Career interest
PROFILER

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CIP-M

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Introduction

Purpose of the Career Interest Profiler (CIP)

The *Career Interest Profiler* was developed to help people clarify their interests and relate them to work and career options. When a person can link what they like to do, with jobs that fulfill those interests, they can make better career decisions. For example, some people enjoy frequent change and lots of variety and would like a job that provides this type of environment. Others would rather work in a structured and stable environment and are equally curious about the occupations best suited for them. The CIP can help people make the connection between what they like to do and careers that meet these desires. By guiding people to make better career choices, people can pursue careers that are more likely to be enjoyable and satisfying. Research shows that people working in careers that match their interests are happier and more satisfied than people who are not.

While most individuals have a good idea about what they like and dislike, many have difficulty relating these preferences to occupations and work environments. Hence, many people pursue careers based on limited or even incorrect information. As a result they often end up in jobs they find unsatisfying and unfulfilling.

The *Career Interest Profiler* was designed to clarify the types of activities a person enjoys and highlight occupations where these interests can be met. By combining an in-depth description of a person's likes and dislikes along with jobs that match these preferences, the CIP can guide career decision makers. This allows people to explore a variety of occupations which have something in common with their interests. The goal of the CIP is not to identify one perfect job for a person, but to help them focus their career search on areas which relate to their interests and hold the best promise for a satisfying and rewarding career.

Unlike many interest inventories that focus on professional careers and contain only a few occupations requiring less than a college/university education, the *Career Interest Profiler* offers a substantial number of vocational/technical occupations that do not require a college or university degree, as well as many that do. This development better reflects the actual distribution of jobs that are available, and recognizes the importance of effective career choices at all occupational levels. Everyone should have the opportunity to explore and find satisfying careers, regardless of their level of education or training.

What the CIP Measures

The *Career Interest Profiler* is a measure of occupational interests. Interests can be defined as the things that a person likes to do. Occupational interests are the likes and dislikes a person has that relate to work activities. By having people rate a number of occupations, work activities, and school subjects, the CIP helps people identify their strongest occupational interests and link these interests to careers that match.

The *Career Interest Profiler* is built upon John Holland's theory of vocational personality. This theory, which has become one of the most widely accepted approaches for helping people make occupational choices, is based on six vocational personality types. Holland believed that people could be described by one of the six types which are briefly described below.

Realistic	R	These people like active jobs that produce tangible results, and enjoy fixing, building, and repairing things.
Investigative	I	These people enjoy work that involves gathering information, developing theories, and analyzing data.
Artistic	A	These people have a great need for self-expression, and enjoy creative work.
Social	S	These individuals like to work with people. They enjoy team work and tend to be nurturing and caring.
Enterprising	E	These people like selling, managing, and persuading others, and pursue organizational goals and economic success.
Conventional	C	These people like activities that require attention to detail, organization and accuracy.

Holland's Codes
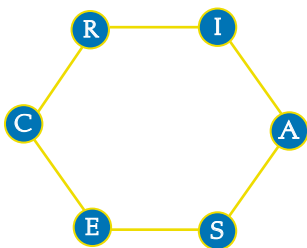
Holland believed that individuals are primarily characterized by one type, but often have some interests that fall in the realm of the other types. As a result, people are usually best described by a combination of some of the six types according to the ranking of their interests. Holland developed a code system which used the first letter from each of the six personality types R-I-A-S-E-C. An individual is assigned a "Holland Code" of one to three letters based on the strengths of their interests. For example a person who shows the highest levels of interest in Realistic activities followed by Conventional activities receives an RC code.

Holland believed that the six interest areas are related to each other. He arranged the interest areas in a hexagonal fashion based on how similar they are to one another. This hexagon is shown in the sidebar. According to Holland, the interest areas that are adjacent to each other are the most similar. The Realistic area has the most in common with the Investigative and Conventional interest areas. The Investigative area has the most in common with the Realistic and Artistic interest areas. Holland also theorized that the interest areas opposite each other on the hexagon are the most dissimilar. For example, the Realistic and Social areas have little in common. As a result, it is very rare to find people who share interests that fall in areas on opposite sides of the hexagon. It is also

rare to find occupations that allow people to meet those interests. When this occurs it can make for a challenging interpretation, which is discussed in Chapter 2.

Understanding these relationships among the interest areas can help in the career counselling process. For individuals who are looking to expand upon the occupations they wish to research, they can begin by examining jobs in interest areas that are more closely related to their primary interest area. For example, a person with strong Enterprising interests would be most interested in Enterprising activities. But this individual may also be interested in activities that satisfy Conventional or Social interests.

Holland also proposed that occupations and work environments could also be described by the RIASEC model, based on the interests that they satisfy. While occupations primarily meet one of the interest areas, they are best described by a combination of interest areas. Holland codes can be used to describe an occupation in terms of one, two, or three interest areas that fit the occupation. Most occupations that have been listed using Holland's typology typically have a two or three letter code. For example, Educational Psychologist is classified as IS because it satisfies investigative and social interests.

Since the CIP can identify the interests of people and list occupations that match an individual's particular interest pattern, it can be used to highlight career options that an individual is likely to enjoy. The better a match between the person's interests and the work involved in an occupation, the greater chance he or she will be satisfied and happy with their career.

Overview of the CIP Report

The CIP report has three main sections. The first section contains a profile which provides a graphic ranking of the clients' interests. The second section lists occupations that match the clients' identified interests. The third section includes exercises designed to help individuals work through their results and formulate a career plan. A sample report is included in Appendix 1.

THE PROFILE

The profile highlights the client's reported level of interest in each of Holland's six categories. The sten scores that a client receives in each category are related to the number of likes, dislikes and unsure responses they made when responding to the test items. Those areas in which they liked more of the occupations, activities and school subjects will show a higher score on the profile graph. Below the client's profile is a brief description of each of Holland's six interest areas.

THE CLIENT'S CAREER INTEREST PATTERN AND OCCUPATIONS

Following the profile the client is given a Holland code which indicates his/her primary interests. This two letter code highlights the two interest areas in which the client reported the greatest level of attraction. The client's interest pattern is then explained with descriptions of their two primary interest areas.

When the client's scores on interest areas are tied, ties are broken in favor of the interest area which the general norm sample showed less affinity for. For example, when a client's

scores on the Artistic and Investigative interest areas are tied, the client would be given the Investigative code because fewer people in the general norm sample chose Investigative. The logic behind breaking ties in favor of the less preferred interest area is that there are fewer people with these interests in the population. If a person reports a similar level of interest in a frequently selected interest area with a less frequently selected interest area it is possible that there is some environmental pressure associated with the "popular" area. This pressure can result in responses that conform to the majority or popular opinion. As a result, the most distinctive and perhaps true interest patterns of the client are probably the interest area which is chosen less frequently.

Counsellors need to be careful not to over-interpret ties between interest areas. When clients' scores are tied, they may be equally interested in both areas, or have a hard time choosing one over the other. It is important to remember that the Holland code they are given is a starting point for looking at their interests and identifying occupations they may want to explore.

Following the description of the client's two highest interest areas, the CIP provides a list of occupations that have the same Holland classification. Each occupation has a brief description and provides O*NET and NOC numbers so the client can find more information about the position in these government occupation databases. O*NET, the Occupational Information Network, is a comprehensive database of worker attributes and job characteristics compiled by the U.S. Department of Labor. As the replacement for the Dictionary of Occupational Titles (DOT), O*NET is the primary source of occupational information in the United States. Clients can conduct further research into occupations using the O*NET numbers in their report, by visiting O*NET Online at: **http://online.onetcenter.org/**.

The National Occupational Classification (NOC) system continues to be the authoritative resource on occupational information in Canada. The most recent edition includes thousands of occupational titles and the addition of 8 new unit groups that better define information technology occupations. Clients can use the NOC numbers in their report to research occupations at: **http://www23.hrdc-drhc.gc.ca/2001/e/generic/ nocsearch.shtml**.

There are many occupations that meet some of a client's interests. After listing occupations that directly match with the client's career interest pattern, the CIP lists occupations that meet some, but not all, of the client's areas of interest. For example, an individual with an RC Holland code, will be shown occupations classified as RC, CR, R and C. Since it is rare for people to meet all of their interests through work, these related occupations highlight possibilities that meet some of their desires, and may be acceptable or attractive to pursue.

REVIEWING YOUR INTERESTS

The third and final section of the report contains a number of exercises that will help people analyze their results and guide their research into occupations that interest them. The CIP provides the client with a series of tasks designed to help them manage their career search. These tasks include setting goals and researching occupations. This part of the report shows how clients can plan their career search and find more information about jobs they are interested in.

Chapter | Two

Administration
and Interpretation

Administration

The CIP is largely self-administered and can be completed individually or in a group setting. The administrator should ensure that the assessment environment is relatively free from distractions, is quiet, and well lit. There is no time limit for the administration and most people complete the 180 items in approximately 20-30 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, valid results. The CIP has been used in a variety of conditions, including formal testing, individual administrations, take home administrations, and paper-pencil and computer testing. The reliability and validity of individuals' results have not been negatively affected by less stringent administration conditions.

When administering the CIP it is useful to follow these four steps:

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

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

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

- Instruct respondents about the purpose of completing the CIP and how it can help them with their career decisions.
- Inform clients that the CIP is not a test. Rather, the CIP is designed to assess equally valid interests and preferences. As a result, there are no right or wrong answers.
- For each item, respondents should consider whether they like, dislike or are unsure about the activity, school subject, or occupation. They should not think about whether they have the education or training required, or the amount of money they could make, when responding to the items.
- There is no time limit for completing the CIP and most people complete the assessment in 20-30 minutes.

- When completing the CIP, it is best for respondents to not think too long about any item. Generally a person's first response is the best response.
- Encourage respondents not to skip any items. If an individual feels unable to make a choice, instruct them to select Unsure.
- Provide respondents with the opportunity to ask questions.
- Emphasize the need for respondents to carefully complete the identifying information, and read through the instructions before completing the CIP.
- If using a paper-pencil administration, stress the importance of matching the numbers on the answer sheet to the numbers on the item booklet.

4 If people have questions during the administration about the meaning of a word or item, the administrator should answer them.

PROVIDING ASSISTANCE TO CLIENTS

In some cases, clients may have difficulty understanding a few of the items. For these clients, it is appropriate for the administrator to help the individual complete some items. Explaining the meaning of words, or briefly describing an occupation can be helpful. However, if the client can not complete the majority of the items on his/her own, the CIP may not be effective.

APPROPRIATE AGE POPULATIONS

The CIP was designed for people who are 14 years of age or older. People younger than 14 may not have enough life experience to effectively relate to the CIP items. They may end up endorsing or negatively responding to items because of their inexperience and lack of knowledge. Also, research has indicated that people younger than 14 may not have had enough time to crystallize their interests fully. Since they are likely still in the process of developing and clarifying their interests, using the CIP with clients younger than 14 years of age should be avoided.

READING LEVEL

The CIP is meant to be used with a diverse range of people, including students (junior high, high school, and college/university), workers in transition, and unemployed individuals. In order to facilitate the use of the CIP with this wide range of people, the reading level was set at approximately the eighth grade.

Interpretation

Interpreting the *Career Interest Profiler* is relatively straightforward. The narrative sections of the report provide a good overview of the individual's results in a self-explanatory manner. However, some clients may have difficulty understanding their results or utilizing the findings in their career search. Some of these challenges may be solved by giving the client more information about their Holland code. For others, the issues may be more difficult and require further interpretation and counselling. This section of the manual provides a further description of Holland's personality types and the characteristics associated with them. Typical interpretation challenges are then identified along with some suggestions on how to best help clients use their results.

DESCRIPTION OF HOLLAND'S THEMES

Below are in-depth descriptions of Holland's six personality types. Each description provides a general overview of the person with that personality type, as well as their preferred leisure activities, their typical skills and strengths, their dislikes, and some of the most popular occupational areas in which they find satisfaction.

R Realistic — *Doers*

Realistic people are practical, self-reliant, and mechanically inclined. They tend to be traditional and value things they can see and touch. Realistic individuals usually have well developed skills for working with tools, operating machines or raising animals. They enjoy work that happens outdoors and involves physical activity. They also like adventurous activities such as riding roller coasters or sky diving. Since they enjoy hands-on activities that involve concrete problem solving, they would rather avoid dealing with people, abstract ideas and lots of data. When faced with a problem, they come up with action oriented solutions instead of verbal or interpersonal ones. As a result, Realistic people tend to avoid careers that involve a lot of social interaction and dealing with people, such as teaching or nursing. Instead, they are drawn toward occupations that produce tangible results.

Common Leisure Activities
building and repairing, gardening and crafts, playing sports, outdoor recreational activities, cars, motor sports, boats, mechanics, home improvement, camping, hunting, fishing

Typical Skills and Strengths
building and repairing, operating machinery and equipment, concrete problem solving

Global Occupational Areas
trades people – carpenters, electricians, mechanics, plumbers; agriculture and forestry; engineering; military

Dislikes
public speaking, social events, cultural and aesthetic activities, mediating disputes, work that involves close interpersonal relationships

I Investigative — *Thinkers*

Investigative people are inquisitive, analytical, and intellectual. They like investigating things and solving complex problems. Investigative individuals enjoy exploring ideas, conducting research, uncovering facts and establishing theories. Their preferred reading material includes scientific or technical magazines. They enjoy working alone because they would rather analyze data and formulate ideas than work with people. Investigative people tend to dislike jobs that involve leading, selling, or persuading others. While they share some of the same interests in the physical world as Realistic people, Investigative types prefer thinking over doing.

Common Leisure Activities
scientific, mathematical, and intellectual pursuits; researching and understanding the physical world; using computers; doing complex calculations; astronomy; crossword puzzles, board games; visiting Museums

Typical Skills and Strengths
understanding and solving science and math problems; analytical, observant, inquisitive; organizing, analyzing, interpreting data, ideas, theories; working independently with loosely defined problems; researching and understanding the physical world

Global Occupational Areas
biology, chemistry, physics; computer programmers, computer engineers; physician, pharmacist, psychologist, veterinarian; technical writer

Dislikes
sales, persuading others, leading people

(A) Artistic — *Creators*

Artistic people are creative and imaginative. They are original, independent people who have a strong desire to express themselves creatively. Artistic individuals value aesthetics and enjoy creative activities such as art, drama, writing, dance and music. They like to use their intuition and originality to develop new ideas. In this way they are similar to Investigative people. However, they are more interested in cultural-aesthetic pursuits than scientific ones. Artistic people find the most satisfaction in environments that have variety and change. They dislike work activities that are highly structured or repetitive. They are more interested in ideas and people, than data or things.

Common Leisure Activities
drawing, painting, creative writing, photography; playing musical instruments; attending concerts, the theatre and art exhibits; reading fiction, plays and poetry

Typical Skills and Strengths
using imagination and originality to develop new ideas; dealing with change in flexible environments; designing products; creating, using intuition and self-expression; artistic abilities – writing, drama, music, art

Global Occupational Areas
musicians, artists, graphic artists, advertising, design, writers/editors

Dislikes
repetitive, structured tasks; lack of variety; processing information; working with numbers

(S) Social — *Helpers*

Social people are friendly, outgoing, and understanding. They enjoy work that involves personal interaction and helping others. They are interested in dealing with people and dislike impersonal tasks that revolve around working with data and things. Social individuals like to form close interpersonal relationships with others, and they enjoy teaching, helping and solving social problems. They are concerned about human welfare, and are excited by work that allows them to overcome interpersonal problems and mediate disputes. They tend to avoid using machines or tools, and dislike extensive intellectual or physical work. Occupations that are very attractive to Social people are nursing, teaching and counselling.

Common Leisure Activities
going to parties, participating in team sports, volunteering with social action groups, caring for children

Typical Skills and Strengths
planning and supervising group activities, helping people with problems, mediating disputes

Global Occupational Areas
nursing, counselling, teaching, clergy

Dislikes
physical work, dealing with data and things, building and repairing

E Enterprising — *Persuaders*

Enterprising people enjoy business activities and deal making. They are self-confident, assertive, persuasive, and energetic. Verbally skilled, Enterprising individuals use these skills to persuade people, unlike Social individuals who use their verbal skills to support others. They enjoy selling things, promoting ideas and influencing people. They also value status and prestige and search out occupations that can meet these desires. Enterprising people are also competitive and willing to take risks. As a result, they have an entrepreneurial nature and like initiating projects and convincing others to jump on board. Enterprising individuals enjoy working with people and data over things and ideas.

Common Leisure Activities
discussing politics, reading business journals, following the stock market, operating a home business

Typical Skills and Strengths
seeking out business opportunities; directing, managing, supervising; selling and persuading

Global Occupational Areas
business management, sales, politics, small business owner, real estate

Dislikes
working alone, focusing on intellectual pursuits, doing complex calculations, scientific and mathematical activities

C Conventional — *Organizers*

Conventional people are methodical, conscientious and efficient. They are accurate and like to follow clearly defined procedures. At work they enjoy rules and regulations that keep things running smoothly. They prefer structure and order to ambiguity. As a result they work well within systems or large organizations. Conventional people have high standards for themselves, are accurate, and pay close attention to details. Conventional individuals are interested in data and things, rather than people. As a result, they prefer to work with the paper and computer based aspects of a business such as accounting, record keeping, and data processing.

Common Leisure Activities
managing personal finances, collecting memorabilia, writing family history, building models, playing computer or card games

Typical Skills and Strengths
working with numbers, processing information, accuracy, organizing, business writing

Global Occupational Areas
accounting, banking and finance, clerical/ secretarial, business administration, insurance – adjuster/underwriter

Dislikes
ambiguous, unstructured activities; dealing with interpersonal issues; drawing, painting, creative writing, photography; activities that involve self expression

INTERPRETATION CHALLENGES

On some occasions clients' results are challenging to interpret. When a client does not agree with their results, or when their report appears to provide little direction, clients quickly become discouraged. However, with careful interpretation everyone's report can provide them with information and guidance to help them make career decisions.

Elevated Profiles

Elevated profiles occur when the client has a high level of interest in at least four of the six interest areas. There are a couple of reasons why a person may get an elevated profile. First, the individual may have a diverse range of interests. This means that they like a wide variety of activities, even though the activities are very different from one another. The challenge when working with these individuals is to narrow their focus onto the interests that are "most" important to them, or those they would like to fulfill in their work life. The remaining interests can be met through hobbies or other activities that take place outside of work.

Second, the person may have responded with an optimistic response pattern, endorsing items as likes in order to avoid eliminating any opportunities. These people may feel uncomfortable limiting their options and want to keep all their avenues open. When working with people in this situation, the counselor should discuss with the client the benefit of focusing on the highest areas of interest so more time can be spent examining occupations that fit best. In order to facilitate this process, the client may need to retake the CIP and adopt a more discriminating approach when responding to the items.

Flat Profiles

Flat profiles occur when clients' scores on most of the interest areas are quite low. As a result, it becomes difficult to clearly identify a group of careers and occupations that they may enjoy. The CIP does provide a Holland code based on the two highest scoring areas. However, if the scores for these interest areas are all low the client may not like any of the jobs presented.

There are a number of reasons why a client may receive a flat profile. First, the individual may have limited experience and feel reluctant endorsing items as "likes" when he/she knows little about them. For clients in this situation, it is best to engage in a number of career exploration activities: reading books/magazines, job shadowing, volunteer work. When they have expanded their career awareness it may be helpful to retake the CIP.

Secondly, the client may only like a very narrow range of activities. Since these individuals do not appear to be very interested in any one area, the challenge is to identify common themes of interest. The first step is to look at the interest areas with the highest scores. These are the areas that the person has shown the greatest affinity for, and will likely hold the most promise for finding careers worth examining. If this still proves difficult, work with the client to begin exploring careers in the interest areas that they think best represents their likes and dislikes based on their past experience.

Holland's Codes
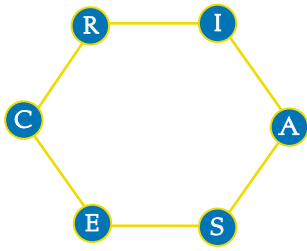
Opposing Interests

Some clients may have an interest pattern that is composed of opposing interests. According to Holland, interests on opposite sides of the hexagon have little in common and may involve activities that are directly opposed to each other. When a client receives a Holland code with opposing interests the greatest challenge is finding occupations that fit with the diverse interest pattern. Since the descriptions of these interest areas are often contradictory, it can be extremely difficult to find ways to meet these desires in one work/career setting.

For some of the opposing categories, the CIP will list very few occupations. For example, if someone is given a CA code, the CIP will not provide any jobs that match that code. When the client receives very few occupations that match their interest code directly, the CIP expands the list of occupations that match some of their interests. The client may need to consider pursuing occupations with codes that include only one of their main areas of interest. This can be done a number of ways. First, the client may need to find different ways to meet their diverse interests. One common approach is separating work and leisure activities. This involves working in an area that meets one area of interest and using leisure activities to satisfy the other. Or in rare cases, clients may find an occupation which involves the tasks of one interest area but takes place in the work environment of another. For example, a person with a CA code could work as a controller for an art gallery. This allows the person to work in an environment which meets their Artistic interests but involves tasks that are primarily Conventional.

Client does not agree with their results

Some clients may feel that their CIP results do not accurately reflect their interests. They may not like any of the occupations that fall under their highest interest area, or may feel that other interests describe them more accurately. It is important for the counselor to encourage the client to continue exploring career opportunities, even if they are not happy with their results. There are a number of options to pursue in order to help the client make the most of their CIP report.

1 **Reexamine occupations listed in the highest interest area**
Go through the list of occupations with the client. The client may have misconceptions about some of the occupations, such as the training required, the tasks involved, and the potential earnings.

2 **Look at the other interest areas to explore careers**
If few of the occupations in the highest interest area are desirable, clients should look at their secondary interest areas. Also have them look at careers which use the same code letters but have them arranged in a different order.

3 **Check out other interest areas**
If the client is not happy with his/her Holland code they should look at the definitions of the other interest areas to see if any of them are more descriptive. If so, they should be encouraged to use other resources to examine jobs that fall into the corresponding interest areas. They can then explore these occupations/careers to see if they feel any are worth pursuing. A great resource for researching occupations by using Holland Codes is the *Dictionary of Holland Occupational Codes*. Gottfredson, G. D., & Holland, J. L. (1996). Dictionary of Holland occupational codes (3rd ed.). Psychological Assessment Resources. ISBN: 0911907262

Chapter | Three

Development of the CIP

The *Career Interest Profiler* (CIP) was designed to provide an efficient and useful measure of career interests for use in career development and counselling. To meet this goal, the development of the items and the creation of test norms followed a specific path. This chapter outlines how the 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 *Career Interest Profiler*'s creation. In order to meet the overall goal to develop an interest measure, 5 key criteria were established.

1 The CIP should measure the six interest areas from Holland's theory. As such, items were designed to produce valid and reliable scales.

2 The CIP should be useful for applications such as career development, career counselling and personal development for people in grade 8 through adulthood.

3 The application and interpretation of the CIP should not require specialist training in psychology.

4 The questions should be easy to read and comprehend and cover a wide range of activities.

5 Respondents should be able to complete the assessment quickly.

The CIP is built upon the 180 items in the Interest Profiler (O*Net, 2000) which was designed by the U.S. Department of Labor. In the construction of the CIP, the Interest Profiler was used both as a base measure for item construction and a source of valid items. It was decided that a valid measure of interests required a variety of different types of items. Since the Interest Profiler only contained work activities, items that included school subjects and occupations were created.

School subjects (25 items) – these items cover a wide range of school subjects.

Occupations (72 items) – these items consist of the names of occupations.

Activities (83 items) – these items consist of occupational activities such as *Develop psychological profiles of criminals*, or *Sell newspaper advertisements*.

Across all three item types (school subjects, occupations, activities) there are 30 items relating to each of Holland's six interest areas. Each item requires the respondent to decide whether they **Like**, **Dislike** or are **Unsure** about the school subject, occupation or activity.

Over 500 items were field tested in seven separate item tryout sessions. The final item selections are based on item level analysis as well as scale to scale item correlations and factor analytic studies. The final version of the *Career Interest Profiler* consists of 180 items.

One reason that interest inventories are helpful for making career decisions is that people in different occupations respond differently to the same items. In the construction of the CIP each item was analyzed at an item level. This was accomplished by looking at the inter-scale correlation with the Interest Profiler Holland scales, and by examining the item-response distribution of people in 28 occupational groups. Only items that correlated .5 and above with the Interest Profiler scales were considered for inclusion in the final version of the *Career Interest Profiler*.

Each item was written to represent one of the six Holland scales. The items were analyzed by examining the item response distribution of occupational groups. Item response distributions were analyzed by examining responses from people grouped in occupations representing a Holland code and comparing the responses to people grouped in occupations that represent the opposite side of the hexagon in the Holland model. Illustrated below are the analyses for two Artistic items. People in Artistic occupations are compared to people in Conventional and Realistic occupations. For example in Table 3.1, *Play a musical instrument* has a greater **like** percentage than *Direct a play* for the Artistic group, but has also a high **like** rate for Conventional and Realistic groups. Thus *Direct a play* is a superior item since it discriminates better between occupational groups. As a result, it was included in the inventory while *Play an instrument* was rejected. Table 3.2 shows the percentage **like** for all occupational groups for these two items. Items selected had to show a high endorsement by the appropriate occupational group and also significantly lower endorsement by other occupational groups.

Table 3.1 Percentage **Like** Responses For Two Artistic Items by Holland Groups

Item Stem	% Like			
	Conventional	Realistic	Artistic	Inclusion
Direct a play	36	25	62	Yes
Play a musical instrument	54	47	66	No

Table 3.2 Percentage **Like** Responses For Different Occupational Groups for Two
Artistic Items

Occupational Group	Direct a play	Play a musical instrument
Management	43	55
Business & Finance	35	51
Education, Training and Library	45	57
Community and Social Services	43	54
Sales	40	53
Office & Administrative Support	36	53
Legal Occupations	42	49
Computer Occupations	30	56
Healthcare Practitioners and Technicians	32	48
Healthcare Support Occupations	35	48
Personal Care and Services	32	44
Mathematical Sciences	23	51
Architecture & Engineering	32	56
Life, Physical, Social Sciences	40	57
Art and Design	55	62
Entertainment & Performance	70	72
Athletics, Coaching and Sports	31	35
Media and Communications	62	66
Protective Services	21	43
Military	25	44
Building and Grounds Maintenance	29	35
Construction & Extraction	22	48
Installation, Maintenance and Repair	16	53
Skilled Trades	22	45
Production and Operations	23	52
Transportation	25	48
Farming, Fishing and Forestry	22	47
Food Services	37	48

FACTOR ANALYSIS

As a final verification of the items ability to represent the Holland interest areas appropriately, the chosen 180 items were subjected to factor analysis. A principal components analysis with a six-factor solution was rotated using a varimax procedure. Table 3.3 shows the rotated factor loadings for each item on each scale.

Table 3.3 Principal Components Factor Loading of CIP Items

Realistic		Investigative		Artistic		Social		Enterprising		Conventional	
item	*load*	*item*	*load*	*item*	*load*	*item*	*load*	*items*	*load*	*items*	*load*
R28	0.66	I14	0.73	A18	0.74	S23	0.76	E29	0.62	C27	0.76
R8	0.65	I26	0.70	A24	0.72	S15	0.74	E22	0.62	C28	0.75
R10	0.64	I29	0.67	A27	0.71	S19	0.73	E20	0.59	C14	0.75
R24	0.63	I9	0.66	A26	0.71	S6	0.71	E15	0.54	C26	0.74
R21	0.63	I8	0.66	A23	0.71	S22	0.69	E23	0.54	C22	0.74
R18	0.62	I17	0.65	A20	0.70	S29	0.69	E16	0.54	C17	0.73
R15	0.62	I24	0.65	A3	0.69	S21	0.69	E7	0.53	C5	0.72
R6	0.61	I21	0.64	A14	0.67	S13	0.68	E1	0.52	C23	0.71
R4	0.61	I7	0.63	A21	0.66	S26	0.67	E12	0.52	C25	0.70
R29	0.60	I28	0.63	A10	0.64	S17	0.66	E27	0.51	C16	0.69
R17	0.59	I5	0.63	A17	0.64	S11	0.66	E8	0.51	C18	0.68
R12	0.58	I19	0.62	A11	0.64	S10	0.65	E28	0.50	C30	0.68
R13	0.57	I13	0.61	A12	0.64	S25	0.62	E14	0.49	C3	0.67
R27	0.56	I30	0.61	A29	0.64	S18	0.61	E11	0.49	C12	0.66
R23	0.56	I23	0.61	A5	0.62	S16	0.60	E2	0.47	C21	0.65
R19	0.55	I10	0.59	A25	0.62	S28	0.59	E3	0.47	C20	0.63
R22	0.54	I25	0.56	A9	0.60	S4	0.59	E21	0.47	C13	0.62
R11	0.54	I16	0.56	A8	0.60	S9	0.58	E24	0.46	C19	0.62
R25	0.53	I6	0.56	A28	0.58	S2	0.57	E26	0.44	C9	0.61
R5	0.53	I1	0.55	A4	0.58	S7	0.55	E25	0.43	C24	0.60
R1	0.52	I2	0.54	A22	0.58	S27	0.55	E19	0.42	C7	0.59
R30	0.52	I15	0.54	A6	0.56	S5	0.55	E30	0.39	C29	0.59
R16	0.52	I20	0.52	A19	0.55	S20	0.47	E5	0.36	C8	0.56
R26	0.51	I27	0.51	A1	0.53	S12	0.46	E18	0.36	C10	0.54
R20	0.50	I4	0.46	A16	0.52	S14	0.45	E13	0.29	C2	0.52
R9	0.49	I3	0.45	A2	0.52	S24	0.43	E9	0.28	C11	0.51
R14	0.45	I18	0.45	A13	0.50	S8	0.42	E10	0.28	C1	0.49
R2	0.44	I12	0.43	A7	0.48	S3	0.41	E17	0.27	C15	0.48
R7	0.43	I22	0.42	A30	0.47	S30	0.41	E6	0.27	C4	0.45
R3	0.42	I11	0.41	A15	0.41	S23	0.34	E4	0.26	C6	0.43

NORMING

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 results 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 CIP was standardized on a sample of over 15000 people. From this group a matched sample of 3818 males and 3818 females were selected to create North American norms. The large number of participants involved in the norm sample ensures that the CIP results are compared against a representative norm group, allowing the effective identification of career interests. Tables 3.4 to 3.7 illustrate the basic demographic background of the participants in the norm sample.

Table 3.4 Age Distribution of Norm Sample n=7636

Age Group	n	Percent	% Female	% Male
15-20	859	11.26	51	49
21-25	1863	24.41	54	46
26-30	1529	20.03	51	49
31-40	1886	24.66	46	54
41-50	1097	14.37	50	50
51-60	358	4.69	42	58
60+	44	0.58	36	64

Table 3.5 Ethnic Origin of Subjects in Norm Sample n=7636

Ethnicity	n	Percent	% Female	% Male
African American	367	4.81	56	44
Native	279	3.66	47	53
Asian	277	3.63	44	56
Caucasian	5845	76.59	50	50
Latino	286	3.75	48	52
Other	582	7.57	49	51

Table 3.6 Employment Status of Subjects in Norm Sample n=7636

Employment Status	n	Percent	% Female	% Male
Student	1801	23.59	52	48
Employed	3813	49.93	51	49
Self-Employed	308	4.03	33	67
Homemaker	203	2.66	93	7
Seeking Employment	1511	19.79	42	58

Table 3.7 Occupational Area of Subjects in Norm Sample   n=7636

Occupational Area	n	Percent	% Female	% Male
Management	640	8.39	38	62
Business & Finance	837	10.97	46	54
Education, Training and Library	604	7.91	66	34
Community and Social Services	333	4.36	70	30
Sales	448	5.87	37	63
Office & Administrative Support	535	7.01	87	13
Legal Occupations	200	2.62	60	40
Computer Occupations	731	9.58	29	71
Healthcare Practitioners and Technicians	256	3.35	71	29
Healthcare Support Occupations	110	1.44	76	25
Personal Care and Services	86	1.13	73	27
Mathematical Sciences	45	0.59	42	58
Architecture & Engineering	210	2.75	24	76
Life, Physical, Social Sciences	297	3.89	55	45
Art and Design	299	3.92	61	39
Entertainment & Performance	177	2.32	48	52
Athletics, Coaching and Sports	63	0.83	32	68
Media and Communications	326	4.27	55	45
Protective Services	77	1.01	23	77
Military	61	0.80	15	85
Building and Grounds Maintenance	20	0.26	40	60
Construction & Extraction	29	0.38	14	86
Installation, Maintenance and Repair	80	1.05	6	94
Skilled Trades	133	1.74	17	83
Production and Operations	114	1.49	34	66
Transportation	71	0.93	17	83
Farming, Fishing and Forestry	47	0.62	43	57
Food Services	118	1.55	53	47
Other	689	9.03	52	48

Sten Scores

A person's results on the CIP 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.

There are many different types of standard scores. Sten scores are one of the most popular types of standard scores when reporting 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 3.1 illustrates how Sten scores are distributed.

Figure 3.1 Distribution of Sten Scores in a Normal Curve
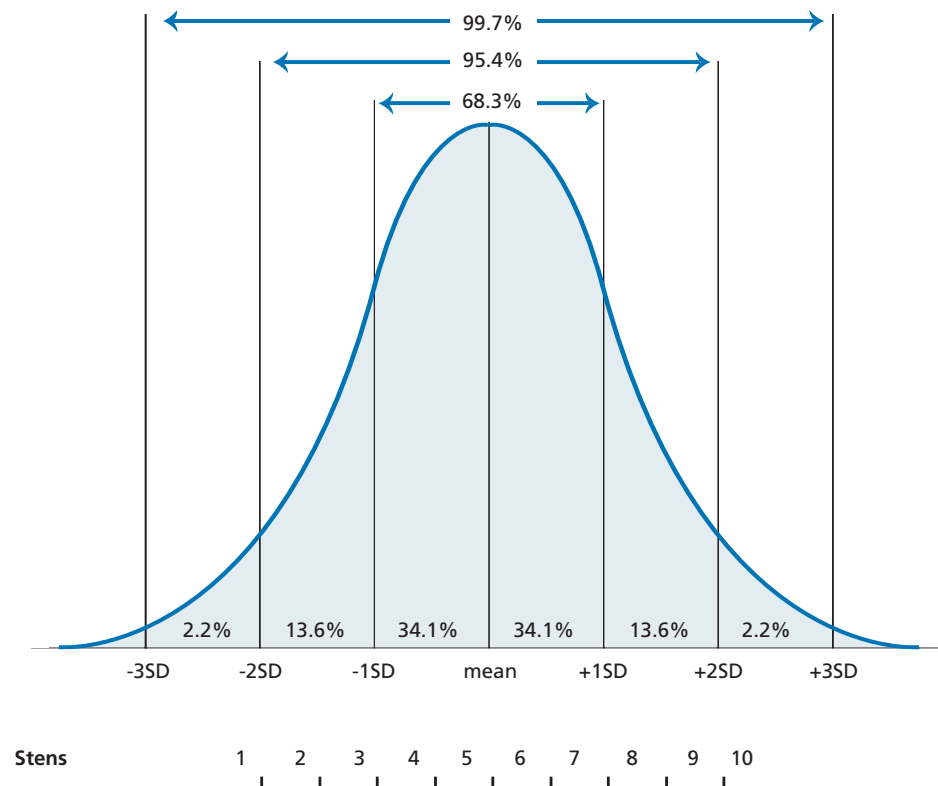
Chapter | Four

Reliability and Validity

This chapter examines the reliability and validity evidence for the *Career Interest Profiler*. These technical evaluations are conducted to determine the effectiveness of the CIP at measuring people's interests. Reliability directly examines the consistency and stability of the assessment, while validity is concerned with the inferences that can be made from the test results. In order for any assessment of psychological traits to be useful it needs to have acceptable levels of reliability and validity.

Reliability

Measures of reliability are used to determine 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 are commonly called random errors.

The reliability of a tool is illustrated using correlation coefficients. A reliability coefficient is denoted by the letter **r**, and is expressed as a number ranging between 0.00 and 1.00 with r=0 indicating no reliability, and r=1.00 indicating perfect reliability. It is important to note that tests are never 100% reliable, so you will not find a test with a correlation coefficient of r=1.00. What you will find are reliability coefficients expressed as a decimal, such as r=.80 or r=.93. The larger the reliability coefficient is, the more consistent and reliable the test scores.

There are a number of reasons and conditions that lead to unreliable test results. Some of the possible causes include the following:

1   Candidate related. Test performance can be influence 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 results.

2   Test related. Item design, instruction, examples and the design of the response procedure can influence an individual's test results. For example, confusing items or complicated instructions can negatively influence a person's results.

3   Procedural. Differences in the assessment environment, such as room temperature, lighting, noise, or even the test administrator and administration procedures can influence an individual's test performance.

These three factors are sources of measurement error in the assessment process. If there were no errors of measurement, an 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 tool.

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. This method effectively splits the test items in every possible way and computes the average of all the combinations. Consistency should be achieved such that all the items measure the same thing, and therefore, the items for each interest 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 the 6 CIP interest scales are listed in Table 4.1. The reliability coefficients range from .92 to .96 indicating that the reliability of the CIP interest scales is high. The strength of these reliability coefficients shows that the CIP is relatively free from measurement errors.

Table 4.1 Internal Consistency of CIP Interest Scales

Interest Scale	Reliability
Realistic	.94
Investigative	.95
Artistic	.95
Social	.95
Enterprising	.92
Conventional	.96

Validity

Validity is a second important consideration when evaluating and deciding to use an assessment tool. While reliability focuses on the consistency of the tests results, validity examines their usefulness. For a test to be valid, it should provide information that is helpful in making decisions. Validity evidence indicates the types of conclusions and predictions that can be made based on the test results.

There are various types of evidence that can provide information regarding the valid uses of a test. Each piece of evidence can help you determine how useful the test will be with certain people and for certain situations. While it is common to talk about different types of validity (e.g. construct validity, content validity, criterion validity), it is better to consider these as sources of evidence that assess the overall validity of the test. A valid test is supported by many types of evidence that should be able to tell you if the test measures what you need to measure, indicates which groups the test is useful for, and informs you of the decisions you can make based on individuals' results.

USING THE CIP WITH DIFFERENT GROUPS

The most useful measurement tools work well with many different people. This allows test users to administer the assessment to a variety of individuals with the knowledge that they can receive informative results, regardless of their client's particular background. By looking at the similarities and differences in scores among specific groups of people, one can judge how well the CIP can work with various populations. If differences between groups are expected and make sense according to what we know about the groups, the tool can be useful. Likewise, if similarities between groups are found in areas where past research has shown people rarely differ, it also provides evidence to the usefulness of the tool. During the standardization phase studies were conducted on over 15,000 people to examine the usefulness of the CIP with different groups.

The CIP and Age

People in many different stages of life face career transitions and require information to help them make better career decisions. Table 4.2 shows the average scores on each of the 6 interest scales for a range of age groups. Between most of the age ranges, the differences between the average scores are quite small. There are only two instances where these differences are larger than $1/2$ of a standard deviation. The first relates to the Realistic scale, where people aged 21-25 score lower than people in the 60+ range. The second difference is found in relation to the Conventional scale, where people in the 15-20 range have an average score that is more than 1 sten score lower than people in the 60+ range. The rest of the differences between age groups on each of the interest scales are minor. These results suggest that in general age does not appear to affect how people respond to the CIP.

Table 4.2 Mean Interest Scale Sten Scores: Age Group

Age	n	R	I	A	S	E	C
15-20	5053	5.23	4.85	5.34	5.53	5.90	5.27
21-25	2853	4.92	5.20	5.50	5.62	5.40	5.41
26-30	2282	5.15	5.43	5.51	5.67	5.28	5.46
31-40	2729	5.43	5.56	5.52	5.61	5.40	5.61
41-50	1595	5.60	5.58	5.57	5.68	5.49	5.79
51-60	478	5.72	5.59	5.55	5.74	5.49	5.82
60+	66	6.15	5.76	5.47	5.71	5.68	6.30

Within age groups, the average scale scores are quite similar between the six occupational themes. For the 15-20 age group the difference between their level of interest in Enterprising and Investigative is greater than $1/2$ of a standard deviation. This is a minor difference but indicates that most people aged 15-20 prefer Enterprising over Investigative activities and occupations. Given that a preference for Investigative activities rises with an individual's level of education, it is not surprising that this age group, which by it's nature has the least amount of education, finds Investigative the least appealing occupational area.

Within the remaining age groups there are no differences between the average interest scale scores that are greater than $1/2$ of a standard deviation.

The CIP and Gender

Gender differences are commonly found on measures of occupational interests. For instruments that use Holland's codes, such as Holland's own *Self-Directed Search*, these differences are typically found on the Realistic and Social themes. Men are more likely to have higher scores on Realistic while women have higher scores on Social. This difference has been found consistently in research studies with a variety of interest measures.

Table 4.3 shows the mean interest scale scores for males and females on the CIP. As with other interest measures, men score quite a bit higher on Realistic and women score higher on Social. Current thinking tends to indicate that these gender differences are real differences in interests between men and women, rather than biases in test items that result in the discrepancy.

Table 4.3 Mean Interest Scale Sten Scores: Gender

Gender	n	R	I	A	S	E	C
male	6146	6.08	5.56	5.36	5.11	5.91	5.43
female	9616	4.75	5.03	5.52	5.92	5.37	5.49

Some interest measures have eliminated gender differences by using male and female norm groups to compute an individual's results. While these techniques help negate gender differences, it can also reduce scale validity. By comparing both genders to a single set of norms, participants typically report greater satisfaction and a better fit with their test results. The CIP uses a single set of norms based on both genders to generate the individual's Holland code. When using separate gender norms, the results can change dramatically. For example, a female who endorses 50% of the Realistic items and 75% of the Social items as **likes** may appear to only have an average level of interest in Realistic and a high level of interest in Social when compared to the total population. However, when compared to females, the same woman's level of Realistic interest could be interpreted as above average, while her level of Social interest may be interpreted as average. So while this person may like Realistic activities more than most women, it is unlikely that her greatest interest would be in occupations that fall in the Realistic area.

The CIP and Ethnicity

Table 4.4 shows the mean interest scale scores for various ethnic groups. These groups are remarkably similar and there are no differences between ethnic groups that are larger than 1/2 of a standard deviation. The only difference that is greater than 1/4 of a standard deviation (.5) is between African Americans and Asians on the Investigative scale.

Table 4.4 Mean Interest Scale Sten Scores: Ethnicity

Ethnicity	n	R	I	A	S	E	C
African American	898	5.15	4.84	5.50	5.78	5.92	5.76
Native	551	5.42	5.32	5.34	5.52	5.52	5.42
Asian	583	5.32	5.46	5.52	5.65	5.82	5.67
Caucasian	11857	5.24	5.25	5.45	5.57	5.49	5.41
Latino	726	5.40	5.23	5.45	5.75	5.81	5.71
Other	1147	5.45	5.27	5.61	5.76	5.98	5.60

The CIP and Education Level

Education level has consistently had a significant relationship with interest preferences. In this regard the CIP is no different. Table 4.5 contains the average interest scale score based on educational level. People with Doctorate and Professional degrees show the highest level of interest in the Investigative theme. This is consistent with expectations for a number of reasons. First, to get these degrees involves extensive education and activities that are primarily Investigative in nature. Second, the occupations which require these degrees are also largely Investigative types of positions.

The other differences between interests and level of education are quite small, indicating that regardless of level of education, the interests of people range across each of Holland's themes.

Table 4.5 Mean Interest Scale Sten Scores: Education

Education	n	R	I	A	S	E	C
Some High School	1656	5.38	4.90	5.35	5.58	6.06	5.35
High School	848	5.38	4.98	5.12	5.51	5.56	5.82
Technical College	213	5.77	5.56	5.21	5.30	5.35	5.89
Some University	1324	5.17	5.34	5.46	5.69	5.38	5.64
Associate Degree	256	5.23	5.11	5.08	5.55	5.44	5.95
Community College	227	5.37	5.16	5.16	5.68	5.37	5.67
Bachelors	1896	5.12	5.46	5.60	5.65	5.40	5.34
Masters	675	5.13	5.55	5.69	5.60	5.39	5.33
Professional Degree	107	5.51	6.21	6.05	6.05	5.84	5.57
Doctorate	74	5.19	6.76	5.55	5.16	4.99	5.20

The CIP and Occupational Groups

The validity of the interest scales can be evaluated by comparing the scores of people who are currently working in different occupations. If the scales are working, people should score high on scales that fit with their current occupation. People in occupations that are not related to the scale should score lower. Figures 4.1 – 4.6 evaluate the validity for the interest scales by ranking the mean sten scores of people in 28 occupational groups on each scale. These figures rank the mean sten scores of people in these occupational groups from highest to lowest and provide an overview of the occupational differences found between the interest themes. The differences for each occupational group on the various interest scales suggest that the validity for each scale is substantial.

Figure 4.1 Mean Occupational Group Scores on the **Realistic** Interest Scale

Occupational Group	Score
Installation, Maintenance and Repair	7.29
Construction & Extraction	7.17
Skilled Trades	6.78
Farming, Fishing and Forestry	6.62
Production and Operations	6.53
Transportation	6.52
Building and Grounds Maintenance	6.44
Architecture & Engineering	6.35
Military	5.99
Protective Services	5.91
Computer Occupations	5.82
Athletics, Coaching and Sports	5.57
Sales	5.44
Management	5.35
Food Services	5.30
Mathematical Sciences	5.27
Business & Finance	5.22
Art and Design	5.07
Education, Training and Library	5.02
Life, Physical, Social Sciences	4.95
Office & Administrative Support	4.88
Healthcare Support Occupations	4.87
Legal Occupations	4.77
Healthcare Practitioners and Technicians	4.76
Personal Care and Services	4.72
Entertainment & Performance	4.69
Community and Social Services	4.66
Media and Communications	4.55

4.00   5.00   6.00   7.00   8.00

Figure 4.2 Mean Occupational Group Scores on the **Investigative** Interest Scale

Occupational Group	Score
Mathematical Sciences	6.45
Life, Physical, Social Sciences	6.26
Architecture & Engineering	5.96
Farming, Fishing and Forestry	5.86
Installation, Maintenance and Repair	5.73
Healthcare Practitioners and Technicians	5.60
Production and Operations	5.57
Computer Occupations	5.51
Management	5.43
Protective Services	5.41
Business & Finance	5.25
Healthcare Support Occupations	5.23
Transportation	5.23
Sales	5.22
Skilled Trades	5.21
Military	5.21
Legal Occupations	5.17
Construction & Extraction	5.13
Education, Training and Library	5.10
Community and Social Services	5.06
Media and Communications	5.01
Office & Administrative Support	4.97
Building and Grounds Maintenance	4.94
Food Services	4.90
Art and Design	4.85
Athletics, Coaching and Sports	4.76
Personal Care and Services	4.63
Entertainment & Performance	4.61

Figure 4.3 Mean Occupational Group Scores on the **Artistic** Interest Scale

Occupational Group	Score
Entertainment & Performance	7.11
Media and Communications	6.50
Art and Design	6.50
Sales	5.63
Legal Occupations	5.58
Education, Training and Library	5.57
Management	5.54
Food Services	5.51
Community and Social Services	5.50
Life, Physical, Social Sciences	5.43
Office & Administrative Support	5.28
Athletics, Coaching and Sports	5.25
Personal Care and Services	5.25
Computer Occupations	5.23
Architecture & Engineering	5.19
Business & Finance	5.16
Transportation	5.08
Healthcare Support Occupations	5.00
Production and Operations	4.98
Military	4.97
Healthcare Practitioners and Technicians	4.96
Protective Services	4.92
Installation, Maintenance and Repair	4.88
Farming, Fishing and Forestry	4.84
Skilled Trades	4.83
Building and Grounds Maintenance	4.81
Mathematical Sciences	4.81
Construction & Extraction	4.63

Figure 4.4 Mean Occupational Group Scores on the **Social** Interest Scale

Occupational Group	Score
Community and Social Services	6.77
Healthcare Support Occupations	6.71
Healthcare Practitioners and Technicians	6.49
Education, Training and Library	6.25
Personal Care and Services	6.18
Life, Physical, Social Sciences	5.86
Food Services	5.83
Sales	5.71
Office & Administrative Support	5.69
Legal Occupations	5.67
Athletics, Coaching and Sports	5.60
Management	5.60
Protective Services	5.54
Media and Communications	5.45
Entertainment & Performance	5.36
Art and Design	5.32
Business & Finance	5.32
Production and Operations	5.16
Farming, Fishing and Forestry	5.07
Skilled Trades	5.06
Transportation	4.95
Mathematical Sciences	4.92
Military	4.89
Building and Grounds Maintenance	4.88
Computer Occupations	4.86
Architecture & Engineering	4.83
Installation, Maintenance and Repair	4.72
Construction & Extraction	4.55

4.00   5.00   6.00   7.00

Figure 4.5 Mean Occupational Group Scores on the **Enterprising** Interest Scale

Occupational Group	Score
Sales	6.41
Management	6.33
Business & Finance	6.24
Athletics, Coaching and Sports	6.12
Food Services	5.95
Legal Occupations	5.85
Construction & Extraction	5.75
Transportation	5.61
Architecture & Engineering	5.52
Installation, Maintenance and Repair	5.51
Production and Operations	5.48
Skilled Trades	5.45
Computer Occupations	5.44
Protective Services	5.44
Personal Care and Services	5.42
Entertainment & Performance	5.42
Office & Administrative Support	5.34
Military	5.34
Media and Communications	5.32
Education, Training and Library	5.30
Art and Design	5.29
Building and Grounds Maintenance	5.25
Healthcare Support Occupations	5.25
Healthcare Practitioners and Technicians	5.04
Community and Social Services	5.04
Mathematical Sciences	5.03
Farming, Fishing and Forestry	5.01
Life, Physical, Social Sciences	4.88

4.00   5.00   6.00   7.00

Figure 4.6 Mean Occupational Group Scores on the **Conventional** Interest Scale

Occupational Group	Score
Office & Administrative Support	6.42
Business & Finance	6.39
Production and Operations	6.11
Computer Occupations	6.02
Management	5.81
Mathematical Sciences	5.64
Sales	5.54
Legal Occupations	5.51
Installation, Maintenance and Repair	5.46
Education, Training and Library	5.44
Healthcare Support Occupations	5.43
Food Services	5.43
Transportation	5.42
Architecture & Engineering	5.40
Protective Services	5.22
Skilled Trades	5.18
Construction & Extraction	5.15
Personal Care and Services	5.08
Military	5.01
Healthcare Practitioners and Technicians	4.99
Athletics, Coaching and Sports	4.98
Community and Social Services	4.96
Life, Physical, Social Sciences	4.87
Farming, Fishing and Forestry	4.82
Building and Grounds Maintenance	4.81
Media and Communications	4.78
Art and Design	4.68
Entertainment & Performance	4.52

RELATIONSHIPS BETWEEN THE CIP AND OTHER ASSESSMENT TOOLS

The validity of the CIP can also be gauged by the relationships it has with other measures of psychological traits. Evidence of validity is found when scales on different tests, which appear to have something in common are positively correlated, and when scales which appear to be opposite each other are negatively correlated. When comparing scales from different tests which do not appear to have anything in common, there should be no correlation.

The CIP and Career Values Scale

The *Career Values Scale* measures 10 work values which describe how the individual's personal value system applies to career choice and work satisfaction. The *Career Values Scale* identifies which values are important to the individual, and provides an indication of the types of work the person will find satisfying and rewarding. In this regard, the *Career Values Scale* is used in a similar fashion as most interest inventories, since identifying work values can help people decide what kind of career and/or work environment they might enjoy and find fulfilling.

Given the close overlap in purpose between the *Career Values Scale* and the *Career Interest Profiler*, one would expect to find significant relationships between the assessment tools. A sample of 2168 individuals completed both the *Career Values Scale* and the *Career Interest Profiler*. Table 4.6 shows the correlation coefficients between the scales for these two instruments.

Table 4.6 Correlations between CIP and Career Values Scale n=2168

	R	I	A	S	E	C
Career Development	.050*	.200**	.155**	.086**	.076**	.026
Creativity	.160**	.218**	.347**	.008	.205**	-.092**
Excitement	.147**	.088**	.150**	.017	.241**	-.052*
Financial Rewards	.075**	.014	.072**	-.123**	.321**	.132**
Independence	.058**	.059**	.194**	-.050*	.083**	-.089**
Influence	.095**	.072**	.106**	.113**	.383**	.144**
Prestige	.037	.022	.102**	.044*	.276**	.109**
Security	.013	-.080**	-.118**	.050*	.081**	.236**
Service Orientation	.025	.037	.092**	.412**	.165**	.147**
Team Orientation	-.009	-.007	.163**	.316**	.251**	.072**

** Correlation is significant at the 0.01 level (2-tailed).
 * Correlation is significant at the 0.05 level (2-tailed).

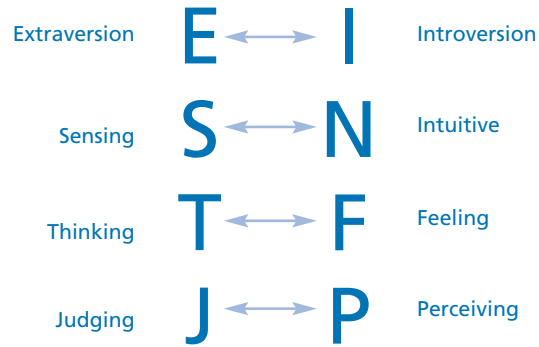The correlations indicate that most of the relationships between the *Career Interest Profiler* and the *Career Values Scale* are consistent with expectations. The one area which is somewhat discrepant is the correlation between the Realistic interest area and the

Creativity value. While this correlation is weak, one would not expect this relationship to be the strongest between the Realistic interest area and the values measured by the *Career Values Scale*. The other interest areas relate to the values in clear and predictable ways.

Table 4.7 lists that top two values for each of the six interest areas (the correlations between the Interest Areas and Career Values are significant at the 0.01 level).

Table 4.7 Strongest Correlating Values for each Holland Interest Scale

Interest Scale	Highest Correlating Values
Realistic	Creativity Excitement
Investigative	Creativity Career Development
Artistic	Creativity Independence
Social	Service Orientation Team Orientation
Enterprising	Influence Financial Rewards
Conventional	Security Service Orientation

The CIP and the Personality Index

The *Personality Index* is an 88 item assessment tool which measures 17 personality traits related to work performance. Personality traits are the characteristics and patterns of behavior that characterize an individual's reaction to the environment and can be used to help explain his/her behavior. The personality traits measured by the *Personality Index* are useful in both career planning and personnel selection as they provide information about the types of work environments the individual prefers and how they tend to approach work activities and relationships. For certain work activities individuals with certain personality traits will perform better and find greater satisfaction than individuals without those traits. For example, people who are outgoing enjoy work that requires them to frequently interact with people, and perform better on tasks that require a lot of social contact. On the other hand, individuals who avoid a lot of social contact perform better in jobs that require a high level of individual work.

Table 4.8 presents the relationships between the CIP interest scales and the personality traits measured by the Personality Index.

Table 4.8 Correlations between CIP and the Personality Index n=2819

	R	I	A	S	E	C
Ambition	-.002	.131**	.080**	.054**	.133**	.084**
Analytical Thinking	.057**	.328**	.113**	-.016	.054**	.018
Attention to Detail	.001	.072**	-.095**	.027	.045*	.284**
Concern for Others	-.124**	-.043*	.136**	.358**	.015	.028
Democratic	-.058**	-.072**	-.006	.103**	-.039*	.010
Dependability	-.036	.041*	-.070**	.017	.068**	.163**
Energy	.042*	.085**	.055**	.055**	.213**	.095**
Flexibility	.004	.130**	.189**	.037	.112**	-.096**
Initiative	.012	.143**	.118**	.077**	.207**	.081**
Innovation	.071**	.147**	.354**	.011	.101**	-.163**
Leadership	.017	.069**	.085**	.004	.274**	.069**
Outgoing	-.011	-.019	.113**	.239**	.270**	.077**
Persistence	.028	.082**	-.041*	.030	.120**	.167**
Rule Following	-.033	-.075**	-.165**	.087**	.015	.294**
Self Control	.125**	.108**	.012	.066**	.121**	.081**
Stress Tolerance	.141**	.128**	.013	.016	.188**	.086**
Teamwork	-.009	.000	.122**	.300**	.233**	.082**

** *Correlation is significant at the 0.01 level (2-tailed).*
 * *Correlation is significant at the 0.05 level (2-tailed).*

The three personality traits with the highest correlations with each of the interest scales are listed below. The Realistic interest scale had the weakest relationships with the 17 personality traits. Each of the other interest scales relates to the personality traits in an expected way. For example, people with Investigative interests tend to score high on the Analytical Thinking scale of the *Personality Index*, while people with Artistic interests score high on the Innovation scale. Except for the Realistic scale, the strongest correlation for each interest scale is with a personality trait that measures a characteristic that is a significant part of Holland's definition of the interest area.

Realistic	R	Stress Tolerance (.14), Self-Control (.13), Concern for Others (-.12)
Investigative	I	Analytical Thinking (.33), Innovation (.15), Initiative (.14)
Artistic	A	Innovation (.35), Flexibility (.19), Rule Following (-.17)
Social	S	Concern for Others (.36), Teamwork (.30), Outgoing (.24)
Enterprising	E	Leadership (.27), Outgoing (.27), Teamwork (.23)
Conventional	C	Rule Following (.29), Attention to Detail (.28), Persistence (.17)

The CIP and Personality Type

Personality Type, which is commonly measured by the *Myers-Briggs Type Indicator®*, identifies individuals' preferences on four dichotomous dimensions. These four dimensions are combined to identify 16 different personality types.

Four MBTI® Dimensions

Extraversion	E ⟷ I	Introversion
Sensing	S ⟷ N	Intuitive
Thinking	T ⟷ F	Feeling
Judging	J ⟷ P	Perceiving

Personality Type theory has often been used to provide career advice to people, since specific types appear to prefer certain occupations more than others. Using reported personality type (the personality type which an individual identifies as best describing his/her preferences) of 2556 people, the average ratings on each interest scale of the CIP was calculated for each of the 16 personality types. Table 4.9 lists the two highest ranked interest scales for each of the 16 types. For example, people who report having an ISTJ personality type show the highest level of interest in the Conventional area, followed by the Investigative area. Similarly, people with the opposite preferences of ENFP show the highest level of interest in Artistic (which is opposite of Conventional on Holland's hexagon), followed by the Social area.

Table 4.9 Highest Ranked Interest Scales of the 16 Personality Types   n=2556
(Based on average ratings by each type)

ISTJ = CI n=175	ISFJ = CS n=111	INFJ = SA n=254	INTJ = IA n=243
ISTP = RI n=44	ISFP = SC n=65	INFP = AS n=424	INTP = AI n=227
ESTP = ES n=49	ESFP = SA n=51	ENFP = AS n=298	ENTP = AE n=135
ESTJ = EC n=104	ESFJ = SE n=85	ENFJ = SA n=178	ENTJ = EA n=113

Other interesting findings from this research include:

- Investigative is a common interest for personality types with preferences for Introversion and Thinking. These preferences are marked by a desire to process information internally and make decisions using logical reasoning.

- Artistic and Social are common interest themes for personality types with preferences for Intuition and Feeling. Personality type research indicates that people of these types emphasize self-expression and communication.

- People with preferences for Extraversion and Thinking share a common interest in Enterprising. Research on personality type and careers indicates that people with these preferences are often found in business and management.

- Social is a common theme for personality types with a Feeling preference. People with a Feeling preference are energized by understanding and supporting others. As a result, one would expect that people with a Feeling preference tend to have occupational interests which fall in the Social category.

- Conventional is a common theme for people with Introverted, Sensing, and Judging personality type preferences.

- Artistic is a common interest among personality types with a preference for Intuition. People with a preference for Intuition tend to be imaginative and creative.

These findings fit well with research on how personality type relates to career preferences. As a result they provide good construct validity evidence for the Career Interest Profiler.

Appendix One

Sample Report

Career interest
PROFILER

Profiling: John Sample   **Date:** 1/7/04

o*net™
in*it

About this report

This report provides an in-depth description of your responses to the Career Interest Profiler (CIP). Designed to help you identify and understand your career interests, this report can start you on the journey of matching your interests with occupations. To guide you through the career planning process and help you set goals, a variety of occupations that correspond with your interests are provided. This report is designed to expand your options, rather than limit them, giving you many avenues to explore that have something in common with your interest profile.

Your personalized report explains your two areas of greatest interests, and then provides a wide variety of occupations that meet those interests in some way. Not all of these jobs will be attractive to you, which is to be expected. While interests play a key role in identifying preferred occupations, other traits such as abilities, skills, values, personality and previous experience also influence what you find appealing. Each of the occupations listed in this report have common activities that match your interests. Of course, some of the jobs listed will match your desires to a greater extent than others.

As you read through this report there are a number of things to keep in mind.

1   Do not expect to find one perfect job. There are many job options available and many will fit your interest profile in some way.

2   The Career Interest Profiler is a measure of interests, not skills. So while it can help you identify jobs you might like, it does not tell you what you are good at.

3   When you are making career decisions gather as much information as possible. This includes taking other types of assessments and talking to people who are working in jobs that interest you.

4   Take the time to discuss your findings with the people who are important to you such as your family and career counselor.
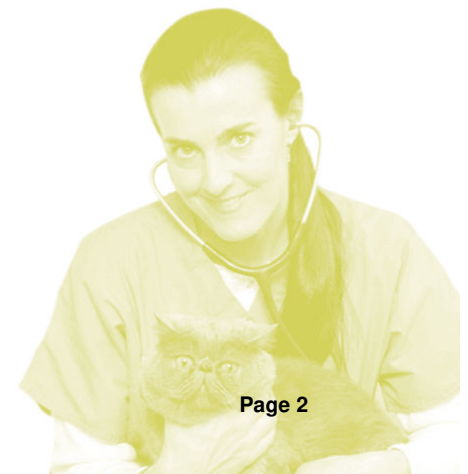
Your Profile

The CIP measures 6 broad patterns of interest: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional. Your scores for the six areas are shown below. Most people have interests that fall into more than one category. At the bottom of the page is a brief description of the 6 interest areas.

Your score for each interest area is directly related to the number of likes, dislikes and uncertain responses you made on the Career Interest Profiler. If you chose many likes in an area, your interest level will be high or very high. If you chose many dislikes then your interest level will be low or very low. The level is neither good nor bad, but a reflection of how interesting you find acivities in each of the six areas.

Theme	Score	Level of Interest				
		very low	low	average	high	very high
R	6					
I	7					
A	5					
S	7					
E	6					
C	6					

Realistic	R	Enjoy work activities that include practical, hands-on problems and solutions. They like dealing with plants, animals, and real-world materials, like wood, tools, and machinery. They enjoy outside work.
Investigative	I	Enjoy work that involves solving complex problems. They like exploring ideas, conducting research and looking at theories. They prefer thinking over doing and prefer data and ideas to people.
Artistic	A	Enjoy work activities that deal with the artistic side of things, such as forms, designs, and patterns. They like self-expression in their work. They prefer settings where work can be done without following a clear set of rules.
Social	S	Enjoy work activities that assist others and promote learning and personal development. They prefer to be with people rather than to work with objects, machines, or data. They like to teach, to give advice, to help, or otherwise be of service to people.
Enterprising	E	Enjoy work activities that have to do with starting up and carrying out projects, especially business ventures. They like persuading and leading people and making decisions. They like taking risks for profit. These people prefer action rather than thought.
Conventional	C	Enjoy work activities that follow set procedures and routines. They prefer working with data and detail more than with ideas. They prefer work in which there are precise standards rather than make judgements. These people like working where the lines of authority are clear.

Investigative - Social

I **S** *is your career interest pattern*

Investigative - *Thinkers*

Investigative people are inquisitive, analytical, and intellectual. They like investigating things and solving complex problems. Investigative individuals enjoy exploring ideas, conducting research, uncovering facts and establishing theories. Their preferred reading material includes scientific or technical magazines. They also enjoy working alone, and prefer working with data and ideas over people. As a result, they tend to avoid jobs that require leading, selling, or persuading others. While they share some of the same interests in the physical world as Realistic people, Investigative types prefer thinking over doing.

activities/hobbies they enjoy
Scientific, mathematical, and intellectual pursuits; researching and understanding the physical world; using computers; doing complex calculations; astronomy, crossword puzzles, board games, and visiting museums.

typical skills and strengths
Understanding and solving science and math problems; analytical, observant, inquisitive; organizing, analyzing, interpreting data, ideas, theories; working independently with loosely defined problems; researching and understanding the physical world.

global occupational areas
Biology, chemistry, physics, computer programing, computer engineering, medicine, pharmacology, psychology, veterinary science, technical writing.

dislikes
Sales, persuading others, leading people.

Social - *Helpers*

Social people are friendly, outgoing, and understanding. They enjoy work that involves personal interaction and helping others. They are interested in people much more than data or things. Social individuals seek out close interpersonal relationships, and like teaching, helping and solving social problems. They are concerned about human welfare, and enjoy work that allows them to overcome interpersonal problems and mediate disputes. They tend to avoid using machines or tools, and dislike extensive intellectual or physical work. Occupations that are very attractive to Social people are nursing, teaching and counseling.

activities/hobbies they enjoy
Going to parties; participating in team sports; volunteering with social action groups; caring for children

typical skills and strengths
Planning and supervising group activities; helping people with problems; mediating disputes

global occupational areas
Nursing, Counseling, Teaching, Religion

dislikes
Physical work; dealing with data and things; building and repairing

Investigative - Social

I — S *Occupations*

Investigative-Social people tend to enjoy exploring ideas and complex problems as well as having some opportunity for personal interaction or helping others. To help identify jobs you will enjoy, you should consider work that involves both of these interests. Below are occupations along with descriptions that fall in the Investigative-Social category.

I — S *Occupations*

Job Title	Zone	ONet Code	NOC
Agricultural Sciences Teachers, Postsecondary	5	25-1041.00	4131

Teach courses in the agricultural sciences. Includes teachers of agronomy, dairy sciences, fisheries management, horticultural sciences, poultry sciences, range management, and agricultural soil conservation

Anthropologists	4	19-3091.01	4169

Research or study the origins and physical, social, and cultural development and behavior of humans and the cultures and organizations they have created

Biological Science Teachers, Postsecondary	5	25-1042.00	4121

Teach courses in biological sciences

Chemistry Teachers, Postsecondary	5	25-1052.00	4121

Teach courses pertaining to the chemical and physical properties and compositional changes of substances. Work may include instruction in the methods of qualitative and quantitative chemical analysis. Includes both teachers primarily engaged in teaching, and those who do a combination of both teaching and research

Educational Psychologists	4	19-3031.01	4151

Investigate processes of learning and teaching and develop psychological principles and techniques applicable to educational problems

Forestry and Conservation Science Teachers, Postsecondary	5	25-1043.00	4121

Teach courses in environmental and conservation science

Health Specialties Teachers, Postsecondary	5	25-1071.00	4121

Teach courses in health specialties, such as veterinary medicine, dentistry, pharmacy, therapy, laboratory technology, and public health

Mathematical Science Teachers, Postsecondary	5	25-1022.00	4131

Teach courses pertaining to mathematical concepts, statistics, and actuarial science and to the application of original and standardized mathematical techniques in solving specific problems and situations

Zone is the amount of skill, education, or prepration to do work required for this occupation. Level 1 occupations require little or no preparation; Level 2 - some preparation; Level 3 - Medium preparation; Level 4 - Considerable preparation; Level 5 jobs require Extensive preparation.

Use the **ONet Code** to gain direct access to the Occupational Information Network database, at http://online.onetcenter.org There you will find the types of activities, skills, abilities, education, and experience needed for these occupations.

The **NOC** is the Canadian National Occupation Classification. Use the NOC number to access the occupational information available at http://www23.hrdc-drhc.gc.ca/

Investigative - Social

I - S *Occupations*

Physician Assistants	4	29-1071.00	3152

Provide healthcare services typically performed by a physician, under the supervision of a physician. Conduct complete physicals, provide treatment, and counsel patients. May, in some cases, prescribe medication. Must graduate from an accredited educational program for physician assistants

Physics Teachers, Postsecondary	5	25-1054.00	4121

Teach courses pertaining to the laws of matter and energy. Includes both teachers primarily engaged in teaching and those who do a combination of both teaching and research

Related Occupations

T here are many jobs out there that will meet some but not all of your interests. To expand your opportunities, it is helpful to look at jobs that utilize some of your interest patterns or rank them in a different order. Since you are Investigative-Social you may want to look at jobs that rearrange the order of your themes such as Social-Investigative, or utilize one of your key interests, Investigative or Social. Below are groups of occupations that are organized by interest pattern that you have something in common with and may want to explore.

S — I *Occupations*

Job Title	Zone	ONet Code	NOC
Anthropology and Archeology Teachers, Postsecondary	5	25-1061.00	4121
Teach courses in anthropology or archeology			
Ethnic and Cultural Studies Teachers, Postsecondary	5	25-1062.00	4121
Teach courses pertaining to the culture and development of an area (e.g., Latin America), an ethnic group, or any other group (e.g., women's studies, urban affairs)			
Audiologists	4	29-1121.00	3141
Assess and treat persons with hearing and related disorders. May fit hearing aids and provide auditory training. May perform research related to hearing problems			
Counseling Psychologists	5	19-3031.03	4151
Assess and evaluate individuals" problems through the use of case history, interview, and observation and provide individual or group counseling services to assist individuals in achieving more effective personal, social, educational, and vocational development and adjustment			
Economics Teachers, Postsecondary	5	25-1063.00	4121
Teach courses in economics			
Graduate Teaching Assistants	5	25-1191.00	4122
Assist department chairperson, faculty members, or other professional staff members in college or university by performing teaching or teaching-related duties, such as teaching lower level courses, developing teaching materials, preparing and giving examinations, and grading examinations or papers. Graduate assistants must be enrolled in a graduate school program. Graduate assistants who primarily perform non-teaching duties, such as laboratory research, should be reported in the occupational category related to the work performed			
History Teachers, Postsecondary	5	25-1125.00	4121
Teach courses in human history and historiography			

Related Occupations

Instructional Coordinators	5	25-9031.00	4166

Develop instructional material, coordinate educational content, and incorporate current technology in specialized fields that provide guidelines to educators and instructors for developing curricula and conducting courses. Develops tests, questionnaires, and procedures to measure effectiveness of curriculum and to determine if program objectives are being met. Confers with school officials, teachers and administrative staff to plan and develop curricula and establish guidelines for educational programs.

Medical and Public Health Social Workers	4	21-1022.00	4152

Provide persons, families, or vulnerable populations with the psychosocial support needed to cope with chronic, acute, or terminal illnesses, such as Alzheimer's, cancer, or AIDS. Services include advising family care givers, providing patient education and counseling, and making necessary referrals for other social services

Mental Health and Substance Abuse Social Workers	4	21-1023.00	4152

Assess and treat individuals with mental, emotional, or substance abuse problems, including abuse of alcohol, tobacco, and/or other drugs. Activities may include individual and group therapy, crisis intervention, case management, client advocacy, prevention, and education

Mental Health Counselors	4	21-1014.00	4153

Counsel with emphasis on prevention. Work with individuals and groups to promote optimum mental health. May help individuals deal with addictions and substance abuse; family, parenting, and marital problems; suicide; stress management; problems with self-esteem; and issues associated with aging and mental and emotional health

Nursing Instructors and Teachers, Postsecondary	5	25-1072.00	4121

Demonstrate and teach patient care in classroom and clinical units to nursing students. Includes both teachers primarily engaged in teaching and those who do a combination of both teaching and research

Orthotists and Prosthetists	3	29-2091.00	3219

Assist patients with disabling conditions of limbs and spine or with partial or total absence of limb by fitting and preparing orthopedic braces or prostheses

Podiatrists	4	29-1081.00	3123

Diagnose and treat diseases and deformities of the human foot .Treats conditions, such as corns, calluses, ingrown nails, tumors, shortened tendons, bunions, cysts, and abscesses by surgical methods. Prescribes corrective footwear.

Political Science Teachers, Postsecondary	5	25-1065.00	4121

Teach courses in political science, international affairs, and international relations

Psychology Teachers, Postsecondary	5	25-1066.00	4121

Teach courses in psychology, such as child, clinical, and developmental psychology, and psychological counseling

Related Occupations

Zone is the amount of skill, education, or prepration to do work required for this occupation. Level 1 occupations require little or no preparation; Level 2 - some preparation; Level 3 - Medium preparation; Level 4 - Considerable preparation; Level 5 jobs require Extensive preparation.

Use the **ONet Code** to gain direct access to the Occupational Information Network database, at http://online.onetcenter.org There you will find the types of activities, skills, abilities, education, and experience needed for these occupations.

The **NOC** is the Canadian National Occupation Classification. Use the NOC number to access the occupational information available at http://www23.hrdc-drhc.gc.ca/

	Zone	ONet Code	NOC
Registered Nurses	4	29-1111.00	3152

Assess patient health problems and needs, develop and implement nursing care plans, and maintain medical records. Administer nursing care to ill, injured, convalescent, or disabled patients. May advise patients on health maintenance and disease prevention or provide case management. Licensing or registration required. Includes advance practice nurses such as: nurse practitioners, clinical nurse specialists, certified nurse midwives, and certified registered nurse anesthetists. Advanced practice nursing is practiced by RNs who have specialized formal, post-basic education and who function in highly autonomous and specialized roles

	Zone	ONet Code	NOC
Sociology Teachers, Postsecondary	5	25-1067.00	4121

Teach courses in sociology

	Zone	ONet Code	NOC
Speech-Language Pathologists	4	29-1127.00	3141

Assess and treat persons with speech, language, voice, and fluency disorders. May select alternative communication systems and teach their use. May perform research related to speech and language problems

	Zone	ONet Code	NOC
Substance Abuse and Behavioral Disorder Counselors	4	21-1011.00	4153

Counsel and advise individuals with alcohol, tobacco, drug, or other problems, such as gambling and eating disorders. May counsel individuals, families, or groups or engage in prevention programs

Ⓘ *Occupations*

Job Title	Zone	ONet Code	NOC
Family and General Practitioners	5	29-1062.00	3112

Diagnose, treat, and help prevent diseases and injuries that commonly occur in the general population

	Zone	ONet Code	NOC
Internists, General	5	29-1063.00	3111

Diagnose and provide non-surgical treatment of diseases and injuries of internal organ systems. Provide care mainly for adults who have a wide range of problems associated with the internal organs

	Zone	ONet Code	NOC
Obstetricians and Gynecologists	5	29-1064.00	3111

Diagnose, treat, and help prevent diseases of women, especially those affecting the reproductive system and the process of childbirth

	Zone	ONet Code	NOC
Pediatricians, General	5	29-1065.00	3111

Diagnose, treat, and help prevent children's diseases and injuries

Related Occupations

(S) *Occupations*

Job Title	Zone	ONet Code	NOC
Child, Family, and School Social Workers	4	21-1021.00	4152

Provide social services and assistance to improve the social and psychological functioning of children and their families and to maximize the family well-being and the academic functioning of children. May assist single parents, arrange adoptions, and find foster homes for abandoned or abused children. In schools, they address such problems as teenage pregnancy, misbehavior, and truancy. May also advise teachers on how to deal with problem children

Reviewing Your Interests

T his report describes how your interests match certain types of work better than others. Work that make the most of your interests will be more rewarding and satisfying for you. Work that do not, may leave you feeling unmotivated or unsatisfied. To get the most out of this report, it is helpful to take some time to review your results. Below are some activities that will help you further analyze your interests and help you find out more about the occupations that interest you.

1   Read through the interest descriptions on page 4. Highlight the activities and tasks that you believe an occupation must have for you to enjoy it. When you start evaluating occupations, check to see if they involve these activities. Remember, not every type of work will fulfill all your interests, however, some jobs will meet more of them than others. Consider which of your interests you are willing to satisfy in leisure activities or hobbies, rather than in work.

List the activities and tasks a job should involve for you to feel satisfied.

_____

_____

_____

_____

_____

_____

_____

_____

_____

List the activities and tasks that you would be willing to satisfy through leisure or hobbies.

_____

_____

_____

_____

_____

_____

_____

_____

Reviewing Your Interests

2   Looking back over your previous experiences, what work and leisure activities have given you the greatest sense of accomplishment or satisfaction?

_____

_____

_____

_____

_____

_____

_____

_____

3   Review the occupations that appear at the beginning of the report. These are the ones that match your primary interests and are most likely to satisfy your interests. If none of them appeal to you, look at the section called More Occupations. Highlight the occupations that you would like to learn more about. Begin with 10 jobs that you are curious about, and write them in the space below. You can begin your career search by using these occupations as a starting point. There are many jobs out there, and by researching the jobs you have listed you will quickly learn what you like and dislike. Explore the possibilities!

List the 10 jobs you are most curious about.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Your Career Search

P utting together a comprehensive and detailed career search with specific goals and deadlines is one of the most important steps for managing career decision making successfully. Too often, people in career transition immediately begin writing resumes, applying for jobs, or jumping into retirement without planning their activities. As a result, people use poor job search techniques or make decisions that they later regret.

To start your career search, you need to do some research. To make good career decisions you should find out as much as you can about each of the occupations that interest you.

1   There are a number of questions you need to answer before you can assess whether or not a job is for you. These include:

   Questions about the work itself - What are the duties and responsibilities? What does a typical work week look like? What are the working conditions?

   Questions about work requirements - What are the minimum educational requirements? What skills are needed? What personal charateristics are needed? Are there any certification requirements? Does training take place on the job or do I need some post-secondary education?

   What does the work offer you - What is the employment outlook? Is the job in a sector that is growing or declining? What are the opportunities for growth? What are the opportunities for career advancement?

2   **Learn more about each job** - if you have access to the internet you can quickly find excellent and reliable information. Each occupation listed in this report has an O*Net Code and a NOC Code. These government resources provide up-to-date information on the tasks, knowledge, skills, abilities, work activities, wages and employment, and related occupations for each job.

   To search by O*Net Code got to http://online.onetcenter.org/ - there you will find a place to type in the O*Net Code.

   To search by NOC Code go to http://www23.hrdc-drhc.gc.ca/ and type in your NOC code.

Your Career Search

If you do not have access to the internet you can do research by going to your local library or career center. Most of these organizations have materials that will give you a good overview of occupations. Most of them also have free internet access and are more than willing to help you get connected. Try and find out the kind of information listed above for each job.

Do not forget to talk to people who are in the occupation. This will give you the opportunity to confirm the information you already have from your other research.

3 **Keep your options open** - Do not discard a job because you have a pre-conceived notion about what it entails. Your understanding may be based on stereotypes. For example, the activities of an automotive service technician may have more to do with computers and electronics than with the ability to use a wrench. Keep an open mind and don't limit yourself unnecessarily.

Don't expect to accomplish your career search in just one day. It will take time and hard work. You need to have a plan and to stick to it! Use the form on the following page to evaluate and take notes on any occupation that interests you. Photocopy it as needed.

Review an Occupation

Name of Occupation _____

1   What are the duties and responsiblities? What does a typical work week look like? What working conditions can you expect?

_____
_____
_____
_____

2   What experience, education, certification or training do you need to get in order to prepare for the career you are exploring?

_____
_____
_____
_____

3   What specific job requirements do you need to meet? (eg shift work, weekend work, on call etc.)

_____
_____
_____
_____

4   List the pros and cons about the occupation that you are researching.

_____
_____
_____
_____

5   Will this occupation meet your needs? (money, relationships, personal development, ambitions etc.)

_____
_____
_____
_____

Photocopy as needed.