.

From the fore-going argument, it can be seen that I-O practitioners are at the heart of workplace counselling. Furthermore, I-O practitioners play a significant role in addressing the effectiveness of the organisation as a whole, as well as the individual's well-being (Rothmann & Cilliers, 2007; Schreuder, 2001). The implication is that I-O psychology students should be effectively prepared with relevant skills for workplace counselling, including being aware of his, and others' inter-and intrapersonal functioning. Intrapersonal functioning corresponds well with personal growth initiative of I-O students (Keyes, 2009). The aim of this study therefore is to assess the personal growth initiative of I-O psychology students as a precursor to the development of effective interpersonal skills to function as an effective workplace counsellor. By determining what the level of personal growth initiative amongst I-O psychology students is, the training of these students could be tailored to stimulate and develop I-O psychology students towards higher levels of personal growth and becoming effective workplace counsellors.

From the afore-mentioned the following research questions can be formulated:

- How are I-O practitioners and PGI conceptualised in the literature?
- What is the prevalence of the different levels of PGI among I-O psychology students?
- Do significant differences exist between the different I-O psychology students' demographic groups (gender, age, ethnicity, qualification and language) in terms of their PGI?
- What recommendations can be made for the future training of I-O psychology students regarding personal growth initiative?

- What recommendations can be made for future research regarding I-O psychology students' intentional personal growth?

1.1 Expected contribution of the study

1.1.2 Contribution for the individual

This study aims at creating awareness among I-O psychology students of the importance of demonstrating personal growth initiative, specifically for their role as a workplace counsellor. The study contributes to I-O psychology students to realise the extent to which they can benefit by focusing on their own personal growth in order to effectively stimulate growth in employees as part of a growth and development process. Furthermore, by knowing their own intention to change and grow as a person they will develop into fully functional workplace counsellors.

1.1.3 Contribution for the organisation

The study aims at assisting training institutes in adapting their training programme to effectively train I-O psychology students as workplace counsellors. Literature shows that employees in organisations often experience work-related and personal problems and are in need of therapeutic interventions. The organisation will ultimately benefit since I-O psychology graduates entering the workplace will be fully equipped with counselling skills to adequately assist employees with problems. Since the graduates will be trained as counsellors by focussing on both inter- and intrapersonal skills, the I-O practitioners will be knowledgeable of providing assistance in a growth- and optimal functioning way.

1.1.4 Contribution for the industrial/organisational literature

Currently no research is available on the Personal Growth Initiative of I-O psychology students. This study will contribute and add to the literature on I-O psychology by providing a better understanding of the Personal Growth Initiative Scale and how the measurement works. More knowledge will therefore be gained on the importance of I-O psychology practitioners to have personal growth to be effective as counsellors. This study makes recommendations that PGI must be incorporated in the I-O psychology training programmes. The study focuses on the assessment of personal growth initiative of I-O psychology students. Another contribution is information on the psychometric functioning of the Personal Growth Initiative Scale within a South African context.

2 RESEARCH OBJECTIVES

Research objectives are divided into a general objective and specific objectives.

2.1 General objective

The general objective of the study is to measure the psychological growth initiative among I-O psychology students of a higher education institution in South Africa.

2.2 Specific objectives

1. To conceptualise I-O practitioners and PGI according to literature.
2. To determine the prevalence of the different levels of PGI among I-O psychology students.
3. To measure whether significant differences exist between the different I-O psychology students' demographic groups (gender, age, ethnicity, and language) in terms of their PGI.
4. To make recommendations for the future training of I-O practitioners regarding their personal growth initiative.
5. To make recommendations for the research regarding I-O psychology students' intentional personal growth.

3 RESEARCH DESIGN

In this section the research approach and method is discussed.

3.1 Research Approach

This study entails a quantitative research approach, which is a type of research that involves large representative samples and structured procedures (Struwig & Stead, 2010). In order to retain the research objectives and collect data, a randomised cross-sectional survey design is used. De Vos, Strydom, Fouché, and Delpont (2011) describe a cross-sectional design as a number of groups of people who are examined during one point in time. This type of design is chosen because it is convenient and less expensive to conduct (De Vos *et al.*, 2011). Because of these two major advantages, the cross-sectional survey design approach is a popular design in research (Corran *et al.*, 2008).

3.2 Research Method

The research method entails a literature review, participants, measuring instruments, research procedure, statistical analysis, and ethical considerations relevant to this study.

3.2.1 Literature review

By conducting extensive scientific research, a complete literature review is conducted. The study comprises two main constructs, namely Personal Growth Initiative and I-O psychology students. Information is gathered by using the following keywords: Industrial Psychologist, personal growth initiative, Personal Growth Initiative Scale, I-O psychology students.

Library resources are used, such as relevant textbooks, accredited and scientific articles on the Internet, and databases such as JSTOR, SAePublications, EBSCO host, Scopus, Juta, ScienceDirect, GoogleScholar and Sabinet References.

3.2.2 Research participants

For purposes of this study, a sample of industrial and organisational students from a higher education institute in South Africa ($N = 568$) is selected by means of a purposive non-probability sampling method. Non-probability sampling does not involve random selection since the study samples with a specific purpose in mind in terms of a specific predefined group, namely all students registered for a degree in I-O psychology, from undergraduate to postgraduate level (*see* Trochim, 2006). The sample can differ with regard to gender, age, ethnicity and language. The study focuses on I-O psychology students who are full-time students in the field of industrial and organisational psychology for 2012-2014.

3.2.3 Measuring instrument(s)

In order to reach the objectives of this study, the following measuring instruments are used to measure biographical characteristics and psychological well-being:

Biographical characteristics: In order to gather information on participants, a biographical questionnaire is used. The questionnaire contains questions to gain information regarding participants' age, ethnicity, gender, and language.

Personal Growth Initiative Scale: For the personal growth initiative of the participants the unidimensional Personal Growth Initiative Scale is utilised (PGIS: Robitschek 1998). The measure aims to assess the individual's intentional and active involvement in order to change and develop as a person (Robitschek, 1999). The items to measure the PGI is rated on a six-point Likert-type scale ranging from 1 = definitely disagree to 6 = definitely agree. The scores on PGI are calculated by taking the sum of the responses on the items. High scores indicate high levels of personal growth initiative. The measurement consists of 9 items. Examples of the items that measure personal growth initiative follow: “*I know how to change specific things that I want to change in my life*” and “*I have a good sense of where I am headed in my life*”. Suitable and internal consistency coefficients ranging from .78 to .80 were found by Robitschek (1999).

3.2.4 Research procedure

The research focuses on a specific group, namely I-O psychology students. Data is captured among under- and postgraduate students during 2012-2014 in this group ($N = 568$). Students are approached during a class session during which the research project was explained and students were invited to partake in the study. Consent forms and questionnaires are distributed to students that showed interest in the study. Letters accompanying the questionnaires indicate the objectives, motivation and importance of the study, informed consent and ethical aspects. The students have a week to complete the questionnaire before they needed to hand it in during class. The anonymity and confidentiality of participants was emphasised and participation in the study as voluntary. Hardcopy, paper-based questionnaires were used. A questionnaire takes approximately 10 minutes to complete.

3.2.5 Statistical analysis

The 22nd version of the Statistical Package for the Social Sciences (SPSS) Program (IBM SPSS, 2014) is used to analyse the data. Descriptive statistics (mean scores, standard deviations, skewness, and kurtosis) are used to determine the normality of the data and the Cronbach's alpha coefficient is used to determine the internal consistency of the measuring instrument. A Cronbach's alpha coefficient of .70 indicates that the items are regarded as internally consistent for research purposes (Nunnally & Bernstein, 1994). Skewness and kurtosis is also determined which accounts for the distribution levels of the items (De Vos *et al.*, 2011). Cut-offs for skewness are $> |2|$ and >4 for

kurtosis. The mean values and standard deviations of the nine PGI items, as well as the PGI total score are used to investigate the prevalence of personal growth initiative among students. An independent-samples *t*-test is used to determine whether significant differences exist regarding personal growth initiative between the two genders. One-way between-groups ANOVA (analysis of variance) is used to determine whether significant differences exist regarding personal growth initiative between the various demographic groups (gender, age, ethnicity, and language) (see Pallant, 2011). ANOVA determines specific differences if any statistical differences occur (Field, 2005).

3.2.6 Ethical considerations

The researcher is concerned with the research project being fair and ethical, and the following ethical considerations are taken into account:

The researcher is respectful to ensure that the research project is fair and ethical towards the participants of this study.

Participation is voluntary and the research is not harmful to the participants in any way .

During the study, there is no invasion of privacy.

A letter of informed consent is given to the participants. This letter informs the participants of what is expected of them and what the study entails.

No fraud is involved during the study.

The research project received ethical clearance from both the faculty and tertiary Ethics Committee.

4 DIVISION OF CHAPTERS

The chapters are presented as follows in the mini-dissertation:

Chapter 1: Introduction

Chapter 2: Research article

Chapter 3: Conclusions, limitations and recommendations.

5 CHAPTER SUMMARY

In this chapter the problem statement, research objectives, and methodology are explained. Next, Chapter 2 follows which is the research article of this study.

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CHAPTER 2
RESEARCH ARTICLE

Personal growth initiative among Industrial Psychology students in a higher education institution in South Africa

ABSTRACT

Orientation: Personal Growth Initiative is an important characteristic of workplace counsellors. I-O psychologists often assist employees with counselling for work-related and personal problems and therefore personal growth initiative is an important research topic for this profession.

Research purpose: The purpose of this study is to measure the personal growth initiative and the differences based on demographic groups among I-O psychology students in a higher education institution in South Africa. Thereby this study will assist the future adaptation of the training programmes of I-O psychology students in order to effectively train them as workplace counsellors.

Motivation: According to the scope of practice for psychologists, growth and development of employees forms part of an I-O psychologists' responsibilities. Personal Growth Initiative is an important characteristic of I-O psychologists in order to efficiently assist employees in a growth and development process.

Research design, approach and method: A cross-sectional survey design was used. A purposive non-probability sample ($N = 568$) of I-O psychology students was taken from a higher education institution in South Africa. A biographical questionnaire and the Personal Growth Initiative Scale (PGIS) were used as measuring instruments.

Main findings: The results indicated that PGI is prevalent among I-O psychology students. No significant differences exist for different gender and ethnicity group. However, significant differences were found in different ages and languages.

Practical implications: The findings in this study will assist towards the future development of a training programme for I-O psychology students to equip them with the counselling skills they will need to function in a counselling role.

Contribution: This study contributes to knowledge regarding the importance for I-O psychology students to show Personal Growth Initiative. The study will also assist higher education institutes to adapt their training programme in order to prepare I-O psychology students for their role as a counsellor. More knowledge will also be provided with regard to the PGIS and how the measurement works.

Key words: Personal growth initiative, Industrial psychology/psychologists, students, demographic differences.

INTRODUCTION

Since employees spend most of their time at work it is not surprising that work stress has become a common phenomenon worldwide (Kompier & Cooper, 2000; Lokke & Madsen, 2014). Managing stress and problems at work is one of the major domains of Industrial and Organisational (I-O) psychology. Bergh (2012) states that the tasks of I-O psychologists as workplace counsellors relate to nurturing well-adjusted employees and their optimal growth. Veldsman (2014) emphasises that I-O psychologists should remodel fixed mind-sets to become more flexible, and to have a growth mind-set. Barnard and Fourie (2007) point out that I-O psychology practitioners have an obvious responsibility as counsellors in current and future roles. When training I-O psychology practitioners as counsellors, particular attention should be paid to the intrapersonal awareness of these trainees. Intrapersonal awareness refers to a process of personal growth, striving for functioning at an optimal level (Wissing, & Cilliers, 1993). Studies have shown that stimulating intrapersonal awareness is a prerequisite for helpers working with people (Barkhuizen, Jorgensen, & Brink, 2014; Cilliers, 2000; Rothmann, 1996). In this study the Personal Growth Initiative Scale of Robitschek (1998) was used to study the personal growth initiative of I-O psychology students.

Personal growth initiative (PGI) is a promising antecedent of optimal functioning and well-being (Robitschek, 1998). A person demonstrates PGI when he/she has a deliberate and active desire to grow in the most crucial areas of their life (Robitschek *et al.*, 2012). Robitschek (1999) defines *Personal Growth Initiative* as intentional participation in the self-change process. Self-changes can be behavioural, or cognitive and take place in any life sphere and are changes that are associated with intentional development. Individuals that obtain a high score in PGI take advantage of opportunities and their intention is to develop themselves (Robitschek *et al.*, 2012).

Research objectives and purpose

In this study the main objective was to investigate the prevalence of personal growth initiative among I-O psychology students, and the specific objectives of the study include the following:

1. To conceptualise I-O practitioners and PGI according to literature.
2. To determine the prevalence of the different levels of PGI among I-O psychology students.
3. To measure whether significant differences exist between the different I-O psychology students' demographic groups (gender, age, ethnicity, and language) in terms of their PGI.
4. To make recommendations for the future training of I-O practitioners regarding their personal growth initiative.

5. To make recommendations for the research regarding I-O psychology students' personal growth initiative.

Currently little research referring to the personal growth initiative of I-O psychology students is available; hence this study aims at contributing to the literature on I-O psychology by providing a better understanding of the personal growth initiative of I-O psychology students and of knowledge on the measurement of PGI. More knowledge will therefore be added regarding the importance of personal growth to be effective as a counsellor. This study further aims at making recommendations on how PGI can be incorporated in the training of I-O psychologists.

Next, a literature review concerning I-O psychology and PGI is provided, followed by the research design used in the study. Finally the results will be discussed where after the article concludes with recommendations and limitations of the study.

The I-O Psychologist

The Health Professions Act (HPCSA, 2011) describes an I-O psychologist as a person that deals with work-related issues of well-adjusted adults by applying principles of psychology in order to optimise the effectiveness and well-being of the individual, the group and the organisation as a whole (HPCSA, 2011). I-O psychology relies on the theory and methodology of psychology to influence human behaviour in the workplace (Bergh, 2012). Coetzee and Schreuder (2010) state that the role of the I-O psychologist relates to optimising the fit between the employee and the workplace. I-O psychology students undergo extensive training in order to qualify as I-O psychologists, by firstly obtaining a relevant Master's degree, followed by completing a twelve-month internship, then writing the national examination with a minimum of a 70% pass rate, and lastly, registering with the Health Professions Act (2011) as psychologists. The registered I-O psychologists' actions are further regulated by the scope of the profession of psychology as well as the scope of practice of I-O psychologists (HPCSA, 2011).

Summarising the scope of practise of I-O psychologists, the tasks of I-O psychologists include the following (HPCSA, 2011): a) applying principles of psychology to the workplace; b) utilising assessment practices; c) facilitating individual and group processes; d) exercising consumer psychological practices; e) doing ergonomic evaluations; f) performing psychological interventions and short-term therapeutic counselling interventions, and, g) conducting assessments. I-O psychology practitioners further also need to adhere to a Code of Ethics to ensure ethical practising

as psychologists, since the HPCSA can apply disciplinary measures against them when not adhering to this Code (HPCSA, 2011).

The South African Department of Health (2012) states that I-O psychology practitioners are allowed to perform a limited number of psychological interventions within their scope of practice. The practitioners can also perform counselling interventions in order to diagnose work-related and organisational challenges and problems. The aim is to increase the personal functioning of groups and individuals in work-related contexts. These interventions correlate with Strümpfer's (2007) opinion, namely that deep-rooted problems of individuals are a concern for the I-O psychology practitioner, and are therefore typical workplace scenarios where I-O psychology practitioners can assist in their role as a workplace counsellor. Literature indicates that employees are influenced by issues such as family responsibilities, culture, and traumatic events (Landy & Conte, 2004; Van Vuuren, 2010). The work-related issues that I-O practitioners deal with can also include traumatic incidents such as harassment, emotional abuse and victimisation (Aquino & Thau, 2009). Another significant workplace incident I-O psychology practitioners are faced with is HIV/AIDS (Motsoaledi, 2011), South Africa contains 0.7% of the global population and the nation carries 17% of the HIV/AIDS burden of the world (Motsoaledi, 2011) making it a force to be considered in the workplace. More work-related problems employees require counselling for entail stress, negative attitudes at work, and burnout (Reynolds, 1997; Preece, Cayley, Scheuchl & Lam, 2005). The components of burnout (depersonalisation, personal accomplishment, and exhaustion) often lead to employees seeking intervention (Maslach, 1978; Friedman, 2000) for the effects such as physical health problems, and absence from work for medical reasons (Aholo, *et al.*, 2008).

McLeod (2010) stated that workplace counselling has the potential of lightening the effect of depression, stress, and anxiety for the majority of the workforce. In a study done by Collins, *et al.* (2012) they found that counselling services in the workplace on distressed employees have a positive effect on employees' well-being. Therefore it is crucial for the I-O psychology practitioner to deal with the organisation as a whole, as well as the individuals' wellbeing (see Rothmann & Cilliers, 2007; Schreuder, 2001). An important result will be that the levels of personal growth initiative and the quality of both the organisation and the individuals' lives will improve (Rothmann & Cilliers, 2007; Schreuder & Coetzee, 2010; Van Vuuren, 2006).

The I-O Psychologist as a counsellor

Workplace counselling is an effective way of assisting employees to cope with psychological, emotional, and behavioural problems (McLeod, 2010). Bergh (2012) states that the tasks of I-O psychologists as workplace counsellors relate to diagnosing and treating the symptoms of workers with emotional conflicts. Previous literature (Comer & Sekerka, 2014; Rothmann, 2002; Seligman & Csikszentmihalyi; Strumpher, 2007) indicates a more positive approach to promoting employee and organisational well-being. This implies that not only emotional problems are addressed, but growth and optimal functioning is developed. From the afore-mentioned, a working definition for I-O psychologists as workplace counsellors for this study is formulated as, “assisting employees with emotional and work-related problems by diagnosing and treating symptoms by means of short-term therapeutic interventions in order to ultimately assist the employee to function at an optimal level”. One important aspect to consider and should be read with the definition is that the I-O psychologist as a workplace counsellor should have available an effective referral network and know when to refer to a more relevant professional practitioner. The workplace counsellor will often also work as part of an intervention process, e.g. health promotion activities (see Bergh, 2012).

According to Rothmann and Van Aardt (2002), graduates in the behavioural sciences often lack the interpersonal skills, knowledge and intrapersonal awareness to be able to perform in a counselling role. It is important for a facilitator of people to have effective interpersonal skills in order to be aware of their emotions, feelings and perceptions. This may be to enhance their self-awareness since it could lead to emotional maturity and self-actualisation in the client (Cilliers, 2000). When helpers possess effective interpersonal skills, they might relate better to the experiences of others (see Carkhuff, 2000). Typical interpersonal skills include utilising micro skills (see Ivey, 2013) which entails skills such as; questioning, minimum encouragement, paraphrasing, clarifying, reflecting, summarising, and giving information (Ivey, 2013).

Possessing effective interpersonal skills often leads to enhanced intrapersonal awareness (see Carkhuff, 2000). Intrapersonal awareness, also described as self-awareness (Kubica & LaForest, 2014), can best be defined as a self-actualising concept studied over the past years by scholars such as Rogers (1970), Jung (1971), and Allport (1961). Rothmann (1996) contends that when a person is intrapersonally aware he tends to function optimally as an individual. Individuals that possess intrapersonal awareness will have constructive interaction with their surroundings while they are constantly growing (Rogers, 1980). Training intrapersonal awareness relates to the individual’s personal growth initiative, optimal functioning, and self-actualisation. Kubica and LaForest (2014) state that intrapersonal awareness can be seen as the fundamental driver of interpersonal skills and

that it is important to an I-O psychologist. A promising antecedent of intrapersonal awareness (optimal functioning and well-being) is personal growth initiative (PGI) (Robitschek, 1998).

Personal Growth Initiative

PGI takes place when one has a deliberate and active desire to grow in the most crucial areas of life (Robitschek *et al.*, 2012). Robitschek (1999) defines *Personal growth initiative* as the intentional participation in the self-change process. Self-changes can be behavioural, or cognitive and take place in any life sphere and are changes that are associated with intentional development. For instance, those that obtain a high score in PGI take advantage of opportunities with the intention to develop themselves (Robitschek & Cook, 1999; Robitschek *et al.*, 2012). Ryff (1989) describes a person with a high level of personal growth initiative as someone that has the intention of constant development. Such a person will see himself as growing; as able to realise his potential; is open to new experiences; is changing in ways that reflect self-knowledge and success; and sees improvement in self and behaviour over time. Personal growth is both an intentional and conscious process (Robitschek, 1998; Robitschek *et al.*, 2012). Contrasting from stable personality traits, PGI is described as skills that can be developed for self-improvement (Robitschek *et al.*, 2012) and as characteristics that have developmental components and can be changed through interventions (Weigold & Robitschek, 2011).

According to Robitschek (1998), personal growth initiative refers to the process of personal growth rather than the outcomes of an individual's efforts to change. PGI can further be described as the skill-set for working through self-change (Robitschek *et al.*, 2012). This skill-set consists of the following: How the individual prepares for the self-change; how the individual applies knowledge to plan and implement the self-change; how the individual uses external resources as assistance; and the intention the individual has to change (Robitschek *et al.*, 2012). Robitschek (2003) indicates that these skills represent the preference to intentionally progress oneself in all life domains. Depending on the skill-set, PGI levels can range from slightly too highly skilled (Robitschek & Hershberger, 2005).

Although PGI shares similarities with other constructs such as *grit* (the continuous efforts to reach long-term goals through adversity) (Duckworth, Peterson, Matthews, & Kelly, 2007), important differences are found between these constructs. These differences can be explained by the way Robitschek *et al.* (2012) indicated that PGI involves the use of a skill-set to change intentionally versus the central drive of grit (Duckworth *et al.*, 2007). Correspondingly, even though higher

levels of PGI are related to better goal-setting orientation (Klockner & Hicks, 2008), PGI differs from goal-setting in two essential ways: firstly, by definition the main focus of PGI is personal growth (Robitschek, 1998) and not general goal-setting (Klockner & Hicks, 2008); and secondly, PGI not only includes setting goals, PGI entails the planning of goals and intentionally taking action to reach these goals (Robitschek *et al.*, 2012).

Robitschek and Keyes (2009) state that persons with higher levels of PGI normally demonstrate higher levels of psychological well-being. High levels of PGI are also associated with people that have increased healthy coping (Robitschek *et al.*, 2012; Robitschek & Kashubeck, 1999), decreased depression levels (Robitschek & Anderson, 2011; Robitschek & Kashubeck, 1999), and greater life satisfaction (Stevic & Ward, 2008). Furthermore, PGI correlates with all the subscales of the Positive Mental Health Scale, namely personal growth and autonomy, interpersonal skills, global affect, emotional support, general coping, and spirituality (Vaingankar *et al.*, 2011), as well as curiosity, self-compassion, optimism, and happiness (Neff, Rude, & Kirkpatrick, 2007).

The intention to grow as a person is applicable to all kinds of people, regardless of status. According to Allport (1961), the capacity to adapt and change is an important characteristic of a healthy personality. The extent to which people seek opportunities to grow will be influenced by the level of PGI the person has (Robitschek & Cook, 1999). Robitschek and Kashubeck (1999) mentioned that this will be a crucial factor, amongst others, to measure the degree to which the person has benefitted from the growth opportunities that presented themselves. PGI is an important characteristic to consider when training workplace counsellors since helping others implies a process of growth. It is essential for I-O psychology students to become aware of their own PGI as first step towards being trained as workplace counsellors.

PGI among students. The results of a study done among Mexican American College students indicated the participants to have levels of Personal Growth Initiative. During this study it appeared that the PGI construct was not restricted to certain cultures. This study indicated that there is a possibility for Mexican American college students to have low or high levels of PGI corresponding with low or high in Ethnic Behaviour, or low or high levels of acculturation. The levels of PGI among the college students are minimally influenced by culture, as one would expect. This study also indicated strong support for cross-cultural validity for PGIS (Robitschek, 2003).

During this study the demographic differences were studied in order to see how different backgrounds have an influence on a person's PGI. The result of a study done among postgraduate students in India indicated that participants that portrayed PGI seemed to experience psychological well-being. This indicated that the students' well-being and effective social functioning lead them to move in the direction of positive self-change. During this study it was evident that three dimensions of PGI correlated in a positive manner to emotional, social, and psychological well-being among the postgraduates, i.e.; Intentional Behaviour, Readiness to change, and Planfulness. The Using resource subscale of the PGI was not notably connected with mental health. The findings also indicated the "Planfulness" domain of PGI to be significantly influenced by psychological well-being among post-graduates. The findings indicated postgraduate students that accept themselves more, have healthy relationships, have a clear purpose in life, they master their environment, have a sense of self-sufficiency, can contribute to their society, are satisfied with their lives, can associate with their society, perceive the world as progressive, are actively and intentionally involved in the process of becoming a better person and of enhancing themselves (Sharma & Rani, 2014).

Although previous international studies reflect that high levels of PGI can lead to numerous positive outcomes for students, only one study Prinsloo (2008) utilising the PGI could be found in South Africa. However, Prinsloo's study utilised the PGI to develop a training programme on student self-regulation and results on the PGI of the students were not reported on; therefore no research is available on the PGI levels of South African students.

In the light of the above, the following hypothesis was set for this study:

Hypothesis 1: PGI is prevalent among I-O psychology students.

The Personal Growth Initiative Scale

Robitschek (2012) states that the Personal Growth Initiative Scale (PGIS) is the ideal instrument for assessing the Personal Growth Initiative of an individual. The PGIS was originally developed by Robitschek (1998) to assess the personal growth of adults experiencing personal or vocational transitions (Robitschek, 1998). The PGIS is a unidimensional scale that has been proven to be valid and reliable in various studies (see Robitschek *et al.*, 2012). The PGIS has item response options on the nine-item single-factor instrument ranging from 0 (*definitely disagree*) to 5 (*definitely agree*). The items are all stated in a positive direction. The original PGIS has strong psychometric properties where the internal consistency ranged from .78 to .90 in various samples (see Spring & Robitschek, 2007).

Apart from the initial instrument development, the Personal Growth Initiative Scale (termed the PGIS-II) has been validated by Robitschek *et al.* (2012) and Yakunina, Weigold, and Weigold (2013). Positive relations between personal growth initiative and adaptive coping strategies, and emotional, social, and psychological well-being have been found. Robitschek *et al.* (2012) adapted the PGIS into the PGIS-II and found that the PGIS-II closely matches the PGI theory and it was a critical contribution to the personal growth literature. The results showed that all of the mean subscale scores were above the midpoint across samples. The transition from agree to disagree is indicated by the midpoint of the possible range.

Demographic differences with regard to Personal Growth Initiative. Previous studies have shown that similar mean scale scores were produced by the PGIS across various ethnic and age groups (e.g., Robitschek, 1998, 1999; Spering & Robitschek, 2007) with the indication for application across cultures (e.g., Robitschek, 1998, 2003) and age groups. Some evidence also indicated that PGI might differ across cultures. For instance, high levels of social desirability were indicated by Mexican Americans with high levels of PGI, whereas these constructs were not applicable to European Americans (Robitschek, 1998).

Concerning gender differences, European and American men and woman showed similar levels of personal growth initiative according to the findings of Whittaker and Robitschek (2001). Differences were noted in the strength of relations among personal growth initiative and other constructs, such as internal locus of control (Whittaker & Robitschek, 2001).

Robitschek *et al.* (2012) reported that it is important for future research to investigate gender differences with regard to PGI. Addis and Mahalik (2003) indicated that this will be supportive of previous gender research on the help seeking-field if one finds that women score significantly higher on the Using Resources subscale than men.

In South Africa there are various languages which consist of various cultures (e.g. Afrikaans speakers are mostly white and coloured people; while the English groups consist of white, coloured and Indian people) (see Nel *et al.*, 2012). According to these differences in the culture between the language groups, previous studies have indicated that Personal Growth Initiative can be relevant across cultures according to Robitschek (2003). This is important for this study which includes a diverse sample of students-in-training to become I-O psychologists. No previous studies using the PGIS could be found relating to the differences in different languages.

The above discussion leads to the following hypothesis:

Hypothesis 2: Differences in PGI for I-O psychology students exist based on different demographic groups (gender, age, ethnicity, and language).

From the literature review it seems clear that I-O practitioners deal with workplace counselling. I-O practitioners also address the organisation and each individual's well-being (Rothmann & Cilliers, 2007; Schreuder, 2001). Therefore I-O psychology students should be aware of their own and others' intrapersonal functioning in order to be effectively prepared for their role as a workplace counsellor. In this research the personal growth initiative of a group of I-O psychology students was assessed. From the study recommendations for future research will be made in order to develop an effective workplace counselling training programme for I-O psychology students. The information gained in this study can help to incorporate elements of PGI into the training programs of emerging psychologists. Next, the methodology followed in this study will be discussed.

RESEARCH DESIGN

Below a discussion follows on the research approach and the research method.

Research approach

This study was of a quantitative nature. The principle of the quantitative approach is to measure and observe a phenomenon concerning individuals and to create correlation variables by making use of statistical measures (Polit & Beck, 2008). Polit and Beck (2008) state that quantitative research design summarises numbers into statistics to help the researcher to understand the obtained data in order for the researcher to be able to write a conclusion. A randomised cross-sectional survey design was used in order to collect data and includes measuring several participants at one point in time (Byrne, 2001). According to Byrne (2001), a cross-sectional design can be used to measure different groups at different stages in time. The reason for using a randomised cross-sectional design was that it was affordable and more convenient to conduct (De Vos, Strydom, Fouché, & Delpont, 2011).

Research method

Next, the characteristics and demographics of the participants, the measuring instruments, the research procedure, and the statistical analysis will be discussed.

Participants

Purposive non-probability sampling method was used to identify the sample. Non-probability sampling does not involve random selection since the study will sample with a specific purpose in mind in terms of a specific predefined group, namely under- and postgraduate students in I-O psychology (see Trochim, 2006). The population ($N = 750$) consisted of students studying I-O psychology at a higher education institution in South Africa. From the population 568 students completed and returned the questionnaire. The characteristics of the participants are presented in Table 1.

Table 1: Characteristics of Participants ($N = 568$)

Item	Category	Frequency	Percentage
Gender	Male	214	37.7
	Female	353	62.1
	<i>Missing</i>	1	0.2
Age	18	8	1.4
	19	292	51.4
	20	105	18.5
	21	72	12.7
	22	52	9.2
	23	23	4.0
	24	6	1.1
	25	4	0.7
	26	3	0.5
	27	1	0.2
	<i>Missing</i>	2	0.4
Ethnicity	White	419	73.8
	African	75	13.2
	Coloured	69	12.1
	Indian	3	0.5
	Other	1	0.2
	<i>Missing</i>	1	0.2
Language	Afrikaans	449	79.0
	English	53	9.3
	Sepedi	5	0.9
	Sesotho	16	2.8
	Setswana	29	5.1
	isiXhosa	9	1.6
	isiZulu	2	0.4
	Xitsonga	1	0.2
	Other	2	0.4
	<i>Missing</i>	2	0.4

Table 1 indicates that the participants were mainly female (63%) and that most of the participants were 19 years of age (51%). The majority of the participants were White (74%), while the Indian ethnic group was under-represented (0.5%). In terms of language, Afrikaans (79%) was the most

prevalent home language, while English represented 9% of the sample and the Bantu languages (Sepedi, Sesotho, Setswana, isiWhosa, isiZulu, Xitsonga) represented approximately 11% of the sample.

Measuring instruments

In this study, the following measuring instruments were used:

Biographical questionnaire. Biographical questions were included in the questionnaire to gather information on participants' gender, age, ethnicity, and language.

Personal Growth Initiative Scale. The personal growth initiative of the participants was measured with the Personal Growth Initiative Scale (PGIS; Robitschek, 1998). The measure assesses an individual's intentional and active involvement to change and develop as a person (Robitschek, 1999). A six-point scale, the PGIS, consists of 9 items, such as "I know how to change specific things that I want to change in my life" and "I have a good sense of where I am headed in my life". A Likert-type scale was used ranging from 1 (definitely disagree) to 6 (definitely agree). The scores on PGI were calculated by taking the sum of the responses on all nine the items. High scores indicated high levels of personal growth initiative. Suitable and internal consistency coefficients ranging from .78 to .80 were found by Robitschek (1999). The PGIS' Cronbach's alpha coefficient for the current study was .91.

Research procedure

Students studying I-O psychology were approached during class each year from 2012 to 2014 and invited to partake in the current study. Hardcopy, paper-based questionnaires was distributed to the students with an accompanying letter that explained the objectives, motivation and importance of the study, informed consent and ethical aspects. The students had a week in which to complete the questionnaire before they needed to submit the document during their class session. The confidentiality of participants was emphasised and participation in the study was voluntary. The original unidimensional Personal Growth Initiative Scale was utilised in this study since the assessment of the participants commenced in 2012, prior to the development of the PGIS-II by Robitschek *et al.* (2012; 2013). It is therefore advisable to use the same instrument to gather the data over the three years to ensure consistency of the research procedure.

Statistical analysis

The statistical analysis of the study was carried out using the SPSS software (IBM SPSS Statistics for Windows, 2012). Descriptive statistics (e.g. mean scores, standard deviations, skewness, and kurtosis) was used to determine the normality of the data. Skewness is described as the asymmetry demonstrated by the data (Stevens, 1996). Stevens (1996) also mentions that kurtosis measures how the histogram has peaked.

The mean values and standard deviations of the nine PGI items, as well as the PGI total score was used to investigate the prevalence of personal growth initiative among students. An independent-samples *t*-test was used to determine whether significant differences occur regarding personal growth initiative between the two genders. One-way between-groups ANOVA (analysis of variance) was used to determine whether significant differences existed regarding personal growth initiative between the various demographic groups (gender, age, ethnicity, and language) (see Pallant, 2011). One-way between-groups ANOVA determine specific differences if any statistical differences are found (Field, 2005). Post-hoc comparisons using the Tukey HSD test will indicate where the differences lie (Palant, 2011). The effect size for the results was calculated using the eta squared statistic, by dividing the sum of squares between groups by the total sum of squares (small = .01, medium = .06, large = .14) (see Pallant, 2011).

RESULTS

The results section provides an overview of the analysis carried out by applying the SPSS program and is reported in the following order:

Table 2. The table report on the descriptive statistics.

Table 3. The independent *t*-test results for the PGI items between males ($N = 214$) and females ($N = 353$) are reported.

Table 4a. One-way between groups ANOVA results for the PGI items and the different age groups are provided.

Table 4b. Significant mean differences between age groups in terms of PGIS items ($N = 565$) are presented.

Table 5. One-way between groups ANOVA results for the PGI items and the different ethnic groups are provided.

Table 6a. The table reports on the one-way between groups ANOVA results for the PGI items and the different language groups.

Table 6b. Significant mean differences between language groups in terms of PGIS items ($N = 565$) are provided.

The descriptive statistics of the nine PGIS items and its total score are presented in Table 2.

Table 2: Descriptive Statistics of the 9-Item PGIS

Item	Mean	SD	Skewness	Kurtosis
PGI1	4.14	1.08	-0.55	0.26
PGI2	4.25	1.06	-0.65	0.36
PGI3	4.03	1.07	-0.29	0.02
PGI4	4.06	1.10	-0.25	-0.10
PGI5	4.34	1.04	-0.65	0.63
PGI6	4.02	1.12	-0.42	-0.01
PGI7	4.35	1.09	-0.81	0.83
PGI8	3.98	1.14	-0.48	0.15
PGI9	4.17	1.08	-0.63	0.28
Total PGIS	4.15	0.82	-0.34	0.28

According to Table 2, the scores for the PGIS were normally distributed with no evidence of extreme skewness and kurtosis. The participants indicated that they mainly agreed with all the PGI statements ($M = 4.15$; $SD = 0.82$).

Next, the independent t -test results for the PGIS items are presented in Table 3, indicating whether significant differences exist between males and females in terms of their personal growth initiative. (One participant did not indicate his/her gender and was omitted from the analysis.)

Table 3: Independent t -test results for the PGI items between males ($N = 214$) and Females ($N = 353$)

Item	M	SD	F	t	df	p
PGI1			0.00	-1.92	565	.972
Males	4.03	1.12				
Females	4.21	1.05				
PGI2			0.09	-1.64	565	.769
Males	4.15	1.05				
Females	4.30	1.07				
PGI3			1.29	-2.10	565	.256
Males	3.91	1.10				

Females	4.11	1.05				
PGI4			2.20	-1.02	565	.139
Males	4.00	1.05				
Females	4.10	1.13				
PGI5			0.11	-2.31	565	.736
Males	4.22	1.05				
Females	4.42	1.03				
PGI6			0.00	-1.88	565	.988
Males	3.91	1.11				
Females	4.09	1.12				
PGI7			0.17	-2.63	565	.679
Males	4.19	1.14				
Females	4.44	1.05				
PGI8			0.00	-0.25	565	.949
Males	3.97	1.13				
Females	3.99	1.15				
PGI9			0.78	-1.22	565	.377
Males	4.10	1.05				
Females	4.21	1.10				
PGI Total Score			0.00	-2.17	565	.941
Males	36.47	7.36				
Females	37.86	7.43				

Table 3 shows that there were no significant differences in personal growth initiative scores on either item level or total score level for males and females. It is, however, noticeable that the female students consistently scored higher in terms of personal growth initiative than their male counterparts, although not significantly so.

Next, the one-way between-groups ANOVA was conducted to investigate the impact of age on personal growth initiative, on both item and total score level (Table 4a). (Two participants did not indicate their age and were omitted from the analysis. In addition, since there was only one person in the 27 year category, the person was also omitted from the ANOVA analysis; ANOVA analysis requires more than two cases per category.)

Table 4a: One-way between-groups ANOVA Results for the PGI Items and the Different Age Groups ($N = 685$)

Item	Age	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
PGI1	18.0	8	4.00	0.76	1.92	.055
	19.0	292	4.15	1.03		
	20.0	105	3.99	1.08		
	21.0	72	3.99	1.20		
	22.0	52	4.38	1.07		
	23.0	23	4.13	1.01		

	24.0	6	5.17	1.17		
	25.0	4	4.75	0.96		
	26.0	3	5.00	1.00		
	Total	565 [†]	4.14	1.07		
PGI2	18.0	8	3.75	1.67	2.28	.021 [†]
	19.0	292	4.25	0.97		
	20.0	105	4.08	1.11		
	21.0	72	4.14	1.14		
	22.0	52	4.50	1.15		
	23.0	23	4.35	1.03		
	24.0	6	5.17	1.17		
	25.0	4	5.25	0.96		
	26.0	3	5.00	1.00		
	Total	565	4.24	1.06		
PGI3*	18.0	292	3.97	0.95	2.19	.070
	19.0	105	3.91	1.12		
	20.0	72	3.93	1.19		
	21.0	52	4.54	1.20		
	22.0	23	4.13	1.06		
	23.0	6	5.17	1.17		
	24.0	4	4.50	0.58		
	25.0	3	4.33	1.53		
	26.0	565	4.03	1.07		
	Total	3	4.33	1.53		
PGI4	18.0	8	4.50	1.14	2.80	.005 ^{††}
	19.0	292	4.03	1.05		
	20.0	105	3.91	1.08		
	21.0	72	3.85	1.21		
	22.0	52	4.37	1.07		
	23.0	23	4.44	0.99		
	24.0	6	5.33	0.82		
	25.0	4	4.25	1.50		
	26.0	3	4.67	1.15		
	Total	565	4.06	1.10		
PGI5	18.0	8	4.63	1.06	2.86	.004 [†]
	19.0	292	4.32	0.96		
	20.0	105	4.10	1.11		
	21.0	72	4.22	1.14		
	22.0	52	4.75	1.03		
	23.0	23	4.48	1.04		
	24.0	6	5.33	0.82		
	25.0	4	4.75	0.96		
	26.0	3	4.67	1.15		
	Total	565	4.34	1.04		
PGI6*	18.0	8	4.13	1.25	1.74	.145
	19.0	292	4.07	1.02		
	20.0	105	3.91	1.08		
	21.0	72	3.81	1.30		
	22.0	52	4.39	1.22		

	23.0	23	3.96	1.15		
	24.0	6	4.67	1.03		
	25.0	4	4.00	1.41		
	26.0	3	2.33	1.15		
	Total	565	4.03	1.11		
PGI7	18.0	8	4.38	0.52	2.15	.030†
	19.0	292	4.37	1.00		
	20.0	105	4.12	1.18		
	21.0	72	4.19	1.23		
	22.0	52	4.69	1.20		
	23.0	23	4.39	0.89		
	24.0	6	5.33	0.82		
	25.0	4	4.75	1.26		
	26.0	3	4.67	1.15		
	Total	565	4.35	1.09		
PGI8	18.0	8	3.88	1.25	1.27	.257
	19.0	292	3.96	1.09		
	20.0	105	3.95	1.15		
	21.0	72	3.83	1.20		
	22.0	52	4.31	1.11		
	23.0	23	3.96	1.46		
	24.0	6	4.83	1.17		
	25.0	4	3.50	1.00		
	26.0	3	4.33	1.53		
	Total	565	3.98	1.14		
PGI9*	18.0	8	4.25	1.28	2.40	.050†
	19.0	292	4.29	0.97		
	20.0	105	4.00	1.10		
	21.0	72	3.39	1.23		
	22.0	52	4.21	1.30		
	23.0	23	3.91	1.00		
	24.0	6	5.00	0.63		
	25.0	4	3.25	1.26		
	26.0	3	4.33	1.53		
	Total	565	4.17	1.08		
Total	18.0	8	37.25	7.98	2.87	.004†
	19.0	292	37.42	6.72		
	20.0	105	35.89	7.41		
	21.0	72	35.89	8.66		
	22.0	52	40.13	8.14		
	23.0	23	37.74	7.17		
	24.0	6	46.00	7.17		
	25.0	4	39.00	8.04		
	26.0	3	39.33	8.50		
	Total	565	37.33	7.41		

*Levene's test for homogeneity of variances for this item is $> .05$ and the assumption of homogeneity of variance has therefore been violated. The F and p values as found under the Robust Tests of Equality of Means (Welsch) have therefore been reported. † $p \geq .05$

There were statistically significant differences at the $p < .05$ level in all but two PGI scores (PGI1, PGI8) for all of the age groups. However, despite reaching statistical significance, the actual differences in mean scores between the various groups for the various items were rather small. Calculating the effect sizes using eta squared produced values between .02 and .04. The results for the post-hoc comparisons using the Tukey HSD test are presented in Table 4b.

Table 4b: Significant Mean Differences between Age Groups in terms of PGIS items ($N = 565$)

Item	Age 1		Age 2		Mean Difference	<i>p</i>
PGI3	19	(<i>M</i> = 3.97, <i>SD</i> = 0.95)	22	(<i>M</i> = 4.54, <i>SD</i> = 1.20)	-0.57	.011
	20	(<i>M</i> = 3.91, <i>SD</i> = 1.12)	22	(<i>M</i> = 4.54, <i>SD</i> = 1.20)	-0.62	.015
	21	(<i>M</i> = 3.93, <i>SD</i> = 1.19)	22	(<i>M</i> = 4.54, <i>SD</i> = 1.20)	-0.61	.042
PGI4	21	(<i>M</i> = 3.85, <i>SD</i> = 1.21)	24	(<i>M</i> = 5.33, <i>SD</i> = 0.82)	-1.49	.036
PGI5	20	(<i>M</i> = 4.10, <i>SD</i> = 1.11)	22	(<i>M</i> = 4.75, <i>SD</i> = 1.03)	-0.65	.006
PGI6	22	(<i>M</i> = 4.39, <i>SD</i> = 1.22)	26	(<i>M</i> = 2.33, <i>SD</i> = 1.15)	2.05	.046

According to Table 4b, significant differences existed in the different age groups for the following items: PGI3 (between the age groups 19 and 22, 20 and 22, and 21 and 22); PGI4 (between the age groups 21 and 24); PGI5 (between the age groups 20 and 22); and PGI6 (between the age groups 22 and 26).

Next, the ANOVA results for the PGI items are presented in Table 5a, indicating whether differences exist between the different ethnic groups in terms of their personal growth initiative. (One participant did not indicate his/her ethnicity and was omitted from the analysis.)

Table 5: One-way between groups ANOVA Results for the PGI Items and the Different Ethnic Groups ($N = 567$)

Item	Ethnicity	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
PGI1	White	419	4.14	1.11	0.09	.966
	African	75	4.15	1.00		
	Coloured	69	4.09	0.95		
	Indian	3	4.33	1.16		
	Total	566 ^T	4.14	1.08		
PGI2	White	419	4.22	1.10	0.32	.377
	African	75	4.25	0.95		
	Coloured	69	4.32	0.96		
	Indian	3	4.67	0.58		
	Total	566	4.24	1.06		
PGI3	White	419	4.05	1.09	1.03	.377
	African	75	3.97	0.99		
	Coloured	69	4.04	0.98		

	Indian	3	3.00	2.00		
	Total	566	4.03	1.07		
PGI4	White	419	4.07	1.11	1.75	.155
	African	75	3.91	1.04		
	Coloured	69	4.19	1.05		
	Indian	3	3.00	2.00		
	Total	566	4.06	1.10		
PGI5	White	419	4.33	1.06	0.22	.883
	African	75	4.31	1.07		
	Coloured	69	4.44	0.87		
	Indian	3	4.33	1.15		
	Total	566	4.34	1.04		
PGI6	White	419	3.97	1.16	1.21	.305
	African	75	4.11	1.06		
	Coloured	69	4.22	0.86		
	Indian	3	4.33	1.15		
	Total	566	4.02	1.12		
PGI7	White	419	4.35	1.12	0.37	.773
	African	75	4.41	1.00		
	Coloured	69	4.25	1.03		
	Indian	3	4.67	0.58		
	Total	566	4.35	1.09		
PGI8	White	419	3.96	1.17	0.20	.896
	African	75	4.00	1.09		
	Coloured	69	4.04	1.02		
	Indian	3	4.33	1.15		
	Total	566	3.98	1.14		
PGI9	White	419	4.13	1.14	0.76	.519
	African	75	4.33	0.88		
	Coloured	69	4.19	0.88		
	Indian	3	4.33	1.15		
	Total	566	4.17	1.08		
Total PGI	White	419	37.24	7.78	0.11	.955
	African	75	37.44	6.44		
	Coloured	69	37.77	6.31		
	Indian	3	37.00	8.00		
	Total	566	37.33	7.43		

Table 5 indicates that there were no significant differences for the PGI items and total score between the various ethnic groups.

Next, the one-way between-groups ANOVA results for the PGI items are presented in Table 6a, indicating whether differences exist between the different languages in terms of their personal growth initiative. (Two participants did not indicate their language and were omitted from the

analysis. In addition, since there was only one person in the Xitsonga category, the person was also omitted from the ANOVA analysis; ANOVA analysis requires more than two cases per category.)

Table 6a: One-way between groups ANOVA Results for the PGI Items and the Different Languages ($N = 565$)

Item	Language	<i>N</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>
PGI1	Afrikaans	449	4.14	1.08	2.63	.011†
	English	53	4.25	0.92		
	Sepedi	5	3.40	0.55		
	Sesotho	16	4.38	0.96		
	Setswana	29	4.35	0.97		
	isiXhosa	9	3.22	1.39		
	isiZulu	2	3.00	1.14		
	Other	2	2.50	2.12		
	Total	565	4.14	1.08		
PGI2	Afrikaans	449	4.24	1.08	0.68	.686
	English	53	4.26	1.02		
	Sepedi	5	4.20	0.45		
	Sesotho	16	4.56	0.96		
	Setswana	29	4.21	1.08		
	isiXhosa	9	4.00	1.32		
	isiZulu	2	3.00	0.00		
	Other	2	4.00	0.00		
	Total	565	4.24	1.06		
PGI3	Afrikaans	449	4.04	1.07	0.65	.718
	English	53	4.09	1.08		
	Sepedi	5	4.20	0.45		
	Sesotho	16	4.00	1.10		
	Setswana	29	4.00	1.10		
	isiXhosa	9	3.56	1.13		
	isiZulu	2	3.50	0.71		
	Other	2	3.00	1.41		
	Total	565	4.03	1.07		
PGI4	Afrikaans	449	4.09	1.09	0.66	.708
	English	53	4.00	1.14		
	Sepedi	5	3.80	0.45		
	Sesotho	16	4.00	1.14		
	Setswana	29	4.00	1.07		
	isiXhosa	9	3.56	1.33		
	isiZulu	2	3.00	1.14		
	Other	2	4.00	1.14		
	Total	565	4.06	1.10		
PGI5	Afrikaans	449	4.35	1.04	2.28	.027†
	English	53	4.30	0.91		
	Sepedi	5	3.60	0.55		
	Sesotho	16	4.94	0.93		
	Setswana	29	4.28	1.16		

	isiXhosa	9	4.22	1.09		
	isiZulu	2	2.50	2.12		
	Other	2	3.50	0.71		
	Total	565	4.34	1.04		
PGI6	Afrikaans	449	4.01	1.12	0.86	.535
	English	53	3.94	1.06		
	Sepedi	5	3.80	0.45		
	Sesotho	16	4.50	1.21		
	Setswana	29	4.17	1.17		
	isiXhosa	9	4.00	1.50		
	isiZulu	2	3.50	0.71		
	Other	2	3.00	0.00		
	Total	565	4.02	1.12		
PGI7	Afrikaans	449	4.35	1.11	1.94	.062
	English	53	4.25	0.92		
	Sepedi	5	4.20	0.84		
	Sesotho	16	4.69	1.14		
	Setswana	29	4.41	1.09		
	isiXhosa	9	4.67	0.71		
	isiZulu	2	3.50	0.71		
	Other	2	2.00	1.41		
	Total	565	4.34	1.09		
PGI8	Afrikaans	449	3.10	1.14	1.84	.078
	English	53	3.91	1.13		
	Sepedi	5	3.60	0.55		
	Sesotho	16	4.25	0.68		
	Setswana	29	4.17	1.23		
	isiXhosa	9	3.67	1.12		
	isiZulu	2	2.00	1.41		
	Other	2	2.50	0.71		
	Total	565	3.98	1.14		
PGI9	Afrikaans	449	4.19	1.08	2.29	.026†
	English	53	3.91	1.11		
	Sepedi	5	4.00	1.00		
	Sesotho	16	4.63	0.96		
	Setswana	29	4.35	1.04		
	isiXhosa	9	4.11	0.60		
	isiZulu	2	3.50	0.71		
	Other	2	2.00	1.41		
	Total	565	4.17	1.08		
Total PGI	Afrikaans	449	37.41	7.63	1.67	.114
	English	53	36.91	6.73		
	Sepedi	5	34.80	3.49		
	Sesotho	16	39.94	6.52		
	Setswana	29	37.93	6.13		
	isiXhosa	9	35.00	6.50		
	isiZulu	2	27.50	0.71		
	Other	2	26.50	4.95		

	Total	565	37.33	7.43
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† $p \geq .05$

There were statistically significant differences at the $p < .05$ level in three PGI items for some of the languages (PGI1: $F(7, 557) = 2.63, p = .011$; PGI5: $F(7, 557) = 2.82, p = .027$; PGI9: $F(7, 557) = 2.29, p = .026$). However, the actual differences in mean scores between the various groups for the various items were rather small (eta squared = .03), despite reaching statistical significance. The results for the post-hoc comparisons using the Tukey HSD test are presented in Table 6b.

Table 6b: Significant Mean Differences between Languages in terms of PGIS Items ($N = 565$)

Item	Language 1	Language 2	Mean Difference	p
PGI5	Sesotho ($M = 4.94, SD = 0.93$)	isiZulu ($M = 2.50, SD = 2.12$)	2.44	.037
PGI9	Sesotho ($M = 4.63, SD = 0.96$)	Other ($M = 2.00, SD = 1.41$)	2.63	.026

The post-hoc comparisons using the Tukey HSD test reveal that significant differences existed in PGI5 between the Sesotho and isiZulu language groups and in PGI9 between Sesotho and Other language groups.

DISCUSSION

Outline of the findings

The general objective of the study was to measure the psychological growth initiative among I-O psychology students of a higher education institution in South Africa. The results mainly indicated that PGI is prevalent among the I-O psychology students. Furthermore, the study showed that PGI is relevant for all gender and ethnic groups under the I-O psychology student sample. However, the results showed that significant differences of PGI levels occur for different age groups and languages.

The results are discussed next by referring to the specific objectives as set for this study.

The *first objective* was to conceptualise I-O psychology practitioners and PGI according to literature. It was found that an *I-O psychology practitioner* can be conceptualised as a psychologist who, after extensive training and completion of an internship, should be able to “...apply knowledge, theories and techniques of psychology to develop and implement interventions to enhance and/or promote individual, group or organisational well-being and optimal functioning...” (HPCSA, 2011). I-O psychologists’ tasks are guided by a scope of practice which includes

performing a limited amount of psychological interventions. The practitioners can also perform counselling interventions in order to diagnose work-related and organisational challenges and problems. Coetzee and Schreuder (2010) state that the role of the I-O psychologist relates to optimising the fit between the employee and the workplace. Literature indicates several types of work-related issues that negatively influence the fit between the employee and the workplace, such as traumatic incidents, HIV/AIDS, stress, negative attitudes at work, and burnout.

A working definition for I-O psychologists as workplace counsellors is used in this study, namely ‘assisting employees with emotional and work-related problems by diagnosing and treating symptoms by means of short-term therapeutic interventions in order to ultimately assist the employee to function at an optimal level’.

Literature indicated that *personal growth initiative* is present when individuals have a deliberate and active desire to grow in the most crucial areas of their life (Robitschek *et al.*, 2012). Robitschek (1999) defined Personal growth initiative as the intentional participation in the self-change process where individuals who score high in PGI take advantage of opportunities with the intention to develop themselves (Robitschek & Cook, 1999; Robitschek *et al.*, 2012). Personal growth is therefore viewed as an intentional and conscious process towards growing, changing and developing. This is very important for I-O psychology students as they are in a constant process of change and development and they should have the intention to grow as a person. What is important is that awareness for personal growth should be created early during the training of I-O psychology students. This will ensure that a process of self-change and growth is stimulated throughout the students’ studies in order to effectively prepare them for their role as a workplace counsellor.

The *second objective* of the study was to determine the prevalence of the different levels of PGI among I-O psychology students. The results confirmed that PGI was overall prevalent among the participants. The inclination of the participants in this study to agree with all the PGI statements reflects that the students have high levels of personal growth initiative. The results implicate that the I-O psychology students have an interest in changing and improving in order to be more complete and fully functioning as a person. This implies that the participants are inclined to prepare themselves for self-change; they apply their knowledge to plan and implement the self-change; they tend to use external resources as assistance; and overall demonstrate the intention to change (Robitschek *et al.*, 2012). The participants’ results indicate that they show the preference to intentionally progress in all life domains. For instance, they want to progress in their studies, career

path, and in their personal life (Robitschek, 2003). This result is in accordance with findings from a study among college students in a Mexican American population (Robitschek, 2003). Hypothesis 1 is therefore accepted.

The *third objective* was to determine the presence of significant differences between the different I-O psychology students' demographic groups (gender, age, ethnicity, and language) in terms of their PGI. According to the results, no significant differences were found for the *gender* and *ethnic* groups. This means that there were no differences in the way male and female students answered the questionnaire. This is confirmed in a study done by Whitakker and Robitschek (2001) in which similar levels of personal growth initiative among European and American men and women were found. The PGI construct was also relevant across ethnic groups as students from different ethnic groups answered the questionnaire in the same manner. This result supports related findings from Robitschek (2003) who suggested that PGI is relevant across cultures. This means that PGI will be present for individuals from different cultures. Hypothesis 2 is therefore partially accepted.

The findings of this study also revealed significant differences in terms of PGI in terms of *age* and *language* groups. According to the results of this study, scores significantly differed for the PGI3 item ("If I want to change something in my life, I initiate the transition process") specifically between the age groups 19 and 22, 20 and 22, and 21 and 22. The 22-year-old students demonstrated a stronger intention to change and are more actively involved in the change process to develop as a person (Robitschek, 1999). A possible explanation for this result is that most 22-year-old students are already busy with their postgraduate studies. The results implied that the younger group of participants do not yet show readiness to change and grow, which is understandable since they are not yet fully prepared for their role as an I-O psychologist.

Differences were also found for the item PGI4 ("I can choose the role that I want to have in a group") for ages 21 and 24), where the students 24 years of age scored higher on the item. The results indicate that the students higher in age seem to be more comfortable in groups than younger students. The finding could reflect the amount of group work postgraduate students have been exposed to, resulting in them being more comfortable with their role in a group, as opposed to younger (undergraduate) students that have not yet been exposed to as much group work and group assignments. These results are in accordance with Keyes' (2009) statement indicating that students with high levels of PGI have better interpersonal relations.

Item PGI5 (“I know what I need to do to get started toward reaching my goals”) indicated differences for age groups 20 and 22, where the 22-year-old students scored higher on the item. Personal growth initiative entails setting goals, planning goals and intentionally taking action to reach these goals (Robitschek *et al.*, 2012). The finding shows that older students are more inclined to initiate goal setting; it might be that they have a clearer goal and view of their future as I-O psychologists. They seem to have direction and do planning and are actively pursuing setting steps they need to follow to reach certain goals. The younger students might not yet feel ready to pursue goals since their studies are not yet completed.

Item PGI6 (“I have a specific action plan to help me reach my goals”) also showed differences for the age groups 22 and 26. An interesting finding in this study is that the 26-year-old students scored lower on this item than the younger (22-year-old) students. Since most students’ age upon completing Master’s Studies is 22-23 years, it might be that the 26-year-old students took longer with their studies than the average student. One could speculate that the students probably changed courses during their studies and might experience more uncertainty regarding I-O psychology as a profession than their counterparts that chose I-O psychology from the start. This could imply that the action plan to reach their goals changed during the course of their studies. The finding could further also indicate that the 26-year-old students are uncertain of their next step; they are in the process of finishing their studies and looking for a job which in itself is an uncertain experience.

Furthermore, the findings indicated for PGI5 (“I know what I need to do to get started toward reaching my goals”) and PGI9 (“I have a plan for making my life more balanced”) the Sesotho-speaking group seems to have higher levels of personal growth initiative than the isiZulu speakers and Other language group counterparts. Above-mentioned results were never found before in any other study; therefore it can be regarded as a unique finding of this study. It is important to note that different languages represent different cultural groups. A previous study indicated that the isiZulu speaker is generally part of the Zulu culture, while the Sesotho (Southern Sotho) speakers are generally part of the Southern Sotho culture (see Nel, Valchev, Rothmann, *et al.*, 2012). The different culture they belong to might have an influence on the way they have answered the questionnaire as different cultures regard different things to be important. Robitschek (2003) suggested that PGI is relevant across cultures which are clearly seen in this finding. The findings further suggest that cultural differences relating to PGI in I-O psychologists need to be further investigated. No previous research could be found on the differences in language groups; this might be an important recommendation for future research.

Limitations and recommendations

As with many studies, this study was not without limitations. A first limitation would have been to consider equal distribution among different gender, ethnic, age and language groups. In order to be able to generalise the data, the research could have included I-O psychology students from different universities. Using students from different backgrounds, a language barrier could have acted as a limitation as the questionnaires were stated in English which is the second or third language for most of the participants. Since the study flowed over 2 years a longitudinal design could have been considered to make sure that age truly had an effect on how PGI levels increase. However, since the questionnaires were anonymously completed, this design could not be used.

The *fourth objective* was to make recommendations for the future training of I-O psychology practitioners regarding their personal growth initiative. A recommendation for the future training of I-O psychology practitioners with regard to their PGI is to adapt their training programmes to focus more on the development of the individual's growth initiative, self-actualisation, and optimal functioning. The development of intrapersonal skills is crucial since it can be seen as the fundamental drivers of the interpersonal skills (Kubica & Sara, 2014). These skills are very important to I-O psychologists that need to function in a counselling role. It is therefore recommended that significant time be allocated for the stimulation of the students' intention to change and grow as a person. At undergraduate level it is necessary to focus on students' knowledge and awareness of PGI theory, while at postgraduate level more practical application is needed.

The *fifth objective* was to make recommendations for the future research regarding I-O psychology students' intentional personal growth. Since the current study commenced in 2012 prior to the development of the PGIS II and therefore the latest version could not be used, a recommendation is to use the latest PGI scale, namely the PGIS-II in future studies. Studies on the differences in language with regard to the PGIS could not be found. Since Robitschek (2003) suggests that personal growth initiative can be relevant across cultures, it is suggested that future research look into the differences in language groups concerning PGI. Also further research on how PGI levels differ according to a person's age can be regarded as a possible research study.

Finally, emphasising Veldsman's (2014) opinion, having a growth mind-set is of major importance to I-O psychologists, since a major aspect of the profession's focus entails nurturing well-adjusted

employees and their optimal growth. It therefore seems quite relevant that such a growth mind-set should be fostered as early as possible during the training of the I-O psychology students.

Practical implications

The current study indicated that PGI is prevalent among the I-O psychology students. It is clear from the study that PGI is relevant for all gender and ethnic groups under the I-O psychology student sample. This information can further be used to incorporate PGI in the training programs of IOP students. Using the PGI in the development of IOP training programs can add value in order to train IOP students as better counsellors.

Conclusion

Although the results showed that significant differences of PGI levels occur for different age groups and languages, PGI is relevant for all IOP students. The PGIS is a valuable tool to use and can be incorporated in the training programs of IOP students.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

3.1 CONCLUSIONS

The general objective of this research was to investigate the prevalence of PGI amongst I-O psychology students from a higher education institution in South Africa. More specifically, to see whether significant differences exist for different demographic groups in terms of PGI levels for I-O psychology students.

Next, the conclusions of the study are presented by referring to the specific objectives

The *first objective* of this study was to conceptualise I-O psychology practitioners and PGI according to literature. The literature review of this study showed that *I-O psychology* is mostly concerned with human behaviour within the workplace (Van Vuuren, 2010). Employees are often exposed to incidents which create distress, such as traumatic incidents, both outside and inside the workplace. Work-related incidents could leave employees suffering from burnout, depression and exhaustion. It is mainly the task of the Industrial and Organisational (I-O) psychologist to address these work-related issues in order to ensure that employees are well-adjusted. However, I-O psychology does not only deal with addressing distresses and negative experiences, but also optimising well-being and effectiveness by applying principles of psychology (Strumpher, 2007).

Although the HPCSA (2011) determines that the main goal of I-O psychologists is to address issues related to the world of work, the practitioner needs to discern how to balance addressing both the distressing event and optimising behaviour. A unique set of skills are necessary for this role as workplace counsellor. Such a role in the I-O psychology domain entails much more than only having basic counselling skills, such as listening, paraphrasing and questioning (Ivey, 2013), it further entails having efficient skills and knowledge to stimulate a process of optimal development in an employee.

The working definition set for this study therefore states that I-O psychologists as workplace counsellors, ‘assisting employees with emotional and work-related problems by diagnosing and treating symptoms by means of short-term therapeutic interventions in order to ultimately assist the employee to function at an optimal level’. However, what is worrying is that recent literature

indicates that I-O psychologists do not feel adequately prepared in their counsellor role (see Barkhuizen, Jorgensen, & Brink, 2014). One can therefore conclude that the training of the I-O psychology student should include skills, knowledge and application of counselling skills, as well as skills to stimulate growth and development.

The literature review further showed that inter- and intrapersonal skills should form part of the training plan of an effective counsellor. Interpersonal skills assist the counsellor in understanding and reflecting on perceptions and emotions of employees, while intrapersonal skills relates to having knowledge of how to enhance self-awareness, emotional maturity and self-actualisation. The I-O psychologist should therefore be open to change and willing to constantly grow as a person in order to promote this within employees. The process of constantly growing can be regarded as *personal growth initiative*, namely the “active, intentional engagement in the process of personal growth which encompasses the cognitive components of self-efficacy, including beliefs, attitudes and values that support personal growth” (Robitschek (1998, p.183).

It can therefore be concluded that it is of the utmost importance that attention be paid to the level of personal growth initiative of students before they enter training in I-O psychology. This will assist the trainer/lecturer in stimulating an intention to grow and the motivation to change in the student as one step towards training effective workplace counsellors.

The *second objective* of the study was to determine the different level of PGI that existed for I-O psychology students. The participants answered the PGIS in a positive manner and therefore it is clear that the I-O psychology students do have levels of PGI. As the results also correlate with a previous study among Mexican American college students (Robitschek, 2003) it can be concluded that students are interested in changing and improving themselves. This is a positive finding as they will be more complete and able to function optimally.

The *third objective* of the study was to establish whether significant differences occurred with regard to the different demographic groups (gender, age, ethnicity, and language) of I-O psychology students with regards to their PGI. The results indicated that for gender and ethnic groups no significant differences occurred. The male and female students seem to have the same levels of PGI. It can be concluded that the levels of PGI of I-O psychology students do not differ in terms of the different ethnic groups to which they belong.

The results indicated significant differences occur in the way the participants from different age and language groups answered the questionnaire. These results lead to the conclusion that students 22 years of age have a stronger intention to change and are more actively involved in the change process of developing as a person (Robitschek, 1999). To conclude, the younger group of participants are not yet ready to change and grow; this is understandable as they are not yet fully prepared for their role as I-O psychologists. It is clear that older students are more comfortable in groups than younger students which could be a result of the group activities postgraduate students are exposed to. Keyes' (2009) state that those students with high levels of PGI have better interpersonal relations, is confirmation of this finding. From the results one can also conclude that older students are more inclined to initiate goal setting. They have a clearer goal and view of their future as an I-O psychologist. They have direction and they plan and are actively pursuing setting steps they need to follow to reach certain goals. It is possible that the younger students do not yet feel ready to pursue goals since their studies are not yet completed.

Robitschek *et al.* (2012) states that PGI not only includes setting goals, but also entails planning goals and intentionally taking action to reach these goals. This finding was interesting as the 22-year-old students scored higher on this item than the 26-year-old students. In conclusion, these students are uncertain about their profession as an I-O psychologist as they are still studying at this age where most of the graduates are 23 years of age. These students are also in the process of completing their studies and searching for a job which is an uncertain timeframe for them.

In terms of the differences of PGI between different language groups, it must be noted that these findings are unique to the current study as similar results were never found before. Future research must also focus on further research in different language groups with regard to their PGI as no previous research is available in this regard. The conclusion has been drawn that I-O psychology students speaking different languages have different levels of PGI as they belong to different cultural groups. The different culture they belong to might have an influence on the way they have answered the questionnaire as different cultures regard different things to be important.

3.2 LIMITATIONS

One of the limitations of this study was that the questionnaires were not distributed equally between the different demographic groups. This limited the researcher to generalise the data. The researcher was further limited in this regard as the data was not gathered from I-O psychology students from

different universities in South Africa. The research design used during this study can also be seen as a possible limitation as the researcher could have used a longitudinal design in order to make sure that a person's age really has an effect on how a person's PGI level increases.

The following limitations were noted in the current study. The population consisted of I-O psychology students from one higher education institution in South Africa. Although the research was conducted among different demographic groups, one cannot suppose that this particular sample is representative of all students. The participants in the study belonged to the same field of study; therefore the findings cannot be generalised to all students.

Another limitation of the current study relates to the use of the PGIS as opposed to the more recent version, the PGSI II. It is therefore recommended to use the latest version of the PGIS in further studies.

The data for this research were collected by using a self-reported scale. Using this type of questionnaire is cost effective, meaningful, and a practical way of gathering data (Olwage, 2012). Even though this is a frequent limitation in counselling research, it is of particular importance in the current study as we study the prevalence of PGI among students and they might not always answer objectively. This could lead to associations that could be incorrect and irrelevant (Olwage, 2012).

3.3 RECOMMENDATIONS

Even though the study had certain limitations, it can also make important recommendations for future research and the organisation.

3.3.1 Recommendations for the organisation

The *fourth objective* was to generate recommendations for the future training of I-O psychology practitioners regarding their personal growth initiative. It is recommended that higher education institutions in South Africa adapt the I-O psychology training programmes to be more focussed on the individual's growth initiative, self-actualisation, and optimal functioning. It is further recommended that the training programme provide I-O psychology students with the necessary intrapersonal skills to function effectively as workplace counsellors. The development of intrapersonal skills is crucial since they can be seen as the fundamental drivers of the interpersonal

skills (Kubica & Sara, 2014). Higher education institutions should therefore allocate more time to stimulating students' intention to grow as a person. It is also recommended that higher education institutions focus on the knowledge that undergraduates have with regard to PGI while it can be more practically applied for postgraduate students.

3.3.2 Recommendations for future research

The *fifth objective* was to make recommendations for future research regarding I-O psychology students' intentional personal growth. It is recommended that future research use the latest PGI scale and, that future research should investigate how PGI levels differ with regard to language differences in accordance with their PGI.

For future research it is recommended that the researcher distribute the questionnaires equally between the different gender, ethnic, age, and language groups. It is advisable that future research include I-O psychology students from different universities in order to generalise the data. It is also recommended that future research use a longitudinal research design to be able to measure whether PGI levels increase as the students grow older.

Finally, the last recommendation for future research is that the same study be repeated by using a Rasch analysis to determine the difficulty of the questions in the PGI questionnaire since the results of the study showed that different demographic groups answered the questions similarly.

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