Career Values Scale



DONALD MACNAB SHAWN BAKKER GEORGE FITZSIMMONS

MANUAL & USER'S GUIDE



CVS-M

Career Values Scale Manual and User's Guide Includes bibliographic references.

© 2005 Psychometrics Publishing. All rights reserved. No portion of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Publisher.

Published and distributed by Psychometrics Canada Ltd. 7125-77 Avenue, Edmonton AB T6B 0B5 CANADA www.psychometrics.com

ISBN 0-929022-42-4

Printed in Canada

Myers-Briggs Type Indicator and MBTI are registered trademarks of the Myers-Briggs Type Indicator Trust in the United States and other countries.

CONTENTS

Chapter 1 • Introduction

Conceptualization of career values in the Career Values scale	1
Overview of the Career Values Scale	3

Chapter 2 • Administration

Procedures	
Appropriate Populations for Administration	

Chapter 3 • Using the Career Values Scale

Scoring and Reporting	. 8
Illustrative Examples	. 9
Exercises using the Career Values Scale	12

Chapter 4 • Development & Norming of the Career Values Scale

Development Process	18
Scale development and item writing	18
Norming of the CVS	19
Sten Scores	21
Means and Standard Deviations	22

Chapter 5 • Reliability and Validity

Reliability	. 23
Validity	. 25
Concurrent Validity	.25
Construct Validity Evidence	. 29
Values and Occupational Interests	. 28
Values and Personality	. 28
Inter-correlation between WPI Scale	. 30
Factor Analysis	. 31
Feedback Study	. 32

Bibliography • Research on Values

Appendix A •	Sample Report	

TABLES & FIGURES

Chapter 1

Figure 1.1	Career Values Scale Factors and Scale	. 3	3

Chapter 4

Table 4.1	Ethnic Origin of Norming Sample 19
Table 4.2	Age Distribution of the Norming Sample19
Table 4.3	Employment Status of Norming Sample
Table 4.4	Occupational Groups of Norming Sample
Table 4.5	Highest educational level of Norming Sample
Figure 4.1	Distribution of Sten Scores in a Normal Curve
Table 4.6	Mean Sten Scores Male and Female Norms Group

Chapter 5

Internal Consistency of CVS Male and Female Norm Groups24
Mean Sten Scores for the CVS by Occupational Group
ANOVAS for the 10 CVS Values Scales by Occupational Groups
Ranking of Average Sten Scores by Occupational Group by Highest to Lowest 28
Correlations – Career Interest Profiler Scale and CVS Scale
Correlations – Work Personality Index Global Scales and CVS Scale 30
Correlations – Work Personality Index Factors and CVS Scale
Inter-Correlations 10 CVS Scales for the Norm Group
CVS Rotated Component Matrix
Feedback Ratings for the CVS

CHAPTER . 1

Introduction

In career development workshops and counselling, one thing is constant; people who are most satisfied with their work or jobs are in careers where most of their values are being met. People who are most dissatisfied with their careers have values that clash with their jobs. Career values are the critical factor in determining satisfaction and dissatisfaction. It is therefore essential that people who are seeking guidance in their careers benefit from being clear on what their values are. In the context of career guidance and development, clarification of career values will assist in providing clients with the self-knowledge that is often missing and secondly, given a number of career choices, help the client choose the one that will best lead to a satisfying career.

Conceptualization of career values in the Career Values scale

Since the 1930's motivational concepts such as values, needs, and preferences have assumed an important role in both the theory and practice of vocational and occupational psychology. Several instruments have been developed from the theories related to these concepts. These instruments range from scales concerned with the measurement of the importance an individual places on such factors as personal development and self-actualization and which give scores based on one broad construct (e.g. Warr, Cook and Wall, 1979); to measures based on wide ranging scales offering indices of numerous different constructs. For example, the Minnesota Importance Questionnaire (Gay, Weiss, Hendel, Dawis and Loftquist, 1971) measures 20 vocationally relevant needs; or the Work Aspect Preference Scale (Pryor, 1981) designed to assess preferences individuals have for 13 aspects of their work; or the Values Scale (Fitzsimmons, Macnab, and Casserly, 1986), which measures 20 values. This latter scale based upon the International Work Importance Study (Super, 1981) is the basis for the Career Values Scale.

Values have been the subject of extensive psychological and philosophical study for many years. Yet there is little consensus on any one description of the construct and the literature is replete with confusing definitions and descriptions. In some definitions there is little difference between values and interests, values and needs, or values and preferences. Super (1973, 1995) offers the following definition of values:

Traits, values, and interests derive from needs. The need ... leads to action, and action leads to modes of behavior or traits that seek objectives formulated in generic terms (values) or in specific terms (interests). Traits are ways (styles) of acting to meet a need in a given situation. Values are objectives that one seeks to attain to satisfy a need. Interests are the specific activities and objects through which values can be obtained and met.

In a study that used the Canadian version of the Values Scale, the Minnesota Importance Questionnaire and the Work Preference Aspects Scale, Macnab and Fitzsimmons, 1989 used multi-trait multi-method analysis to provide a logical and empirical basis for the definition of values. This study helped established that even when values are assessed from different theoretical perspectives that they can be measured objectively.

In career counselling, values are especially helpful with clients that have flat interest profiles, whose interests pull them in different directions, or whose immaturity leads to doubt about the validity of their expressed or even their assessed interests. This is because values are more fundamental than interests. Ascertaining what it is that a client wants to get out of life is often helpful in pursuing the question of the field or activity in which to seek it.

It was decided on the basis of national and international literature reviews, that the available instruments were lacking in terms of their applicability. Many of the most widely used scales have norms dating back 20 to 30 years and many have not had their item content updated from this time. The Career Values Scale is designed to provide an individual with information about what is important in their work or career. It can be used in individual career counselling and planning to structure the exploration of the relative importance of client's values. At all ages the Career Values Scale is a useful introduction to the vocabulary of values. Completing the scale in itself has some educational value, where individuals can learn more about themselves. The language of values offers a linguistic framework to express what they are discovering about themselves.

In employment counselling with adults the Career Values Scale is helpful in providing a standardized description of clients' values. By comparing the qualities of a career as prized by the client, the requirements of a career opportunity can be examined for discrepancies. These differences may offer positive opportunities for a review. Topics such as career ladder, job satisfaction, needs met through career or jobs, and special qualities that can be found in work environments can be explored.

Overview of the Career Values Scales

In order to facilitate the interpretation of the Career Values Scale each of the 10 subscales is outlined below. The Career Values scale is subdivided into three factors: Working with Others, Self-Expression and Extrinsic Rewards. Figure 1 illustrates how the scales are organized. The name of each value is defined by the high scores on each scale. A short description of the high end of the scales is provided.



Working with Others
Service Orientation
Teamwork
Influence
Self-Expression
Creativity
Independence
Excitement
Career Development
Extrinsic Rewards
Financial Rewards
Prestige
Security

Factor 1 · Working with Others

Every career involves some interaction with people. Personal values strongly impact both the type and quality of interaction your clients prefer to have with others. Some individuals prefer an environment that is outgoing and warm, while others prefer a more formal and independent workplace.

Service Orientation

People with high scores on Service Orientation value helping people with their problems. They place a high value on work settings where you can gauge the thoughts and feelings of people. Common examples include care giving and customer service positions. They value activities where there is a direct positive effect upon others.

What is important: Relationships, personal service, providing direct benefits to others

Teamwork

People with a high score on Teamwork value working closely with co-workers and clients. They value encouragement and encouraging others. Occupations that rely heavily on teamwork, networking and relationships will be rewarding.

What is important: Teamwork, good co-worker relations, collaborative work unit

Influence

People with a high score on Influence value being directive rather than collaborative and like to control and manage the work that they are involved with. They will enjoy having a high level of responsibility and will be satisfied in an organization where they can use a directive leadership style.

What is important: High level of responsibility, taking control, influencing people and events

Factor 2 · Self-Expression

Each individual approaches work in a unique way. Differences in self-expression can be attributed to how individuals value creativity, independence, excitement and personal development. Values in these areas will influence both the types of tasks and work environments that clients will find enjoyable and satisfying.

Creativity

People with high scores on Creativity value working in an organization that promotes ingenuity and creativity. They value developing new ideas, exploring unconventional approaches and using their imagination. The types of work that will be satisfying will require creativity and innovation, and will allow the client to use their curiosity to identify and evaluate new ideas.

What is important: Solving problems, being creative and original

Independence

People with high scores on Independence value the self-reliance and the freedom to set their own goals and schedule. They value working without supervision and enjoy tasks that can be worked on independently without having to seek advice from co-workers. The type of work they enjoy will allow them to do things in their own way most of the time.

What is important: Making independent decisions and being free from the influence of others

Excitement

People with high scores on Excitement value trying new things. They value environments where there is uncertainty and where change is expected. The type of work they will enjoy will include the possibility of trying something new and where they can take risks.

What is important: Variety, risk and fast-paced work

Career Development

People with high scores on Career Development value developing both personally and professionally. They value learning new skills and expanding their expertise and will enjoy working in an organization where there is a culture of life-long learning, where there are constant challenges and where they can have an opportunity to develop new skills.

What is important: Personal and professional development and growth

Factor 3 · Extrinsic Rewards

This section looks at the things that motivate people. It examines how the client values financial rewards, job security and prestige. Recognizing what motivates them is an important step in identifying ideal occupations and making career exploration and analysis easier.

Financial Rewards

People with high scores on Financial Rewards value having enough income to ensure that they can afford life's luxuries. Excellent financial rewards are the key to their happiness and satisfaction. They value working in an organization that values financial incentives and where they are paid according to their performance.

What is important: High salary and financial security

Prestige

People with high scores on Prestige value recognition and acclaim. They value working in an organization where they are publicly recognized as a superior performer. They value working for an organization that in itself is well known or is recognized as being amongst the best.

What is important: Recognition, admiration and status

Security

People with high scores on Security value a consistent career path and a feeling of job security. They prefer the steady and the predictable to rapid and unpredictable change and will enjoy working where they feel that they can plan for the future.

What is important: Security, stability and predictability

CHAPTER · 2

Administration

This chapter covers the administration guidelines that describe the settings and populations where the CVS can be used effectively. The most important consideration when having people complete self-report measures of values is to create an atmosphere where they feel at ease and are free to accurately report their traits. This is usually best achieved when the administration is clear and consistent, and respondents' questions are handled appropriately.

The CVS is largely self-administered, and can be completed individually or in groups. The administrator should ensure that the assessment environment is relatively free from distractions, is quiet, and well lit. It is important to create an environment that makes the individuals taking the CVS as comfortable as possible. While there is no time limit to the administration, most people complete the 88 items in approximately 20 minutes. Those who take longer may be encouraged to work more rapidly and not study the items at length.

No rigorous controls are required to establish dependable, reliable results. The CVS has been used in a variety of conditions, including formal testing, individual administrations, and take home administrations. While a standard, supervised administration is ideal, the reliability and validity of individuals' results have not been negatively affected through less stringent administration conditions.

Procedures

When conducting a supervised assessment, it is useful to follow the steps below:

Ensure that you have the proper materials to complete the assessment.

STEP 1 STEP 2

Prepare the room by providing enough space for each respondent to feel comfortable and that they have some privacy while answering the items.

At the beginning of the assessment session give a brief introduction that includes the STEP **3** following:

- The CVS is a measure of career and personal values, not a test. Therefore, there are no right or wrong answers.
- There is no time limit for completing the CVS, however, most people complete the assessment in 20 minutes.

- When completing the assessment, it is best not to think too long about any item. Generally, the person's first response is the best response.
- Encourage respondents not to omit items. If an individual truly feels unable to make a choice, instruct them to select N for Neutral.
- Inform the people taking the CVS what will happen with their results.
 A statement that discusses the purposes of the assessment and how the results will be used is helpful in winning the respondents' attention and motivation.
- Provide respondents with the opportunity to ask questions.
- Emphasize the need for respondents to carefully complete the required identifying information, and tell them to carefully read through the instructions before responding to the items.
- If using a paper-pencil administration, stress the importance of matching the numbers on the answer sheet to the numbers on the item booklet.
- STEP **4** If respondents have questions during the administration about the meaning of a word or item, the administrator should answer them.
- STEP **5** After all the respondents have completed the assessment, review their answer sheet to ensure that they did not miss items and have completed all the required identifying information.

Appropriate Populations for Administration

Age

The CVS measures personal and career values. The test items revolve around typical career experiences, and for people to respond to them correctly they need to be able to relate to the situations presented in each item. For this reason, the CVS is appropriate for people in the working population. Younger students may not have enough work experience to respond to the items in a valid way. Therefore, it is recommended that the CVS be used with people who are older than fifteen years of age.

Required Reading Level

The reading level of the CVS questionnaire was assessed using two popular methods. The Flesch Reading Ease score rates text on a 100-point scale using the average sentence length and the average number of syllables per word. The score for the CVS questionnaire was 63.6.

The Flesch-Kincaid Grade level score rates text on a U.S. grade school level. For most standard documents, a score of approximately 7.0 to 8.0 indicates that the majority of the population can read it. The CVS questionnaire is rated at 6.5, meaning that a seventh grader can understand the items.

CHAPTER . 3

Using the Career Values Scales

As a practitioner it is part of your role to help the client discover and prioritize their values. This will be useful to clients in a number of spheres: career counselling, retirement counselling, leisure counselling, team building, organizational planning and other activities in which this type of self-knowledge is important.

Clients will often have unanswered questions such as: What am I seeking in a job? What values dominate my career? To help clients achieve long-term career satisfaction, you will want help them understand the centrality of values in their careers and life. In this process the Career Values Scale can be used to:

- Explain that values are part of your personal make-up and are relatively stable goals that a person tries to obtain through work and careers.
- Explain that values are critical in the understanding of satisfaction and dissatisfaction that one realizes from a particular job.
- Guide career development process by helping the client toward opportunities that will include as many important values as possible.
- Identify the values that the client wishes to see satisfied in their careers
- Prioritize the values that the client holds, that is, rank the importance of the values
- Resolve internal conflicts between competing sets of values.
- Discover sources of satisfaction and dissatisfaction.

Scoring and Reporting

The Career Values Scale is only available in a computer scored format. Each client will receive a report that is between 12 and 16 pages in length. The report is self-explanatory and should provide clients with a good overview of their career values. It includes a description of each of the ten values measured by the Career Values Scale, outlines potential sources of satisfaction and potential sources of dissatisfaction. It also outlines a number of exercises that will be useful for the client to undertake either alone, with counsellor guidance or in a workshop situation. These include:

- Working with their career values
- Deciding on their core career values
- Assessing their current situation

An example report can be found in Appendix A.

Illustrative Examples

JIM - RETIREMENT COUNSELLING

Jim is a successful entrepreneur in the process of retiring from work. He is asking a question that people who have spent their entire lives working in one career have:

"Now what?"

Assessing a 59 year-old usually reveals values that have been held for many years. Values that are in the Sten range 4-7 are in the "average" range. Values from 1-3 and 8-10 are usually an indication of very important preferences and suggest highly important principles. Most of Jim's scores were between 4-7, suggesting very few highly held values. A discussion and validation of each individual value helps him validate and contextualize the personal meaning of how the value plays itself out in his life. This type of exploration helped to give him a vocabulary to discuss some of the problems he was having. Jim decided that there were two core values: Creativity was 3, suggesting that he preferred practical well-grounded solutions. Security was also 3, suggesting he preferred novelty, variety and change. In Jim's case, he was looking to find some new ventures or activities that would be personally attractive. He was encouraged to seek out activities that would accommodate his "must haves."

Knowledge of the core values, seemingly in conflict, lead to the conclusion that to be satisfied he would set out to find a number of activities that required some practical down-to-earth solutions. As a respected entrepreneur in the community, he was able to find numerous volunteer projects that required organizing, supervising and assistance with set-up. These two polarized values have been central in his adaptation to the transition into retirement. He was able to draw upon his experience as a businessman to apply the practical, down-to-earth solutions to working in a fast changing environment that he found exciting and satisfying.



BETTY – CAREER TRANSITION

Betty had a successful career as a radio host, who, because of budget cuts was forced to seek a new career. The Career Values Scale was used to help her identify her values. There were three significant outliers. Service Orientation - 9; Career development – 1; and Influence – 3.

An analysis of her career history verifies what the scales suggested. She presents as an altruistic person, generous with her time, enjoying social relationships. Betty mentioned that after completing high school, she sought employment at a radio station. She soon was given her own late night show. From that start, she continued as an announcer being moved to larger audience time slots until she hosted the noon and early afternoon weekday programming. She spent a number of years abroad working in different settings. While appearing very informed, aware of current events, and presenting with social poise, she felt very insecure about her academic ability but not interested in proceeding with academic upgrading (confirmed by her Career Development score of 1). She needed assistance in marketing her experiences, work history, and social gifts as they stand.

Finally, there is her Influence Sten of 3. She confirmed no desire to rise in any organization through management advances. Others could pull the levers of power while she delivered her competencies directly to the audience. With these delimitations of the most significant work values in her presentation for employment, we could move on to exploring her work personality and occupational interests.

In addition to the Career Values Scale Betty completed the Career Interest Profiler - a measure of the six Holland codes. The occupations that came up through this process were Broadcast News Analyst, Interpreters and Translators and Foreign Language and Literature Teachers. The former she was trying to move away from, the latter, given her Career Development score were not particularly interesting. However, having spent a number of years abroad, she was interested in something related to this area. She discovered that all levels of governments hosted foreign trade missions for investors, scholars, and manufacturers. Having spent a number of years abroad and being acutely sensitive to the needs of others, she was able to recognize an opportunity that could use her skills and satisfy her values. She has successfully started a consulting company that enables her to serve people in the community who wish to do business in foreign countries, providing them with information about local knowledge, customs, faux-pas, appropriate gifting, etc. at the same time fulfilling her values.



JESSICA - ELEVATED PROFILE

Jessica is a first year university student who has not yet decided on a major.

The most apparent aspect of her profile is that almost all of her scores are high or very high. This type of profile may indicate a number of things about the client. In this particular case it pointed to a person who had very little self-knowledge. She indicates that almost everything is important. Counselling will help her become aware that very few careers offer such a wide variety of avenues where one can gain satisfaction. It will also help to make her aware of what is really important to her and what is not.

Occasionally, you might find an elevated profile that is valid. This will usually be a person who has had a long and successful career and who is tremendously motivated. It is highly unlikely that you would find such a profile in a self-aware college student.

JOSEPH - LEARNING THE LANGUAGE OF VALUES

Joseph is a Grade 12 student who was part of a group career and life management workshop.

As part of the workshop participants were asked to outline what they wanted from a career. Joe wrote: "Good pay"; "Being creative"; and "Being able to work by himself", As can be seen from his profile the Career Values Scale reinforces these wishes with Financial Rewards (Sten 7), Creativity (Sten 8) and Independence (Sten 8). As well as these the Career Values Profile also indicates that Joseph values Service Orientation (Sten 8) and Career Development (Sten 9). This illustrates one of the reasons to use psychometrically derived instruments over self-report. A person in a group workshop setting may not have the guidance to be able to think of all of the things that are important to them or have the language skills and vocabulary to adequately portray them.



Exercises using the Career Values Scale

The following exercises are designed for small group work (6 to 10 participants). But can be modified to accommodate larger groups or be used in individual counselling sessions.

EXERCISE	1	Understanding Career Values – Values Review
EXERCISE	2	Sources of Satisfaction and Dissatisfaction Exercise
EXERCISE	3	Self-Awareness Crystallization Exercise
EXERCISE	4	Your Current Career Situation Exercise

Understanding Career Values – Values Review Materials: Career Values Scale Reports for each participant. STEP 1 Overview of career values, needs and preference. Review theory. STEP 2 Handout personalized Career Values Scale Report (pages 1 -9) STEP 3 Explain the meaning of Sten scores. Explain that there are no good or bad results. The results reflect the way they see themselves. It is not better to have a higher or lower score on a value. Explain that participants should only share their results if they feel comfortable. STEP 4 For each value go through the following procedures • How did you score on Service Orientation? Please raise your hands if you received a Sten of 1 or 2, 3 or 4, etc. • Note the lowest Sten and highest Sten. Ask the participants with the lowest and highest scores to read the descriptive comments related to the value. • Have the participants discuss how this value is playing out in their lives. Where is there satisfaction or disappointment because of this value in their life?

Sources of Satisfaction and Dissatisfaction Materials: Career Values Scale Reports for each participant.

STEP	1
STEP	2

Beginning on page 10 of the report are Sources of Satisfaction for the three Factors of Working with Others, Self Expression, and Extrinsic Rewards.

Invite each person to write a small story about at least one of the joys identified in each of the three factors. These are affirmations of the significance of these essential pleasures to be regularly experienced in their working life. From a career counselling point of view, these are examples of the "must haves" during the workweek.

STEP **3** On page 11 are the Sources of Dissatisfaction.

Again choose at least one value from each of the three factors to write a brief vignette indicating how upsetting the violation of these values actually is in their working life. In the ideal world, the frequency of occurrence will be low. In reality, they are often quite high.

STEP **4** Talk about stress in relation to dissatisfaction in careers.

Talk about the possibility of finding other ways of satisfying areas that they find dissatisfying in their careers. Assist participants in finding ways to deal with any frustrations. A coaching challenge may be to modify the work environment of the client or to help the client modify their values.

STEP 5

In a group meeting alternate between delights and dismays.

When a participant shares a story of satisfaction, invite group reaction as they process the meaning for the participant and for themselves. Invite the same participant to share a negative story from the same factor revealing a source of dissatisfaction. Since there are usually participants with opposing scores on the same value, much learning occurs.

STEP 6

Ask to rate their responses as to frequency (1=hourly, 2=daily, 3=weekly, 4=monthly) and amount of distress experienced because of unsatisfactory situations (light, moderate, severe). Look for information to shape your intervention strategies if the client is staying with their employer. If moving on, then identify what to seek next in a new work environment.

Self-Awareness Crystallization Exercise

This is an ideal follow-on from the last exercise. Once everyone has told their stories, you have an excellent perception of the primary drivers in the work life of each participant.

Materials: Career Values Scale Reports for each participant. (Page 12)

STEP 1

Have the clients complete the exercise on page 12 of the Career Values Scale report.

The most important career values can be written on page 12 and shared with the group. It may be that values implicated in some of the tales heard are not repeated in the Core Values section. That is OK, but the client is likely to be asked for an explanation by the group.

STEP 2

After clarification, reality checks, and personal validation you can follow this with Your Current Career Situation exercise.

At this point, these statements have become personally very telling about the quality of their current career situation. What is satisfactory and what is not. This is very diagnostic for the coach/counsellor.

	Your Current Career Situation Exercise
	This exercise is extremely useful as an organizational development exercise or in career counselling with people who are employed.
	Materials: Career Values Scale Reports for each participant.
1	
STEP 1	Explain satisfaction and dissatisfaction in careers and how these are related to their values.
STEP 2	Handout personalized Career Values Scale Report (pages 13 – 14)
STEP 3	Explain that the two pages are a personalized questionnaire related directly to their results on the Career Values Scale.
STEP 4	Outline the task – read top of page 13.
STEP 5	Have the participants complete the questionnaire.
STEP 6	Work through the questions at the bottom of page 14.
	Many people have not often worked from first principles in the career development or adjustment process. The Career Values Scale helps to identify, clarify, and articulate what the issues are and why they are significant for participants.

CHAPTER · 4

Development & Norming of the Career Values Scale

The CVS was designed to provide an efficient and useful measure of values for personal development applications. To meet this goal, the development of the items and the creation of test norms followed a specific path. This chapter outlines how the values model, test items, and norms were developed.

The starting point in the development process was to set design criteria that would guide the progress of the CVS's creation. In order to meet the overall goal to develop a career values measure, 5 key criteria were established.

- 1 The CVS should only measure values that are directly related to careers.
- **2** The CVS should be useful for applications such as career development, team building, and personal development.
- **3** The application and interpretation of the CVS should not require specialist training in psychology or personality.
- 4 The questions should be easy to read and comprehend.
- 5 Respondents should be able to complete the assessment quickly.

The design criteria guided the development of the CVS in several ways. The values the CVS measures have been found to relate to job satisfaction in a direct way. This ensures that users are provided information that directly helps people understand the way their values relate to their career development and satisfaction.

Development Process

The CVS is built upon earlier work on values, specifically, on the research of Donald Super and the International Work Importance Study (Super and Sverko, 1995), After conducting an extensive literature review and examination of current values measures, 10 scales were identified that were considered relevant to clients in the career development process. These 10 scales provided the foundation of the CVS. Having identified the 10 scales, the following steps were taken to construct the CVS.

Scale development and item writing

To construct a measure of the 10 scales, a thorough review was conducted of research studies and current and past values measures to develop objective, operational definitions for each value. After having created definitions for each career value, items that provided evidence for the traits were developed. The items were written according to the following rules:

- Items should relate directly to careers. The situation presented in the item needed to examine preferences and motivations for different types of work and work environments.
- **2** Items should target a single construct. It was essential for the situation outlined in each item to be related to only one of the 10 career values.
- 3 Items should be short, direct, and easy to understand.
- **4** A five-point Likert scale was developed to allow individuals to register how important they felt each statement to be. The respondents could indicate their preferences by choosing one of the five options for each item.

For example:

Work for a well-known company

NOT AT ALL IMPORTANT UNIMPORTANT NEUTRAL IMPORTANT VERY IMPORTANT

Through this process, a first trial of the questionnaire consisting of 120 items (12 items per scale) was conducted. Examination of the internal consistency and item reliability resulted in the dropping of 32 items, bringing the total to 88. The items retained contributed positively to coefficient alpha reliability as well as ensured that the number of items on the questionnaire remained manageable for users. The number of items per scale varies from 8 to 10 items with internal consistency reliabilities that range from .75 to .89 (for complete internal consistency results see page 24).

Norming of the CVS

Norming is a key step in test development. The norms set the baseline which all test results are measured against, which allows the comparison of different individual's scores. Norms identify the below average, average, and above average performance on the test, and help the test user appropriately interpret a person's results and make decisions. The more people that are included in the norm sample helps ensure that the test norms represent the actual distribution of traits of the people in the population. This in turn allows the test results to be more accurate and informative when comparing different individuals.

The CVS was standardized on a large sample of over 28000 people. From this group a matched sample of 7000 males and 7000 females were selected to create North American norms. The large number of participants involved in the norm sample ensures that the CVS results effectively measure and identify differences in values. Tables 4.1 to 4.5 illustrate the basic demographic background of the participants in the norm sample.

Ethnic Group	Number	Total %	Female %	Male %
African American/Canadian	830	5.9	6.3	5.5
Native American/Canadian	796	5.7	5.3	6.1
Asian American/Canadian	573	4.1	4.0	4.2
Caucasian	10531	75.2	75.4	75.1
Latino/Latina	540	3.9	3.8	3.9
Other	730	5.2	5.2	5.2
Total	14000	100.0	100.0	100.0

Table 4.1 Ethnic Origin of Norming Sample (n=14000)

Table 4.2	Age Distribution	of the Norming	Sample (n=14000)
-----------	------------------	----------------	------------------

Age Group	Number	Total %	Female %	Male %
15-20	4658	33.3	30.0	36.5
21-25	1895	13.5	16.6	10.5
26-30	1856	13.3	14.3	12.2
31-40	2790	19.9	19.8	20.1
41-50	1977	14.1	14.5	13.7
51-60	748	5.3	4.4	6.3
60+	76	.5	.4	.7
Total	14000	100.0	100.0	100.0

· · · · · · · · · · · · · · · · · · ·		J - P - K	,	
Employment Status	Number	Total %	Female %	Male %
Junior High	244	1.7	1.5	2.0
High School	3371	24.1	20.2	28.0
College	1952	13.9	16.6	11.3
Employed	5721	40.9	43.8	37.9
Self-Employed	537	3.8	2.9	4.8
Homemaker	204	1.5	2.8	.2
Job Seeker	1971	14.1	12.2	15.9
Total	14000	100.0	100.0	100.0

Table 4.3 Employment Status of Norming Sample (n=14000)

Table 4.4 Occupational Groups of Norming Sample

Occupational Group	Number	Percentage
Architecture	879	6.3%
Art/Design	1129	8.1%
Business - Management	2607	18.6%
Business - Sales/Clerical	948	6.8%
Education	1248	8.9%
Journalism	295	2.1%
Law	654	4.7%
Science	596	4.3%
Medicine Health	1048	7.5%
Social Science	687	4.9%
Human Services	973	7.0%
Agriculture	100	0.7%
Transportation	173	1.2%
Machine Trades	143	1.0%
Construction	195	1.4%
Religion	108	0.8%
Entertainment	488	3.5%
Other	1729	12.4%

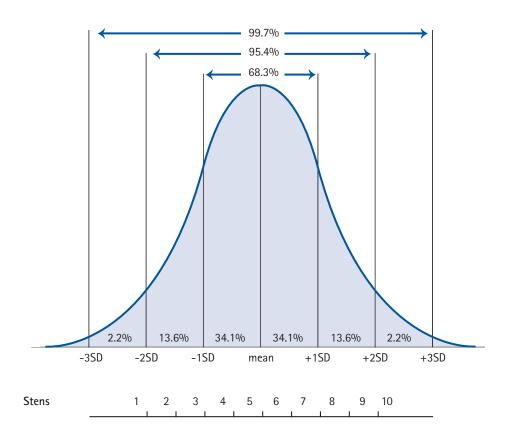
Table 4.5 Highest educational level of the Norming Sample

Occupational Group	Number	Percentage
High School	1233	8.8%
Trade/Technical School	305	2.2%
Some College	2451	17.5%
Associate Degree	532	3.8%
Community College	364	2.6%
Bachelor's Degree	3685	26.3%
Master's Degree	1600	11.4%
Professional Degree	189	1.4%
Doctorate	184	1.3%

Sten Scores

A person's results on the CVS are reported in a standard score format known as Sten Scores. Standard scores are converted raw scores that help with the interpretation of test results by allowing the comparison of an individual's results with the norm group. Standard scores also help compare a person's primary scale scores against each other. This allows us, for example, to determine if the person scores higher on Creativity than Security. There are many different types of standard scores. Sten scores are one of the most popular types of standard scores when reporting psychological assessment results. Sten scores range from 1 to 10, have a Mean of 5.5, and a Standard Deviation of 2. This means, that an individual with a Sten score of 5.5 falls exactly on the average score of the norm population. As a result, 50 percent of the norm sample would score above and below the individual. Figure 4.1 illustrates how Sten scores are distributed.





Means and Standard Deviations

Table 4.6 provides a detailed description of the CVS scale scores for the North American sample. The means and standard deviations shown provide the norms which individual's who complete the CVS are compared against. The mean sten score for each scale represents the "average" score of people in North America. The standard deviation indicates the spread of scores found among people in the normative sample. Approximately 68% of the population will obtain scores within one standard deviation above and below the mean, while 95% of the population will score within two standard deviations of the mean.

	Female n	=7000	Male n=70	00
	Mean	SD	Mean	SD
Service	5.71	1.86	5.31	1.88
Teamwork	5.69	1.95	5.30	1.97
Influence	5.31	1.96	5.67	1.97
Creativity	5.23	1.97	5.75	1.94
Independence	5.41	1.97	5.60	1.95
Excitement	5.32	1.82	5.75	1.83
Development	5.71	1.97	5.39	1.99
Finance	5.28	1.97	5.76	1.95
Prestige	5.46	1.99	5.64	1.98
Security	5.52	1.91	5.47	2.01

Table 4.6 Mean Sten Scores Male and Female Norms Group

CHAPTER · 5

Reliability and Validity

When developing assessments for psychological traits such as values, it is necessary to conduct research to determine the reliability and validity of the tool. Reliability directly examines the consistency and stability of the assessment, while validity is concerned with the types of inferences (e.g. predicting work behavior, choosing satisfying careers) that can be made from test results. For an assessment to be useful it needs to be both reliable and valid. The following chapter examines evidence for both the reliability and validity of the CVS.

Reliability

Reliability is concerned with the consistency of test scores, and how free test results are from external, confounding influences. The higher the reliability of a test, the more likely it is consistently measuring differences between people. More reliable tests provide results that remain unaffected by irrelevant variations, or what is commonly called random errors. We assess the reliability of the CVS by examining how consistently the test measures values. For example, a test that yields similar scores for a person who repeats the test is said to be reliable. However, if a person takes the same test twice and receives very different scores, the test is unreliable. In general, reliability refers to how dependable a test is. Reliability is measured using correlation coefficients. A reliability coefficient is denoted by the letter "r", and is expressed as a number ranging between 0 and 1.00 with r=0 indicating no reliability, and r=1.00 indicating perfect reliability. It is important to recognize that tests are never 100% accurate, so you will not find a test with a correlation coefficient of r=1.00. In general you will see the reliability of a test expressed as a decimal, for example, r=.80 or r=.93. The larger the reliability coefficient the more consistent the test scores. There are a number of reasons and/or conditions that lead to unreliable test results. Some of the possible reasons include the following.

- **1 Candidate related.** Test performance can be influenced by a person's psychological or physical state at the time of testing. For example, differing levels of anxiety, fatigue, or motivation may affect the individual's test results.
- **2 Test-related.** Item design, instructions, examples and the design of the response procedure can influence an individual's test results. For example, confusing items or complicated instructions, which make understanding the test difficult, can negatively affect a person's results.
- **3 Procedural.** Differences in the testing environment, such as room temperature, lighting, noise, or even the test administrator and scoring procedures can influence an individual's test performance.

These three factors are sources of chance or random measurement error in the assessment process. If there were no random errors of measurement, the individual would get the same test score, their "true" score, each time. The degree to which test scores are unaffected by measurement errors is an indication of the reliability of the test. One of the main approaches used to assess reliability is through measures of internal consistency. A sophisticated form of internal consistency reliability is Cronbach's alpha. It effectively splits the test items in every possible way and computes the average of all combinations. Consistency should be achieved such that all the items are measuring the same thing to the same degree, and, therefore, the items for each test scale should have a high degree of correlation. Most professionals agree that test scales with correlation coefficients above .70 are useful for most applications. The internal consistency reliability coefficients for each of the CVS scales are listed in Table 5.1. As shown in the table, the reliability coefficients range from .75 to .89. This meets or exceeds the .70 level for every scale, indicating the consistency of CVS test scores is high. The strength of the reliability coefficients indicates that the CVS is relatively free from external errors that could negatively impact the measurement of values. This allows the CVS to provide a close estimate of each individual's true score on the 10 scales

	Female	Male	Total
Service	.84	.84	.84
Teamwork	.89	.89	.89
Influence	.85	.85	.85
Creativity	.87	.86	.87
Independence	.81	.79	.80
Excitement	.76	.75	.75
Development	.89	.88	.89
Finance	.87	.86	.86
Prestige	.84	.83	.84
Security	.77	.78	.77

Table 5.1 Internal Consistency of CVS Male and Female Norm Groups

Validity

When deciding to use a test, validity is the most important consideration. While reliability focuses on how consistently a test measures, validity examines the extent to which a test measures what it claims to measure. Validity describes the degree to which you can make specific conclusions or predictions about people based on their test scores. In short, validity indicates the usefulness of a test. A test's validity is established in reference to a specific purpose; the test may not be valid for different purposes. This means that a test is never valid or invalid. Instead, how the test is used can be classified as valid or invalid. For example, a ruler is a valid measure of a person's height, but an invalid measure of that individual's technical proficiency or leadership style.

There are various types of evidence that can indicate the valid uses of a test. Each piece of validity evidence can help determine how useful the test will be for specific situations, and with specific populations. While it is common to talk about different types of validity (e.g. construct validity, content validity, criterion validity), it is better to consider them as sources of evidence that assess the overall validity of a test, rather than separate measures. A valid test is supported by various types of evidence. Therefore validity evidence should be able to tell you if the test measures what you need to measure, indicate which groups the test is useful for, and inform you of the decisions you can make based on individual's results.

Concurrent Validity

The CVS was designed for use with a wide variety of individuals, and for a wide variety of uses. If the CVS can be used validly with different people, research should find similarities among people, and differences between people where expected. For example, we expect that people who work in artistic occupations would score higher on the Creativity scale than people working as clerical staff. We would expect that business managers would score higher on scales in the Extrinsic Rewards domain than other occupational groups. We would also expect people working in the human services to score higher on the scales in the Working with Others domain. The differences between occupational groups' average scores can provide evidence that the CVS is picking up individual characteristics that are related to work.

Table 5.2 lists the average sten scores for 16 different occupational groups. The evidence suggests that the CVS is able to discriminate between occupational groups. One-way analysis of variance for each scale across all groups showed significant difference for all values. (See Table 5.3). The data confirm that the CVS can discriminate significantly between occupations that people are working in or preparing for. Table 5.4 further illustrates the validity of the CVS in relation to occupational groupings.

i i	Table 5.2 Mean Sten Scores for the CVS by Occupational Group	lean Ster	Scores f	or the C	'VS by Oc	cupation	al Grouβ	0										
515 495 564 5.88 5.06 4.89 5.56 4.84 6.21 5.96 6.47 5.42 5.29 5.17 5.12 1 5.56 5.49 5.88 5.32 5.30 5.32 5.33 5.14 5.14 5.14 1 5.60 5.02 6.34 5.25 5.48 5.07 5.96 5.43 5.33 5.33 5.33 5.35 5.14 5.14 5.14 5.14 1 6.13 6.30 5.43 5.07 5.96 5.43 5.03 5.35 5.31 5.73 5.33 5.33 5.33 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.35 5.34 5.36 5.34 5.36 5.34 5.36 5.34 5.36 5.34 5.36 5.34 5.36 5.34 5.36 5.34 5.36 5.34 <		-	2	m	4	5	9	7	80	6	10	11	12	13	14	15	16	17
(k) 5.25 5.49 5.83 5.32 5.80 5.01 6.04 5.81 5.12 5.33 5.14 <th< td=""><td>Service</td><td>5.15</td><td>4.95</td><td>5.64</td><td>5.58</td><td>6.06</td><td>4.89</td><td>5.56</td><td>4.84</td><td>6.21</td><td>5.96</td><td>6.47</td><td>5.42</td><td>5.29</td><td>5.17</td><td>5.12</td><td>6.31</td><td>5.04</td></th<>	Service	5.15	4.95	5.64	5.58	6.06	4.89	5.56	4.84	6.21	5.96	6.47	5.42	5.29	5.17	5.12	6.31	5.04
© 560 5.02 6.34 5.73 5.48 5.06 5.43 5.38 5.33 5.58 5.72 w 6.13 6.30 5.70 5.04 5.82 5.13 5.34 5.58 5.73 5.88 5.73 dence 5.45 6.00 5.46 5.21 5.31 5.71 5.32 5.83 5.73 5.83 5.73 5.83 5.73 5.84 5.74 5.00 5.4 5.64 5.83 5.04 5.06 5.4 5.06 5.4 5.06 5.74 5.01 5.02 5.04 5.06 5.04 5.06 5.04 5.06 5.04 5.06 5.04 5.06	Teamwork	5.25	5.49	5.68	5.43	5.83	5.32	5.80	5.01	6.04	5.81	6.15	5.02	5.33	5.14	5.14	5.91	5.79
y 6.13 6.30 5.70 5.04 5.14 5.18 5.82 5.03 5.23 5.10 5.34 5.58 5.10 5.34 5.58 5.74 5.74 dence 5.45 5.00 5.41 5.12 5.13 5.47 5.32 5.13 5.47 5.32 5.49 5.40 5.49 5.49 5.49 5.49 5.40 5.49 5.49 5.49 5.40 5.49 5.49 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40 5.40	Influence	5.60	5.02	6.34	5.25	5.48	5.07	5.96	4.95	5.48	5.06	5.43	5.38	5.73	5.58	5.72	5.48	5.28
dence 5.45 6.00 5.46 5.21 5.17 5.32 5.13 5.47 5.37 5.82 4.96 5.47 5.74 5.09 5.74 5.05 5.74 5.04 5.05 5.04 5.04 5.05 5.04 5.05 5.04 5.04 5.05 5.04 5.09 5.04 5.09 5.09 5.04 <t< td=""><td>Creativity</td><td>6.13</td><td>6.30</td><td>5.70</td><td>5.09</td><td>5.35</td><td>5.74</td><td>5.18</td><td>5.82</td><td>5.08</td><td>5.31</td><td>5.28</td><td>5.10</td><td>5.34</td><td>5.58</td><td>5.27</td><td>5.47</td><td>5.70</td></t<>	Creativity	6.13	6.30	5.70	5.09	5.35	5.74	5.18	5.82	5.08	5.31	5.28	5.10	5.34	5.58	5.27	5.47	5.70
ant 5.61 5.64 5.33 5.09 5.64 6.00 5.40 5.51 5.03 5.26 5.78 5.64 5.89 6.08 ment 5.67 5.41 5.79 5.83 5.63 5.63 5.63 5.03 5.04 5.90 5.00 5.77 5.99 5.64 4.67 5.29 5.90 5.48 4.68 5.19 5.01 5.01 5.00 5.77 5.59 5.69 5.20 5.48 5.48 4.66 5.19 5.01 5.00 5.04 5.05 5.01 5.00 5.10 5.10 5.01 5.01 5.00 5.62 5.19 5.10 5.10 5.10 5.10 5.10 5.01 6.00 5.11 5.10 5.10 5.10 5.10 5.10 5.10 5.01 5.00 5.10 5.10 5.01 5.00 5.10 5.10 5.01 5.00 5.10 5.10 5.10 5.10	Independence	5.45	6.00	5.46	5.21	5.31	5.77	5.32	5.22	5.13	5.47	5.37	5.82	4.96	5.47	5.74	5.49	5.68
ment 5.67 5.41 5.79 5.48 5.63 5.54 5.89 5.79 5.04 5.06 5.34 5.00 5.77 5.57 5.99 5.64 4.67 5.29 5.90 5.48 4.68 5.19 5.01 5.	Excitement	5.61	5.64	5.79	5.33	5.09	5.64	6.00	5.40	5.51	5.03	5.26	5.78	5.64	5.89	6.08	5.22	5.92
5.775.905.644.675.295.905.205.484.684.665.195.755.916.005.625.495.755.245.195.805.165.175.465.925.665.665.375.215.105.165.195.175.465.925.665.665.375.225.245.965.055.165.625.826.056.025.661Architecture3 = Business - Management7 = Law10 = Social Science13 = Transportation2 = Art/Design6 = Education9 = Medicine Health12 = Agriculture15 = Construction	Development	5.67	5.41	5.79	5.48	5.58	5.63	5.54	5.89	5.59	5.74	5.65	5.04	5.06	5.34	5.00	5.09	5.29
5.62 5.36 5.37 6.17 5.19 5.80 5.16 5.17 5.46 5.92 5.66 5.37 5.22 5.11 5.69 5.32 4.92 5.72 5.24 5.96 5.05 5.65 5.02 5.66 5.37 5.10 5.10 5.66 5.05 5.16 5.62 5.60 6.02 6.03 6.02 6.02 6.02 6.02 <	Finance	5.77	5.57	5.99	5.64	4.67	5.29	5.90	5.20	5.48	4.68	4.86	5.19	5.75	5.91	6.00	3.99	5.70
5.37 5.22 5.11 5.69 5.32 4.92 5.72 5.24 5.96 5.05 5.62 5.05 6.05 6.02 6.02 1 = Architecture 3 = Business - Management 7 = Law 10 = Social Science 13 = Transportation 2 = Art/Design 4 = Business - Sales/Clerical 8 = Science 11 = Human Services 14 = Machine Trades 3 = Business 6 = Education 9 = Medicine Health 12 = Arture 15 = Construction	Prestige	5.62	5.49	5.75	5.26	5.32	5.37	6.17	5.19	5.80	5.16	5.19	5.17	5.46	5.92	5.66	4.70	5.69
e3 = Business - Management7 = Law10 = Social Science13 = Transportation4 = Business - Sales/Clerical8 = Science11 = Human Services14 = Machine Trades6 = Education9 = Medicine Health12 = Agriculture15 = Construction	Security	5.37	5.22	5.11	5.69	5.32	4.92	5.72	5.24	5.96	5.05	5.16	5.62	5.82	6.05	6.02	4.87	5.14
		1 = Arc 2 = Art 3 = Bus	:hitecture /Design iiness		3 = Busi 4 = Busi 6 = Educ	ness – Man ness – Sales cation	agement //Clerical	7 = Law 8 = Scien 9 = Medi	ice icine Health	F	10 = Soci 11 = Hur 12 = Agr	ial Science nan Service iculture	s	13 = Trai 14 = Ma 15 = Cor	nsportation chine Trade nstruction	S	16 = Reli 17 = Ente	gion ertainment

g
Occupational
þ
CVS by
the
for
Scores for
Sten
Mean
le 5.2
<u> </u>

	Su	ims of Squares	df Me	ean Squares	F	Sig.
Service	Between Groups	5833.738	16	364.609	116.406	.000
	Within Groups	77074.336	24607	3.132		
	Total	82908.074	24623			
Influence	Between Groups	5603.158	16	350.197	96.670	.000
	Within Groups	89141.051	24607	3.623		
	Total	94744.209	24623			
Independence	Between Groups	1395.605	16	87.225	23.360	.000
	Within Groups	91880.342	24607	3.734		
	Total	93275.947	24623			
Creativity	Between Groups	3504.262	16	219.016	59.089	.000
	Within Groups	91206.895	24607	3.707		
	Total	94711.156	24623			
Finance	Between Groups	5835.573	16	364.723	101.388	.000
	Within Groups	88519.120	24607	3.597		
	Total	94354.693	24623			
Development	Between Groups	826.847	16	51.678	13.977	.000
	Within Groups	90979.317	24607	3.697		
	Total	91806.165	24623			
Prestige	Between Groups	2019.733	16	126.233	32.736	.000
	Within Groups	94887.303	24607	3.856		
	Total	96907.036	24623			
Teamwork	Between Groups	2207.532	16	137.971	38.952	.000
	Within Groups	87160.049	24607	3.542		
	Total	89367.580	24623			
Security	Between Groups	2238.290	16	139.893	36.664	.000
	Within Groups	93888.722	24607	3.816		
	Total	96127.012	24623			
Risk	Between Groups	2065.263	16	129.079	40.298	.000
	Within Groups	78818.421	24607	3.203		
	Total	80883.684	24623			

Table 5.3 ANOVAS for the 10 CVS Values Scales by Occupational Groups

Architecture	Art/Design	Management	Sales/Clerical	Education	Journalism	Law	Science	Medicine Health	Social
Creativity	Creativity	Influence	Security	Service	Independence	Prestige	Development	Service	Service
Finance	Independence	Finance	Finance	Teamwork	Creativity	Risk	Creativity	Teamwork	Teamwork
Development	Risk	Risk	Service	Development	Risk	Influence	Risk	Security	Development
Prestige	Finance	Development	Development	Influence	Development	Finance	Security	Prestige	Independence
Risk	Teamwork	Prestige	Teamwork	Creativity	Prestige	Teamwork	Independence	Development	Creativity
Influence	Prestige	Creativity	Risk	Security	Teamwork	Security	Finance	Risk	Prestige
Independence	Development	Teamwork	Prestige	Prestige	Finance	Service	Prestige	Influence	Influence
Security	Security	Service	Influence	Independence	Influence	Development	Teamwork	Finance	Security
Teamwork	Influence	Independence	Independence	Risk	Security	Independence	Influence	Independence	Risk
Service	Service	Security	Creativity	Finance	Service	Creativity	Service	Creativity	Finance
N = 1566	N = 2254	N = 5559	N = 2101	N = 2404	N = 656	N = 1223	N = 1275	N = 2106	N = 1465

Human Services Agriculture	Agriculture	Transportation	Machine Trades	Construction	Religion	Entertainmer
Service	Independence	Security	Security	Risk	Service	Risk
Teamwork	Risk	Finance	Prestige	Security	Teamwork	Teamwork
Development	Security	Influence	Finance	Finance	Independence	Creativity
Influence	Service	Risk	Risk	Independence	Influence	Finance
Independence	Influence	Prestige	Influence	Influence	Creativity	Prestige
Creativity	Finance	Creativity	Creativity	Prestige	Risk	Independence
Risk	Prestige	Teamwork	Independence	Creativity	Development	Development
Prestige	Creativity	Service	Development	Teamwork	Security	Influence
Security	Development	Development	Service	Service	Prestige	Security
Finance	Teamwork	Independence	Teamwork	Development	Finance	Service
N = 2004	N = 187	N = 304	N = 180	N = 248	N = 180	N = 912

änt

Table 5.4 Ranking of Average Sten Scores by Occupational Group by Highest to Lowest

Construct Validity Evidence

Another primary source of validity evidence is known as construct validity. Construct validity evidence shows whether the test is appropriate to measure a particular psychological construct.

The most popular method of examining construct evidence is to compare two different tests that are supposed to measure similar or dissimilar constructs.

Values and Occupational Interests

The Career Interest Profiler (Bakker and Macnab, 2004) is a measure of occupational interests. It measures the 6 Holland factors of Realistic, Investigative, Artistic, Social, Enterprising and Conventional. Interests form another measure of preferences for occupations that are different from values. They focus on the activities of work or on general likes and dislikes about work. In contrast the CVS looks at what is important to the client. If this is true then there should be few large correlations between the Career Interest Profiler Scales and those of the Career Values Scale. Table 5.5 show that only ten of the possible 60 inter-correlations are above).20 and could be considered substantive.

						· · ·
	Artistic	Conventional	Enterprising	Investigative	Realistic	Social
Service	.104	.194	.194	.011	.056	.434
Team	.129	.080	.215	053	.001	.357
Influence	025	.025	.055	.003	.007	072
Creativity	.319	063	.240	.219	.168	.067
Independence	.163	041	.112	.001	015	048
Excitement	.155	018	.252	.135	.171	.094
Development	.102	.028	.062	.199	.025	.090
Financial	.056	.235	.301	033	.033	057
Prestige	.049	.160	.276	.006	.018	.037
Security	121	.242	.103	134	015	.014

Table 5.5 Correlations – Career Interest Profiler Scales and CVS Scales (n=737)

Values and Personality

Work Personality Index and the CVS

The Work Personality Index (WPI) (Macnab and Bakker, 2001) is a measure of personality traits that directly relate to work performance. The WPI assesses 17 primary scales. These 17 scales are categorized into five factors that provide a global view of personality. The WPI and CVS were administered to 1624 people. The correlations between the two tests are shown in Tables 5.6 and 5.7. Although they measure two different domains, there are some substantive correlations between the two scales. These are in a predictable direction.

	Thinking Style	Work Style	Dealing with Pressure	Interpersonal Style	Personal Drive
Service	.146	.314	.228	.462	.303
Teamwork	.128	.163	.176	.573	.268
Influence	.297	.268	.271	.206	.546
Creativity	.600	.042	.186	.018	.415
Independen	.224	089	027	153	.121
Excitement	.254	.032	.221	.107	.435
Developmer	nt .421	.262	.249	.126	.451
Finance	.141	.103	.056	.008	.167
Prestige	.100	.127	.023	.143	.173
Security	214	.209	132	.094	230

Table 5.6 - Correlations – Work Personality Index Global Scales and CVS Scales (n=1624)

Table 5.7 - Correlations - Work Personality Index Factors and CVS Scales (n=1624)

	Service	Team	Influence	Creativity	Independence	Excitement	Development	Financial	Prestige	Security
Ambition	.243	.143	.351	.251	.052	.217	.441	.133	.169	069
Analytical Thinking	033	134	.156	.266	.069	.055	.298	.009	.028	135
Attention to Detail	.163	.051	.230	049	094	.013	.180	.088	.086	.169
Concern for Others	.510	.387	.098	.065	003	.022	.158	107	020	008
Democratic	.103	.175	133	213	305	175	036	133	017	.190
Dependability	.200	.096	.207	041	100	.024	.255	.113	.047	.063
Energy	.194	.202	.339	.212	013	.345	.280	.140	.149	100
Flexibility	.171	.249	.244	.426	.212	.482	.386	.017	.020	392
Initiative	.264	.213	.406	.379	.094	.348	.454	.127	.164	165
Innovation	.082	.079	.184	.616	.234	.247	.255	.095	.102	215
Leadership	.148	.218	.567	.243	.144	.334	.157	.271	.286	.036
Outgoing	.351	.578	.213	.017	177	.148	.074	019	.097	010
Persistence	.229	.171	.329	.118	028	.155	.288	.174	.116	.071
Rule-Following	.165	.015	001	310	391	204	.015	086	.001	.222
Self-Control	.164	.137	.063	.030	109	.103	.081	027	076	174
Stress Tolerance	.114	.143	.192	.100	065	.205	.083	.042	023	134
Teamwork	.434	.601	.238	.105	137	.153	.132	037	.081	016

Inter-correlation between CVS Scales

The correlations in Table 5.8 show the relationships between the 10 Career Values Scales. Reviewing the table shows there are significant relationships among some of the scales. This suggests that scores on some of the scales could be combined to form a broader level of analysis. In general, the scales that correlate highly together can be grouped into three global areas. For more information on how these scales relate to each other, read the following section on Factor Analysis.

	Teamwork	Influence	Creativity	Independence	Excitement	Development	Finance	Prestige	Security
Service	.59	.45	.23	.11	.23	.36	.09	.23	.23
Teamwork		.44	.26	.16	.41	.33	.23	.38	.23
Influence			.44	.31	.46	.35	.44	.54	.20
Creativity				.49	.48	.51	.31	.29	03
Independence					.35	.29	.38	.28	.16
Risk						.36	.35	.36	.01
Development							.22	.27	.078
Finance								.60	.43
Prestige									.39

Table 5.8 - Inter-Correlations 10 CVS Scales for the Norm Group (n=14000)

Factor Analysis

Factor Analysis is a statistical process used to examine the CVS's subscale structure and assess the extent to which the CVS Model is justified. In simple terms, factor analysis helps determine how the 10 CVS scales hang together. The factor loadings are presented in Table 5.9. This data justifies the use of an overall three-factor model to organize the 10 CVS scales.

	Self-Expression	Extrinsic	Working with Others
Service			.888
Influence			.485
Teamwork			.800
Independence	.697		
Creativity	.852		
Risk	.685		
Development	.578		
Finance		.803	
Prestige		.735	
Security		.782	

Table 5.9 - CVS Rotated Component Matrix (n=14000)

Feedback Study

8554 people who completed the Career Values Scale rated the accuracy of their test results and feedback. They were asked to rate how accurately the feedback they were given described them. 95% of the participants rated the CVSI feedback as quite accurate to very accurate. Only 4.8% of the sample considered the feedback to be inaccurate. Table 5.6 outlines the results of the feedback study. Since people are often one of the best sources to rate their own values, this high level of endorsement from test takers provides strong evidence that the CVS feedback is accurate and valid.

	Frequency	Percent
Very Accurate	2144	25.1
Accurate	3433	40.0
Quite Accurate	2566	30.0
Not Very Accurate	356	4.2
Totally Inaccurate	55	0.6
Total	8556	100.0

Table 5.10 Feedback Ratings for the CVS

BIBLIOGRAPHY

Research on Values

Allport, G. W. & Vernon, P.E. (1931). The study of values. Boston: Houghton Mifflin.

Andolsek, D.M. & Stebe, J. (2004). Multinational Perspectives on Work Values and Commitment. (2004). *International Journal of Cross Cultural Management*, 4, 181-209.

Bakker, S, & Macnab, D. (2004). *Career Interest Profiler Manual*. Edmonton, Alberta: Psychometrics Canada Ltd.

Brown, D. (2002). The Role of Work and Cultural Values in Occupational Choice, Satisfaction, and Success: A Theoretical Statement. *Journal of Counselling & Development*, 80, 48-56.

Cherrington, D.J., Conde, S.J., & England, J.L. (1979). Age and work values. Academy of Management Journal, 22, 617–623.

Crosby, L.A., Bitner, M.J., & Gill, J.D. (1990). Organizational structure of values. Special Issue: Social values. *Journal of Business Research*, 20, 123–134.

Dawis, R.V. (1991). Vocational interests, values and preferences. In M.D. Dunnette & L.M. Hough (Eds.), *Handbook of industrial & organizational psychology, Vol. 2* (pp.833–872). Palo Alto, CA: Consulting Psychologists Press.

Dawis, R. V., & Lofquist, L. H. (1984). *A psychological theory of work adjustment*. Minneapolis, MN: University of Minnesota Press.

Elizur, D. (1984). Facets of work values: A structural analysis of work outcomes. *Journal of Applied Psychology*, 69(3), 379–389.

Elizur, D. (1999). Facets of Personal Values: A Structural Analysis of Life and Work Values. *Applied Psychology: An International Review,* 48, 73-88.

Elizur, D., Borg, I., Hunt, R., & Beck, I.M. (1991). The structure of work values: A cross cultural comparison. *Journal of Organizational Behavior*, 12, 21–38.

Fitzsimmon, G.W., Macnab, D. & Casserly, C. (1986) *Technical manual for the Life Roles Inventory: Values and Salience*. Edmonton, Alberta, Canada: Psychometrics Canada.

Kern, C.W. (1998). Mentoring work values: Implications for counselors. *Educational Gerontology*, 24, 349-359.

Knoop, R. (1994). Work values and job satisfaction. Journal of Psychology, 128, 683-691.

Macnab, D. (1985). Work related needs, preferences, and values: An empirical integration. *Unpublished doctoral dissertation*. University of Alberta, Edmonton.

Macnab, D. & Bakker, S. (2001). *Work Personality Index User's Manual*. Edmonton, Alberta: Psychometrics Canada Ltd.

Macnab, D. & Fitzsimmons, G.W. (1987). A multitrait, multimethod study of work-related needs, values, and preferences. *Journal of Vocational Behavior*, 30, 1-15.

Nevill, D.D. & Super, D.E. (1989). *Manual to the Values Scale* (rev. ed.). Palo Alto, CA: Consulting Psychologists Press.

Plant, P. (1997). Careerist, Wage-Earner, or Entrepreneur: Work Values and Counselling. *Journal of Employment Counselling*, 34, 165-171.

Pryor, R.G.L. (1979). In search of a concept: Work values. Vocational Guidance Quarterly, 27, 250-258.

Pryor, R.G.L. (1983). *The Work Aspects Preference Scale*. Hawthorn, Victoria: Australian Council for Educational Research.

Pryor, R.G.L. (1999). *The Work Aspects Preference Scale: 2nd. Edition.* Sydney, Australia, Conguency Pty Ltd.

Roe, R.A. & Ester, P. (1999). Values and Work: Empirical Findings and Theoretical Perspective. Applied Psychology: An International Review, 48, 1-21.

Rokeach, M. (1973). The nature of human values. New York: Free Press.

Ros, M., Schwartz, Shalom H. & Surkiss, S. (1999). Basic Individual Values, Work Values, and the Meaning of Work. *Applied Psychology: An International Review*, 48, 49-72.

Rounds, J.B., Henley, G.A., Dawis, R.V., Lofquist, L.H., & Weiss, D.J. (1981). Manual for the Minnesota Importance Questionnaire. Minneapolis: University of Minnesota.

Schwartz, S.H. (1999). A Theory of Cultural Values and Some Implications for Work. *Applied Psychology: An International Review,* 48, 23-48.

Super, D.E. (1970). The Work Values Inventory. Boston: Houghton Mifflin.

Super, D.E. (1980). A life-span, life-space, approach to career development. *Journal of Vocational Behavior*, 16, 282-298.

Super, D.E. (1981). The relative importance of work. *Bulletin of the International Association of Educational and Vocational Guidance*, 37, 26-36.

Super, D.E. (1995). Values: Their nature, assessment, and practical use. In Super, D.E. & Sverko, B. (Eds.) *Life Roles, Values, and Careers*. San Francisco, CA: Jossey-Bass.

Super, D.E. & Nevill, D.D. (1986). The Values Scale. Palo Alto, CA: Consulting Psychologists Press.

Super, D.E. & Sverko, B. (Eds.) (1995). Life Roles, Values, and Careers. San Francisco, CA: Jossey-Bass.

Sverko, B. (1989). Origin of individual differences in importance attached to work: A model and contribution to its evaluation. *Journal of Vocational Behavior*, 34, 28-39.

Sverko, B. (1995). The structure and hierarchy of values viewed cross-nationally. In D.E. Super, & B. Sverko (Eds.), *Life roles, values, and careers: International findings of the work importance study* (pp.225–240). San Francisco, CA: Jossey-Bass, Inc.

Warr, P.B., Cook,J. & Wall, T.D. (1979). Scales of measurement of some work attitudes and aspects of psychological well-being. *Journal of Occupational Psychology*, 52, 129-148.

Zytowski, D.G. (1994). A super contribution to vocational theory: Work values. Special Issue: From vocational guidance to career counselling: Essays to honor Donald E. Super. *Career Development Quarterly* 43, 25–31.

APPENDIX . A

Sample Report



Wednesday, January 8, 2005

Copyright 2002 by Psychometrics Publishing. All rights reserved in whole or part.

About this report

This report provides a summary of your responses to the Career Values Scale (CVS). The CVS describes key features of your personal value system as it applies to careers and work. The Career Values Map is designed to provide you with information and advice that is useful for exploring career and work life. When looking at your career or work it is important to think about your values. Career values are aspects of the work world that are important to you. As such they are good indicator of what you will find satisfying and rewarding. Knowing what your career values are will help you decide what kind of job or career you might like to explore or what kind of work environment you might enjoy.

Inside this report are descriptions of ten career values: Service Orientation, Teamwork, Influence, Creativity, Independence, Excitement, Personal Development, Financial Rewards, Prestige and Security. Your report contains descriptions of what is important to you, what your main sources of satisfaction and dissatisfaction are, and suggestions for working with this knowledge.

It will be valuable for you to look at your career values and to identify those that are present or missing in your current career. While this report does provide you with in-depth information, it is important to recognize the no one scale can tell you which career path to follow. Planning your career and future should take into account information about you that this report does not provide, such as your abilities, education, skills, previous work and leisure experiences, and your family situation. To benefit fully from this report, consider discussing this information with people who know you well, or a trained career professional.

On the next page you will find a graphical representation of your career values. The statements to the left and right provide a description of the kind values that are likely to be held by you. The triangle indicates where on the scale your score is. If the triangle is closer to the left, then the left-hand description is more likely to apply to you. If the triangle is closer to the right, then the right-hand statement is more likely to be descriptive of you. If you are in the middle then you are likely to value aspects of both.



Working with Others Service Orientation Looking objectively at issues without having to concern yourself about the feelings of others Relationships, personal service, providing direct benefits to others 1 **Team Orientation** Independent decision making, working by yourself 5 Team work, good co-worker relations Influence Contributing expertise without being in charge 2 Influencing people and events Self-Expression Creativity Practical well-grounded solutions 8 Creativity and originality Independence Being free from the influence of others 8 Clearly outlined roles and functions Excitement Predictability, stability and structure 3 Variety, risk and fast-paced work **Career Development** Work that uses your present level of knowledge and expertise Personal and professional development 3 **Extrinsic Rewards Financial Rewards** High salary and financial security Professional satisfaction 2 Security 1 Novelty, variety and change Security, stability and predictability Prestige A A A Pride in performance 2 Recognition, admiration and status

Working with Others

Every career involves some interaction with people. Your personal values strongly impact both the type and quality of interaction you prefer to have with others. Some individuals prefer an environment that is outgoing and warm, while others prefer a more formal and independent workplace. Knowing your values is important because it influences the types of personal interactions that you will find satisfying.

Service Orientation

Looking objectively at issues without having to concern yourself about the feelings of others

Service Orientation

Relationships, personal service, providing direct benefits to others

You are likely to feel most comfortable in environments where you can maintain formal relationships with others. Positions that allow you to take an objective look at issues should be very enjoyable. Work that you will find satisfying will not require you to assist customers directly, or show sympathy and support. As a result, care giving and customer service jobs may be unsatisfying for you. You are likely to become tired and dissatisfied when required to deal with concerns of people too often. You will prefer to work in positions where you can concentrate on concrete issues rather than on people issues.

Sources of Satisfaction: Work in which you can look objectively at issues without having to concern yourself about the feelings of others

Sources of Dissatisfaction: Having to deal directly with the concerns of people

Team Orientation

Independent decision making, working by yourself **Team Orientation**

14-

5

Team work, good co-worker relations

You will be comfortable working in an environment that has a balance of team and independent work. You will feel satisfied where you have the opportunity to work closely with others and to have the opportunity to pursue your own goals. It is likely that you would feel dissatisfied in organizations where you are forced to work independently all of the time. At the same time you are likely to dislike spending all of your time working in groups, teams and committees. For some activities you will prefer working collaboratively for others you would rather work alone.

Sources of Satisfaction: A balanced mix of teamwork and independent work

Sources of Dissatisfaction: Having to work alone all of the time, having to work in groups all of the time

Page 5

Influence

	Influence	
Contributing expertise without being in charge	2	Influencing people and events

You are most likely to be satisfied in organizations that allow you to contribute your skills and expertise while letting others worry about the responsibility of being in charge. In general you will be most satisfied in jobs that do not require you to take a leadership rolevery often. It is not important to you to be in charge. Positions where you have the sole responsibility for all aspects of your job will likely leave you feeling uncomfortable and dissatisfied.

Sources of Satisfaction: Contributing expertise without being in charge

Sources of Dissatisfaction: High level of responsibility, taking control, influencing people and events

Self-Expression

Each individual approaches work in a unique way. Dfferences in self-expression can be attributed to how you value creativity, independence, excitement and personal development. Your values in these areas will influence both the types of tasks and work environments that you will find enjoyable and satisfying.

Creativity

		Crea	ativit	y							
Practical well-grounded solutions	8	di.	. A.	- 6.	.A.	.A.	Α.	4		- A	Creativity and originality

You will be most satisfied working in an organization that promotes ingenuity and creativity. People with similar values to yours enjoy developing new ideas, exploring unconventional approaches and using their imagination. You will not be particularly interested in spending a lot of your time on the practical, routine aspects of a job. You will prefer a work environment that is supportive of original and ingenious solutions to problems. The types of work you will enjoy will require creativity and innovation, and will allow you to use your curiosity to identify and evaluate new ideas.

Sources of Satisfaction: Solving problems, using your creativity and originality

Sources of Dissatisfaction: Spending time on straightforward routine activities

Independence

		Inde	epen	denc	e					
Clearly outlined roles and functions	8	d.	- 1		1	<u>.</u>	1	÷.	-	Being free from the influence of others

You will be most satisfied working in an organization that gives you the freedom to set your own goals and schedule, and which values employees who are self-reliant. People with profiles similar to yours prefer to work without supervision. You are likely to enjoy tasks that can be worked on independently without having to seek advice from co-workers. You will likely feel dissatisfied in occupations where there are many rules and procedures and where you are frequently have to consult with others. The type of work you enjoy will likely allow you to do things in your own way most of the time.

Sources of Satisfaction: Making independent decisions and being free from the influence of others

Sources of Dissatisfaction: Spending a lot of time consulting with others

Page 7

Excitement

3	ide.	14		1	 4	 4	-	Variety, risk and fast-paced work
	3		Excitement					

You are likely to be satisfied in environments where there is stability and structure. Jobs defined by clear methods will probably be attractive to you. You will not enjoy working in an organization where there is a great deal of change and where you are expected to be changing roles frequently. You enjoy established ways of working. You are most comfortable in occupations where most of your responsibilities are well defined and rarely change.

Sources of Satisfaction: Predictability, stability and structure

Sources of Dissatisfaction: A great deal of variety, change or risk

Career development

Work that uses your present level of knowledge and expertise Career Development

Personal and professional development

You will enjoy working in an environment that offers you some opportunity to develop work related skills. You will not be particularly interested in constantly upgrading your skills and will be quite satisfied in positions where you can work without too much learning or upgrading. Learning for learning's sake is not particularly motivating. However, you will probably enjoy the opportunity to increase your skills and knowledge when you see a direct link to your job.

Sources of Satisfaction: Professional development linked directly to your job

Sources of Dissatisfaction: Development activities not seen as relevant

Extrinsic Rewards

This section looks at the things that motivate you. It examines how you value financial rewards, job security and prestige. Recognizing what motivates you is an important step in identifying ideal occupations and making career exploration and analysis easier.

Financial Rewards

	Financial Rewards	
Professional satisfaction	2	High salary and financial security

You place a relatively low value on financial rewards and incentives. You will probably be most satisfied in an organization that provides you with professional satisfaction. You will judge the value of what you do by how much pride you feel rather than by how much money you make. Money is not your prime motivator. You are likely to be willing to take a less well-paid job if you can be assured of learning new skills or using your professional expertise.

Sources of Satisfaction: Professional pride

Sources of Dissatisfaction: Work where concerns with money come first

Security		
	Security	
Novelty, variety and change	1	Security, stability and predictability

You place a great deal of value on future possibilities and you are not overly concerned about job security. You are likely to become bored and dissatisfied where everything is predictable and routine. Since you do not particularly value working in an organization that is predictable and stable, you will be comfortable with change and rarely find it stressful. Your adaptability allows you to be effective in work settings where frequent change is the norm. You are likely to be satisfied with a career path where you change organizations and roles frequently

Sources of Satisfaction: Novelty, variety and change

Sources of Dissatisfaction: Routine or predictable work

Prestige			
	Prestige		
Pride in performance	2	<u> </u>	Recognition, admiration and status

You judge the value of what you do by how good a job you have done rather than the acknowledgement you receive. As such you will be most satisfied working in an organization which values commitment rather than individual recognition. You will likely dislike working in occupations where you are always in the limelight or where others are always seeking recognition. You are unlikely to obtain much satisfaction from personal status or from status symbols. You are likely to enjoy positions that give you a sense of pride based on your performance rather than on the prestige of your occupation.

Sources of Satisfaction: Knowing for yourself that you have done a good job

Sources of Dissatisfaction: Being the center of attention

Sources of Satisfaction

When working with others your main sources of satisfaction are likely to be:

Work in which you can look objectively at issues without having to concern yourself about the feelings of others

A balanced mix of teamwork and independent work

Contributing expertise without being in charge

In the area of self-expression your main source of satisfaction is likely to be:

Solving problems, using your creativity and originality Making independent decisions and being free from the influence of others Predictability, stability and structure Professional development linked directly to your job

Your main sources of satisfaction in the area of extrinsic rewards are:

Professional pride Novelty, variety and change Knowing for yourself that you have done a good job

Sources of Dissatisfaction

When working with others your main sources of dissatisfaction are likely to be:

Having to deal directly with the concerns of people Having to work alone all of the time, having to work in groups all of the time High level of responsibility, taking control, influencing people and events

In the area of self-expression your main source of dissatisfaction is likely to be:

Spending time on straightforward routine activities Spending a lot of time consulting with others A great deal of variety, change or risk Development activities not seen as relevant

Main sources of dissatisfaction in Extrinsic Rewards are:

Work where concerns with money come first Routine or predictable work Being the center of attention

Working with your career values

Putting together a comprehensive career plan with specific goals is one of the most important steps in managing your career successfully. Examining your values will help you determine what your priorities are in your current situation and help you plan for the future. "What is important to you?" is the fundamental question in the career planning process.

First, read through your report a number of times. Pay close attention to what it says about you and highlight the statements you believe describe you best. Second, underline the statements that surprise you.

Having read about your values it will be helpful to complete the following exercises and think about the following questions. This will give you a clearer picture of what is really important to you.

Deciding on your core career values

Choose four or five career values that you feel are essential for you to be satisfied in your career. If you feel you cannot do without a value, it is likely to be a core career value. Your career satisfaction is likely to depend on these values being fulfilled. Write the names of these values below.

My Core Career Values

This exercise should be carried out periodically. Come back to this report in 6 months, re-read the values and complete this exercise again. Did anything change? What changed? Why did they change? What impact have these changes had on your career?



Your current career situation

In this exercise you will look at the satisfiers and dissatisfiers associated with each value. Your task is to look at each pair below and decide which best represents your present situation. Circle the *S* or the *D* when you have decided. Please do this for all values.

Service Orientation - Which of the following best describes your current career situation?

- S Work in which you can look objectively at issues
- D Having to deal directly with the concerns of people

Team Orientation - Which of the following best describes your current career situation?

- S A balanced mix of teamwork and independent work
- D Having to work alone all of the time or having to work in groups all of the time

Influence - Which of the following best describes your current career situation?

- S Contributing expertise without being in charge
- D High level of responsibility, taking control, influencing people and events

Creativity - Which of the following best describes your current career situation?

- S Solving problems, using your creativity and originality
- D Spending time on straightforward routine activities

Independence - Which of the following best describes your current career situation?

- S Making independent decisions and being free from the influence of others
- D Spending a lot of time consulting with others

Excitement - Which of the following best describes your current career situation?

S - Predictability, stability and structure

D - A great deal of variety, change or risk

Career Development - Which of the following best describes your current career situation?

S - A balance of new activities and consistent routines

D - Too much routine or too much change and risk

Financial Rewards - Which of the following best describes your current career situation?

S - Lots of professional pride

D - Work where concerns with money come first

Security - Which of the following best describes your current career situation?

S - Novelty, variety and change

D - Routine or predictable work

Prestige - Which of the following best describes your current career situation?

S - Knowing for yourself that you have done a good job

D - Being the center of attention

Now that you have decided on which of the above pairs best represent your current situation, please do the following.

Count the number of Ss and write it below.

Count the number of Ds and write it below.

If you have more Ss than Ds you are likely to be having a positive career experience. Check to see that the Core Values listed on the previous page are Ss. If any of them are Ds then you may still experience some frustration in relation to them. Ask yourself the following questions.

If you have more Ds than Ss then you are likely to be feeling somewhat dissatisfied in your current career situation. This will be especially true if you have a large number of core values classified as D. Ask yourself the following questions.

- Is the career that you have compatible with the values that you hold?
- What are the barriers to satisfaction?
- What is the probability of you having the opportunity to satisfy missing values in your present situation?
- What goals do you have in relation to your missing values?

Conclusion

You can't expect to have all of your values met in your career. One of the secrets of effective career management is finding other ways to fulfill your values which are not being met in your career. Many values can be satisfied in other areas, such as volunteer work, recreational pursuits and participation in groups or clubs.

Create a list of areas to address that will help you improve your work and personal life. Carefully examine your current environment and set some realistic goals for achieving satisfaction. Then consider your future goals and outline adjustments you could make that would enable you to reach them.

While the Career Values Scale outlines a number of areas that can impact your satisfaction and success in life, it is important to recognize that many other variables can also play an important role. The Career Values Scale addresses what you find important in your career, but it does not provide information on your skills, abilities, personality, interests, work experience and specialized training. These also need to be reviewed when determining what you need to acquire to achieve what you desire.