

**THE CROSS-CULTURAL APPLICATION OF THE  
ADAPTED SCHWARTZ VALUES INSTRUMENT IN SOUTH  
AFRICA**

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## COMMENTS

The reader should keep the following in mind:

- The editorial style as well as the references referred to in this mini-dissertation follows the format prescribed by the Publication Manual (4<sup>th</sup> edition) of the American Psychological Association (APA). This practice is in line with the policy of the Programme in Industrial Psychology of the North-West University, Potchefstroom Campus, to use the APA style in all scientific documents as from January 1999.
- The mini-dissertation is submitted in the form of a research article. The names of the study leaders appear on the article, as it was submitted for publication in a national journal.

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# TABLE OF CONTENTS

	Page
List of Tables	iv
List of Figures	v
Abstract	vi
Opsomming	vii
<b>CHAPTER 1: INTRODUCTION</b>	
1.1 Problem statement	1
1.2 Research objectives	6
1.2.1 General objectives	6
1.2.2 Specific objectives	6
1.3 Research method	7
1.3.1 Literature review	7
1.3.2 Research design	7
1.3.3 Participants	7
1.3.4 Measuring instrument	8
1.3.5 Data analysis	8
1.4 Research procedure	9
1.5 Division of chapters	10
1.6 Chapter summary	10
References	11
<b>CHAPTER 2: RESEARCH ARTICLE</b>	
<b>CHAPTER 3: CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS</b>	
3.1 Conclusions	42
3.2 Limitations	44
3.3 Recommendations	45
References	47

## LIST OF TABLES

Table	Description	Page
1	Characteristics of the Participants	23
2	Rotated Component Matrix of the Work and Organizational Values Scale (Model 1)	26
3	Tucker's phi coefficients of the Work and Organizational Values Scale for Different Language Groups (Model 1)	27
4	Rotated Component Matrix of the Work and Organizational Values Scale (Model 2)	28
5	Tucker's phi coefficients of the Work and Organizational Values Scale for Different Language Groups (Model 2)	28
6	Rotated Component Matrix of the WOVS for the Total Sample	29
7	Descriptive Statistics of the WOVS	30
8	MANOVA of the Values of Language and Gender Groups	31

## LIST OF FIGURES

Figure	Description	Page
1	Scree plot of the WOVS	26

## ABSTRACT

**Title:** The cross-cultural application of the Adapted Schwartz Values Instrument in South Africa.

**Key terms:** Values, cross-cultural assessment, equivalence, language, police.

Different value systems are a major source of diversity between people and culture groups. A better understanding of these differences can be a valuable tool when a diverse work force, as found in South Africa, has to be managed. Values can act as a unifying theory for the field of human motivation, as a way of organising the different needs, motives and goals proposed in other theories. The values theory describes aspects of the human psychological structure that are fundamental, aspects presumably common to all humankind.

The objective of this study was to investigate the construct equivalence of the values as measured by the Work and Organizational Values Scale for new applicants from different language groups in the South African Police Service (SAPS), and to investigate the relationship between the value patterns of the different language and gender groups.

A cross-sectional survey design was used. The study population consisted of two groups who applied for jobs in the South African Police Services (SAPS). The first group consisted of civilians ( $N=3\ 400$ ), while the second group consisted of police applicants ( $N=1\ 800$ ). The Work and Organizational Values Scale was administered. Descriptive statistics, exploratory factor analyses, and multivariate analysis of variance were used to analyse the results.

Principal component analysis with a direct oblimin rotation resulted in two factors. The first factor was interpreted as *self-enhancement* (power, materialism and prestige) versus *conservation* (conformity and security). The second factor was interpreted as *collectivism* (social commitment, relations, and environment) versus *individualism* (goal-orientedness, stimulation and self-direction). These factors were found to be equivalent for four language groups. Statistically significant differences were found between the value priorities of different language groups as well as genders. However, larger practically significant differences were found between males and females than between different language groups.

Recommendations for future research were made.

## OPSOMMING

**Titel:** Die kruis-kulturele gebruik van die Aangepaste Schwartz Waardes Instrument in Suid-Afrika.

**Sleutel terme:** Waardes, kruis-kulturele taksering, ekwivalensie, polisie, taal.

Verskille tussen waardesisteme is 'n groot bron van diversiteit tussen mense en kultuurgroepe. Meer kennis van dié verskille kan egter as 'n waardevolle instrument dien wanneer 'n diverse werkerskorps, soos gevind word in Suid-Afrika, bestuur word. Waardes kan as 'n oorkoepelende teorie dien vir die veld van menslike motivering; dit kan dien as 'n metode om verskillende behoeftes, motiewe en doelwitte wat deur ander teorieë daargestel is, te organiseer.

Die doel van hierdie studie was om die konstrukekwivalensie van waardes soos gemeet met behulp van die *Work and Organizational Values Scale* te bepaal vir nuwe applikante uit die verskillende taalgroepe binne die Suid-Afrikaanse Polisie, en om die verhouding tussen die verskillende waardesisteme van die verskillende taalgroepe te ondersoek.

'n Dwarsnee-opname-ontwerp is gebruik. Die studiepopulasie bestaan uit twee groepe wat aansoek gedoen het vir poste in die Suid-Afrikaanse Polisie. Die eerste groep het bestaan uit burgerlikes ( $N = 3\,400$ ), terwyl die tweede groep bestaan het uit polisie-aansoekers ( $N = 1\,800$ ). Die *Work and Organizational Values Scale* is as meetinstrument gebruik. Beskrywende statistiek, verkennende faktoranalise en meervoudige variansie-analise is gebruik om die resultate te ontleed.

Twee faktore is met behulp van hoofkomponent-faktoranalise met 'n direkte oblimin-rotasie onttrek. Die eerste faktor is geïnterpreteer as *selfverheffing* (mag, materialisme en prestige) versus *bewaring* (konformiteit en sekuriteit). Die tweede faktor is geïnterpreteer as *kollektiwisme* (sosiale verbondenheid, verhoudings en omgewing) versus *individualisme* (doelgerigheid, stimulasie en selfrigtinggewing). Hierdie faktore was ekwivalent vir vier taalgroepe. Statisties beduidende verskille is tussen die waardeprioriteite van verskillende

taalgroepe sowel as geslagte gevind. Groter prakties betekenisvolle verskille is egter tussen mans en dames gevind as wat die geval ten opsigte van taalgroepe was.

Aanbevelings vir toekomstige navorsing is aan die hand gedoen.

# **CHAPTER 1**

## **INTRODUCTION**

This mini-dissertation focuses on the cross-cultural application of the adapted Schwartz values instrument in South Africa.

This chapter contains the problem statement and a discussion of the research objectives, in which the general objective and specific objectives are set out. The research method is explained and the division of chapters given.

### **1.1 PROBLEM STATEMENT**

South Africa is known as the country with the rainbow nation, filled with different cultures and traditions often derived from influences that are from completely different continents. According to Census 2001 (Statistics South Africa, 2003), South Africa is the home of no fewer than 11 official language groups and just as many cultures, making the South African setting unique from the rest of Africa and the world, and creating an environment that is highly differentiated in terms of culture, race, ethnical grouping, values and attitudes (Nel, Gerber, Van Dyk, Haasbroek, Schultz, Soho & Werner, 2001). This diverse and unique setting has called for legislation that protects different cultures, race and ethnic groups.

The Employment Equity Act 55 of 1998, Section 8 (Government Gazette, 1998, p. 9), stipulates the following: "Psychological testing and other similar assessments are prohibited unless the test or assessment being used (a) has been scientifically shown to be valid and reliable, (b) can be applied fairly to all employees; and (c) is not biased against any employee or group." The Employment Equity Act requirements have opened a huge gap in the area of psychological testing, leaving a great need for measuring instruments that can be used fairly within all cultures.

Instruments that meet the Employment Equity Act requirements cannot be developed without keeping the diverse setting of South Africa in mind. It is extremely important to take the country's political, economic and social history into account when investigating psychological testing (Claassen, 1997).

In recent years South Africa has, however, mainly followed international trends and tests were imported from abroad (Foxcroft, 1997). Retief (1992) agrees with this, saying that to this point psychological testing in South Africa is to a large extent carried out by imported instruments that are mainly English. A few of these instruments have been revised for use in South Africa, but the meanings of items in the questionnaires are still understood differently by different cultures. Researchers have shown that most imported tests are not suitable for use in a multicultural society like South Africa (Abrahams, 1996, 2002; Abrahams & Mauer, 1999a, 1999b; Meiring, 2000; Spence, 1982; Tact 1999; Taylor & Boeyens, 1991). The English language used in these tests is often too difficult to understand, even if English is the home language (Abrahams & Mauer, 1999a, 1999b; Taylor, 2000; Wallis & Brit, 2003).

In addition to numerous languages, South Africa also has a rich cultural heritage. Since 1994 contact between different cultures has occurred more frequently than in the past. Concepts like *ubuntu* were formerly seen as part of black African culture, but with more intercultural contact, ubuntu is starting to gain recognition in a multicultural setting. Ubuntu is conceptualised as communalism and interdependence (Kamwangamalu, 1999). Communalism means that the focus is on the community. Focusing on the community is therefore becoming an increasingly important concept in the multicultural setting of this country.

In a multicultural society like that in South Africa, acculturation is an important concept to consider. Acculturation can be defined as a culture change, either at the level of the population or at the level of the individual, as a result of groups of individuals from different cultures coming into continuous direct contact with one another (Berry, 1991). Increased intercultural contact over the past decade has resulted in white and non-white South Africans sharing areas like government, sport, work setting and education. The intercultural contact and sharing of resources have caused many black South Africans to assimilate some of the values of the dominant capitalist culture, yet they have also brought with them into the workplace their own cultural values (Taylor, 2004).

According to Triandis (1994), culture is to a community what memory is to an individual. The culture in which individuals find themselves affects their life and learning environment, their experience of the world, their environment and themselves, and also how they expect other cultures (communities) to behave.

With intercultural contact increasing dramatically in recent times, research is attempting to understand cultural differences and cross-cultural dynamics better. This is the reason for studies being undertaken across different nations and cultures. These studies strive to compare certain psychological constructs across different cultures. According to Van de Vijver and Leung (2001), cross-cultural studies aim to determine the similarities and differences in psychological aspects across different culture groups.

Cross-cultural research, however, does not necessarily mean study across different nations. It is not uncommon for one country and even one community to experience culture differences (diversity) within that specific country or community (Scholtz, 2004). In these multicultural communities the value system, attitude and interaction of groups will differ (Brislin 1994; Triandis, 1994), leading to cultural diversity.

Diversity becomes evident when one looks at different values and attitudes shown by different culture groups (Schwartz, 1994c; Triandis, 1994). Mbigi (1993) warns that diverse values and attitudes may cause conflict and stress between different culture groups. Values and attitudes may thus be the reason for bad relations between different culture groups. Mbigi (1993) also states that harmony can only be created when mutual values are experienced or accepted by the different groups.

Values play an important role in culture and the way one cultural group experiences another cultural group. Differences within cultures will therefore go hand in hand with value differences. Values can be seen as part of the building blocks of culture. The concept of values and value differences can thus be used to understand and explain the diversity of thoughts, emotions and behaviour between different cultures.

Schwartz (1994a) defines values as constructs that determine what people will strive for in their lives and what they are prepared to sacrifice. Values are trans-situational criteria or goals ordered by importance as guiding principles in life. The following main features are identified as part of the values theory (Schwartz, 1992, 1994b; Schwartz & Bilsky, 1990): Values are beliefs, values are a motivational construct, values transcend specific actions and situations, values guide the selection or evaluation of actions, policies, people and events, and values are ordered by importance relative to one another.

Although values is a main source of differences between culture groups, Schwartz (2003) is of the opinion that values can act as a unifying theory for the field of human motivation, a way of organizing the different needs, motives and goals proposed in other theories. The values theory describes aspects of the human psychological structure that are fundamental, and are presumably common to all human kind. Schwartz's idea of a unified theory is shared by other writers who have similar opinions about the unifying ability of the values theory. According to Rokeach (1973), the value concept may be able to unify the apparently diverse interests of all the sciences concerned with human behaviour. Williams (1968) and Kluckhohn (1951) have similar opinions. They say that values are not qualities inherent in objects, but view values as the criteria people use to evaluate actions, people and events.

According to Schwartz (1999), individual values and value priorities are a product of both shared culture and of unique personal experience. Shared cultural values in a society help to shape the contingencies to which people must adapt in the institutions in which they spend their time. This results in members of the same cultural group sharing many value-related experiences, and they are socialized to accept shared social values. There may, however, be certain individuals within a cultural group who have different value priorities. This is due to the unique personalities and experiences of the individual. However, the average priorities attributed to different values by members of a society reflect the central thrust of their shared enculturation. The average priorities therefore point to the underlying, common cultural value (Schwartz 1999).

Just like individuals differ in value priorities, different cultures also have different values and value priorities. Individuals find themselves within a social environment inside a specific culture, but with their own norms, language, systems and values (Smith & Bond 1993; Triandis, 1994). Studies have shown that nations, countries and other social categories display distinct value profiles or patterns (Roe & Ester, 1999). Following Hofstede (1980), Kluckhohn and Strodtbeck (1961) and Rokeach (1973), Schwartz (1999) says that cultural dimensions of values reflect the basic issues or problems that societies must face in order to regulate human activities. Williams (1970) adds that cultural values represent the implicit or explicit shared abstract ideas about what is good, right and desirable in a society. These cultural values are the base for the specific norms that tell people what is appropriate in various situations. Because cultural value priorities are shared, role incumbents in social

institutions can draw on them to select socially appropriate behaviour and to justify their behaviour choices to others (Schwartz, 1999).

Most of the recent data on values has been collected with an instrument known as the Schwartz Value Survey (SVS), consisting of 10 motivational types, known as universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, self-direction and stimulation (Schwartz, 1992). Respondents from every inhabited continent completed the SVS anonymously in their native language (Schwartz, 1999). The SVS has been translated into 46 languages and 210 samples were drawn from 67 countries located on every inhabited continent, with a total of 64 271 respondents. The samples included highly diverse geographical, cultural, linguistic, religious, age, gender and occupational groups. To compare within-culture and between-culture variations in the empirical content of values and in the structure of value relations, multiple samples from the same society were drawn (Schwartz, 2003). The SVS asks respondents to rate the importance of 56 single values (“guiding principles”) in their lives Schwartz (2003).

An adapted version of the SVS, namely the Work and Organizational Values Scale (WOVS) (De Clercq & Fontaine, 2004), which was developed as a comprehensive value instrument of work values, was used in this study. This instrument was developed by critically evaluating a total of 67 value and organisational culture instruments (e.g. Braithwaite, 1982; Chinese Culture Connection, 1987; O'Reilly, Chatman, & Caldwell, 1991). More than 1 500 items had to be sorted into the ten motivational types identified by Schwartz (1992) (universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, self-direction and stimulation). Most of the items that did not match one of the content dimensions did not satisfy the definition of values as trans-situational goals and were no longer taken into account. The content of the remaining items were analysed further. As a result, 15 content dimensions were found.

To measure values and value differences between different cultural groups does, however, add a major complexity to social science measurement. Responses to apparently the same questions can have different meanings across cultural groups (Fontaine, 2004). In order to deal conceptually with comparability or incomparability, the two concepts of equivalence and bias have been developed. Equivalence refers to the effects of bias on the comparability of constructs and test scores across cultural groups (Van de Vijver & Leung, 2001). Equivalence

can be described as the “lack of bias” and is usually regarded from a measurement-level perspective (Van de Vijver & Tanzer, 1997). Three types of equivalence are distinguished, namely structural (construct) equivalence, measurement equivalence and scalar (full scale) equivalence. Van de Vijver and Leung (1997) point out that equivalence is often merely assumed in most empirical studies, which is not sufficient as a point of departure for comparison between cultural groups. They insist that in order to compare the factorial structure of two groups, a level of equivalence needs to be established.

Within the content of culture diversity is the fundamental and psycho-dynamic culture concepts of values and attitudes (Schwartz, 1994; Triandis, 1994). Very little research has so far been done in these areas in a South African context (De Klerk, 1999; Scholtz, 1996). Carter (1991) also states that in recent years more and more research has been done on the importance of values and what effect values have on culture groups and the lives of people. These studies and information, however, do not yet give sufficient amounts of information in this regard. Therefore, it is clear that further investigation regarding the manifestation of values in a South African context is needed.

## **1.2 RESEARCH OBJECTIVES**

The research objectives are divided into general objectives and specific objectives.

### **1.2.1 General objectives**

The general objectives of this study were to investigate the construct equivalence of the Work and Organizational Values Scale in the South African context and to investigate differences between the values of different language and gender groups.

### **1.2.2 Specific objectives**

The specific objectives of this study were as follows:

- To assess the construct equivalence of the Work and Organizational Values Scale in a South African context.

- To investigate differences between the values of different language groups in South Africa.
- To investigate gender differences regarding values.

### **1.3 RESEARCH METHOD**

The research method consisted of a literature review and an empirical study. The results obtained will be presented in the form of a research article.

#### **1.3.1 Literature review**

The literature review focused on values in the workplace and their application in cross-cultural settings.

#### **1.3.2 Research design**

A cross-sectional survey design, whereby a sample is drawn from a population at a specific time, was used to obtain the desired research objectives (Shaughnessy & Zechmeister, 1997). Information collected was used to describe the population at that time. According to Shaughnessy and Zechmeister (1997) this design is ideally suited to the descriptive and predictive functions associated with correlational research.

#### **1.3.3 Participants**

The study population consisted of two groups who applied for posts in the South African Police Services (SAPS). The first group consisted of civilians ( $N=3\ 400$ ) who applied for administrative jobs at the Firearms Control Unit of the SAPS, while the second group consisted of police applicants ( $N=1\ 800$ ) who were recruited for the basic training programme for the SAPS.

### 1.3.4 Measuring instrument

An adapted version of the Schwartz Value Instrument was used in this study. Respondents completed the 84-item *Work and Organizational Values Scale* (WOVS) (De Clercq & Fontaine, 2004). These values had been sampled to cover the 12 different types of values (De Clercq & Fontaine, 2005; based on Schwartz, 1992). Each of the values was followed in parentheses by a short explanatory phrase (e.g., CONFORMISM [to comply with rules and regulations]). Respondents rated the importance of each value on a five-point scale: (A) meant the value was not important, while (E) meant the value was extremely important. Items were rated for their importance in the respondent's work (personal work values) and in the organization they worked for (organisational values). For work values, the alpha coefficients ranged from 0,67 (*self-direction*) to 0,86 (*goal-orientedness*), with an average of 0,78; for organisational values, the alpha coefficients ranged from 0,70 (*self-direction*) to 0,87 (*hedonism*), with an average of 0,80.

### 1.3.5 Data analysis

The statistical analysis was carried out with the help of the SPSS-program (SPSS 2003). Cronbach alpha coefficients and factor analysis were used to assess the reliability and equivalence of the measuring instrument (Clark & Watson, 1995).

Descriptive statistics (e.g. means and standard deviations) were used to analyse the data. A cut-off point of  $p \leq 0,05$  was set for the statistical significance of the results. Effect sizes (Cohen, 1988) were used to decide on the practical significance of the findings. Pearson product-moment correlation coefficients were used to specify the relationships between the variables. A cut-off point of 0,30 (medium effect, Cohen, 1988) was set for the practical significance of correlation coefficients.

Construct equivalence of the instrument was also performed. According to Van der Vijver and Leung (1997), construct equivalence can be investigated with several techniques, such as factor analysis, cluster analysis, and multidimensional scaling or other dimensionality-reducing techniques. Factor analysis is the most frequently employed technique for studying construct equivalence. In the current study both exploratory and confirmatory models could

have been used. In view of the fact that there is information about the composition of the instrument (from previous studies), the choice of confirmatory factor analysis may seem obvious. However, the current authors used exploratory factor analysis for a pragmatic reason. In line with many other studies, these authors found a poor overall fit with their data when using confirmatory models.

A principal components analysis was conducted to determine the number of factors of the WOVS in the total sample. Subsequently, a varimax rotation was used to determine the solution for each language group. Factors obtained in each group were compared (after target rotation). The agreement was evaluated by a factor congruence coefficient, Tucker's phi (Van de Vijver & Leung, 1997). Values above 0,90 were taken to indicate essential agreement between cultural groups, while values above 0,95 indicated very good agreement. A high agreement implies that the factor loadings of the lower and higher levels are equal up to a multiplying constant.

Multivariate analysis of variance (MANOVA) was used to determine the significance of differences between values and culture groups. In MANOVA a new dependent variable that maximises group differences is created from the set of dependent variables. One-way analysis is then performed on the newly created dependent variable. When an effect is significant in MANOVA, one-way analysis of variance (ANOVA) is used to discover which dependent variables were affected.

#### **1.4 RESEARCH PROCEDURE**

The measuring battery containing the WOVS was compiled. Ethical aspects of the research were discussed with the participants. The test battery was administered on two separate occasions at the Police College in Pretoria. The first group consisted of civilians who had applied for administrative posts at the Firearms Control Unit of the SAPS and the second group consisted of police applicants who had been recruited for the basic training programme of the SAPS.

## **1.5 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.

## **1.6 CHAPTER SUMMARY**

This chapter discussed the problem statement and research objectives. The measuring instruments and research method used when doing the research were explained. A brief overview of the chapters followed.

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# THE CROSS-CULTURAL APPLICATION OF THE ADAPTED SCHWARTZ VALUES INSTRUMENT IN SOUTH AFRICA

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## ABSTRACT

The objectives of this study were to assess the construct equivalence of the Work and Organizational Values Scale (WOVS) in the South African context and to investigate differences between the values of different language and gender groups. A cross-sectional survey design was used. The participants consisted of two groups who had applied for jobs in the South African Police Services (SAPS), namely civilians ( $N = 3\ 400$ ) and police applicants ( $N = 1\ 800$ ). The WOVS was administered. Two factors were extracted. The first factor was interpreted as *self-enhancement* versus *conservation*. The second factor was interpreted as *collectivism* versus *individualism*. These factors were found to be equivalent for four language groups. Statistically significant differences were found between the value priorities of different language groups as well as genders.

## OPSOMMING

Die doelstelling van hierdie studie was om die konstrukekwivalensie van 'n aangepaste vorm van die *Work and Organizational Values Scale* (WOVS) in die Suid-Afrikaanse konteks te bepaal en om verskille tussen die waardes van verskillende tale en geslagte te bepaal. 'n Dwarssnec opname-ontwerp is gebruik. Die studiepopulasie het bestaan uit twee groepe wat aansoek gedoen het vir poste in die Suid-Afrikaanse Polisie. Die eerste groep het bestaan uit burgerlikes ( $N = 3\ 400$ ), die tweede groep bestaan uit polisie-aansoekers ( $N = 1\ 800$ ). Die WOVS is gebruik as meetinstrument. Twee faktore is onttrek. Die eerste faktor is geïnterpreteer as *selfverheffing* versus *bewaring*. Die tweede faktor is geïnterpreteer as *kollektiwisme* versus *individualisme*. Hierdie faktore was ekwivalent vir vier taalgroepe. Statisties beduidende verskille is tussen die waardeprioriteite van verskillende taalgroepe sowel as geslagte gevind.

Values can act as a unifying theory for the field of human motivation, a way of organising the different needs, motives and goals proposed in other theories (Schwartz, 2003). The values theory describes aspects of the human psychological structure that are fundamental, aspects presumably common to all humankind. Schwartz's idea of a unified theory is shared by other writers who have similar opinions about the unifying ability of the values theory. According to Rokeach (1973) the value concept may be able to unify the apparently diverse interests of all the sciences concerned with human behaviour. According to Williams (1968) and Kluckhohn (1951), values are not qualities inherent in objects, but criteria that individuals use to evaluate actions, people and events.

Through the years researchers have formed different models of values and how values manifest within people and cultures (Kluckhohn & Strodtbeck, 1961; Rokeach, 1986; Lonner & Malpass, 1994; Schwartz, 1994). Most of the recent data collection containing values has been done with an instrument known as the Schwartz Value Survey (SVS). This instrument was developed to measure 10 universal values (universalism, benevolence, conformity, tradition, security, power, achievement, hedonism, self-direction and stimulation) and was developed by Schwartz (1992). Respondents from every inhabited continent have completed the SVS. A total of 64 271 respondents from 67 countries have completed the SVS (Schwartz, 1999). The respondents who completed the SVS can be divided into highly diverse groups that differ in areas that include geographical, cultural, linguistic, religious, age, gender and occupation differences.

Although the Schwartz Value Survey (SVS) remains the most widely used instrument to measure values, an alternative measure instrument that has been developed to measure values is an adapted version of the Schwartz Value Survey, known as the Work and Organizational Values Scale (WOVS). The Work and Organizational Values Scale was developed in Belgium and was used in an international study. The main purpose for the development of the WOVS was to serve as a comprehensive value instrument to measure work and organisational values (De Clercq & Fontaine, 2004).

Extensive research on values have been done in the international arena, but locally in South Africa the research on values is limited (De Klerk, 1999; Scholtz, 1996). No research on the application of the WOVS in a South African context could be found. In recent years, however, more research on the importance of values and what effects they have on culture

groups and the lives of people has been done, but these studies do not yet give sufficient amounts of information in this regard (Carter, 1991). This lack of information has caused South Africa to mainly follow international trends and norms (Foxcroft, 1997; Retief, 1992).

The use of norms and data derived in an international setting may lead to unsatisfactory results. South Africa is a country with different cultures and traditions and is the home of eleven official languages (Statistics South Africa, 2003), making the South African setting unique in terms of cultural diversity and creating an environment that is highly differentiated in terms of culture, race, ethnical grouping, values and attitudes (Nel et al., 2001). This has created a strong need for research that includes all cultures, race and ethnic groups calling South Africa home.

This need is stressed by new legislation promulgated since 1994 in the form of the Employment Equity Act 55 of 1998, Section 8 (Government Gazette, 1998, p. 9). According to the Act, psychological testing and other similar assessments are prohibited unless the test or assessment being used (a) has been scientifically shown to be valid and reliable, (b) can be applied fairly to all employees; and (c) is not biased against any employee or group.

The objectives of this study were to assess the construct equivalence of the Work and Organizational Values Scale in the South African context and to investigate differences between the values of different language and gender groups.

## **Values**

Values are types of beliefs, centrally located within one's total belief system, about how one ought or ought not to behave, or about some end state of existence worth attaining (Rokeach, 1986). Kluckhohn and Strodtbeck (1961) view values as concepts that influence the selection from available modes, means and ends of action. Lonner and Malpass (1994) have a similar opinion, saying that values are general beliefs about desirable or undesirable ways of behaving and about desirable or undesirable goals or end states.

Schwartz (1994a) defines values as constructs that determine what people will strive for in their lives and what they are prepared to sacrifice. Values are trans-situational criteria or goals ordered by importance as guiding principles in life. The following main features have

been identified as part of the values theory (Schwartz, 1992, 1994b; Schwartz & Bilsky, 1990): Values are beliefs, values are a motivational construct, values transcend specific actions and situations, values guide the selection or evaluation of actions, policies, people and events, and values are ordered by importance relative to one another.

Values can be seen as culturally bound. This becomes clear when one looks at the different values and attitudes of different culture groups (Schwartz, 1994c; Triandis, 1994). According Smith and Bond (1993) and Triandis (1994), individuals who find themselves in a specific culture are also bound in a specific social environment. This social environment is home to their own unique norms, language, systems and values. This results in members of similar culture groups sharing many cultural and social values. Individual values and values priorities are, however, also formed by the individual's unique personal experience (Schwartz, 1999). This may result in individuals within a certain culture group having different and unique values and value priorities.

Recent studies have shown that values and value priorities are not displayed only by people, but that nations, countries and other social categories also display distinct value profiles or patterns (Roe & Ester, 1999). According to research, cultural dimensions of values reflect the basic issues or problems that societies must face in order to regulate human activities (Hofstede, 1980; Kluckhohn & Strodtbeck, 1961; Rokeach, 1973; Schwartz, 1999). Values are the foundation of cultural norms, and set the standard for appropriate behaviour in specific situations (Schwartz, 1999). Williams (1970) also says that cultural values represent the implicit or explicit shared abstract ideas about what is good, right and desirable in a society. Cultural values systems therefore play a vital role in forming and directing behaviour and norms (Carter & Goodwin, 1994). Values indicate how a person experiences his/her activities in relation to other people, nature and time (Feather, 1998; Lonner & Malpass, 1994; Sue, 1981).

According to Du Preez (1986), cultural values manifest in two main areas: collectivism and individualism. Traditional Western thinking tends to rate success and achievement very highly and is a good example of typical individualism (Botha, 1995; Duckitt & Foster, 1991). The opposite can be found in an African thinking pattern, where the emphasis falls on traditions and conformity. Collectivism is therefore more important. In these societies the needs of the group are more important than those of the individual (Botha, 1995; Triandis,

1994; Smith & Bond, 1993). The concept of *ubuntu* will therefore go hand in hand with collectivism. Ubuntu is conceptualised as communalism and interdependence (Kamwangamalu, 1999).

Through the years, different value models have been developed by various researchers and all these models are evidence that values are part of culture. Kluckhohn and Strodtbeck (1961) were the first to develop a model on values. According to their model, different value systems can be found within different culture groups. They identified five main problems that can be found across all cultural groups, namely a) What is the essence of being human? b) What is the relationship between humans, nature and the supernatural? c) What should the time focus of humans be? d) What is acceptable for human activity? e) What is the essence of human interpersonal relations? According to Kluckhohn and Strodtbeck (1961), these five problems are present within all cultures. Priorities may, however, vary within different groups.

Rokeach (1986), on the other hand, says that values can be placed in hierarchical order within every individual. He distinguishes between two main sets of values, namely terminal values and instrumental values. Terminal values are values that people find important in order to live a meaningful life. In order to achieve one's terminal values, instrumental values must be applied. Instrumental values are the values individuals use to achieve the end state of their objectives. In all culture groups a total of 36 terminal and instrumental values are present, but the hierarchal order may vary (Rokeach, 1986). This can explain why different cultural groups have different value systems.

Lonner and Malpass (1994) have developed a third model. They say that the focus is on core values that are vital to an individual and not on values that are in a hierarchal order.

The final model was developed by Schwartz (1994). He identified 10 universal values that are present within all cultures, but may vary in importance in different groups. Within these 10 universal values, four higher-order values can be found, namely: Self-transcendence, conservation, self-development and independence. Schwartz (1994) has placed the 10 universal values in a scalogram. The closer the values are to one another, the more similar they are. Opposing values, on the other hand, are the complete opposite of one another.

## Measuring organisational values

An instrument known as the Organizational Values Scale (WOVS) was used for the current study. The construction of the WOVS was based on the Schwartz value approach (e.g. Schwartz, 1992), which forms a cross-culturally validated comprehensive approach to life values (see Schwartz et al., 2001). Schwartz (1992) defines values as concepts or beliefs that pertain to desirable end states or behaviours, transcend specific situations, guide the selection or evaluation of behaviour and events, and are ordered by relative importance. Schwartz (1992) has derived 10 universal motivational types of values. A dynamic relation can be found among these motivational types of values. These values can be summarized as two orthogonal dimensions: *self-enhancement* versus *self-transcendence* and *conservation* versus *openness to change*. De Clercq and Fontaine (2004) have investigated to what extent measurements of work values and organisational values could be represented by the Schwartz value model of life values. In total, 42 value and organizational culture instruments were critically evaluated (e.g. Boxx, Odom, & Dunn, 1991; Erdogan et al., 2004; Harris & Mossholder, 1996; Judge & Cable, 1997; Parkes, Bochner, & Schneider, 2001). A content analysis using independent expert judges revealed that 1 578 items stemming from these instruments could be reliably framed within the 10 value types proposed by Schwartz (1992). Most of the items that did not match one of the 10 value types did not satisfy the definition of values as trans-situational goals, therefore they could be discarded.

On the basis of the content analysis of the work and organisational value measures within the framework of the Schwartz value theory, a new instrument was constructed, namely the Work and Organizational Values Scale (WOVS). This value scale represented comprehensively the domain of work and organisational values (De Clercq & Fontaine, 2004).

On the basis of empirical research, a 12<sup>th</sup> value scale, which is closely related to the Schwartz value scale, was identified both at the work and the organisational level. Factor analyses on these 12 value scales revealed a commensurable three-factor value structure for both work and organisational values. The first two bipolar factors could be interpreted according to Schwartz's value theory. On the first factor, *power*, *materialism* and *prestige* are opposed to *social commitment*, *environment* and *relations*. This factor can thus be interpreted as *self-enhancement* versus *self-transcendence*. On the second factor, *conformity* and *security* are

opposed to *stimulation* and *self-direction*, and can thus be interpreted as *conservation* versus *openness to change*. Moreover, a third bipolar factor emerged, opposing *goal-orientedness* to *hedonism*. This third factor turned out to be specific for the work and organizational context.

By means of orthogonal Procrustes rotation (McCrae, Zonderman, Bond, Costa, & Paunonen, 1996; Schönemann, 1966), the commensurability of the value factors between the personal and organisational level were investigated. Factor congruence was assessed by the Tucker's phi (Tucker, 1951). A congruence coefficient of 0,90 or higher is traditionally considered evidence of factor replication (Barrett, 1986). All three congruence coefficients complied with this threshold of 0,90: the Tucker's Phi was 0,98 for the first factor (*self-enhancement* versus *self-transcendence*); 0,91 for the second factor (*conservation* versus *openness to change*), and 0,957 for the third factor (*goal-orientedness* versus *hedonism*).

Certain changes were, however, necessary to use the WOVS in a South African setting. The instrument used in South Africa requested the respondents to complete the 84-item questionnaire containing items that had been sampled to cover 12 different types of values (De Clercq & Fontaine, 2005; based on Schwartz, 1992). Each of the single values was followed in parentheses by a short explanatory phrase (e.g. CONFORMISM [to comply with rules and regulations]). A 5-point scale was used to rate the importance of each value, with (A) meaning the value was not important and (E) meaning the value was extremely important. An extra item (measuring *ubuntu*) was also added to the instrument.

## **Equivalence**

Equivalence is an important concept in psychological tests administered in a multicultural society. In the unique and culture-rich society of South Africa it is even more important. Bias can be explained as scores that differ with regard to the indicators of a particular construct and that do not correspond with differences in the underlying trait or ability (Van de Vijver & Tanzer, 1997). Equivalence, on the other hand, can be explained as the measurement level at which scores obtained for different cultures can be compared.

Construct equivalence, which is the most frequently studied type of equivalence, indicates the extent to which the same construct is measured across all groups studied. When an instrument measures different constructs in different race groups, i.e. when inequivalence exists, no

comparison can be made. The same construct is measured in the case of construct equivalence (also labelled structural equivalence) (Van de Vijver & Leung, 1997).

## **METHOD**

### **Research design**

A cross-sectional survey design, whereby a sample is drawn from a population at one time was used to obtain the desired research objectives (Shaughnessy & Zechmeister, 1997). Information collected was used to describe the population at that time. According to Shaughnessy and Zechmeister (1997) this design is ideally suited to the descriptive and predictive functions associated with correlational research.

### **Participants**

The study population consisted of two groups who had applied for jobs in the South African Police Services (SAPS). The first group consisted of civilians ( $N = 3\ 400$ ) who had applied for administrative posts at the Firearms Control Unit of the SAPS. The second group consisted of police applicants ( $N = 1\ 800$ ) who had been recruited for the basic training program for the SAPS. Table 1 presents some of the characteristics of the participants.

Table 1

*Characteristics of the Participants*

Item	Category	Frequency	Percentage
Gender	Male	2 194	48,4
	Female	2 341	51,6
Language	English	30	0,6
	Afrikaans	81	1,7
	Xhosa	158	3,4
	Zulu	283	6,1
	Sesotho	353	7,6
	Setswana	908	19,6
	Swati	179	3,9
	Tsonga	587	12,7
	Venda	386	8,3
	Ndebele	223	4,8
	Scpedi	1 452	31,2

According to Table 1, the number of males (48,4%) and females (51,6%) were very similar. Participants mainly came from the African group (97,2%) and the majority of the participants spoke Sepedi (31,2%), Setswana (19,5%) and Tsonga (12,6%), while only 0,6% of the participants spoke English. The mean age of the participants was 26,59 ( $SD = 4,51$ ).

**Measuring instrument**

The *Work and Organizational Values Scale* (De Clercq & Fontaine, 2004) was used in this study. Respondents completed the 84item scale. These values had been sampled to cover the 12 different types of values (De Clercq & Fontaine, 2005; based on Schwartz, 1992). Each of the single values was followed in parentheses by a short explanatory phrase (e.g. CONFORMISM [to comply with rules and regulations]). Respondents rated the importance of each value on a five-point scale, with (A) meaning the value was not important and (E) meaning the value was extremely important. Items were rated for their importance in the respondent's work (personal work values) and in the organization they worked for (organizational values). For work values, the alpha coefficients ranged from 0,67 (*self-*

*direction*) to 0,86 (*goal-orientedness*), with an average of 0,78; for organizational values, the alpha coefficients ranged from 0,70 (*self-direction*) to 0,87 (*hedonism*), with an average of 0,80.

### **Data analysis**

The statistical analysis was carried out with the help of the SPSS-program (SPSS, 2003). Cronbach alpha coefficients and factor analysis were computed to assess the reliability and equivalence of the measuring instrument (Clark & Watson, 1995).

Descriptive statistics (e.g. means and standard deviations) were used to analyse the data. Construct equivalence of the instrument was also performed. According to Van der Vijver and Leung (1997), construct equivalence can be investigated with several techniques such as factor analysis, cluster analysis, and multidimensional scaling or other dimensionality-reducing techniques. Factor analysis is the most frequently employed technique for studying construct equivalence. In the current study both exploratory and confirmatory models could have been used. Given that there was information about the composition of the instrument (on the basis of previous studies), the choice of confirmatory factor analysis may seem obvious. However, the current authors used exploratory factor analysis for a pragmatic reason. In line with many other studies, these authors found a poor overall fit with their data when they used confirmatory models.

A principal components analysis was conducted to determine the number of factors of the WOVS in the total sample. Subsequently, a varimax rotation was used to determine the solution for each language group. Factors obtained in each group were compared (after target rotation). The agreement was evaluated by a factor congruence coefficient, Tucker's phi (Van de Vijver & Leung, 1997). Values above 0,90 were taken to point to essential agreement between cultural groups, while values above 0,95 pointed to very good agreement. A high agreement implies that the factor loadings of the lower and higher levels are equal up to a multiplying constant.

Multivariate analysis of variance (MANOVA) is used to determine the significance between values and culture groups. In MANOVA a new dependent variable that maximises group differences is created from the set of dependent variables. One-way analysis is then

performed on the newly created dependent variable. When an effect is significant in MANOVA, one-way analysis of variance (ANOVA) is used to discover which dependent variables had been affected.

## RESULTS

Principal component analysis was conducted on the centred scores of all the items of the WOVS. Two factors were indicated by the scree plot. However, it was decided to conduct a principal component analysis on the 12 value types. The centred scores were used to calculate scores for the 12 types.

The composition of the sample was such that it was decided to conduct the analysis in this study on language groups. The sample was divided into four groups, each containing a number of language groups, namely Group 1 (Afrikaans and English), Group 2 (Nguni languages, i.e. Xhosa, Zulu, Seswati, Ndebele), Group 3 (Sesotho languages, namely Sepedi, Sesotho, Setswana), and Group 4 (Venda, Tsonga). Four factors with eigenvalues higher than one were extracted (Factor 1 = 2,88, Factor 2 = 1,52, Factor 3 = 1,03, and Factor 4 = 1,03). These four factors explained 53,85% of the total variance. However, the scree plot showed that three factors (which explained 45,28%) of the total variance could be extracted (see Figure 1). A principal component analysis with a varimax rotation was consequently carried out on the WOVS for each language group, but the three-factor structure did not make sense in any of the subgroups. It was therefore decided to specify two factors instead of three. The rotated component matrices for each of the language groups are reported in Table 2.

Scree Plot

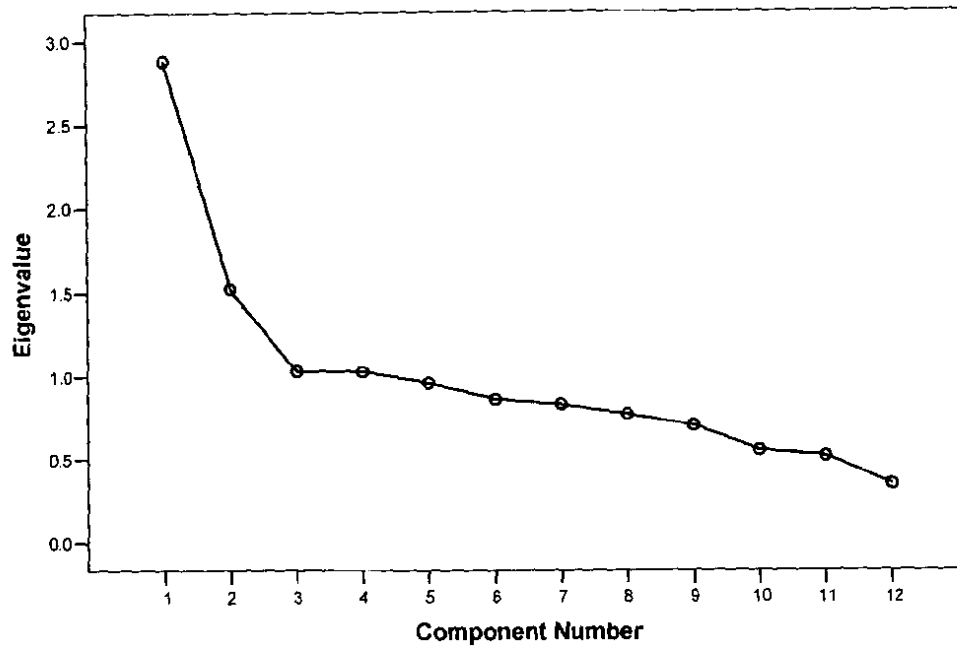


Figure 1. Scree plot of the WOVs factors

Table 2

Rotated Component Matrix of the Work and Organizational Values Scale (Model 1)

Item	Group 1 (Afrikaans and English)		Group 2 (Nguni languages)		Group 3 (Sesotho languages)		Group 4 (Venda and Tsonga)	
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
Altruism	-0,28	<b>-0,74</b>	-0,45	<b>-0,49</b>	-0,49	<b>-0,53</b>	-0,46	<b>0,53</b>
Conformity	<b>-0,76</b>	-0,31	<b>-0,68</b>	0,26	<b>-0,64</b>	0,27	<b>-0,60</b>	-0,19
Relations	<b>0,23</b>	-0,01	-0,03	<b>-0,50</b>	0,06	<b>-0,45</b>	-0,07	<b>0,50</b>
Hedonism	0,14	<b>0,68</b>	<b>0,51</b>	0,03	<b>0,46</b>	-0,05	<b>0,47</b>	0,02
Power	<b>0,77</b>	0,01	<b>0,63</b>	0,07	<b>0,58</b>	0,01	<b>0,62</b>	-0,09
Materialism	<b>0,77</b>	0,24	<b>0,74</b>	-0,01	<b>0,77</b>	0,01	<b>0,72</b>	-0,14
Environment	0,25	<b>-0,38</b>	0,11	<b>-0,73</b>	0,09	<b>-0,64</b>	0,02	<b>0,66</b>
Goal-orientedness	<b>-0,73</b>	0,05	-0,48	<b>0,57</b>	-0,53	<b>-0,55</b>	<b>-0,51</b>	-0,49
Prestige	<b>0,46</b>	-0,23	<b>0,50</b>	0,07	<b>0,43</b>	0,03	<b>0,54</b>	0,13
Stimulation	0,09	<b>0,44</b>	0,17	<b>0,31</b>	0,11	<b>0,33</b>	-0,16	<b>-0,28</b>
Security	<b>-0,63</b>	-0,06	<b>-0,59</b>	0,08	<b>-0,59</b>	-0,04	<b>-0,54</b>	-0,03
Self-direction	-0,28	<b>0,43</b>	-0,23	<b>0,46</b>	-0,15	<b>0,60</b>	-0,10	<b>-0,48</b>

Table 2 shows that *Hedonism* loaded on a different factor for the African languages compared with the Afrikaans/English language group. The factor loading of *Relations* was also low in the Afrikaans/English language group. However, it should be remembered that the sample size of the Afrikaans/English language group was relatively small, compared with the other groups.

To assess the construct equivalence of the WOVs for different language groups, the rotated matrices of the two-factor solutions for the four language groups were used as input for an exploratory factor analysis with target rotations. Each language group was compared with every other group. The Tucker's phi coefficients for the comparisons are shown in Table 3.

Table 3

*Tucker's Phi Coefficients of the Work and Organizational Values Scale for Different Language Groups (Model 1)*

Item	Factor 1	Factor 2
Afrikaans/English vs. Nguni languages	0,96	0,70
Afrikaans/English vs. Sesotho languages	0,98	0,71
Afrikaans/English vs. Venda/Tsonga	0,94	0,72
Nguni languages vs. Sesotho languages	0,99	0,98
Nguni languages vs. Venda/Tsonga	0,98	0,98
Sesotho languages vs. Venda/Tsonga	0,98	0,98

The results in Table 3 show that the Tucker's phi coefficients for the Afrikaans/English language group were substantially lower than the guideline of 0,90 for Factor 2 in all three African language groups. Therefore, it was decided to remove one item, namely *Hedonism*, from the analysis. *Hedonism* versus *goal-orientedness* were factors added after studies in Belgium.

The rotated component matrices for each of the language groups after removal of the value *Hedonism* are reported in Table 4, while the Tucker's phi coefficients for the comparisons of the various groups are shown in Table 5.

Table 4

*Rotated Component Matrix of the Work and Organizational Values Scale (Model 2)*

Item	Group 1 (Afrikaans and English)		Group 2 (Nguni languages)		Group 3 (Sesotho languages)		Group 4 (Venda and Tsonga)	
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
Social commitment	0,46	<b>0,59</b>	0,45	<b>-0,47</b>	0,48	<b>-0,48</b>	0,42	<b>0,47</b>
Conformity	<b>0,80</b>	0,00	<b>0,68</b>	0,29	<b>0,62</b>	0,33	<b>0,56</b>	-0,26
Relations	-0,18	<b>0,36</b>	0,02	<b>-0,49</b>	-0,06	<b>-0,47</b>	0,05	<b>0,50</b>
Power	<b>-0,77</b>	0,03	<b>-0,66</b>	0,06	<b>-0,63</b>	-0,02	<b>-0,66</b>	-0,04
Materialism	<b>-0,81</b>	-0,09	<b>-0,75</b>	-0,02	<b>-0,78</b>	-0,05	<b>-0,73</b>	-0,06
Environment	-0,11	<b>0,65</b>	-0,13	<b>-0,73</b>	-0,10	-0,65	-0,06	<b>0,67</b>
Goal-orientedness	0,68	<b>-0,36</b>	0,49	<b>0,59</b>	0,52	<b>0,60</b>	0,53	<b>-0,54</b>
Prestige	<b>-0,40</b>	0,11	<b>-0,48</b>	0,04	<b>-0,43</b>	-0,01	<b>-0,55</b>	0,19
Stimulation	-0,20	<b>-0,35</b>	-0,11	<b>0,31</b>	-0,11	<b>0,32</b>	0,16	<b>-0,31</b>
Security	<b>0,64</b>	0,01	<b>0,61</b>	0,08	<b>0,59</b>	0,01	<b>0,56</b>	-0,08
Self-direction	0,14	<b>-0,55</b>	0,24	<b>0,47</b>	0,16	<b>0,61</b>	0,12	<b>-0,49</b>

Table 5

*Tucker's Phi Coefficients of the Work and Organizational Values Scale (Model 2)*

Item	Factor 1	Factor 2
Afrikaans/English vs. Nguni languages	0,98	0,95
Afrikaans/English vs. Sesotho languages	0,94	0,97
Afrikaans/English vs. Venda/Tsonga	0,95	0,97
Nguni languages vs. Sesotho languages	0,99	0,99
Nguni languages vs. Venda/Tsonga	0,98	0,98
Sesotho languages vs. Venda/Tsonga	0,98	0,98

Table 5 shows that highly acceptable ( $> 0,90$ ) Tucker's phi coefficients were found for all the comparisons. Therefore, sufficient evidence for the construct equivalence of the WOVS was demonstrated.

Next, a principal component analysis with a varimax rotation was carried out on the total sample. This was done because the equivalence of the WOVS for different language groups was demonstrated.

Table 6

*Rotated Component Matrix of the WOVS for the Total Sample*

Item	Factor 1	Factor 2
Conformity (restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms)	<b>0,63</b>	0,29
Security (safety, harmony and stability of society, of relationships, and of self)	<b>0,60</b>	0,03
Power (control and dominance over people and resources, attaching great importance to leadership and authority)	<b>-0,65</b>	0,01
Materialism (wealth and luxury, attaching importance to material goods)	<b>-0,77</b>	-0,02
Prestige (striving for admiration and recognition)	<b>-0,46</b>	-0,03
Social commitment (preservation and enhancement of the welfare of all people, to dedicate oneself to a better world)	0,46	<b>-0,48</b>
Relations (having good interpersonal relations with other people, valuing true friendship)	-0,03	<b>-0,47</b>
Environment (protecting the environment and unity with nature)	-0,11	<b>-0,67</b>
Goal-orientedness (living and working to fulfil a purpose, not giving up, taking initiative)	0,53	<b>0,58</b>
Stimulation (excitement, novelty and challenge in life)	-0,05	<b>0,32</b>
Self-direction (independent thought and action-choosing, creating and exploring)	0,18	<b>0,56</b>

On the first factor, *power*, *materialism* and *prestige* are opposed to *conformity* and *security*. This factor can thus be interpreted as *self-enhancement* versus *conservation*. On the second factor, *social commitment*, *relations*, and *environment* are opposed to *goal-orientedness*, *stimulation* and *self-direction*, and can thus be interpreted as *collectivism* versus *individualism*.

The descriptive statistics of the four language groups on the WOVS are reported in Table 7.

Table 7

*Descriptive Statistics of the WOVS*

	Group 1 (Afrikaans/English)		Group 2 (Nguni languages)		Group 3 (Sesotho languages)		Group 4 (Venda and Tsonga)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Conformity	0,82	2,25	0,02	2,35	0,34	2,34	0,41	2,25
Security	1,64	2,17	0,92	2,08	1,25	2,06	1,04	2,05
Power	-5,54	3,43	-4,47	3,03	-4,44	3,17	-4,23	3,24
Materialism	-6,15	4,03	-4,45	3,39	-4,90	3,72	-4,17	3,35
Prestige	-0,41	2,59	-0,55	2,67	-0,58	2,60	-0,77	2,82
Social commitment	2,40	2,24	1,42	2,17	1,38	2,18	1,22	2,12
Relations	1,21	1,64	0,92	2,07	0,94	2,14	1,14	1,99
Environment	-1,38	1,99	0,18	2,03	-0,07	2,13	0,13	2,05
Goal-orientation	2,24	2,97	1,25	3,35	1,70	3,26	1,46	3,29
Stimulation	-0,73	1,81	-0,93	1,89	-0,93	1,92	-0,94	1,94
Self-direction	0,27	1,86	-0,49	2,17	-0,31	2,20	-0,66	2,16

According to Table 7, *conformity*, *security*, *social commitment*, *relations* and *goal-orientation* all loaded positively, while *power*, *materialism*, *prestige* and *stimulation* had a negative loading. More complex items were *environment* and *self-direction*, where the items had different loadings for different language groups.

Next, multivariate analysis of variance (MANOVA) was used to analyse the differences between the values of language and gender groups (see Table 8). In MANOVA, several dependent variables (in this case *conformity*, *security*, *power*, *materialism*, *prestige*, *social commitment*, *relations*, *environment*, *goal-orientedness*, *stimulation* and *self-direction*) are considered together in the same analysis.

Table 8

*MANOVA of the Values of Language and Gender Groups*

Dependent Variable	Language					Gender				
	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	$\eta^2$	<i>df</i>	Mean Square	<i>F</i>	<i>p</i>	$\eta^2$
Conformity	3	35,41	6,54	0,00*	0,01	1	926,54	178,00	0,00*	0,04
Security	3	37,90	9,07	0,00*	0,01	1	107,58	25,58	0,00*	0,01
Power	3	57,71	5,82	0,00*	0,01	1	498,93	50,44	0,00*	0,01
Materialism	3	227,34	17,94	0,00*	0,01	1	579,30	45,72	0,00*	0,01
Prestige	3	4,55	0,66	0,58	-	1	51,83	7,46	0,01 *	0,01
Social commitment	3	39,67	8,81	0,00*	0,01	1	302,35	67,53	0,00*	0,02
Relations	3	10,07	2,35	0,07	-	1	147,79	34,60	0,00*	0,01
Environment	3	18,72	4,36	0,01*	0,01	1	893,11	216,82	0,00*	0,05
Goal-orientedness	3	81,79	7,36	0,00*	0,01	1	4066,05	400,79	0,00*	0,09
Stimulation	3	1,23	0,34	0,80	-	1	45,02	12,41	0,00*	0,01
Self-direction	3	36,34	7,67	0,00*	0,01	1	704,61	153,84	0,00*	0,04

\*  $p < 0,01$

Table 8 reflects the significant effect of language groups on the combined dependent variable *values* ( $F = 4,57, p < 0,01$ ; Wilks' Lambda = 0,96;  $\eta^2 = 0,01$ ). However, this effect was small (1% of the variance explained). The results obtained from the different language groups showed that prestige, relations and stimulation had no effect as far the combined dependent variable is concerned. Conformity, security, power, materialism, social commitment, environment, goal-orientedness, and self-direction in turn had a very small effect, and only explained 1% of the variance. From the abovementioned results it became evident that when the value priorities between the language groups are compared the differences are minimal, and it seems that value priorities are quite similar across different language groups.

Furthermore, Table 8 reflects the significant effect of gender on the combined dependent variable *values* ( $F = 57,43, p < 0,01$ ; Wilks' Lambda = 0,86;  $\eta^2 = 0,14$ ). This effect was large (14% of the variance explained). Analysis of each individual dependent variable showed that all the values differed statistically significantly between males and females. The effect for prestige, relations, stimulation, security, power and materialism was small, and explained only 1% of the variance. Social commitment measured higher for females and had a slightly larger effect, explaining 2% of the variance. The largest effects were found on the items conformity, goal-orientedness, self-direction, and environment, explaining 14% of the variance. Self-direction and environment measured higher for males. On the other hand, conformity and goal-orientation measured higher for females, with a large effect size for goal-orientedness.

## DISCUSSION

The general objective of this study is to investigate the construct equivalence of the Work and Organizational Values Scale in the South African context and to investigate differences between the values of different language and gender groups.

The first objective was to investigate the construct equivalence of the Work and Organizational Values Scale. A principal component analysis with a varimax rotation was carried out on the WOVS for each language group. Two factors were extracted, namely self-enhancement versus conservation, and collectivism versus individualism. However, exploratory factor analysis with target rotations showed that construct equivalence of the scale was not acceptable. Inspection on the factor loadings revealed that the item “*hedonism*” was complex and problematic. This item loaded on different factors for the Afrikaans and English group when compared with the African language groups.

The causes of the problematic and complex nature of this item can be explained by a number of reasons. First, it is possible that different cultures add different meanings to the concept of hedonism. According to Census 2001 (Statistics South Africa, 2003), South Africa is the home of no fewer than 11 official language groups and just as many cultural groups, making the South African environment one of diversity and cultural differences. Due to the fact that English was not the first language for the majority of the sample group, it is possible that the items on this scale were misunderstood. Researchers have shown that most imported tests are not suitable for use in a multicultural society like that of South Africa and that items in the questionnaires are understood differently by different cultures (Abrahams, 1996, 2002; Abrahams & Mauer, 1999a, 1999b; Meiring, 2000; Spence, 1982; Tact 1999; Taylor & Boeyens, 1991). The English language used in tests is often too difficult to understand, even if English is the home language (Abrahams & Mauer, 1999a, 1999b; Taylor, 2000; Wallis & Brit, 2003).

Second, the fact that hedonism loaded on *self-enhancement* in the African language groups, but on *individualism* in the Afrikaans/English group, might represent differences in value priorities between these language groups. According to Schwartz (1994c) and Triandis (1994), diversity becomes evident when one looks at different values and attitudes shown by

different cultural groups. Just like individuals differ in value priorities, different cultures also have different values and value priorities. Individuals find themselves within a social environment inside a specific culture, with their own norms, language, systems and values (Smith & Bond 1993; Triandis, 1994). Studies have shown that nations, countries and other social categories tend to display distinct value profiles or patterns (Roe & Ester, 1999). Following Hofstede (1980), Kluckhohn and Strodtbeck (1961) and Rokeach (1973), Schwartz (1999) noted that cultural dimensions of values reflect the basic issues or problems that societies must face in order to regulate human activities. Williams (1970) adds that cultural values represent the implicit or explicit shared abstract ideas about what is good, right and desirable in a society. These cultural values are the base for the specific norms that tell people what is appropriate in various situations. Because cultural value priorities are shared, role incumbents in social institutions can draw on them to select socially appropriate behaviour and to justify their behaviour choices to others (Schwartz, 1999).

Third, when comparing the sample sizes, the Afrikaans and English group was substantially smaller than the African language groups. The relatively small sample of the Afrikaans/English group is not representative of all Afrikaans/English-speaking people in South Africa. Furthermore, factor analysis has limitations when applied to small samples, even though the ratio of items to participants was not that unfavourable.

The second objective of this study was to investigate differences between the values of different language and gender groups. When value priorities of the differences between language groups were compared, the effect for conformity, security, power, materialism, social commitment, environment, goal-orientation, and self-direction was small, and only explained 1% of the variance. Analysis also showed that there were no significant differences between the language groups as far as prestige, relations and stimulation are concerned.

Furthermore, the significant differences between gender groups were investigated. The differences found between gender groups had a much larger effect on the combined dependent variable. Analysis of each individual dependent variable showed that all the values differed statistically significantly between males and females. When the effect that gender groups had on the combined dependent variable was studied, the effect for prestige, relations, stimulation, security, power and materialism was small, and only explained 1% of the

variance. Social commitment measured higher for females and had a slightly bigger effect, explaining 2% of the variance.

The largest effects were found on the items conformity, goal-orientation, self-direction, and environment, explaining 14% of the variance. Self-direction and environment measured higher for males. On the other hand, conformity and goal-orientedness measured higher for females, with large difference in effect for goal orientedness. This can be explained by new opportunities created in the labour market for females, giving females the opportunity to set goals and pursue a career.

In conclusion, on the basis of the results obtained in this study, it seems as if the WOVS is a equivalent instrument for measuring work and personal value priorities in a South African context. This instrument is even more effective when the item, *hedonism* is removed.

This study had various limitations. First, the sample size of the Afrikaans/English group was relatively small. Although the scores were standardised, the smaller sample size could have influenced the results. Second, only 0,6% of the participants spoke English as their home language. This could have contributed to misunderstanding of items and incorrect interpretations when the questionnaires were completed. Third, the participants in this study were relatively young and mostly unemployed, which could affect the generalisation of findings.

## RECOMMENDATIONS

Despite the limitations of this study, the present findings suggest that, with further research regarding the psychometric properties of the instrument, the WOVS can be used effectively to measure value priorities in a South African context. On the basis of the results of this study it is recommended that the Work and Organizational Values Scale be used to assess values in a South African context. However, the item *hedonism* should be omitted when the Work and Organizational Values Scale is administered.

It is suggested that additional research be conducted to determine the validity and reliability of the instrument for other South African samples. Samples from different life and work

settings might provide confidence that study findings would be consistent across other similar samples. It is also recommended that the samples in future studies include more members from the Afrikaans and English-speaking group, in order to compare the different language groups more effectively.

Furthermore, future research can also compare the African sample group with European and other Western samples. Research in South Africa needs to focus on the prevalence of values among the different languages and culture groups. However, to effectively use this instrument in a diverse setting like that in South Africa, a translation of the instrument into a language other than English is recommended.

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## CHAPTER 3

### CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

This chapter comprises conclusions regarding the literature review and the empirical study according to the specific objectives. The limitations of the research are discussed, followed by recommendations for the research problem in the organisation. Lastly, suggestions are made for future research.

#### 3.1 CONCLUSIONS

The general aim of this study was to investigate the construct equivalence of the Work and Organizational Values Scale in the South African context and to investigate differences between the values of different language and gender groups.

A principal component analysis with a varimax rotation was carried out on the Work and Organizational Values Scale for each language group, which resulted in acceptable construct equivalence of the two factors for all four language groups. The first factor was labelled *self-enhancement versus conservation*, and the second factor was labelled *collectivism versus individualism*. After removing the item “*hedonism*”, the two-factor model represented the data quite well. The problems experienced with this item can be due to a number of reasons. Firstly, it may be due to psychometric problems, where different cultures attach different meanings to the concept of hedonism. For the majority of the sample English was their second, third or even fourth language of choice. Due to the abstract nature of the items used in this instrument, participants may have experienced a lack of understanding with some of the items found in the instrument.

Another possible reason for the problems experienced with the abovementioned item may be cultural differences. Values can be seen as culturally bound. This becomes clear when one looks at different values and attitudes shown by different culture groups (Schwartz, 1994c; Triandis, 1994). According Smith and Bond (1993) and Triandis (1994), individuals who find themselves in a specific culture are also bound in a specific social environment. This social environment is home to their own unique norms, language, systems and values. This results in members of similar culture groups sharing many cultural and social values. According to

research, cultural dimensions of values reflect the basic issues or problems that societies must face in order to regulate human activities (Hofstede, 1980; Kluckhohn & Strodtbeck, 1961; Rokeach, 1973; Schwartz, 1999). Values are the foundation of cultural norms, and set the standard for appropriate behaviour in specific situations (Schwartz, 1999). Williams (1970) also said that cultural values represent the implicit or explicit shared abstract ideas about what is good, right and desirable in a society. Cultural values systems therefore play a vital role in forming and directing behaviour and norms (Carter & Goodwin, 1994).

Lastly, there may have been some problems with the research design. When one takes a closer look at the sample sizes, the language groups found in the sample were very unevenly matched when compared with regard to sample size. The Afrikaans and English-speaking group was a lot smaller than the African language groups found in the sample. When combined, the Afrikaans and English-speaking group only made up 2,3% of the total sample size. This made it difficult to make any valid conclusions by comparing the abovementioned group with the other language groups.

The second objective of this study was to investigate differences between the values of different language and gender groups. When one looks at the results, it becomes evident that the differences found between language groups were very small, explaining only 1% of the variance. In turn, the effect that gender had on the results was much more significant, with differences emerging that explained 14% of the variance.

When analysed, the results obtained from the different language groups showed that prestige, relations and stimulation had no effect as far the combined dependent variable is concerned. Conformity, security, power, materialism, social commitment, environment, goal-orientation, and self-direction in turn had a very small effect, and only explained 1% of the variance. From the abovementioned results it became evident that when the value priorities between the language groups are compared the differences are minimal, and it seems that value priorities are quite similar across different language groups.

The significant effect of gender on the combined dependent variable was also investigated. On the basis of the results the differences found between gender groups were much larger. Gender had a much larger and more definite effect on the combined dependent variable than language groups had. From the results it became evident that each individual dependent

variable found between males and females had a statistically significant difference, explaining 14% of the variance.

On further investigation of the differences found between gender groups it was found that the dependent variables prestige, relations, stimulation, security, power and materialism showed a small effect, explaining only 1% of the variance. Social commitment measured higher for females and had a slightly bigger effect, explaining 2% of the variance. Conformity, goal-orientation, self-direction and environment in turn showed a much larger effect, explaining 14% of the variance.

The results showed that the items self-direction and environment measured higher for males. On the other hand it was found that conformity and goal-orientation measured higher for females, with goal-orientation showing a big difference. New legislation creating opportunities for females, and in turn putting males on the back seat, and new-found opportunities for females in the private and governmental sector may have caused goal-orientation to have a very large effect among females. Females are given opportunities that they previously did not have, giving a sense of purpose and direction.

### **3.2 LIMITATIONS**

The first limitation in this study was a cross-sectional design, and no causal inferences could be drawn. Therefore, the causal relationship between variables was interpreted rather than established, and more complex forms of non-recursive linkages could not be examined. To deal with the limitations set by using a cross-sectional design, prospective longitudinal studies and quasi-experimental research designs are needed to further validate the hypothesised causal relationships.

The second limitation of this study was that the majority of the participants did not speak English as their home language. This could have influenced the way in which the respondents answered the questionnaires, because of misunderstanding or incorrect interpretation.

Thirdly, the participants in this study were relatively young and mostly unemployed, which could affect the generalisation of findings.

### 3.3 RECOMMENDATIONS

A clear and accurate understanding of values is necessary in order to implement effective individual, managerial and organisational practice. Managers and organisations should become aware of how to use the values theory as a management tool. If they are aware of how to use the values theory, interventions can be conducted, using the values theory as a tool to optimise the work force.

Future research in South Africa needs to focus on the prevalence of values among the different languages groups. This will enable researchers to determine the different value priorities of the different language groups, which in turn will allow management to optimise the diverse work force found in South Africa.

Future samples should have a more equal representation of all the different language groups. In the present study the Afrikaans and English-speaking group was far outnumbered by the African-language groups, causing research design problems.

The Work and Organizational Values Scale was used as measuring instrument in this study. The instrument is, however, still in its developmental phase. More research needs to be done to determine the validity and reliability of the instrument in other South African samples. Lastly, the majority of the respondents had English as a second or third language. Translation of the instrument into a language other than English should be considered for future research.

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