

Users Manual

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1 Introduction

Business professionals continue to search for methods that enable the effective use of human resources. In order to make the best use of their personnel, organizations have focused on identifying the characteristics of workers that predict good performance. It is common knowledge that people have skills and capabilities that allow them to be successful in certain types of work. A wide variety of tools and techniques have been developed to identify these skills.

Currently, assessment experts recognize that a person's success at work involves much more than his or her cognitive abilities. The ability requirements of an occupation represent only one type of attribute that influences the potential for success. Differences revolving around individuals' preferences and typical work behavior also influence how successful they may be. The idea that people differ from one another is quite obvious, and we can easily believe that individuals with certain traits are more effective in some jobs than others. Research over the past 15 years has indicated that workers' personality traits are related to job performance in a wide variety of occupations. Personality traits, which are the distinctive patterns of behaviour that characterize an individual, have been found to play a key role in an individual's effectiveness at work.

Personality can be thought of as a combination of an individual's traits and tendencies. These traits are relatively enduring dispositions that distinguish one person from another. Personality traits describe an individual's tendency to act, think, or feel in a certain manner. These traits tend to be stable and do not change much over the course of a person's lifetime. As with cognitive abilities, aspects of personality can be clearly and efficiently assessed through psychometric tests and questionnaires. Personality tests measure unique characteristics that cannot be identified by ability and aptitude tests. As a result, they provide complimentary information that can be extremely useful for selection, career, development and team-building applications.

The Work Personality Index (WPI)

The WPI is a questionnaire that is specifically designed to identify personality traits that directly relate to work performance. By helping identify individuals' personality traits, the WPI can help select candidates, guide career development, and increase team functioning. This primary focus of the WPI helps professionals make the most efficient and effective match between people and work roles.

Unlike some personality models that attempt to provide a comprehensive measure of personality, the WPI focuses on the traits that are important in the work environment. The WPI measures personality traits for the normal adult population and does not examine clinical or mental health related issues. As a result, low scores on the scales are not indicative of pathology, but rather, different preferences and motivations for working. These different preferences and motivations influence the type of work people are successful at and what they enjoy doing.

The WPI assesses 17 primary scales that measure distinct aspects of work personality which allow professionals to make many links between an individual's preferences and their work behavior. These 17 scales are categorized into five groups that provide a global view of work personality.

Uses of the WPI

With the WPI you can assess aspects of personal work style for a number of different applications. The most common uses of the WPI include personnel selection, career development, and team building.

Personnel selection is one of the primary applications of the WPI since it helps match a person's characteristics with those required for successful performance on the job. For career development the WPI helps people identify their preferences and motivations and how these relate to different occupations and work environments. In team building the WPI can help resolve conflict and improve team communication.

Using the WPI in Personnel Selection

The WPI is useful in personnel selection because it was designed to help match candidates' characteristics with job requirements. The WPI, when used in conjunction with other techniques and tools, can increase the effectiveness of an organization's selection procedure. By conducting a job analysis to identify the personality traits of successful employees, and then using the WPI to identify the presence or absence of these traits in candidates, professionals can increase the efficiency and accuracy of their personnel selection process. For example, when hiring salespeople, the candidates who tend to be successful score high on the Ambition, Persistence, and Outgoing scales. By using the WPI to screen for applicants who have these characteristics, you can improve the quality of those hired.

Using the WPI in Career Development

Career development revolves around helping people gain self-awareness of their skills, preferences and values and then identifying occupations that provide a good fit. The WPI can help individuals gain an understanding of their work preferences and link them to occupations. This information is extremely useful for people who desire to identify potential careers and make choices regarding further education and skill development. Results from the WPI are also helpful for examining job satisfaction, occupational selection, and turnover. For example, individuals who score low on Energy and high on Attention to Detail usually enjoy work that follows a steady pace, uses methodical procedures, and is well organized. When these same people are placed in a fast-paced, loosely structured environment, they tend to experience dissatisfaction.

Using the WPI in Team Building

The WPI can also be effective in team building applications. The key aspect of effective team building is to help individuals understand themselves and the other members of their team. This allows the team to make the most of each person's strengths and gives each team member an understanding of why and how others adopt different approaches to their work. By helping team members appreciate the differences amongst themselves, they can make constructive use of their diverse skills. For example, with teams working in a structured environment on projects that follow a strict schedule, it is important for someone on the team to adopt a leadership role. In settings where a team needs to brainstorm ideas and develop alternative solutions, it is important that team members be innovative and democratic.

2 Personality and the WPI Model

Personality is the pattern of behaviour that characterize an individual and his or her reactions to the environment. Most experts believe that personality is a combination of traits that distinguish one person from another. Traits are enduring tendencies to act, think or feel in a certain way in any given circumstance.

Every individual's combination and strength of different traits leads him/her to act a certain way in a wide variety of circumstances. For example, extraverted people tend to be outgoing in most settings. When it comes to measuring extraversion and other traits that make up personality, we know that personality questionnaires can provide a reliable and valid assessment.

Our current understanding of personality supports the claim that personality traits can predict effective performance in many occupations. Therefore, it is easy to see why organizations would like to measure personality. If they can identify an individual's traits, which predict how the person will act and react to the job, the organization can select the candidates who have the traits required for successful performance.

There are many models of personality that measure a large number of personality traits. Some of these models are built around two or three traits, while others may have upwards of thirty. There is considerable debate around the true number of personality traits that can be measured. Rather than trying to measure all aspects of human personality, the WPI examines only those traits that research has shown are related to successful work performance.

Conceptualization of the WPI Model

The WPI model is built upon the personality traits identified in the Occupational Information Network (O*NET) developed by the U.S. Department of Labor. This model is not based upon a theoretical view of human personality, but is a combination and ordering of personality traits that predict job performance. The model was formulated by examining two main sources.

First, many research studies have been conducted that link different personality traits to effective job performance. Commonly known as predictive or concurrent validity studies, this research provides important evidence of the traits that can be measured effectively and that predict job performance. Examining these studies lead to the identification of a number of personality traits that consistently relate to effectiveness on the job.

Second, existing taxonomies that are used in personal development and personnel selection were reviewed. To examine these taxonomies, the personality measures that operationalize them were analyzed, and their research critiqued. These personality measures included: the California Psychological Inventory, by Harrison Gough, the Hogan Personality Inventory, by R. Hogan and J. Hogan, and the NEO PI-R, by Paul Costa and Robert McCrae. Reviewing these personality assessments led to the identification of other personality traits that are closely tied to work preferences and motivations.

By examining these two main sources, 17 primary scales were identified, which the O*NET researchers grouped into 7 global scales. However, factor analysis of the trial WPI data indicated that a 5 factor solution provided a better fit (see page 39). Therefore, the WPI contains 17 primary scales that are categorized into 5 global constructs. Figure 2.1 illustrates how these scales are organized. The 5 groups are labeled Achievement Orientation, Conscientiousness, Social Orientation, Practical Intelligence and Adjustment. These groups closely mirror the global traits identified in the Five-Factor Model of Personality. The 17 primary scales represent a finer grained assessment of the 5 constructs. For example, Achievement Orientation contains the following primary scales: Ambition, Initiative, Flexibility, Energy, and Leadership. The justification for the 5 constructs and the primary scale components is described below.

Figure 2.1 – 5 Global Constructs and 17 Primary Traits of the WPI Model

Achievement Orientation
Ambition
Initiative
Flexibility
Energy
Leadership
Conscientiousness
Persistence
Attention to Detail
Rule-Following
Dependability
Social Orientation
Teamwork
Concern for Others
Outgoing
Democratic
Practical Intelligence
Innovation
Analytical Thinking
Adjustment
Self-Control
Stress Tolerance

Achievement Orientation

Achievement Orientation involves working hard and wanting to get ahead, persisting in the face of obstacles, and striving for career success. This construct has been an important component of personality theory for many years. In the Five-Factor Model, Achievement Orientation falls under the Conscientiousness factor. However, the WPI separates the achievement striving from the dependable and disciplined behaviours that are grouped in the Conscientiousness factor of the Five-Factor Model. This construct is commonly called Achievement Striving, Assertiveness, and Ambition.

The **Achievement Orientation** composite contains the following primary scales: **Ambition, Initiative, Flexibility, Energy, and Leadership.**

Conscientiousness

Conscientiousness involves being planful, careful, dependable and disciplined. While the Conscientiousness label is taken from the Five Factor Model, the WPI composite does not contain the achievement related content. Research has shown that Conscientiousness is consistently related to work performance in a wide variety of occupations.

The four primary scales that reflect the **Conscientiousness** composite are: **Persistence, Attention to Detail, Rule-Following, and Dependability.**

Social Orientation

Social Orientation is represented by sensitivity to the needs of others, a willingness to work cooperatively rather than independently, and a preference for working with others and establishing personal relationships. This composite closely resembles the Extraversion factor of the Five-Factor Model.

The elements of **Social Orientation** are found in the following primary scales: **Teamwork, Concern for Others, Outgoing, and Democratic.**

Practical Intelligence

Practical Intelligence involves characteristics such as insight, imagination, originality, being open to new ideas, and maintaining a thoughtful approach to work. This construct is commonly found in many personality taxonomies and has been

labeled Openness to Experience, Openness, Culture, Intellect, and Intellectance.

The **Practical Intelligence** composite found in the WPI is composed of two primary scales; **Innovation and Analytical Thinking**.

Adjustment

The Adjustment composite found in the WPI closely resembles the Neuroticism composite found in the Five-Factor Model. Representing the tendency to remain calm, composed and free from worry in stressful situations, other common labels for this construct include Emotional Stabiltiy, Negative Emotionality, and Worrying.

The two primary scales that reflect the key aspects of **Adjustment** are **Self-Control and Stress Tolerance.**

3 Administration

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

Administration Procedure

The WPI is largely self-administered, and can be completed individually or in groups. The administrator should ensure that the assessment environment is relatively free from distractions, is quiet, and well lit. It is important to create an environment that makes the individuals taking the WPI as comfortable as possible. While there is no time limit to the administration, most people complete the 153 items in approximately 15–20 minutes. Those who take longer may be encouraged to work more rapidly and not study the items at length.

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

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

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

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

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

a The WPI is a personality index, not a test. The WPI is designed to assess equally valid personal styles and preferences. Therefore, there are no right or wrong answers.

b There is no time limit for completing the WPI, however, most people complete the assessment in 15–20 minutes.

c When completing the assessment, it is best not to think too long about any item. Generally, the person's first response is the best response.

d Encourage respondents not to omit items. If an individual truly feels unable to make a choice, instruct them to select N for Neutral.

e Inform the people taking the WPI what will happen with their results. A statement that discusses the purposes of the assessment and how the results will be used is helpful in winning the respondents' attention and motivation.

f Provide respondents with the opportunity to ask questions.

g Emphasize the need for respondents to carefully complete the required identifying information, and tell them to carefully read through the instructions before responding to the items.

h If using a paper-pencil administration, stress the importance of matching the numbers on the answer sheet to the numbers on the item booklet.

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

Step 5 After all the respondents have completed the assessment, review their answer sheet to ensure that they did not miss items and have completed all the required identifying information.

Appropriate Populations for Administration

Age

The WPI measures personality traits immediately applicable to work settings. The test items revolve around typical work experiences, and for people to respond to them correctly they need to be able to relate to the situations presented in each item. For

this reason, the WPI is appropriate for people in the working population. Younger adults may not have enough work experience to respond to the items in a valid way. Therefore, it is recommended that the WPI be used with people who are older than seventeen years of age.

Ethnic Groups

The WPI has been normed with individuals from a variety of ethnic and cultural backgrounds in the United States and Canada. Research results presented in Chapter 6 suggest that the WPI may be used effectively with people from different cultures with little threat of adverse impact.

Required Reading Level

The reading level of the WPI questionnaire was assessed using two popular methods. The Flesch Reading Ease score rates text on a 100-point scale using the average sentence length and the average number of syllables per word. The score for the WPI questionnaire was 51.6.

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

Scoring and Reporting

Two different reports can be generated from a respondent's WPI answer sheet, the Select Report and the Personal Effectiveness Report. Each of these reports contain the same scales and present results in Sten scores. However, the organization of each report and the type of feedback provided is significantly different.

The **WPI Select Report** is designed for personnel selection. It describes key features of a candidate's personal style that influence his/her approach to tasks, ways of interacting with people, and performance at work. The Select Report contains a profile page which provides a graphic summary of the individual's results, along with a narrative interpretation which describes the meaning of the scores.

The **WPI Personal Effectiveness Report** is designed as a tool for professional growth. It contains narrative descriptions of an individual's preferences and strengths, and provides techniques for increasing personal effectiveness in the following areas: Working with Others, Dynamism, Work Style, Problem Solving, Dealing with Pressure and Stress, Identifying and Managing Change.

4 Interpreting the WPI

There are many applications where the WPI can be useful. The most popular include personnel selection, communication and team building, and career development. After the responses have been scored and the reports have been generated, the results can be interpreted. This chapter outlines the steps for appropriately interpreting WPI results, and provides in-depth information on the meaning of the 17 WPI scales.

Steps for Interpreting the WPI

The following four steps outline the recommended process for interpreting an individual's WPI results.

Step One: Assess the validity of the WPI results

The validity of the WPI results must be evaluated before proceeding with the interpretation of an individual's profile. Assessing the validity involves examining the number of omitted items. While this is rarely a concern, some individuals dislike responding to self-report measures and may omit answering certain questions. If the omission rate, which is the percentage of incomplete items, is more than 6% or 10 items, the results should be interpreted cautiously.

Step Two: Interpret the Primary Scale Scores

The next level of interpretation is at the primary scale level which pinpoints specific strengths, challenges, preferences, and tendencies. This allows you to identify differences among people that play an important role in effectively matching candidates to a job, guiding team building, and making career choices. Individuals' highest and lowest scale scores are important to examine closely since their pattern closely relates to the work tasks they will be successful at, the work environment in which they will perform effectively, and the types of tasks they will enjoy.

If you are selecting personnel and have developed benchmarks for the position, it is appropriate to compare the candidates style with the benchmarks at this stage. Differences between the individual and the job requirements can be explored in Step Three when conducting interviews or utilizing other assessments.

When interpreting the primary scales it is important to recognize that scores are never good or bad, only more on less appropriate to certain types of work. For example, low scores on the Democratic scale are appropriate for work that requires many solitary hours. However, this independent style can be counterproductive for work in a team environment. Specific interpretation for each of the 17 scales can be found later in this chapter.

Step Three: Compare WPI results to other sources of information

When making decisions related to personnel selection, or helping people with career choices, it is recommended that the results be used to guide an interview that is designed to come to a greater understanding of the individual. Hypotheses developed about an individual's approach to work and preferred environment can be examined through interviews, additional assessments, and behavioural observation. These other sources of information can provide a more meaningful interpretation of the WPI results. The WPI should not be used as the only source of information when making important decisions. Rather, when combined with other details gathered from different techniques, the WPI can contribute comprehensive, powerful findings.

Step Four: Summarize the findings and make decisions

Making decisions is the crucial step in employing the WPI. While the WPI should never be used alone as a decision making tool, in conjunction with other sources of information it can enhance the selection and development of individuals. Based on the nature and strength of individuals' scale scores, hypotheses can be generated and their appropriateness for specific occupations can be determined. These hypotheses can be followed up through interviews or further assessments to better determine an individual's suitability.

Having interpreted the individual's WPI profile

it is best to provide feedback to the candidate. Merely providing a copy of the WPI profile does not constitute effective feedback. While it can be difficult in corporate settings to provide feedback to each candidate (especially in personnel selection), the feedback sessions can be conducted in either group or individual formats.

Interpretation Summary:

The recommended approach to interpreting WPI results is to adopt a systematic, and thorough set of procedures. The steps outlined above provide a logical system to examine an individual's results and compare them with other sources of information. These steps allow professionals using the WPI to interpret scores effectively and make appropriate decisions, whether the WPI is used for personnel selection, team building, or career development.

Interpreting the WPI Primary Scales

The 17 Primary scales measure precise dimensions, providing a specific analysis of an individual's personality. In order to examine the many variations among how people approach and complete their work, spending time carefully reviewing the 17 scales is often necessary.

The 17 Primary Scales are bipolar, and therefore both low and high scores have meaning. Low scores are not "bad" and high scores are not "good." Instead they describe an individual's personality style that should be interpreted in the context of his/her current or potential work environment. Very low (sten scores of 1-2) and very high (sten scores of 9-10) scores on any of the scales include both positive and negative elements. Scores that fall in the average range (5-6) suggest that the respondent shows a few of the strong tendencies and behaviors (both positive and negative) found at both ends of the scale. For example, people with high scores on the Teamwork scale work well with others. Yet when required to work alone, they quickly become dissatisfied and have difficulty motivating themselves. On the other hand, people with low Teamwork scores work well alone, but often struggle when required to work closely with others.

Achievement Orientation Scales

Ambition

This scale represents an individual's tendency to set high standards, establish tough goals, and work to achieve success.

High scorers tend to:

- set difficult goals for themselves
- be driven to achieve high standards
- have high aspirations and work hard to achieve their goals
- be described by colleagues as driven and competitive
- put a lot of effert into everything they do

Low scorers tend to:

- set less difficult goals that are easily reached
- dislike expending great amounts of energy to get ahead
- be described by colleagues as easy going, and noncompetitive
- find happiness where they are at, and do not feel the urge to get ahead
- prefer occupations that do not require great amounts of effort

Initiative

This scale reflects the individual's willingness to take on new or additional work responsibilities and challenges.

High scorers tend to:

- enjoy identifying and taking on new challenges
- often volunteer to take on new or additional work responsibilities
- start projects without help from others

- be described by colleagues as proactive
- take the initiative when they see new opportunities

Low scorers tend to:

- prefer stable work responsibilities
- dislike having new responsibilities added to their workload
- have little interest in identifying and meeting new challenges
- rarely take the initiative to solve work problems
- undertake new projects only after discussing the benefits and repercussions with others and receiving their support

Flexibility

This scale measures the capacity to cope with a frequently changing work environment.

High scorers tend to:

- prefer novelty and work with lots of variety
- dislike routine, stable work environments
- adapt quickly and enjoy adjusting to changes
- often try new things at work
- initiate change for the sake of doing things differently, not because it is needed

Low scorers tend to:

- prefer stable work environments and enjoy routine work
- value order, structure, and predictability
- stick with methods that have worked well in the past
- have difficulty dealing with sudden or frequent changes
- become ineffective or stressed when faced with lots of variety at work

Energy

This scale represents an individual's stamina and the tendency to maintain a high level of energy.

High scorers tend to:

- be very energetic
- enjoy work environments that are mentally/physically demanding
- lead busy lives, and participate in a large number of activities
- work well under pressure

Low scorers tend to:

- tire quickly when faced with difficult or long tasks
- dislike being extremely busy, and prefer not having lots to do in a short period of time
- work less effectively when under pressure
- feel tired at the end of the work day
- enjoy rest and relaxation

Leadership

This scale measures the willingness to lead, take charge of situations, and offer opinions and directions to others.

High scorers tend to:

- enjoy influencing others and acting decisively
- assume leadership positions
- freely offer advice, and do not hesitate to provide guidance to others
- be dominant and forceful
- be seen as overbearing and demanding

Low scorers tend to:

- generate consensus rather than direct others
- avoid leadership positions
- prefer working in the background to influencing the work of colleagues
- rarely tell others what to do
- dislike being in charge and having to give directions to others

Conscientiousness Scales

Persistence

This scale measures the preference for sticking with tasks, and the element of not giving up and overcoming obstacles in getting the job done.

High scorers tend to:

- persist in the face of obstacles
- enjoy overcoming challenges

- keep trying to solve problems, no matter how difficult
- dislike leaving things unfinished
- carry through with tasks even when feeling bored or distracted
- want to see things through to the end
- may over commit themselves to projects that are not worth the resources to complete

Low scorers tend to:

- give up when things become difficult
- be easily distracted and have difficulty motivating themselves to complete boring work
- dislike work that requires overcoming obstacles
- prefer tasks that can be completed quickly and with relative ease
- rarely commit themselves to projects that are not worth the time and effort to complete

Attention to Detail

This scale reflects the individual's tendency to focus on details, work towards perfection, and approach work in a neat and organized manner.

High scorers tend to:

- focus on details
- be well organized and take a methodical approach to tasks
- strive for perfection, even on minor projects
- rarely skip corners
- prefer sending something late, rather than on time with minor problems
- be seen as perfectionists and over-conscientious

Low scorers tend to:

- rarely concern themselves with minor details
- cut corners to get things done on time
- be seen as sloppy or careless
- avoid highly detailed work
- focus on global problems and solutions

Rule-Following

This scale measures the tendency to adhere to rules and strictly follow work regulations.

High scorers tend to:

- strictly follow rules and adhere to work procedures
- believe no opportunity justifies ignoring or breaking regulations
- follow a strict code of ethics
- conduct themselves according to a rigid set of principles
- follow guidelines even when they are personally inconvenient or they are no longer relevant

Low scorers tend to:

- ignore rules and regulations when they hinder work
- dislike work involving frequent ethical and moral decisions
- be casual about work procedures and codes
- treat rules as general guidelines, not specific instructions

Dependability

This scale measures the extent to which a person is reliable, responsible, dependable and fulfills obligations.

High scorers tend to:

- meet all their obligations
- be described as responsible and trustworthy
- finish what they start
- follow through on their commitments
- rarely fail to finish their tasks

Low scorers tend to:

- miss deadlines and do not meet all their commitments
- be casual about work requirements and deadlines
- be seen as unreliable and irresponsible
- leave things unfinished

Social Orientation Scales

Teamwork

This scale reflects an individual's tendency to be cooperative with others, display a good-natured attitude, and encourage people to work together.

High scorers tend to:

- enjoy helping others reach their goals
- encourage people to work together
- like cooperative work environments
- be pleasant and good-natured
- rarely get frustrated with colleagues

Low scorers tend to:

- prefer working alone
- be more formal and reserved
- dislike working in large groups
- be described by colleagues as distant
- prefer environments where there are many opportunities to work independently

Concern for Others

This scale measures how sensitive and understanding an individual is to the needs and feelings of others.

High scorers tend to:

- be sympathetic and show concern for others
- quickly pick up on the feelings of others
- lend a helping hand and support colleagues
- show a willingness to help people with their problems
- be described as caring and understanding

Low scorers tend to:

- be self-centered and unaware of others feelings
- be reluctant to get involved with individuals' problems
- miss minor cues that indicate what a person is feeling
- take a more logical approach to solving problems
- rarely pay attention to the feelings of the people around them

Outgoing

This scale reflects the preferences for interacting with others and establishing personal connections with people.

High scorers tend to:

- like making friends at work
- enjoy meeting new people and spending time with others
- prefer working with others rather than alone
- quickly form close relationships with people
- be talkative and outgoing

Low scorers tend to:

- enjoy spending time by themselves
- prefer to work that does not require them to interact with lots of new people
- appear detached and seen as hard to understand
- be quiet and reserved

Democratic

This scale reflects the preference for making decisions through consultation, and working with close supervision.

High scorers tend to:

- prefer supervision and feedback
- look to others for guidance
- rarely make decisions without consulting others
- be willing to adopt others' ideas

Low scorers tend to:

- like making important decisions on their own
- work more efficiently when given full responsibility for their tasks
- dislike frequent supervision
- avoid looking to others for leadership and guidance
- like developing their own ways of doing things

Practical Intelligence Scales

Innovation

This scale measures the degree of creativity and open-mindedness when addressing work issues.

High scorers tend to:

- have lots of original ideas
- enjoy solving problems
- like work that requires creativity
- be curious about many things, and enjoy learning
- be open to new things
- dream about future opportunities

Low scorers tend to:

- have difficulty generating new ideas
- prefer focussing their energy on narrow topics
- be suspicious of new or unconventional ideas
- keep to the task at hand
- use established ways of working

Analytical Thinking

This scale measures the tendency to carefully analyze information and use logic to address issues and problems.

High scorers tend to:

- enjoy discussing theoretical concepts
- like solving complex problems
- analyze problems from many different angles
- be critical and take an impartial, logical approach to evaluation
- be seen as calculating, cautious and deliberate
- make decisions only after careful analysis

Low scorers tend to:

- make quick decisions
- be more spontaneous and willing to make choices with limited information
- dislike problem solving and analytical tasks
- rely on their intuition when making decisions

Adjustment Scales

Self-Control

This scale measures the extent to which individuals maintain their composure, keep emotions in check, and control their anger.

High scorers tend to:

- be slow to anger, and rarely lose their temper
- maintain their composure, even in difficult situations
- deal with problems in a calm and easy manner
- rarely experience feeling angry with others
- keep their emotions in check

Low scorers tend to:

- readily feel anger and frustration
- be easily annoyed and quickly become upset
- act impatiently when things do not go their way
- let others know what they are feeling

Stress Tolerance

This scale represents the tendency to be accepting of criticism and deal calmly and effectively with high stress situations.

High scorers tend to:

- tolerate stress well
- be able to cope with many demands
- react calmly in stressful situations
- accept criticism positively
- not worry about things beyond their control

Low scorers tend to:

- have difficulty relaxing
- become tense when faced with many tasks
- dislike high pressure work
- take criticism personally
- quickly become nervous and tense
- worry about things beyond their control

5 Development and Norming of the WPI

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

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

1. The WPI should only measure personality traits that are directly related to the work environment and job performance.

2. The WPI should be useful for applications such as personnel selection, team building, and personal development.

3. The application and interpretation of the WPI should not require specialist training in psychology or personality.

4. The questions should be easy to read and comprehend.

5. Respondents should be able to complete the assessment quickly.

The design criteria guided the development of the WPI in several ways. The personality traits the WPI measures have been found to relate to work preferences and job performance in a direct way. This ensures that users are provided information that directly helps in the selection or development of personnel. In traditional personality assessments, job relevant traits are measured alongside non-job relevant traits, making the interpretation of the results more difficult and increasing the chances for making errors.

Alongside the selection of work related personality traits, the application and interpretation of the WPI was designed for the typical business professional. Many tests require the services of a psychologist or specially trained human resource professionals. However, the WPI avoids complex personality factors, making the results easily interpretable.

Development Process

As mentioned earlier in this chapter, the WPI is built upon the 17 personality traits identified in O*NET, the occupational classification system designed by the U.S. Department of Labor. After conducting an extensive literature review and examination of current personality measures, researchers identified 17 traits that were commonly found to relate to work performance. These 17 traits provided the foundation of the WPI. Having identified the 17 traits, the following steps were taken to construct the WPI.

Scale development and item writing

To construct a measure of the 17 traits, a thorough review was conducted of research studies and current personality measures to develop objective, operational definitions for each trait. At this stage, the definitions developed for the O*NET model were modified to better fit research findings.

After having created definitions for each personality trait, items that provided behavioural evidence for the traits were developed. The items were written according to the following rules:

1. Items should relate directly to work behaviour. The situation presented in the item needed to examine preferences and motivations for different types of work and work environments.

2. Items were to be written in the first person (e.g. "I am… ", "At work I… ", "For me… "). Since the WPI is a self -report measure, it was necessary to write items in the first person.

3. Items should target a single construct. It was essential for the situation outlined in each item to be related to only one of the seventeen personality traits. The items were designed around behaviours that provided evidence of a specific trait.

4. Items should be short, direct, and easy to understand.

5. A five-point Likert scale was developed to allow individuals to register the extent of their agreement of disagreement with each statement. The respondents could indicate their preferences by choosing one of the five options for each item. For example:

People describe me as understanding.

Strongly Disagree Disagree Neutral Agree Strongly Agree

Through this process, a first trial of the questionnaire consisting of 170 items (10 items per scale) was conducted. Examination of the internal consistency and item reliability resulted in the dropping of 17 items, bringing the total to 153. The items retained contributed positively to coefficient alpha reliability as well as ensured that the number of items on the questionnaire remained manageable for users. The number of items per scale vary from 8 to 10 items with internal consistency reliabilities that range from .70 to .89 (for complete internal consistency results see page 27).

Norming of the WPI

Norming is a key step in test development. The norms set the baseline which all test results are measured against, which allows the comparison of different individual's scores. Norms identify the below average, average, and above average performance on the test, and help the test user appropriately interpret a person's results and make decisions. The more people that are included in the norm sample helps ensure that the test norms represent the actual distribution of personality 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 WPI was standardized on a large sample of over 8000 people. From this group a matched sample of 3000 males and 3000 females were selected to create North American norms. The large number of participants involved in the norm sample ensures that the WPI results effectively measure and identify differences in personality traits. Tables 5.1 to 5.5 illustrate the basic demographic background of the participants in the norm sample.

Sten Scores

A person's results on the WPI are reported in a standard score format known as Sten Scores. Standard scores are converted raw scores that help with the interpretation test results by allowing the comparison of an individual's results with the norm group. Standard scores also help compare a person's primary scale scores against each other. This allows us, for example, to determine if the person scores higher on Flexibility than Persistence.

There are many different types of standard scores. Sten scores are one of the most popular types of standard scores when reporting personality 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 5.1 illustrates how Sten scores are distributed.

Means and Standard Deviations

Table 5.6 provides a detailed description of the WPI raw scale scores for the North American sample. The means and standard deviations shown provide the norms which individual's who complete the WPI are compared against. The mean raw score for each scale represents the "average" score of

people in North America. The standard deviation indicates the spread of scores found among people in the normative sample. Approximately 68% of the population will obtain scores within one standard deviation above and below the mean, while 95% of the population will score within two standard deviations of the mean.

Standard Error of Measurement

Every time someone completes the WPI, their scores are made up of two components. The first component is their true score – the amount of their score represents the personality trait being measured. The second component is random score – the amount of their score that is due to external conditions which has nothing to do with the trait being measured. For example, if an individual is distracted or tired, it may impact the score they obtain on the WPI. Since this random score has a negative influence on the consistency of an individual's results, it is usually called random error. The Standard Error of Measurement (SEM) gives an indication of how much an individual's obtained score might vary from their true score. The SEM can be interpreted as meaning that an individual's true score will within +or- 1 SEM 68% of the time, and within +or- 2SEM's 95% of the time. To illustrate, consider Paul receives a Sten score of 6 on the Ambition scale. We know that 68% of the time, his true score will lie in between 5.09 and 6.91 (+-1 SEM). We also know that 95% of the time, his true score will lie between 4.17 and 7.83(+-2 SEM). Table 5.7 shows the Standard Error of Measurement (SEM) for the 17 WPI scales.

Figure 5.1 – Distribution of Sten Scores in a Normal Curve

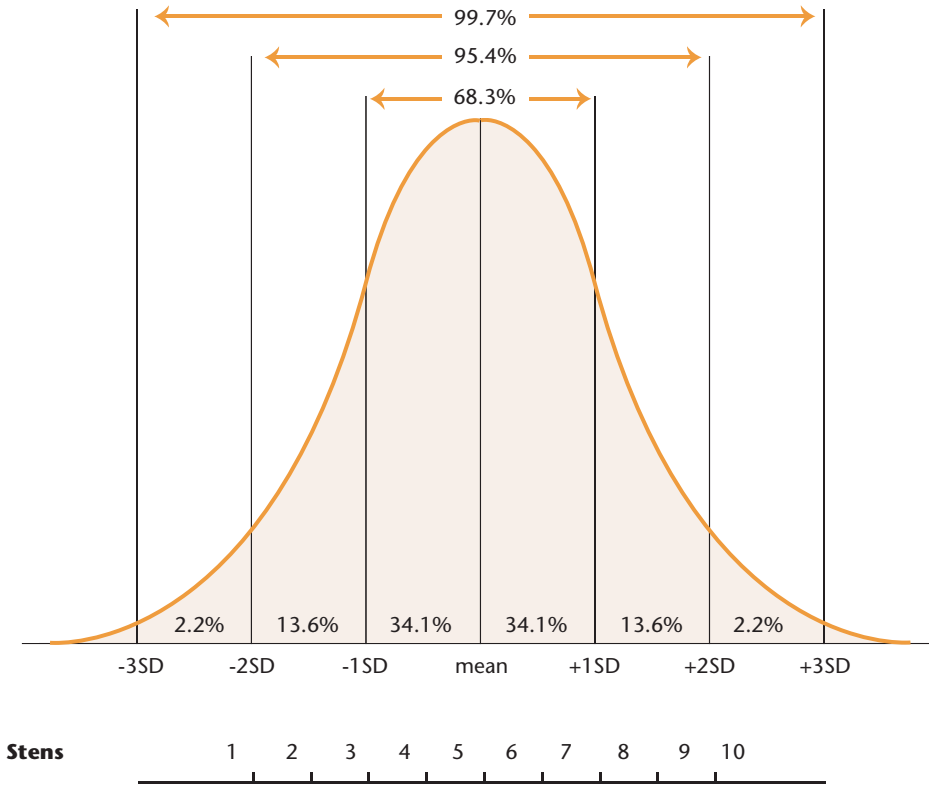


Table 5.1 – Age Distribution of Norming Sample (n=6000)

Age Group	Number	Percent	% Female	% Male
15-20	738	12.3	10.5	14.2
21-25	804	13.4	15.0	11.8
26-30	984	16.4	17.4	15.3
31-40	1776	29.6	29.3	29.8
41-50	1236	20.6	20.8	20.5
51-60	426	7.1	6.3	7.8

Table 5.2 – Highest Education Level Achieved by Subjects in Norming Sample (n=6000)

	Number	% Total	% Female	% Male
Some High School	461	7.7	5.9	9.5
High School	390	6.5	7.5	5.5
Trade/Technical School	169	2.8	2.1	3.5
Some College	1017	17.0	20.0	13.9
Associate Degree	253	4.2	5.1	3.3
Community College	179	3.0	3.4	2.5
Bachelors	1895	31.6	33.0	30.1
Masters	898	15.0	16.2	13.8
Professional Degree	128	2.1	2.2	2.0
Doctorate	104	1.7	1.2	2.3
None Given	506	8.4	3.4	13.5

Table 5.3 – Ethnic Origin of Subjects in Norming Sample (n=6000)

Ethnicity	Frequency	Percent	% Females	% Males
Latini/Latina	469	7.8	8.0	7.6
Native American/Canadian	224	3.7	3.8	3.6
African American/Canadian	471	7.9	7.7	8.1
Asian American/Canadian	163	2.7	3.2	2.2
White/Caucasian	4437	74.0	74.2	73.8
Other	236	3.9	3.1	4.7

Table 5.4 – Employment Status of Subjects in Norming Sample (n=6000)

Employment	Frequency	% Total	% Females	% Males
High School Student	472	7.4	6.3	9.5
College Student	583	9.7	11.5	8.0
Employed	3398	56.6	61.4	51.8
Self-Employed	317	5.3	4.9	5.7
Homemaker	103	1.7	3.3	0.1
Seeking Employment	740	12.3	11.6	13.1
None Given	387	6.5	1.1	11.8

Table 5.5 – Occupational Area of Subjects in Norming Sample (n=6000)

Occupational Area	Frequency	Percent
Architecture	328	5.5
Art/Design	330	5.5
Management	1484	24.7
Clerical/Sales	506	8.4
Education	462	7.7
Journalism	116	1.9
Law	164	2.7
Science	232	3.9
Medicine	316	5.3
Social Science	288	4.8
Human Services	428	7.1
Agriculture	34	0.6
Transportation	66	1.1
Machine Trades	27	0.5
Construction	48	0.8
Religion	34	0.6
Entertainment	140	2.3
None Given	997	16.6

Table 5.6 – Descriptive Statistics for the North American Sample (n=6000)

	Mean	SD	KR20	# of Items	Range
Ambition	30.04	4.60	.79	8	8-40
Initiative	30.85	4.32	.80	8	8-40
Flexibility	34.07	5.82	.84	10	10-50
Energy	32.40	5.33	.83	9	9-45
Leadership	27.06	5.96	.89	8	8-40
Persistence	33.76	5.54	.85	9	9-45
Attention to Detail	31.65	5.97	.83	9	9-45
Rule-Following	30.61	6.28	.83	10	10-50
Dependability	38.69	5.65	.87	10	10-50
Teamwork	31.49	5.21	.82	9	9-45
Concern for Others	34.80	5.556	.87	9	9-45
Outgoing	29.68	5.85	.83	9	9-45
Democratic	28.92	4.58	.70	9	9-45
Innovation	33.94	6.23	.89	9	9-45
Analytical Thinking	30.29	4.63	.78	8	8-40
Self-Control	28.30	5.79	.81	9	9-45
Stess Tolerance	32.46	3.58	.85	10	10-50

Table 5.7 – Standard Error of Measurement for WPI Scales and Confidency Intervals (n=6000)

	SEM (as a sten score)	68% Confidence Interval Plus and Minus	95% Confidence Interval Plus and Minus
Ambition	.91	1	2
Initiative	.86	1	1.5
Flexibility	.82	1	1.5
Energy	.80	1	1.5
Leadership	.66	0.5	1.5
Persistence	.76	1	1.5
Attention to Detail	.82	1	1.5
Rule-Following	.82	1	1.5
Dependability	.70	0.5	1.5
Teamwork	.83	1	1.5
Concern for Others	.71	0.5	1.5
Outgoing	.80	1	1.5
Democratic	1.08	1	2
Innovation	.64	0.5	1.5
Analytical Thinking	.93	1	2
Self-Control	.87	1	1.5
Stess Tolerance	.77	1	1.5

6 Reliability and Validity of the WPI

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

Reliability

Reliability is concerned with the consistency of test scores, and how free test results are from external, confounding influences. The higher the reliability of a test, the more likely it is consistently measuring differences between people. More reliable tests provide results that remain unaffected by irrelevant variations, or what is commonly called random errors. We assess the reliability of the WPI by examining how consistently the test measures personality traits. For example, a test that yields similar scores for a person who repeats the test is said to be reliable. However, if a person takes the same test twice and receives very different scores, the test is unreliable. In general, reliability refers to how dependable a test is.

Reliability is measured using correlation coefficients. A reliability coefficient is denoted by the letter "r", and is expressed as a number ranging between 0 and 1.00 with r=0 indicating no reliability, and r=1.00 indicating perfect reliability. It is important to recognize that tests are never 100% accurate, so you will not find a test with a correlation coefficient of r=1.00. In general you will see the reliability of a test expressed as a decimal, for example, r=.80 or r=.93. The larger the reliability coefficient, the more consistent the test scores.

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

1. Candidate related. Test performance can be influenced by a person's psychological or physical state at the time of testing. For example, differing levels of anxiety, fatigue, or motivation may affect the individual's test results.

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

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

These three factors are sources of chance or random measurement error in the assessment process. If there were no random errors of measurement, the individual would get the same test score, their "true" score, each time. The degree to which test scores are unaffected by measurement errors is an indication of the reliability of the test.

One of the main approaches used to assess reliability is through measures of internal consistency. A sophisticated form of internal consistency reliability is Cronbach's alpha. It effectively splits the test items in every possible way and computes the average of all combinations. Consistency should be achieved such that all the items are measuring the same thing to the same degree, and, therefore, the items for each test scale should have a high degree of correlation. Most professionals agree that test scales with correlation coefficients above .70 are useful for most applications. The internal consistency reliability coefficients for each of the WPI scales are listed in Table 6.1. As shown in the table, the reliability coefficients range from .70 to .89. This meets or exceeds the .70 level for every scale, indicating the consistency of WPI test scores is high.

The strength of the reliability coefficients indicates that the WPI is relatively free from external errors that could negatively impact the measurement of personality traits. This allows the WPI to provide a close estimate of each individual's true score on the 17 scales.

Table 6.1 – Internal Consistency of WPI 17 Scales

Scale	North American Sample (n=6000)
Ambition	.79
Initiative	.80
Flexibility	.84
Energy	.83
Leadership	.89
Persistence	.85
Attention to Detail	.83
Rule-Following	.83
Dependability	.87
Teamwork	.82
Concern for Others	.87
Outgoing	.83
Democratic	.70
Innovation	.89
Analytic Thinking	.78
Self-Control	.81
Stress Tolerance	.85

Validity

When deciding to use a test, validity is the most important consideration. While reliability focuses on how consistently a test measures, validity examines the extent to which a test measures what it claims to measure. Validity describes the degree to which you can make specific conclusions or predictions about people based on their test scores. In short, validity indicates the usefulness of a test.

A test's validity is established in reference to a specific purpose; the test may not be valid for different purposes. This means that a test is never valid or invalid. Instead, how the test is used can be classified as valid or invalid. For example, a ruler is a valid measure of a person's height, but an invalid measure of that individual's technical proficiency or leadership style.

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

Validity evidence for the usefulness of the WPI with different groups

The WPI was designed for use with a wide variety of individuals, and for a wide variety of positions. If the WPI can be used validly with different people, research should find similarities among people, and differences between people where expected. For example, we expect that people in leadership positions would score higher on the Leadership scale than people working as clerical staff. However, since we tend not to find differences in personality traits among minorities, we expect that the WPI shows little differentiation in scores between people from different ethnic groups. Evidence of the WPI's capability for different groups is divided into the following areas: Age, Gender, Ethnicity, Education, and Occupation.

Age Differences

Many psychological traits can change throughout a person's lifetime, and others tend to remain very stable. Examining the differences among people of different ages can help determine the effects age may have on a person's personality traits. Age effects are summarized in Table 6.2, where age is divided into seven categories. While some differences can be found between the different age groups, the overall similarity of the mean scale scores across the 7 age groups indicates the WPI can be useful in comparing the personality traits for people from ages that range from 15 to over 60.

Gender Differences

Since the WPI is used to compare people, including both males and females, it is important to have an understanding of the gender differences found on the 17 scales. A number of minor gender effects were discovered when comparing the mean scores of males and females. While most of the differences are quite small in magnitude, some are significant. In general, females tended to receive higher scores on Concern for Others, Dependability, Attention to Detail and Rule-Following. Males tended to receive higher scores on Stress Tolerance. These differences are relatively common and have been found in a number of studies addressing the effects of gender on personality traits. Since the differences between the other WPI scales were minimal they should not influence test interpretation. Table 6.3 lists the mean raw scores on the 17 scales for males and females.

Table 6.2 – Age Groups Mean Raw Scores

	15-20	21-25	26-30	31-40	41-50	51-60	60+
Ambition	28.24	29.98	30.25	30.23	30.74	30.88	29.29
Initiative	28.58	30.52	30.98	31.30	31.78	31.74	29.74
Flexibility	32.39	33.61	34.22	34.56	34.66	34.97	32.03
Energy	31.25	32.02	32.44	32.62	32.96	32.81	31.50
Leadership	26.59	26.94	26.70	27.25	27.41	27.52	26.85
Persistence	32.84	33.56	33.40	33.67	34.60	34.86	34.65
Attention to Detail	30.74	32.22	32.30	31.74	31.66	30.94	30.59
Rule Following	30.46	30.69	30.59	30.57	30.81	30.32	32.53
Dependability	37.28	38.72	38.68	38.62	39.42	39.73	39.91
Teamwork	30.93	31.40	31.62	31.52	31.85	31.82	30.41
Concern for Others	33.56	35.21	34.99	34.94	35.16	35.30	35.15
Outgoing	29.84	29.98	29.93	29.59	29.50	29.41	29.91
Democratic	26.13	26.10	25.44	24.67	24.28	24.05	23.79
Innovation	32.22	33.19	34.19	34.23	34.72	35.35	34.06
Analytical Thinking	28.40	30.18	30.86	30.78	30.60	30.74	28.29
Self-Control	27.89	27.93	27.91	28.41	28.69	28.81	29.76

Table 6.3 – Mean Raw Scores on WPI Scales for Females and Males

	Female (N=3000)		Male (N=3000)	
	Mean	SD	Mean	SD
Ambition	30.39	4.47	29.70	4.71
Initiative	31.28	4.08	30.42	4.51
Flexibility	34.13	5.88	34.02	5.76
Energy	32.47	5.34	32.33	5.32
Leadership	26.79	6.16	27.33	5.75
Persistence	34.13	5.45	33.38	5.61
Attention to Detail	32.32	6.02	30.98	5.85
Rule Following	31.14	6.32	30.08	6.21
Dependability	39.34	5.50	38.04	5.73
Teamwork	31.51	5.14	31.47	5.28
Concern for Others	35.98	5.14	33.62	5.70
Outgoing	29.95	5.87	29.41	5.81
Democratic	28.98	4.68	28.86	4.48
Innovation	33.57	6.22	34.31	6.22
Analytic Thinking	29.90	4.68	30.67	4.55
Self-Control	28.00	5.79	28.60	5.77
Stress Tolerance	31.89	6.44	33.04	6.57

Ethnic Differences

The norm sample for the WPI contains a significant number of minorities, allowing for the examination of ethnic differences. A test which finds significantly large variations among ethnic groups can result in adverse impact, making it inadvisable to use such a test in the selection process. These types of differences are commonly when using cognitive ability tests. However these variations tend to be less frequent and less pronounced for measures of personality such as the WPI. Table 6.4 lists the mean score for the WPI dimensions for five ethnic groups. While minor differences can be observed between the ethnic groups, their effect on test interpretation is minimal. One way analysis-of-variance found significant differences on Analytical Thinking, Concern for Others, Democratic, Ambition, Flexibility, Initiative, Innovation, and Stress Tolerance. Post-hoc analysis (Tukey) showed significant differences on the scales for the following groups:

Ambition: Caucasian vs. Latino

Initiative: Latino vs. Native American; Caucasian

Concern for Others: Latino vs. Native American; African American; Caucasian

Democrative: Native American vs. Latino; African American; Asian

Innovation: Latino vs. Caucasian

Analytical Thinking: Latino vs. Caucasian

Stress Tolerance: Native American vs. Asian

Due to the large number of people in the sample, statistically significant differences are easily found and tend to exaggerate the variation among ethnic groups. Therefore, while the differentiation among people of different ethnicity is significant, the differences among raw scores are virtually eliminated when converted to standard scores. These findings suggest that the WPI can be used with different ethnic groups with little threat of adverse impact.

Education Differences

Variation of WPI scores for people with different levels of education also provides validity evidence for the WPI. Some of the personality traits measured by the WPI would appear to interact with the type and level of education achieved by people. There are a number of interesting education effects found in the table. Individuals with graduate degrees (Masters or Doctorate) or professional degrees (LLB, MD) have the highest average scores on scales in the Achievement Orientation domain. Since these levels of education require a large amount of time and effort, these findings are consistent with what is expected.

Table 6.4 – Mean Raw Scores on WPI Scales for Ethnic Groups

	Latina/Latino (n=469)	America/ Canadian (n=224)	African American/ Canadian (n=471)	Asian American/ Canadian (n=163)	White/ Caucasian (n=4437)
	Mean	Mean	Mean	Mean	Mean
Ambition*	29.21	30.32	29.95	30.29	30.11
Initiative*	29.83	31.04	30.66	30.17	31.00
Flexibility*	33.36	34.09	34.35	32.72	34.13
Energy	32.08	32.40	32.26	31.21	32.45
Leadership	26.42	26.77	27.01	26.09	27.14
Persistence	33.25	34.39	33.60	32.98	33.82
Attention to Detail	30.83	31.83	31.50	32.43	31.73
Rule Following	30.27	30.98	30.52	31.42	30.65
Dependability	38.26	38.47	38.29	38.48	38.83
Teamwork	31.03	31.98	31.93	31.45	31.41
Concern for Others*	33.68	35.68	35.20	34.99	34.84
Outgoing	29.28	29.79	30.23	29.47	29.61
Democratic*	25.59	24.37	25.59	25.98	24.92
Innovation*	32.86	34.22	33.47	32.17	34.13
Analytical Thinking*	29.23	30.15	29.83	29.81	30.44
Self-Control	28.54	29.38	27.97	27.96	28.20
Stress Tolerance*	32.10	33.79	32.22	31.58	32.36

*significant at the .01 level

People with Associate Degrees report the highest average scores on each of the four scales that makes up the Conscientiousness domain. Since people with associate degrees tend to work in support positions in organizations their higher levels of Persistence, Dependability, Rule-Following, and Attention to Detail are expected.

The members of the norm sample who reported Community College as their highest level of education had the highest mean scores on Cooperation, Concern for Others, and Outgoing. These three scales all fall under the Social Orientation domain. Since many community college programs teach skills and disciplines that revolve heavily around working with people, one would expect that individuals with a community college education would show stronger preferences for working with others.

When examining the average scores for the two scales that make up the Practical Intelligence Domain, Innovation and Analytical Thinking, people who have received a Doctorate degree show the highest scores. Since almost all Doctorate level education involves a significant portion of research and investigation, these strong preferences are necessary for successful completion of a degree.

Other education differences can be found in Table 6.5 which lists the mean raw scores on the different WPI scales by level of education.

Occupational Differences

Another method of examining validity is to see if the WPI identifies personality differences among groups of people working in diverse occupations. For example, we would expect that business managers would score higher on scales in the Achievement Orientation domain than other occupational groups. We would also expect people working in the human services to score higher on the scales in the Social Orientation domain. The differences between occupational groups' average scores can provide evidence that the WPI is picking up individual characteristics that are related to work.

Table 6.6 lists the average sten scores for 17 different occupational groups. As expected, business managers average the highest scores on Ambition, Initiative, Flexibility, Energy, and Leadership. These five scales are grouped together under the Achievement Orientation domain in the WPI model. This suggests that compared to people in other occupations, business managers tend to be more driven, prefer to adopt leadership positions, have higher levels of energy, and show a strong desire to get ahead.

People working in occupations classified as Business/Clerical had higher than average scores on Attention to Detail, Rule-following, and Dependability. These scales are all found in the Conscientiousness domain, and indicate that business clerical staff are dependable, pay close attention to details, and tend to follow the rules. Each of these preferences tend to be strong requirements for clerical positions.

For those who classify their occupation as Human Services, they showed above average scores in Teamwork, Concern for Others, Outgoing, and Democratic. Each of these scales relates directly to how a person interacts with others, and are grouped together under the Social Orientation domain. As expected, people who work in a human service capacity have higher levels of empathy, enjoy working with others in a cooperative manner, and prefer to make decisions through collaboration and consultation.

These examples only highlight a few of the differences found between occupational groups. Further examination of Table 6.6 will highlight other differences between people in occupations that

Table 6.5 – Mean Raw Scores on WPI Scales by Level of Education

	Some High School	High School	Trade School	Some College	Associate Degree	Community College	Bachelors Degree	Masters Degree	Professional Degree	Doctorate
	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean	Mean
Ambition	28.16	29.13	29.27	29.97	30.37	30.23	30.41	30.97	30.52	31.18
Initiative	28.48	29.91	30.40	31.34	31.10	31.51	31.09	31.69	31.51	31.48
Flexibility	32.27	32.76	33.26	34.10	33.39	34.20	34.51	35.25	35.24	35.23
Energy	31.36	31.78	32.44	32.51	32.23	33.35	32.49	32.76	32.89	32.51
Leadership	26.66	26.80	27.03	27.18	26.75	27.82	26.94	27.59	27.85	26.65
Persistence	32.92	33.90	34.24	33.53	34.63	34.49	33.83	33.98	33.59	33.63
Attention to Detail	30.79	31.95	32.73	32.12	33.18	32.38	32.00	30.63	30.48	30.27
Rule Following	30.42	31.19	31.59	30.69	32.00	30.68	30.71	29.81	29.80	29.83
Dependability	36.92	38.55	38.94	38.54	39.35	39.31	39.06	38.91	38.20	38.85
Teamwork	31.04	31.19	30.99	31.40	30.76	32.61	31.58	31.97	31.73	31.88
Concern for Others	32.94	34.52	33.79	35.36	34.63	35.65	35.05	35.34	34.37	35.19
Outgoing	29.77	29.67	29.61	29.81	28.55	30.99	29.61	29.78	30.28	29.48
Democratic	26.17	24.97	24.72	24.68	24.46	24.90	25.02	25.19	25.02	25.05
Innovation	31.87	32.32	33.57	34.25	33.68	33.88	34.19	35.12	34.99	36.18
Stress Tolerance	32.28	31.72	32.30	32.75	32.26	32.74	32.36	32.80	32.41	33.48

Table 6.6 – Mean Raw Scores on WPI Scales by Occupation

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Ambition	29.88	29.00	31.30	29.25	29.94	29.39	30.26	29.30	30.72	29.91	29.66	27.82	29.65	28.63	28.90	29.06	28.44
Initiative	30.21	29.66	32.20	30.73	30.98	30.50	30.54	29.70	30.85	30.36	30.93	29.24	30.79	29.44	29.52	30.21	29.82
Flexibility	33.93	34.21	35.27	32.91	34.08	34.64	33.84	33.18	33.28	33.43	34.13	33.18	33.14	32.85	33.46	33.53	34.11
Energy	32.27	30.80	34.08	32.55	31.61	30.93	32.74	30.97	32.67	31.22	32.26	30.65	32.94	32.26	31.96	29.53	30.99
Leadership	26.49	24.70	29.29	25.67	26.40	25.22	28.72	25.84	26.97	25.82	26.65	25.88	27.61	25.15	27.92	26.50	27.02
Persistence	33.11	32.22	34.92	33.98	33.92	32.16	33.99	32.85	34.51	32.93	33.62	32.65	34.21	34.11	33.67	31.47	31.46
Attention to Detail	31.90	30.84	31.95	33.16	30.87	30.87	31.87	32.43	32.75	30.96	30.47	29.85	32.67	32.74	30.60	30.15	30.09
Rule Following	30.52	28.68	30.72	32.12	30.14	28.65	31.44	30.88	32.24	30.07	30.49	29.68	31.50	32.19	30.67	31.18	28.84
Dependability	37.48	36.99	39.58	39.28	39.05	37.13	38.32	38.25	39.46	38.78	38.94	35.85	38.94	37.59	37.27	37.47	36.54
Teamwork	31.23	29.87	32.36	31.33	32.36	29.81	30.24	30.09	31.57	30.84	32.85	29.85	30.03	30.70	29.60	31.29	31.12
Concern for Others	32.63	34.74	34.67	35.06	36.29	35.81	32.70	33.33	36.08	36.68	36.88	33.68	32.27	31.63	30.33	35.62	34.00
Outgoing	28.91	28.46	30.55	29.64	30.28	28.30	28.64	28.13	30.08	28.94	30.87	28.44	28.41	28.11	28.31	29.71	30.17
Democratic	25.38	25.05	24.78	25.04	25.34	24.41	24.51	24.85	25.12	24.96	25.55	25.00	23.62	25.70	24.50	25.91	25.49
Innovation	33.92	36.22	34.61	31.96	34.65	36.18	33.09	33.55	33.45	33.55	33.69	32.06	33.23	32.37	32.44	35.21	33.93
Analytical Thinking	31.07	29.64	31.14	29.09	30.19	29.82	30.77	31.54	30.17	30.88	29.39	28.68	30.79	28.44	28.27	28.68	29.11
Self-Control	28.61	27.36	28.48	28.46	28.75	27.34	27.05	27.69	28.48	28.56	29.21	28.12	28.61	26.93	26.40	27.29	27.04
Stress Tolerance	33.05	30.26	34.19	32.32	31.86	30.44	32.79	31.37	32.15	31.39	32.28	30.59	34.62	32.63	31.23	30.32	31.21

1=Architecture (n=328) **2**=Art/Design (n=330) **3**=Management (n=1484) **4**= Business/Clerical (n=506) **5**=Education (n=462) **6**=Journalism (n=116) **7**=Law (n=164) **8**=Science (n=232) 9=Medicine (n=316) **10**=Social Science (288) **11**=Human Services (n=428) **12**=Agriculture (n=34) **13**=Transportation (n=66) **14**=Machine Trades (n=27) **15**=Construction (n=48) **16**=Religion (n=34) **17**=Entertainment (n=140)

indicate the WPI does measure differences among people that are relevant to work performance. One way analysis of variance yielded significant differences for all 17 scales.

A second method of looking at occupational differences for validity evidence is to examine the typical WPI profile for people working within an occupational area. This involves examining the average scale scores of people working in one occupation and determining if their pattern of scores fits with what is expected. For example, when examining the profile of scores for people working in science occupations, we would expect their highest scores to be on the Analytical Thinking and Attention to Detail scales. We would also expect that people who work as clerical staff tend to score higher on Dependability and Attention to Detail than the other WPI scales.

Table 6.7 ranks the 17 scales for 10 occupational groups according to their average score, from highest to lowest. We see that people working in architecture score highest on Analytical Thinking, and lowest on Concern for Others. Business managers score highest on Leadership and lowest on Democratic. The ranking of the occupational groups by WPI scale scores appears consistent with expectations and supports the use of the WPI in identifying individual differences. For example, Clerical staff responses show that Attention to Detail, Rule-Following, and Dependability are their strongest preferences, while Leadership and Innovation are their weakest preferences. Also, people working in Human Services have Concern for Others and Teamwork as their strongest preferences, and Analytical Thinking and Attention to Detail as their weakest. The profiles of other occupations also follow expectations and can be further examined in Table 6.7.

Construct Validity Evidence

Another primary sources of validity evidence is known as construct validity. Construct validity evidence shows whether the test is appropriate to measure a particular psychological construct. The most popular method of examining construct evidence is to compare two different tests that are supposed to measure the same construct. For example, if the Outgoing scale on the WPI is valid, individual's scores should relate with other tests that also measure extraversion and social orientation.

Comparison of the WPI and the Myers-Briggs Type Indicator® (MBTI®)

A sample of 1463 individuals who completed the WPI also provided their MBTI® personality type. The MBTI® measures four dichotomies: Extraversion vs. Introversion (EI), Sensing vs. Intuition (SN), Thinking vs. Feeling (TF), and Judging vs. Perceiving (JP). A number of the WPI personality traits measure similar constructs as identified in the MBTI® model. Using the participants reported personality type from the MBTI® and their mean scores on the WPI scales, a number of significant results were identified.

Table 6.8 shows the significant differences found on WPI scales based on the preferences for Extraversion or Introversion. Based on MBTI® Type theory, people with a preference for Extraversion exhibit the following behaviors. They are energetic, outgoing, and sociable. They also like peer cohesion and tend to be assertive and take leadership roles. Introverts on the other hand tend to be more accommodating, less outgoing, and preferring working alone or in smaller groups. As expected, Extraverts tend to score much higher on the Outgoing, Teamwork, Leadership, and Energy scales of the WPI.

Table 6.7 – Ranking of Average Scores by Occupational Area from Highest to Lowest

	Architecture	Art/ Design	Business Management	Clerical	Education	Journalism	Law	Science	Medicine Services	Human
1	Analytical Thinking	Innovation	Leadership	Attention to Detail	Concern for Others	Innovation	Leadership	Analytical Thinking	Rule-Following	Concern for Others
2	Stress Tolerance	Flexibility	Energy	Rule-Following	Teamwork	Concern for Others	Analytical Thinking	Attention to Detail	Concern for Others	Teamwork
3	Attention to Detail	Democratic	Initiative	Dependability	Outgoing	Flexibility	Rule-Following	Rule-Following	Attention to Detail	Outgoing
4	Democratic	Concern for Others	Stress Tolerance	Persistence	Innovation	Analytical Thinking	Attention to Detail	Democratic	Dependability	Self-Control
5	Self-Control	Attention to Detail	Ambition	Concern for Others	Self-Control	Attention to Detail	Energy	Innovation	Persistence	Democratic
6	Innovation	Analytical Thinking	Flexibility	Outgoing	Dependability	Initiative	Persistence	Dependability	Ambition	Dependability
7	Rule-Following	Outgoing	Persistence	Democratic	Democratic	Democratic	Stress Tolerance	Self-Control	Outgoing	Flexibility
8	Flexibility	Self-Control	Analytical Thinking	Energy	Persistence	Ambition	Ambition	Ambition	Energy	Initiative
9	Energy	Ambition	Outgoing	Self-Control	Initiative	Self-Control	Flexibility	Stress Tolerance	Self-Control	Persistence
10	Ambition	Persistence	Teamwork	Stress Tolerance	Analytical Thinking	Outgoing	Dependability	Persistence	Teamwork	Stress Tolerance
11	Teamwork	Initiative	Dependability	Teamwork	Flexibility	Dependability	Initiative	Flexibility	Democratic	Rule-Following
12	Outgoing	Dependability	Innovation	Initiative	Ambition	Energy	Democratic	Outgoing	Analytical Thinking	Energy
13	Persistence	Rule-Following	Attention to Detail	Achievement	Stress Tolerance	Persistence	Outgoing	Teamwork	Initiative	Innovation
14	Leadership	Stress Tolerance	Rule-Following	Flexibility	Rule-Following	Rule-Following	Innovation	Concern for Others	Stress Tolerance	Ambition
15	Initiative	Teamwork	Self-Control	Analytical Thinking	Attention to Detail	Stress Tolerance	Teamwork	Leadership	Innovation	Leadership
16	Dependability	Energy	Concern for Others	Leadership	Energy	Teamwork	Self-Control	Initiative	Leadership	Analytical Thinking
17	Concern for Others	Leadership	Democratic	Innovation	Leadership	Leadership	Concern for Others	Energy	Flexibility	Attention to Detail

Table 6.9 shows the differences found on WPI scales based on the preferences for Sensing and Intuition. People with a sensing preference tend to adopt a practical approach to their work, value control and order, are rule conscious, and tend to focus on details. People with an Intuitive preference tend to be open to change, are flexible, enjoy variety, and focus on global, abstract issues. Results indicate that individuals with a preference for Intuition scored significantly higher that people with a Sensing preference on the Analytical Thinking, Flexibility, and Innovation scales of the WPI. People with a Sensing preference scored significantly higher on the Attention to Detail, and Rule Following scales.

The differences between people with preferences for Thinking vs. Feeling are highlighted in Table 6.10. MBTI theory suggests that people with a thinking preference are tough-minded, dissenting, independent, and take a logical, skeptical approach to problems. People with a Feeling preference tend to be nurturing, sensitive, agreeable and accommodating. The results indicate that people with a Thinking preference score higher on the Analytical Thinking, Stress Tolerance and Leadership scales of the WPI. People with a Feeling preference score higher on the Concern for Others, and Democratic scales.

The final dichotomy measured by the MBTI highlights preferences for Judging vs. Perceiving. Research with the MBTI has found the following attitudes and behaviors correlate with the Judging preference. People with a Judging preference tend to be systematic, value order, are conscientious and responsible, show endurance and are rule conscious. Research has shown that people with a Perceiving preference are flexible, open to change, autonomous, spontaneous, and variety seeking. Table 6.11 shows the differences between Judgers and Perceivers on certain WPI scales. As expected, people with a Judging preference scored higher on Attention to Detail, Dependability, Persistence, and Rule Following. People with a Perceiving preference score higher on Flexibility and Innovation.

Inter-correlation between WPI Scales

The correlations in Table 6.12 show the relationships between the 17 WPI scales. Reviewing the table shows there are significant relationships among some of the scales. This suggests that scores on some of the scales could be combined to form a broader level of analysis. In general, the scales that correlate highly together can be grouped into five global areas that closely represent the Big Five personality factors. For more information on how these scales relate to each other, read the following section on Factor Analysis.

Table 6.8 – WPI Scale Scores for People with Extraversion and Introversion Preferences

WPI Scale	Mean score for Extraverts	Mean score for Introverts	Significance (2-tailed)
Energy	33.79	30.42	.000
Leadership	28.95	24.67	.000
Teamwork	33.36	29.73	.000
Outgoing	33.58	25.60	.000

Table 6.9 – WPI Scale Scores for People with Sensing and Intuition Preferences

WPI Scale	Mean score for Sensors	Mean score for Intuitives	Significance (2-tailed)
Flexibility	31.67	36.03	.000
Attention to Detail	32.70	29.11	.000
Rule Following	32.49	28.17	.000
Innovation	31.30	36.42	.000
Analytical Thinking	29.09	31.45	.000

Table 6.10 – WPI Scale Scores for People with Thinking and Feeling Preferences

WPI Scale	Mean score for Thinkers	Mean score for Feelers	Significance (2-tailed)
Leadership	27.91	24.99	.000
Concern for Others	32.42	37.51	.000
Democratic	23.82	25.67	.000
Analytical Thinking	32.56	29.13	.000
Stress Tolerance	32.77	30.53	.000

Table 6.11 – WPI Scale Scores for People with Judging and Perceiving Preferences

WPI Scale	Mean score for Judgers	Mean score for Perceivers	Significance (2-tailed)
Flexibility	32.86	37.02	.000
Persistence	34.55	30.97	.000
Attention to Detail	32.54	27.46	.000
Rule Following	31.43	27.07	.000
Dependability	40.05	35.87	.000
Innovation	34.01	36.23	.000

Table 6.12 – Inter-correlations of 17 WPI scales (n=6000)

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Ambition	1.000																
2	Initiative	.625	1.000															
3	Flexibility	.293	.524	1.000														
4	Energy	.560	.673	.424	1.000													
5	Leadership	.403	.494	.274	.476	1.000												
6	Persistence	.605	.501	.133	.560	.334	1.000											
7	Attention to Detail	.358	.200	-.209	.246	.119	.538	1.000										
8	Rule Following	.189	.021	-.363	.114	-.011	.359	.539	1.000									
9	Dependability	.477	.402	.034	.442	.229	.799	.553	.400	1.000								
10	Teamwork	.170	.305	.214	.332	.155	.220	.028	.132	.179	1.000							
11	Concern for Others	.166	.271	.131	.188	-.002	.194	.100	.128	.245	.520	1.000						
12	Outgoing	.131	.291	.259	.350	.260	.183	-.032	.032	.140	.761	.495	1.000					
13	Democratic	-.201	-.214	-.121	-.110	-.245	-.175	-.113	.084	-.171	.494	.207	.410	1.000				
14	Innovation	.336	.484	.471	.318	.297	.161	-.043	-.192	.085	.126	.162	.161	-.227	1.000			
15	Analytical Thinking	.377	.375	.252	.274	.239	.248	.234	.044	.193	.067	.085	-.003	-.177	.475	1.000		
16	Self-Control	.069	.175	.127	.244	-.098	.226	.111	.156	.227	.351	.372	.236	.105	.068	.132	1.000	
17	Stress Tolerance	.340	.499	.407	.635	.340	.437	.169	.065	.339	.346	.172	.317	-.086	.248	.259	.579	1.000

Factor Analysis

Factor Analysis is a statistical process used to examine the WPI's subscale structure and assess the extent to which the WPI Personality Model is justified. In simple terms, factor analysis helps determine how the 17 WPI scales hang together. The factor loadings are presented in Table 6.13. This data justifies the use of an overall five factor model to organize the 17 WPI scales. The five factors identified are quite similar to the Big Five personality traits that are best represented by the work of Barrick and Mount (1991).

Feedback Study

4732 people who completed the WPI for the norming study rated the accuracy of their test results and feedback. They were asked to rate how accurately the feedback they were given described them. 96.5% of the participants rated the WPI feedback as quite accurate to very accurate. Only 3.5% of the sample considered the feedback to be inaccurate. Table 6.14 outlines the results of the feedback study. Since people are often one of the best sources to rate their own personality traits, this high level of endorsement from test takers provides strong evidence that the WPI feedback is accurate and valid.

Table 6.13 – Rotated Component Matrix

	1	2	3	4	5
Ambition	.595				
Initiative	.715				
Flexibility	.540				
Energy	.756				
Leadership	.786				
Persistence		.666			
Attention to Detail		.830			
Rule Following		.786			
Dependability		.722			
Teamwork			.862		
Concern for Others			.659		
Outgoing			.831		
Democratic			.725		
Innovation				.771	
Analytical Thinking				.804	
Self-Control					.888
Stress Tolerance					.737

Table 6.14 – Feedback Ratings

	Frequency	Percent
Very Accurate	1183	25.0
Accurate	2178	46.0
Quite Accurate	1205	25.5
Not Very Accurate	149	3.1
Totally Inaccurate	17	.4
Total	4732	100.0

WPI and MBTI® Form K

In this research study, 51 adults completed the Work Personality Index and the Myers-Briggs Type Indicator® Form K, which is commonly referred to as Step II. The MBTI® Form K was designed to measure facets of the four Personality Type dichotomies of Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving. There are 20 subscales that identify components of each of the four type dichotomies and provide a finer grained interpretation of an individual's personality preferences. The MBTI® Form K facet scales measure aspects of personality that are similar to those identified through the 17 scales on the Work Personality Index. Therefore, one would expect to find a number of significant correlations between the scales of these two assessment instruments. Table 6.15 lists the 20 facet scales from the Form K.

The purpose of this study was to identify the relationships between the WPI and MBTI® Form K scales, and examine whether these relationships fit with current knowledge and understanding of personality. Correlating the scores of a new assessment like the WPI with those of other instruments is a common method of establishing validity. This type of comparison provides validity evidence by determining if the WPI scales correlate with Form K scales in ways that would be expected. For example, one would expect that the WPI scale of Outgoingness has significant relationships with the Form K scales that measure aspects of Extraversion.

Table 6.15 – MBTI® Form K Facet Scales

MBTI® Form K
E-I Facets
Initiating-Receiving
Expressive-Contained
Gregarious-Intimate
Participative-Reflective
Enthusiastic-Quiet
S-N Facets
Concrete-Abstract
Realistic-Imaginative
Practical-Inferential
Experiential-Theoretical
Traditional-Original
T-F Facets
Logical-Empathetic
Reasonable-Compassionate
Questioning-Accommodating
Critical-Accepting
Tough-Tender
J-P Facets
Systematic-Casual
Planful-Open Ended
Early Starting-Pressure Prompted
Scheduled-Spontaneous
Methodical-Emergent

Relationships between WPI Scales and MBTI® Dimensions

The Form K scales are organized by the four major dichotomies of Personality Type theory. The first stage of the analysis examined the correlations between the 17 WPI scales and MBTI® preference scores. In order to compute these correlations, the MBTI® dimensions were arranged as single continuous variables ranging from low to high: Extraversion-Introversion (EI), Sensing-Intuition (SN), Thinking-Feeling (TF), Judging-Perceiving (JP). As a result, people with low scores on these variables would identify with Extraversion, Sensing, Thinking, and Judging, while people with high scores would identify with Introversion, Intuition, Feeling, and Perceiving. The relationships between the 17 WPI scales and the MBTI® preference scales are shown in Table 6.16.

WPI Correlations with E-I preference scores

The Extraversion-Introversion dichotomy of the MBTI® indicates the differences in people that result from where they focus their attention and get energy. People who describe themselves as preferring Extraversion are directed toward the outer world of people or objects, while those who prefer Introversion are directed toward the inner world of experience and ideas. Table 6.17 contains further descriptions on how the E-I preferences manifest themselves in work settings.

Table 6.16 – Correlations between WPI Scale Scores and MBTI® Preference Scores

	EI	SN	TF	JP
Ambition	-.23	.05	-.001	.17
Initiative	**-.44**	.08	-.04	.25
Flexibility	**-.30**	**.47**	.16	**.60**
Energy	**-.34**	-.19	**-.33**	.02
Leadership	**-.43**	**-.32**	**-.28**	-.21
Persistence	-.17	-.20	.01	-.20
Attention to Detail	.10	**-.33**	.07	**-.36**
Rule Following	.16	-.24 -	.26	**-.41**
Dependability	-.18	-.09	-.02	-.17
Teamwork	**-.63**	-.04	.27	.27
Concern for Others	**-.42**	.10	**.64**	**.30**
Outgoing	**-.80**	-.13	.14	.20
Democratic	**-.32**	.10	.27	**.30**
Innovation	**-.31**	**.42**	.09	.27
Analytic Thinking	.14	.25	**-.45**	-.04
Self-Control	.10	.21	.27	.10
Stress Tolerance	.20	.02	-.21	.01

Correlations significant beyond the 5% level are in **bold**

The MBTI® Extraversion-Introversion scale correlates most strongly with Outgoing (-.80), Teamwork (-.63), Initiative (-.44), Leadership (-.43), and Concern for Others (-.42). These findings indicate that people who score toward Extraversion on the MBTI® tend to be outgoing, enjoy working closely with others, like taking the initiative, gravitate toward leadership positions, and express concern for others as measured by the WPI. These results indicate that these WPI scales are measuring some of the same personality characteristics as the Extraversion-Introversion scale on the MBTI®.

WPI Correlations with S-N preference scores

The Sensing-Intuition dichotomy describes what an individual pays attention to. People with a preference for Sensing tend to focus on information that can be gathered through the five senses. As a result, they tend to be practical, and focus on factual details. People with a preference for Intuition tend to focus on future possibilities and novelty. As a result, they tend to be theoretical, creative, driven by insights, and enjoy variety. Table 6.18 provides a further description of the S-N preferences.

MBTI® Sensing-Intuition correlates with Flexibility (.47), Innovation (.42), Attention to Detail (-.33), and Leadership (-.32). These findings indicate that people who score toward Intuition on the MBTI® tend to be identified as flexible and innovative by the WPI. Those individuals who score toward Sensing on the MBTI® are identified as preferring to pay close attention to details and gravitate towards leadership roles on the WPI.

WPI Correlations with T-F preference scores

The Thinking-Feeling dichotomy describes the process an individual uses to make decisions. People with a Thinking Preference tend to structure and organize information to make decisions in a logical, objective way. Individuals who have a preference for Feeling organize and structure information to decide in a personal, values-oriented way. Table 6.19 contains more descriptions of the T-F preferences.

Table 6.17 – Characteristics of E-I Preferences in Work Settings

Extraversion	Introversion
Like variety and action	Like peace and quiet
Enjoy interacting with people	Enjoy focusing on a project or task
Develop ideas through discussion	Develop ideas internally
Learn new tasks by talking and doing	Learn new tasks by reading and reflecting
Sociable and forthcoming	Private and aloof

Table 6.18 – Characteristics of S-N Preferences in Work Settings

Sensing	Intuition
Focused on present	Focused on future
Factual and detailed	Original and creative
Take time to come to conclusions	Quickly come to conclusions
Like things with a practical bent	Like things with an innovative bent

MBTI® Thinking-Feeling correlates with Concern for Others (.64), Analytical Thinking (-.45), Energy (-.32), and Leadership (-.28). As expected, people who score towards Feeling on the MBTI also score high on the Concern for Others scale on the WPI. Those individuals who score towards Thinking tend to be analytical, energetic and have leadership aspirations.

WPI Correlations with J-P preference scores

The Judging-Perceiving dichotomy describes the type of lifestyle a person adopts. People with a preference for Judging live planned, organized lives. Individuals with a preference for Perceiving live a spontaneous, flexible life. Table 6.20 summarizes the characteristics of the T-F preferences in work settings.

MBTI® Judging-Perceiving scores correlate positively with Flexibility (.60), Democratic (.30), and Concern for Others (.30). This indicates that individuals who score towards Perceiving also tend to be flexible, democratic and concerned about the feelings and values of others. The Judging-Perceiving scale correlates negatively with Rule-Following (-.41), and Attention to Detail (-.36), suggesting the people with a Judging preference tend to follow guidelines closely, are well organized, and focused on details.

Relationships between WPI scales and Form K Facets

The most detailed study of the relationship between the Work Personality Index and the MBTI® Form K is obtained when correlating the results from the 17 WPI traits and the 20 Form K facets. Since each of these scales measures distinct personality traits, rather than global traits, the comparison between the two tests at this level provides the best indication of their relationship.

Tables 6.21 to 6.24 show the correlations between the 17 WPI traits and the 20 Form K facet scales. Since there are 340 correlations in these tables, coefficients with r >.27, indicating the strongest relationships, are in bold type. A brief discussion of these findings is outlined below. To clarify the relationships with the Form K facet scales, which have bi-polar titles, only the pole that describes

Table 6.19 – Characteristics of T-F Preferences in Work Settings

Thinking	Feeling
Use logic to reach conclusions	Use values to reach conclusions
Critical	Kind hearted
Strive for objectivity	Strive for harmony
Even-handed	Considerate

Table 6.20 – Characteristics of J-P Preferences in Work Settings

Judging	Perceiving
Planful	Impulsive
Organized	Adaptable
Systematic	Open-ended
Make definite plans	Always adapting plans

the direction of the correlation is written in the discussion.

Extraversion - Introversion Facet Scales

The first five scales on the Form K measure facets of the Extraversion-Introversion dichotomy. They would be expected to correlate with the scales on the WPI that measure aspects of social outgoingness and activity. The results shown in Table 6.21 are in line with expectations. Some of the significant results include:

- All E-I facets correlate significantly with the Teamwork and Outgoing scales on the WPI.
- WPI Concern for Others correlates significantly with Initiating, Expressive, Participative, and Enthusiastic
- WPI Democratic correlates significantly with Expressive, Participative, and Enthusiastic
- WPI Leadership correlates significantly with Initiating, Gregarious, Participative, and Enthusiastic
- WPI Democratic correlates significantly with Expressive, Participative, and Enthusiastic.

Sensing - Intuition Facet Scales

The next five facet scales on the Form K measure aspects of the Sensing-Intuition dichotomy. These would be expected to correlate with WPI scales that measure whether people are practical and detail-oriented, or innovative and focused on possibilities. The relationships between the WPI and Form K appear to be consistent with the hypothesis and

Table 6.21 – Correlations of WPI Scales with E-I Facet Scales

	Initiating-Receiving	Expressive-Contained	Gregarious-Intimate	Participative-Reflective	Enthusiastic-Quiet
Ambition	-.24	.02	-.05	-.11	**-.38**
Initiative	**-.42**	-.24	**-.29**	-.23	**-.47**
Flexibility	**-.29**	-.16	-.24	-.14	**-.38**
Energy	**-.36**	-.17	-.15	-.26	**-.49**
Leadership	**-.44**	-.21	**-.38**	**-.47**	**-.30**
Persistence	-.13	.03	-.14	-.25	-.16
Attention to Detail	.13	.11	.17	.03	.20
Rule-Following	.07	.09	.19	.07	.06
Dependability	-.19	.02	-.02	-.15	-.18
Teamwork	**-.57**	**-.45**	**-.50**	**-.61**	**-.60**
Concern for Others	**-.34**	**-.43**	-.24	**-.35**	**-.38**
Outgoing	**-.78**	**-.69**	**-.65**	**-.67**	**-.70**
Democratic	-.27	**-.40**	-.21	**-.36**	**-.33**
Innovation	**-.35**	-.10	-.13	-.22	**-.41**
Analytical Thinking	.03	**.30**	**.29**	.10	.10
Self Control	-.08	-.05	-.12	-.16	-.18
Stress Tolerance	-.22	.04	-.22	**-.36**	-.20

are shown in Table 6.22. Significant findings in this area include:

- WPI Innovation scale correlates significantly with Abstract, Imaginative, Theoretical, Original
- WPI Flexibility correlates significantly with Abstract, Imaginative, Original
- WPI Attention to Detail correlates significantly with Realistic and Traditional

Thinking - Feeling Facet Scales

The Thinking-Feeling facet scales help identify typical ways in which people make decisions and the standards they use to maintain relationships. One would expect that these facet scales show some relationships to the WPI scales that measure aspects of how people relate to others, and how they deal with information. Table 6.23 lists the correlation coefficients. Some of the more interesting results include:

- WPI Teamwork correlates significantly with Compassionate, Accepting, and Tender
- WPI Concern for Others correlates significantly with Empathetic, Compassionate, Accepting, and Tender
- WPI Analytical Thinking correlates significantly with Logical, Reasonable, Questioning, and Tough

Judging - Perceiving Facet Scales

The final five facet scales on the Form K measure

Table 6.22 – Correlations of WPI Scales with S-N Facet Scales

	Concrete-Abstract	Realistic-Imaginative	Practical-Inferential	Experiential-Theoretical	Traditional-Original
Ambition	.04	.08	.13	.04	.04
Initiative	-.07	.08	.14	-.02	.21
Flexibility	**.34**	**.38**	.05	.27	**.54**
Energy	-.18	-.16	-.04	-.15	-.09
Leadership	**-.34**	**-.30**	-.20	-.12	-.20
Persistence	-.26	-.08	.23	-.21	-.11
Attention to Detail	-.24	**-.35**	-.16	-.21	**-.30**
Rule-Following	-.26	-.17	.06	-.15	**-.29**
Dependability	-.07	.03	.05	-.07	-.10
Teamwork	-.01	-.01	-.19	-.14	.07
Concern for Others	.11	.09	-.01	-.09	.22
Outgoing	-.05	-.13	-.18	-.20	-.04
Democratic	.25	.09	-.16	-.02	.13
Innovation	**.29**	**.44**	.20	**.33**	**.41**
Analytical Thinking	.19	.26	.23	**.46**	.15
Self Control	.20	.22	-.01	.08	**.29**
Stress Tolerance	.03	-.03	.00	.04	.01

personality traits that are considered part of the Judging-Perceiving dichotomy. These facets show whether an individual is planful and organized, or spontaneous and flexible. The relationship between the J-P facets and the WPI scales are also in line with expectations, and are provided in Table 6.24. These results include:

- WPI Flexibility correlates significantly with all J-P Facets in the direction of Perceiving. This shows the people with higher scores on the Flexibility scale describe themselves as Casual, Open-ended, Pressure Prompted, Spontaneous, and Emergent on the Form K.
- WPI Attention to Detail correlates with Systematic, Early Starting, and Scheduled
- WPI Rule-Following correlates significantly with Systematic, Planful, Early Starting, and Scheduled
- WPI Persistence correlates significantly with Systematic, and Methodical
- WPI Dependability correlates significantly with Early Starting, and Methodical

Conclusion

The results of this exploratory study indicate a number of significant relationships between the WPI and the MBTI® Form K. These relationships show that both tests measure some of the same personality characteristics. All of the Form K facet scales, except for Practical-Inferential, are significantly correlated with at least one of the WPI scales. These findings

Table 6.23 – Correlations of WPI Scales with T-F Facet Scales

	Logical-Empathetic	Reasonable-Compassionate	Questioning-Accommodating	Critical-Accepting	Tough-Tender
Ambition	.04	.08	**-.28**	-.03	.10
Initiative	-.01	.08	**-.40**	.07	-.01
Flexibility	.24	.17	**-.32**	.22	.06
Energy	**-.28**	-.27	**-.44**	-.17	-.12
Leadership	**-.29**	-.22	**-.34**	-.04	-.06
Persistence	-.04	.02	.00	.13	.11
Attention to Detail	.01	.17	.13	.15	.01
Rule-Following	**-.31**	-.24	.07	-.21	-.15
Dependability	-.03	-.05	-.13	.14	.11
Teamwork	.14	**.33**	-.16	**.31**	**.33**
Concern for Others	**.55**	**.67**	-.05	**.52**	**.54**
Outgoing	.03	.20	-.17	.25	**.28**
Democratic	.20	.23	.10	**.32**	.16
Innovation	.12	-.02	**-.36**	**.29**	.03
Analytical Thinking	**-.36**	**-.53**	**-.29**	-.24	**-.30**
Self Control	.14	.13	**.31**	**.49**	.18
Stress Tolerance	-.17	**-.31**	-.18	.07	-.13

lend support to the use of the WPI as a measure of personality traits that play an important role in how people approach their work.

Table 6.24 – Correlations of WPI Scales with J-P Facet Scales

	Systematic-Casual	Planful - Open-ended	Early Starting-Pressure Prompted	Scheduled-Spontaneous	Methodical-Emergent
Ambition	.02	.20	.09	.24	.04
Initiative	.20	.20	.22	.24	.15
Flexibility	**.52**	**.55**	**.42**	**.64**	**.45**
Energy	-.12	.03	.13	.05	.01
Leadership	**-.31**	-.15	-.05	-.14	-.23
Persistence	**-.28**	-.07	-.27	-.15	**-.29**
Attention to Detail	**-.32**	-.16	**-.30**	**-.46**	**-.46**
Rule-Following	**-.47**	**-.34**	**-.35**	**-.40**	-.18
Dependability	-.20	-.05	**-.31**	-.06	**-.28**
Teamwork	**.33**	.27	.13	.22	-.04
Concern for Others	**.38**	**.39**	.11	.20	-.08
Outgoing	.27	.16	.14	.14	-.03
Democratic	**.33**	**.31**	.25	.24	-.02
Innovation	.21	**.30**	.17	.23	.22
Analytical Thinking	-.12	-.04	.07	-.06	.18
Self Control	.14	.17	.02	.08	-.03
Stress Tolerance	-.01	.02	.09	.01	.01

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2004 WPI Research Addendum

This research addendum provides additional information to evaluate the reliability and validity of the Work Personality Index. Included in this document are validity studies that examine the relationships between the WPI and other measures of personality traits, criterion validity, and test-retest reliability. The final section of this research report outlines the development and interpretation of a Social Desirability scale, which is used on the WPI Select Report to help identify candidates who may not be providing an authentic picture of his/her personal style.

Correlations between the Work Personality Index (WPI) and Selected Psychological Variables and Scales

A number of correlational matrices have been derived involving the WPI and other psychological tests and instruments. This research was conducted to provide further evidence of the validity of the WPI as a measure of personality traits. The findings listed below outline the relationship between the WPI and other established measures of personality.

Work Personality Index and the NEO PI-R

The NEO PI-R is a measure of five major factors of personality and some of the important facets that define each factor. The five factor scales and thirty facet scales provide an assessment of adult personality.

Thirty participants completed both the WPI and the NEO PI-R Form S (the self report version of the assessment). The correlations between the WPI scales and the various NEO PI-R factors and facets are shown in Tables 1 - 6. There are many conceptual similarities between the WPI and the NEO PI-R dimensions, which the data confirms.

Table 1 – Correlations of WPI Scales with NEO PI-R Five Factors (n = 30)

	Neuroticism	Extraversion	Openess	Agreeable	Conscientiousness
Ambition	-.251	.359	.103	-.070	.327
Initiative	-.242	.625**	.319	.039	.225
Flexibility	-.171	.574**	.486**	.101	.121
Energy	-.446*	.461*	.115	-.055	.338
Leadership	-.080	.459*	.100	-.254	.164
Persistence	-.003	.332	-.247	.133	.452*
ttention to Detail	.393*	.169	-.064	.137	.295
Rule-Following	.149	-.326	-.467**	.072	.159
Dependability	.004	.471**	-.025	-.172	.534**
Teamwork	.015	.635**	.269	.348	.200
Concern for Others	.285	.457*	.189	.481**	-.041
Outgoing	-.103	.863**	.167	.058	.304
Democratic	.269	.216	.131	.244	-.050
Innovation	-.069	.478**	.588**	-.194	.089
Analytical Thinking	-.261	.303	.466**	-.251	.157
Self-Control	.235	.081	-.135	.573**	.111
Stress Tolerance	-.457*	.326	.144	-.071	.333

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

Table 2 – Correlations of WPI Scales with NEO PI-R Neuroticism Facets (n = 30)

	N1 Anxiety	N2 Angry Hostility	N3 Depression	N4 Self-Consciousness	N5 Impulsiveness	N6 Vulnerability
Ambition	-.154	.002	-.222	-.145	-.423*	-.270
Initiative	-.044	.017	-.256	-.295	-.251	-.339
Flexibility	.003	.002	-.270	-.289	-.126	-.107
Energy	-.250	-.161	-.427*	-.383*	-.427*	-.447*
Leadership	.028	.156	.000	-.313	.033	-.320
Persistence	.103	.120	-.148	.062	-.076	-.084
Attention to Detail	.436*	.250	.321	.274	.165	.308
Rule-Following	-.005	.010	.131	.397*	-.082	.247
Dependability	.044	.295	-.213	-.140	.018	.085
Teamwork	.169	-.096	-.084	-.092	.072	.095
Concern for Others	.470**	.027	.139	.120	.243	.270
Outgoing	.065	.087	-.207	-.351	.028	-.083
Democratic	.389*	-.013	.215	.159	.104	.319
Innovation	.072	.195	-.181	-.306	.083	-.163
Analytical Thinking	-.228	.138	-.298	-.399*	-.134	-.233
Self-Control	-.132	-.545**	-.132	.139	-.355	-.136
Stress Tolerance	-.371*	-.187	-.397*	-.341	-.414*	-.403*

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

Table 3 – Correlations of WPI Scales with NEO PI-R Extraversion Facets (n = 30)

	E1 Warmth	E2 Gregariousness	E3 Assertiveness	E4 Activity	E5 Excitement -Seeking	E6 Positive Emotions
Ambition	.090	.413*	.219	.395*	.309	.246
Initiative	.488**	.601**	.579**	.470**	.167	.547**
Flexibility	.495**	.493**	.409*	.455*	.307	.515**
Energy	.205	.503**	.464**	.414*	.169	.333
Leadership	.269	.359	.652**	.274	.325	.167
Persistence	.197	.294	.405*	.355	-.047	.297
Attention to Detail	.007	.367*	.202	-.111	.136	.089
Rule-Following	-.352	-.109	-.325	-.261	-.264	-.223
Dependability	.252	.431*	.332	.572**	.340	.283
Teamwork	.635**	.649**	.540**	.193	.169	.683**
Concern for Others	.550*	.448*	.360	.115	.061	.541**
Outgoing	.702**	.830**	.788**	.527**	.369*	.715**
Democratic	.345	.288	.063	-.059	.196	.155
Innovation	.334	.470**	.448*	.313	.195	.410*
Analytical Thinking	.078	.253	.270	.333	.172	.300
Self-Control	.091	.197	.122	-.213	-.226	.322
Stress Tolerance	-.015	.403(*)	.396(*)	.259	.109	.289

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

Table 4 – Correlations of WPI Scales with NEO PI-R Openness Facets (n = 30)

	O1 Fantasy	O2 Aesthetics	O3 Feelings	O4 Actions	O5 Ideas	O6 Values
Ambition	-.004	.027	.088	.369*	.337	-.038
Initiative	.209	.165	.293	.597**	.393*	.223
Flexibility	.257	.306	.443*	.650**	.417*	.316
Energy	-.026	-.031	.224	.285	.344	.052
Leadership	-.053	.143	.091	.258	-.189	.354
Persistence	-.260	-.172	.241	.050	-.090	-.397*
Attention to Detail	-.203	.157	.316	-.141	-.091	-.340
Rule-Following	-.447*	-.281	-.273	-.430*	-.134	-.398*
Dependability	-.195	-.070	.326	.329	-.007	-.150
Teamwork	.054	.272	.623**	.345	.113	.090
Concern for Others	-.013	.317	.711**	.107	-.033	.032
Outgoing	-.096	.172	.536**	.427*	.082	.112
Democratic	-.133	.189	.452*	.124	-.146	.293
Innovation	.563**	.502**	.391*	.438*	.580**	.106
Analytical Thinking	.426*	.180	.187	.446*	.726**	.110
Self-Control	-.229	-.083	.066	-.081	.100	-.080
Stress Tolerance	-.043	.073	.053	.366*	.424*	-.127

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

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

Table 5 – Correlations of WPI Scales with NEO PI-R Agreeableness Facets (n = 30)

	A1 Trust	A2 Straightforwardness	A3 Altruism	A4 Compliance	A5 Modesty	A6 Tender-Mindedness
Ambition	.060	.118	.047	-.341	-.175	.088
Initiative	.250	.031	.193	-.218	-.131	.100
Flexibility	.237	.238	.209	-.220	-.301	.311
Energy	.190	.116	.099	-.174	-.237	-.091
Leadership	.056	-.397*	.106	-.036	-.166	-.422*
Persistence	.095	.379*	.317	-.028	-.142	-.032
Attention to Detail	-.151	.216	.363*	.145	-.094	.058
Rule-Following	-.014	.162	-.043	.220	.071	-.137
Dependability	.017	.018	.365*	-.155	-.431*	-.288
Teamwork	.219	.262	.594**	.086	-.156	.377*
Concern for Others	.112	.301	.644**	.223	.076	.450*
Outgoing	.157	.067	.498**	-.142	-.352	.125
Democratic	-.017	.057	.361*	.140	.195	.147
Innovation	-.183	-.151	.045	-.238	-.332	.163
Analytical Thinking	-.059	-.052	-.143	-.370*	-.343	.078
Self-Control	.458*	.396*	.302	.490**	.223	.279
Stress Tolerance	.056	.146	-.059	-.109	-.274	.036

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

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

Table 6 – Correlations of WPI Scales with NEO PI-R Conscientiousness Facets (n = 30)

	C1 Competence	C2 Order	C3 Dutifulness	C4 Achievement Striving	C5 Self-Discipline	C6 Deliberation
Ambition	.202	.126	.212	.559**	.246	-.103
Initiative	.132	.171	.207	.303	.235	-.186
Flexibility	.272	-.051	.182	.380*	.083	-.336
Energy	.234	.232	.303	.276	.412*	-.163
Leadership	-.03	.335	-.022	.180	.061	.030
Persistence	.320	.440*	.525**	.115	.638**	-.299
Attention to Detail	.043	.478**	.319	.024	.181	.024
Rule-Following	-.016	.218	.229	-.181	.120	.199
Dependability	.408*	.546**	.453*	.338	.350	-.088
Teamwork	.152	.226	.406*	.076	.153	-.218
Concern for Others	-.055	.111	.268	-.221	.065	-.280
Outgoing	.240	.376*	.355	.138	.313	-.255
Democratic	-.256	.118	.090	-.178	-.040	.046
Innovation	.157	.032	-.037	.308	-.068	-.051
Analytical Thinking	.304	.063	.029	.440*	-.016	-.198
Self-Control	.012	.105	.217	-.116	.285	-.073
Stress Tolerance	.226	.135	.219	.271	.452*	-.039

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

Work Personality Index and the Myers Briggs Type Indicator (MBTI) Form Q

The MBTI was originally developed as a measure of Jungian personality type. This has evolved into a personality assessment that measures four dichotomies: Extraversion vs. Introversion (EI), Sensing vs. Intuition (SN), Thinking vs. Feeling (TF), and Judging vs. Perceiving (JP). The MBTI Form Q expands on this personality type assessment by providing a more detailed assessment of an individual's type preferences. Each of the four dichotomies of the MBTI personality inventory is made up of five facets, which represent aspects of the complex nature of the dichotomy.

215 participants completed both the WPI and the MBTI Form Q. Table 7 lists the correlations between the WPI scales with the four MBTI Preference Scores. Tables 8 to 11 list the correlations among the WPI scales and the MBTI Facet Scales for each of the four MBTI dichotomies.

Table 7 – Correlations of WPI Scales with MBTI Preference Scores (n = 215)

	EI Preference Score	SN Preference Score	TF Preference Score	JP Preference Score
Ambition	-.034	.033	-.224**	-.042
Initiative	-.332**	.245**	-.103	.257**
Flexibility	-.263**	.600**	.132	.641**
Energy	-.374**	.038	-.204**	.038
Leaders	-.291**	-.026	-.338**	-.157*
Persistence	-.024	-.255**	-.298**	-.385**
Attention to Detail	.058	-.516**	-.181**	-.589**
Rule-Following	.125	-.544**	-.172*	-.537**
Dependability	-.026	-.404**	-.325**	-.492**
Teamwork	-.486**	.160*	.298**	.191**
Concern for Others	.802**	.018	.083	.135*
Outgoing	-.802**	.018	.083	.135*
Democratic	-.374*	-.016	.191**	.115
Innovation	-.104	.663**	.065	.329**
Analytical Thinking	.201**	.215**	-.433**	-.083
Self-Control	-.050	.043	.112	.134
Stress Tolerance	-.172*	.042	-.258**	.234**

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

Table 8 – Correlations of WPI Scales with Extraversion-Introversion Facet Scales (n = 215)

	Initiating-Receiving	Expressive-Contained	Gregarious Intimate	Active-Reflective	Enthusiastic-Quiet
Ambition	-.056	.026	-.010	-.035	-.030
Initiative	-.322**	-.227**	-.307**	-.295**	-.281**
Flexibility	.279**	-.177**	-.197**	-.231**	-.214**
Energy	-.338**	-.283**	-.343**	-.335**	-.339**
Leadership	-.260**	-.227**	-.304**	-.293**	-.323**
Persistence	-.012	-.036	-.022	-.013	.008
Attention to Detail	.030	.067	-.007	.062	.022
Rule-Following	.120	.079	.073	.092	.059
Dependability	-.006	-.081	-.051	-.035	.012
Teamwork	-.441**	-.457**	-.423**	-.428**	-.445**
Concern for Others	-.146*	-.238**	-.041	-.123	-.120
Outgoing	-.753**	-.708**	-.720**	-.736**	-.738**
Democratic	-.325**	-.372**	-.339**	-.346**	-.353**
Innovation	-.121	-.055	-.088	-.088	-.064
Analytical Thinking	.153*	.264**	.139*	.166*	.228**
Self-Control	-.059	-.063	.042	-.033	.026
Stress Tolerance	-.170*	-.106	-.114	-.125	-.094

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

Table 9 – Correlations of WPI Scales with Sensing-Intuition Facet Scales (n = 215)

	Concrete-Abstract	Realistic-Imaginative	Practical-Conceptual	Experiential-Theoretical	Traditional-Original
Ambition	.006	.029	.108	-.006	.148*
Initiative	.176**	.233**	.189**	.188**	.377**
Flexibility	.510**	.567**	.468**	.520**	.635**
Energy	-.009	.046	-.018	.035	.142*
Leadership	-.061	-.027	-.072	-.019	.058
Persistence	-.269**	-.272**	-.187**	-.216**	-.151*
Attention to Detail	-.453**	-.507**	-.410**	-.487**	-.470**
Rule-Following	-.511**	-.502**	-.440**	-.495**	-.553**
Dependability	-.395**	-.378**	-.335**	-.361**	-.365**
Teamwork	.106	.187**	.033	.138*	.148*
Concern for Others	.217*	.220**	.151*	.183**	.180**
Outgoing	-.029	.041	-.071	.012	.073
Democratic	-.032	.014	-.119	.009	-.065
Innovation	.597**	.626**	.603**	.571**	.655**
Analytical Thinking	.216	.119	.212**	.200**	.234**
Self-Control	.025	.024	.020	.046	.058
Stress Tolerance	-.020	.031	.017	.032	.161*

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

Table 10 – Correlations of WPI Scales with Thinking-Feeling Facet Scales (n = 215)

	Logical-Empathetic	Reasonable-Compassionate	Questioning-Accommodating	Critical-Accepting	Tough-Tender
Ambition	-.199**	-.181**	-.240**	-.245**	-.255**
Initiative	-.110	-.086	-.239**	-.045	-.139*
Flexibility	.114	.066	-.178**	.144*	.078
Energy	-.178**	-.174*	-.174*	-.190**	-.245**
Leadership	-.307**	-.295**	-.284**	-.352**	-.347**
Persistence	-.284**	-.233**	-.148*	-.189**	-.296**
Attention to Detail	-.154*	-.117	.057	-.143*	-.165*
Rule-Following	-.173*	-.074	.157*	-.160*	-.145*
Dependability	-.328	-.237**	-.035	-.184**	-.294**
Teamwork	.270**	.305**	.212**	.351**	.226**
Concern for Others	.588**	.646**	.301**	.589**	.596**
Outgoing	.098	.086	.056	.162*	.030
Democratic	.183**	.173*	.170*	.272**	.155*
Innovation	.041	.039	-.151*	.066	.067
Analytical Thinking	-.465**	-.403**	-.329	-.346**	-.399**
Self-Control	.013	.161	.111	.180**	.113
Stress Tolerance	-.251**	-.172*	-.206**	-.202**	-.328**

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

Table 11 – Correlations of WPI Scales with Judging-Perceiving Facet Scales (n = 215)

	Systematic-Casual	Planful-Open-Ended	Early Starting-Pressure Prompted	Scheduled-Spontaneous	Methodical-Emergent
Ambition	-.089	-.033	.010	-.010	.021
Initiative	.238**	.178	.217**	.257**	.200**
Flexibility	.545**	.528**	.516**	.613**	.497**
Energy	-.038	.033	.110	.019	.120
Leadership	-.168*	-.156*	-.074	-.156*	-.077
Persistence	-.326**	-.349**	-.398**	-.390**	-.306**
Attention to Detail	-.493**	-.475**	-.536**	-.516**	-.589**
Rule-Following	-.511**	-.381**	-.440**	-.490**	-.465**
Dependability	-.466**	-.405**	-.523**	-.482**	-.430**
Teamwork	.205*	.143*	.218**	.149*	.131
Concern for Others	.327**	.126	.198**	.165*	.105
Outgoing	.150*	.096	.164*	.094	.077
Democratic	.120	.123	.199**	.082	.063
Innovation	.307**	.190**	.300**	.323**	.242**
Analytical Thinking	-.138*	-.098	-.114	-.022	-.068
Self-Control	.194**	.171*	.064	.097	.053
Stress Tolerance	.144*	.263**	.250**	.212**	.225**

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

Work Personality Index and the Career Values Scale

Table 12.1 and 12.2 present the correlations between the 17 WPI scales and the Career Values Scale.

The Career Values Scale is an assessment of career values that identify the importance of the following variables in a person's life and work:

- Service Orientation - providing direct service and benefit to others
- Team Orientation - team work, good co-worker relations
- Influence - influencing people and events
- Creativity - creativity and originality
- Independence - being free from the influence of others
- Excitement - variety, risk and fast-paced work
- Career Development - personal and professional development
- Financial Rewards - high salary and financial security
- Security - security, stability and predictability
- Prestige - recognition, admiration and status

Table 12.1 – Correlations of WPI Scales and Career Values Scale (n = 662)

	Service Orientation	Team Orientation	Influence	Creativity	Independence
Ambition	0.243	0.143	0.351	0.251	0.052
Initiative	0.264	0.213	0.40	0.379	0.094
Flexibility	0.171	0.249	0.244	0.426	0.212
Energy	0.194	0.202	0.339	0.212	-0.013
Leadership	0.148	0.218	0.567	0.243	0.144
Persistence	0.229	0.171	0.329	0.118	-0.028
Attention to Detail	0.163	0.051	0.23	-0.049	-0.094
Rule-Following	0.165	0.015	-0.001	-0.31	-0.391
Dependability	0.2	0.096	0.207	-0.041	-0.1
Teamwork	0.434	0.601	0.238	0.105	-0.137
Concern for Others	0.51	0.387	0.098	0.065	-0.003
Outgoing	0.351	0.578	0.213	0.017	-0.177
Democratic	0.103	0.175	-0.133	-0.213	-0.305
Innovation	0.082	0.079	0.184	0.616	0.234
Analytical Thinking	-0.033	-0.134	0.156	0.266	0.069
Self-Control	0.164	0.137	0.063	0.03	-0.109
Stress Tolerance	0.114	0.143	0.192	0.1	-0.065

Table 12.2 – Correlations of WPI Scales and Career Values Scale (n = 662)

	Excitement	Career Development	Financial Rewards	Security	Prestige
Ambition	0.217	0.441	0.133	-0.069	0.169
Initiative	0.348	0.454	0.127	-0.165	0.164
Flexibility	0.482	0.386	0.017	-0.392	0.02
Energy	0.345	0.28	0.14	-0.1	0.149
Leadership	0.334	0.157	0.271	0.036	0.286
Persistence	0.155	0.288	0.174	0.071	0.116
Attention to Detail	0.013	0.18	0.088	0.169	0.086
Rule-Following	-0.204	0.015	-0.086	0.222	0.001
Dependability	0.024	0.255	0.113	0.063	0.047
Teamwork	0.153	0.132	-0.037	-0.016	0.081
Concern for Others	0.022	0.158	-0.107	-0.008	-0.02
Outgoing	0.148	0.074	-0.019	-0.01	0.097
Democratic	-0.175	-0.036	-0.133	0.19	-0.017
Innovation	0.247	0.255	0.095	-0.215	0.102
Analytical Thinking	0.055	0.298	0.009	-0.135	0.028
Self-Control	0.103	0.081	-0.027	-0.174	-0.076
Stress Tolerance	0.205	0.083	0.042	-0.134	-0.023

Work Personality Index and the Career Interest Profiler

Table 13 shows the correlations between the WPI and Career Interest Profiler. The *Career Interest Profiler* is a measure of occupational interests that uses John Holland's theory of vocational personality. This theory, which has become one of the most widely accepted approaches for helping people make occupation choices, is based on six vocational personality types. Holland believed that people could be described by one of the six types:

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

Table 13 – Correlations of WPI Scales and Career Interest Profiler (n = 772)

	Realistic	Investigative	Artistic	Social	Enterprising	Conventional
Ambition	.060	.141	.040	.052	.124	.103
Initiative	.075	.144	.097	.082	.172	.084
Flexibility	.092	.125	.156	.050	.112	-.105
Energy	.089	.079	-.004	.074	.134	.075
Leadership	.085	.041	.087	-.031	.196	.053
Persistence	.046	.063	-.062	-.001	.058	.142
Attention to Detail	-.021	.069	-.107	-.003	.020	.251
Rule-Following	-.044	-.024	-.226	.028	-.032	.245
Dependability	-.045	.073	-.111	.013	-.021	.167
Teamwork	.071	-.021	.059	.277	.219	.092
Concern for Others	-.048	-.050	.102	.338	.094	.071
Outgoing	.073	-.065	.012	.208	.225	.101
Democratic	-.050	-.061	-.078	.081	-.095	-.014
Innovation	.114	.137	.371	.062	.059	-.170
Analytical Thinking	.128	.323	.071	-.063	.039	.034
Self-Control	.138	.099	-.013	.107	.090	.059
Stress Tolerance	.135	.081	-.005	.024	.102	.019

Criterion Validity for Tax Collection Officers

The following statistical analyses were conducted to explore the relationships between the personality traits measured by the WPI and job performance ratings for 24 collection officers from a government tax collection agency. Given the small sample size, the relationships should be viewed as general trends or hypotheses.

Table 14 lists the correlations between the 17 WPI scales and four work review ratings for the collection officers. There are a number of significant correlations, indicating a strong relationship between the WPI and job performance for this sample. For example, the Dependability scale on the WPI correlates with ratings of Investigation Skills (.645), Timeliness of Actions (.658), Use of Collection Tools (.706), and Maintenance and Control (.587). The strength of these correlation coefficients indicate that the WPI scales of Ambition, Initiative, Energy, Persistence, Rule-Following, and Dependability show promise in being able to predict aspects of job success for this occupation.

Table 14 – Correlations of WPI Scales with Performance Ratings (n = 24)

	Investigation Skills	Timeliness of Actions	Use of Collection Tools	Maintenance and Control
Ambition	.392	.602**	.591**	.401
Initiative	.151	.439*	.399	.136
Flexibility	-.144	.068	-.044	-.135
Energy	.135	.591**	.450	.152
Leadership	.236	.394	.385	.166
Persistence	.449*	.539**	.602**	.485*
Attention to Detail	.337	.290	.367	.407*
Rule-Following	.607**	.310	.490*	.629**
Dependability	.645**	.658**	.706**	.587**
Teamwork	-.065	.037	.078	.068
Concern for Others	-.072	-.056	.045	.016
Outgoing	.035	.115	.198	.070
Democratic	-.151	-.269	-.178	-.097
Innovation	-.196	.212	.055	-.142
Analytical Thinking	-.131	.270	.172	.001
Self-Control	-.270	.100	-.082	-.300
Stress Tolerance	.098	.472*	.339	.052

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

Table 15 illustrates the correlations between the WPI scales and the five organizational competencies. The Commitment to Learning competency correlates significantly with Ambition, Initiative, Energy, Leadership, Persistence, Attention to Detail, Rule-Following, and Dependability. The Conflict Management competency was significantly correlated with Persistence, and the Supporting Organizational Values competency correlated strongly with Energy and Dependability.

Table 15 – Correlations of WPI Scales with Organizational Competencies (n = 24)

	Client Service Orientation	Commitment to Learning	Conflict Management	Supporting Equity + Diversity	Supporting Organizational Values
Ambition	-.242	.571**	.382	.174	.193
Initiative	-.106	.493*	.128	-.167	.296
Flexibility	.065	.171	-.030	-.158	.275
Energy	-.081	.406*	.236	-.316	.518**
Leadership	-.135	.570**	.217	-.027	.128
Persistence	-.005	.480*	.481*	.074	.246
Attention to Detail	-.251	.538**	.199	.131	-.218
Rule-Following	.046	.431*	.336	.271	.050
Dependability	.015	.448*	.368	-.237	.458*
Teamwork	.165	.045	.131	-.037	.223
Concern for Others	.178	-.022	-.097	-.303	.297
Outgoing	.172	.070	.141	-.171	.151
Democratic	.220	-.202	-.099	-.210	.054
Innovation	-.187	.214	-.041	-.284	-.009
Analytical Thinking	-.212	.380	.039	-.140	.007
Self-Control	.072	-.020	.069	-.201	.237
Stress Tolerance	.031	.278	.267	-.164	.326

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

Table 16 outlines the correlations between the WPI scales and 8 behavioral competencies measured by the organization. The Ambition, Energy, Persistence, Rule-Following, Dependability, Analytical Thinking, and Self-Control scales on the WPI are significantly related to one or a number of the Collection Officers behavioral competencies.

Table 16 – Correlations of WPI Scales with Behavioral Competencies (n = 24)

	Adaptability	Analytical Thinking	Decisiveness	Effective Interactive Communication	Initiative	Self Confidence	Teamwork Communication	Dealing with difficult situations
Ambition	.275	.299	.317	.209	.427*	.274	.432*	.321
Initiative	.299	.295	.284	.140	.373	.214	.280	.242
Flexibility	.249	.271	.064	.039	.264	.008	.179	.033
Energy	.496*	.252	.294	.265	.164	.132	.347	.334
Leadership	.141	.381	.260	.153	.393	.326	.319	.104
Persistence	.209	.127	.394	.245	.333	.460*	.383	.378
Attention to Detail	.003	.077	-.054	-.044	.183	.208	.060	-.164
Rule-Following	-.085	.286	.234	.358	.328	.534*	.208	.205
Dependability	.232	.371	.433*	.488*	.236	.507*	.141	.449*
Teamwork	.299	.010	.017	.306	.100	.108	.155	.329
Concern for Others	.342	-.062	-.063	.329	-.021	.122	-.254	.373
Outgoing	.175	.061	.154	.264	.029	.085	.174	.294
Democratic	.192	-.090	-.057	.180	-.299	-.204	-.315	.125
Innovation	.093	.009	-.097	-.078	.110	-.049	.121	.066
Analytical Thinking	.063	-.012	-.025	-.154	.202	.029	.409*	-.015
Self-Control	.408*	-.182	.044	.044	-.180	-.144	.158	.088
Stress Tolerance	.353	.249	.226	.245	.089	.075	.368	.130

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

WPI Test-Retest Reliability

Test-retest reliability is an estimate of how stable a characteristic is over time. It is calculated by correlating the results of a group of individuals tested on two separate occasions. The degree to which consistency is achieved on both occasions will indicate the test-retest reliability of the test. Evidence of this type of reliability is important for personality measures since personality traits are thought to be quite stable and change very little.

A sample of 36 people completed the WPI on two separate occasions. The median time interval was 8.5 weeks, and the time intervals ranged from 2 to 159 weeks. Table 17 lists the test-retest correlations for the 17 WPI traits, which range from 0.75 to 0.94 and indicate that the WPI traits show consistency over time.

Table 17 – Test-Retest Correlations of 17 WPI Scales (n=36)

Scale	Test-Retest Correlations
Ambition	0.78
Initiative	0.75
Flexibility	0.89
Energy	0.83
Leadership	0.84
Persistence	0.79
Attention to Detail	0.87
Rule-Following	0.84
Dependability	0.81
Teamwork	0.92
Concern for Others	0.83
Outgoing	0.94
Democratic	0.84
Innovation	0.83
Analytical Thinking	0.85
Self-Control	0.78
Stress Tolerance	0.75

** All correlations are significant at the 0.01 level.

Work Personality Index: Social Desirability Scale

The Social Desirability Scale was developed to help identify job candidates who respond to the WPI based on what they believe the employer is looking for, rather than their own personal style. Job candidates often have stereotypical views of the ideal employee, and some respond according to what they believe will get them the job, rather than how they typically carry themselves in work settings. As a result, some job candidates are not entirely frank and misrepresent their behavioral characteristics. When this occurs, the candidate's test results do not provide an authentic picture of his/her personal style. While the number of candidates who misrepresent themselves tends to be small, it is not insignificant considering the costly effects of a bad selection decision.

The Social Desirability Scale is designed to flag these candidates who may be manipulating their answers in order to come across in a highly socially desirable manner. Identifying people who may be misrepresenting themselves gives the employer the opportunity to confirm the candidate's results through other assessment methods, and confirm whether or not the candidate's responses are valid or invalid. The Social Desirability Scale is only reported on the WPI Select Report.

Development of a Social Desirability Scale

The Social Desirability Scale was created in two stages. These stages are discussed below, and provide a road map for how the scale was developed.

Stage One: Identifying Socially Desirable Items

The objective of this stage was to identify items that could possibly be used for a social desirability scale. This was done by finding items that are strongly endorsed (strongly agree or strongly disagree) by people with inflated scores on a total sten score scale. This total sten score scale was created by adding up candidates' sten scores for all of the 17 WPI Traits. Candidates with high scores on this total sten scale have very extreme ratings on all of the traits measured by the WPI. Since it is very unusual for people to have very high or low scores on all of the traits, strong correlations between items and the total sten score scale indicated which items people with exaggerated responses typically respond to. After correlating item responses with the total sten score scale, 48 items were found to have a correlation coefficient of .450 or greater.

Stage Two: Selecting Socially Desirable Items

The purpose of the second stage was to select the most appropriate items from this original pool of 48. Items were selected based on the following rules:

1. No more than two items per scale were selected.
2. The items were selected based on the differences between the mean item response of people who took the test for selection purposes and had an inflated total sten score (top 10%) and individuals who took the WPI for personal development purposes. The items with the largest difference in mean scores were chosen. The reasoning for comparing these groups is that the population who took the WPI for personal development purposes have no reason to alter their responses in a socially desirable way. The information is provided to the individual and the purpose of the test in these settings is to help people identify their strengths and weaknesses.

On the other hand, people taking the WPI for selection purposes are pursuing a job, and have an inherent interest in making a good impression. The top 10% of the selection candidates on the total sten score scale were individuals who described themselves in many desirous and sometimes inconsistent ways. Therefore, this group was deemed to be prone to responding in socially desirable ways and was used to identify the items that people who want to make a good impression respond to.

This process resulted in 21 items being selected. These 21 items came from 12 of the 17 scales. 10 of the items are scored in the positive direction, while 11 are scored in the negative direction.

Interpreting the Social Desirability Scale

When do you need to interpret the SD scale?

The SD scale uses Sten Scores. When a candidate's score is 8 or higher he/she may have responded in a highly socially desirable manner. When this occurs, the candidate's results should be viewed as potentially not accurate and verified through other methods.

What does a high score on the SD scale mean?

A high score on the SD scale means that the individual has responded to the items in a way that is similar to people who are trying to make themselves look good. This does not necessarily mean that the person is lying, but it does indicate that his/her pattern of results is highly socially desirable and should be further investigated with other means.

A high score can occur when a) the individual is trying to make themselves look as good as possible by answering in ways that they believe are socially desirable (e.g. Strongly Disagree with the statement "I am sometimes impatient with people"), b) when the individual's pattern of personality traits is very similar to people who are responding in ways that are socially desirable.

What should you do when a candidate receives a high score on the SD scale?

When a candidate receives a high score on the SD scale the goal should be to determine the accuracy of their responses. Until his/her responses can be verified through other methods, such as different assessment tools or interviews, their results should be considered to be potentially not accurate.



INTERVIEW QUESTION GUIDE

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Interview Question Guide

These questions can be used to inquire into a candidate's past experience in order to verify their personal style. You do not need to ask all the questions. Instead pick questions for those traits that are most important for successful job performance and will work best in your environment.

In order to choose the appropriate questions, it is important to have a clear picture of what personality traits a person needs in order to be successful on the job. You can then select which questions will identify the candidates who are best suited to the position.

The questions are grouped by personality trait, and some traits include subsections of questions based on the type of person you are looking for. For example, you will find a selection of questions that can help identify someone with a high level of teamwork grouped together. Following these questions, you will find a second group of questions that can help identify someone with a low level of teamwork; the type of person who works well independently. If the job requires a mix of teamwork and independent tasks you can choose some questions from each section.

WORKING WITH OTHERS

Teamwork

If the job involves a lot of teamwork and you need someone who works well in groups, consider some of the following questions:

- Give me an example of when you had to work closely with others. What was your role? What aspects of teamwork do you enjoy/dislike? Name a problem you had with a team member and discuss how you worked to resolve it.
- Describe a situation where you needed to encourage people to work together.
- How do you do your best work; with others or on your own? Why?
- To what extent have you worked closely with groups of people in the past?

If the job involves a lot of independent work, and you need someone who can work well on their own, consider some of the following questions:

- Tell me about a time when you had to work independently. What aspects of the experience were successful? What did you enjoy/dislike about working on your own?
- To what extent have you worked independently before?
- How do you do your best work; with others or on your own? Why?

Concern for Others

If you need someone who can support and help others, and/or gauge the personal thoughts and feelings of others, consider some of the following questions:

- Describe a situation where you had to be sympathetic.
- To what extent do you believe you should involve yourself in other people's problems?
- Name a time when your sensitivity to someone's feelings gave you an advantage?
- To what extent should an employer get involved in employee's personal problems?
- How do you show concern/sympathy?
- Describe a time when you failed to pick up on someone's feelings.
- Tell me about a time when you picked up on a person's feelings/reactions that others had missed.

If you need someone who can be tough-minded and comfortable making difficult decisions that negatively impact people, consider some of the following questions:

- Tell me about a decision you made that had a negative impact on people. How did you do it?
- Have you experienced a situation where paying too much attention to people's feelings was problematic? What was it?
- To what extent do you believe you should involve yourself in other peoples' problems?

Outgoing

If you need someone who is comfortable with frequent personal interaction and meeting with a lot of people, consider some of the following questions:

- What skills are important for meeting new people? What skills do you have and utilize when meeting new people?
- Tell me of a time when you had to meet a lot of new people. What was that time like for you? What was enjoyable? What was challenging/difficult?
- Tell me about your past experiences with making business acquaintances, meeting people, developing business relationships.

If the job has little personal interaction and does not require meeting with a lot of people, consider some of the following questions:

- How do you deal with work that involves little interaction with others? Give me an example of work you completed that involved little to no interaction with people.
- Would you describe yourself as outgoing or reserved?
- Tell me about your past experiences with making business acquaintances, meeting people, developing business relationships.

Democratic

If you are looking for someone who is comfortable making important decisions on their own, and works effectively with little to no supervision, consider some of the following questions:

- Describe a time when you had to make a difficult decision on your own.
- Have you ever sacrificed your own ideas to follow someone else's? What was that like for you?
- Do you believe that decisions should be made through consultation? How much consultation?
- Would you prefer to have close supervision of your work, or no supervision at all?
- How often do you consult with others when making decisions?

If you are looking for someone who makes decisions through consultation and is comfortable with supervision, consider some of the following questions:

- Give me an example of a time when you had to work under close supervision. What was that experience like for you?
- Tell me of a place where you worked where most decisions were made through consultation. What was that experience like for you? What were the positives and negatives of that approach?
- Give me an example of when you followed someone else's ideas at the expense of your own.
- Tell me about a decision you made by consulting with others extensively.
- Have you experienced a time when you had to sacrifice your own ideas to follow someone else's? What was that like for you?

DYNAMISM

Ambition

If you are looking for someone who is driven and goal oriented consider some of the following questions:

- Tell me some career goals you have set for yourself.
- Would you describe yourself as easy-going or competitive? Why? How competitive are you? How does that show itself in your work?
- Tell me of a time when you needed to compete hard to win.
- What do you think are the key skills for success?
- Tell me about some difficult goals you set for yourself, and how you reached them.

If you are looking for someone to fill a job that has little room for advancement, consider some of the following questions:

- Describe a situation in which you adopted a noncompetitive attitude in order to be successful.

- Have you ever had a job with little room for advancement? What was that like for you?
- Would you describe yourself as easy-going or competitive? Why? How competitive are you? How does that show itself in your work?

Energy

If you are looking for someone with a high level of energy who does not tire easily, consider some of the following questions:

• What kinds of activities drain your energy?

- Describe a project you worked on that required a lot of energy. What was that experience like? What did you do to keep your energy level up? What would you do differently?
- Name a time when you ran out of energy working on a project.
- How do you deal with easy tasks? Do you get bored? How do you deal with demanding tasks?
- Name some of the most demanding things you have done.

If you are looking for someone who prefers steady work with little demands, consider some of the following questions:

- What wears you down? What do you do to get your energy back?
- What kinds of activities drain your energy?
- How do you deal with easy tasks? Do you get bored? How do you deal with demanding tasks?

Persistence

If the job requires someone with a high level of persistence, consider some of the following questions:

- Tell me about a difficult task that you recently completed. What made it difficult? How did you manage to work through the difficulties/obstacles?
- Describe a time when you had a large amount of boring/dull/uninteresting work to complete. How did you motivate yourself?
- Give me an example of a project that you gave up on because it was no longer worth the resources to complete.
- Tell me about a time when you showed a high level of persistence.
- Tell me about some obstacles you have overcome that took a lot of persistence.
- Give me an example of something you gave up on because you did not think it worth the effort.

If the job mostly involves tasks that can be completed quickly and has few obstacles to overcome, consider some of the following questions:

- Give me an example of a project that you gave up on because it was no longer worth the resources to complete.
- Describe a time when you had a lot of boring work to complete. How did you motivate yourself?
- Have you ever had a job that only required you to do easy work that had no challenges? What was that like for you? Was it pleasant or unpleasant?

Leadership

If you need someone willing to take a directive leadership role, consider some of the following questions:

- How do you lead others? How do you convince people to follow you?
- What experience have you had with telling people what to do? What was that like for you? What was positive about the experience? What would you do differently? How could you have been a more effective leader?
- What leadership experience do you have?
- What are your leadership skills? What makes you a good leader?
- Tell me about an occasion when you encountered difficulties with subordinates. What were the difficulties and how did you overcome them?
- Name a time when you took on a leadership role without being asked.
- What are the characteristics of a good/bad leader?
- Would you describe your leadership style as directive or consultative? Why?
- Give me an example of a difficult leadership role you took on.

If you need someone comfortable following the lead of others, or who prefers to lead by example, consider some of the following questions:

- Tell me about a time when you had to follow someone else's lead.
- What are the characteristics of a good/bad leader?
- Would you describe your leadership style as directive or consultative? Why?

TASK ORIENTATION

Attention to Detail

If the job involves working with a lot of detailed information, consider some of the following questions:

- Describe a project you worked on that involved a lot of detailed work.
- What is the most detailed work you have had to complete?
- What is worse for you, submitting a project late, or submitting it on time with imperfections?
- What kind of work have you had to do in the past that required you to pay close attention to details?

If the job does not involve examining a lot of detailed work, but requires someone who focuses on global issues, consider some of the following questions:

- Tell me about a time when you ignored the details and focused on the big picture.
- Tell me about a time when people you were working with focused too much on details and missed the big picture. What did you do to help them broaden their focus? Is there such a thing as spending too much time looking at the minor details?
- What experience do you have with determining corporate strategy/looking at the big picture/setting large goals and priorities?

Rule-Following

If the job has a lot of work procedures and rules that need to be strictly followed, consider some of the following questions:

- Describe your past experiences of working in a very structured, rule bound workplace.
- Describe your experiences of working in an environment with no structures or rules on how to work.
- Can you tell me about an occasion where you needed to ignore rules or work procedures to get your work done successfully?
- How do you determine when work procedures/rules can be ignored? Are there situations where you believe they should be followed all the time? How do you determine when that is?

If the job has few to no work procedures and rules, and requires the individual to determine the best way to complete their work, consider some of the following questions:

- Tell me about some ineffective rules that were still followed in your previous places of work.
- Can you tell me about an occasion where you needed to ignore rules or work procedures to get your work done successfully?
- How do you determine when work procedures/rules can be ignored? Are there situations where you believe they should be followed all the time? How do you determine when that is?
- How often do you encounter work rules/procedures that you think should no longer be in effect?

- How comfortable are you working on tasks when you have not been given any direction/instruction? Do you enjoy the freedom? Do you wish you could get feedback to ensure you are doing your work correctly?

Dependability

If you are looking for someone with a high level of dependability, consider some of the following questions:

- Tell me about a project you couldn't finish on time. What happened? What would you do differently?
- Are you comfortable leaving a job unfinished if something else comes up?
- Give me an example of a task that you needed to work beyond your normal hours to complete. What was that experience like?
- Can you describe a time when you had to shift priorities and leave a task you were working on unfinished? What happened? How did you complete the first task?
- Name a time where it was difficult for you to complete your work. What happened, and how did you resolve the difficulties?
- Describe a time when you needed to work extra hard to get your tasks done on schedule.

PROBLEM SOLVING

Innovation

If the job requires someone who is creative and innovative, consider some of the following questions:

- Tell me about a problem you solved in an innovative way.
- Name an original/creative/new solution you came up with to solve a problem.
- When addressing a problem do you first look at what has worked in the past, or do you come up with an entirely new solution?
- What are the benefits/disadvantages of using past solutions?
- What have been some of your most creative ideas at work?

If the job does not require much problem solving, or the problems addressed only require incremental changes or practical solutions, consider some of the following questions:

- When addressing a problem do you first look at what has worked in the past, or do you come up with an entirely new solution?
- What value do you see in sticking with the established ways of doing a job?
- What are the benefits/disadvantages of using past solutions?
- What have been some of your most practical solutions to work problems?
- Would you describe yourself as innovative or practical?

Analytical Thinking

If the job requires analyzing a large amount of information and a decision making approach that is logical, cautious, and deliberate, consider some of the following questions:

- How much information do you need to feel comfortable making a decision? How do you get that information?
- Tell me about a decision you have made through extensive information gathering and discussion with others. How did it work out? Did you need to be as cautious as you were, or could you have made the decision more quickly?
- Would your friends describe you as analytical and calculating or intuitive and spontaneous? Why?
- What process do you go through before you make a decision?
- Tell me about an important decision you needed to make quickly.

If the job requires quick decision making that does not allow for the extensive gathering of information, consider some of the following questions:

- How much information do you need to feel comfortable making a decision? How do you get that information?
- Tell me about a decision you have made based on your gut feelings. How did it work out? How comfortable are you making decisions that way?
- Would your friends describe you as analytical and calculating or intuitive and spontaneous? Why?
- When have you had to rely upon your intuition to make a decision?

IDENTIFYING AND MANAGING CHANGE

Initiative

If the job requires someone with a high level of initiative to identify new opportunities and take on challenges, consider some of the following questions:

- Give me an example of a time when you completed a project without any support from others. What was the outcome?
- Tell me about an opportunity you identified that others missed.
- Describe some new challenges that you took on without encouragement from others.
- Name some new responsibilities you took on voluntarily.
- When you identify a potential opportunity what do you need before you will begin working towards it?
- What do you prefer, stable job responsibilities or frequently changing responsibilities, and why?

- Tell me about some occasions where you have shown initiative.
- Give me some examples of when you have shown initiative.

If the job consists of stable responsibilities and the individuals' responsibilities will rarely change, consider some of the following questions:

- What do you prefer, stable job responsibilities or frequently changing responsibilities, and why?
- Have you ever had a job where you identified changes that would make the work better, but you were not given the freedom to pursue your ideas? What was that like for you?
- Have you ever had a job where your responsibilities changed too often? What was that like for you?

Flexibility

If the job involves frequent change and you need someone who is flexible and able to adapt to changing circumstances, consider some of the following questions:

- Tell me about a significant change that occurred in your previous work and how you managed to cope.
- Would you prefer structure and routine in your job or flexibility and variety? Why?
- How do you adjust to changes in your work?
- How do you cope with change?
- What kinds of changes have you had to adjust to in the past?
- Have you ever been in a situation where things were changing too much? Describe it for me.
- Have you worked in a place that changed a lot? What was that like for you?
- Give me some examples of how you had to be flexible at work.

If the job involves little to no change and you need someone who is comfortable working in a stable environment, consider some of the following questions:

- Give me an example of a time when you thought an organization you worked for would have been better off sticking with their old ways of doing things.
- Have you ever worked in a place where you had to do the same tasks every day? What was that like for you?
- Have you ever been in a situation where things were changing too much? Describe it for me.
- Tell me about your experience working in environments with little change. Did you enjoy it or feel restricted?
- Have you ever changed things at work solely for the variety the change would bring?

DEALING WITH PRESSURE AND STRESS

Self-Control

If they job requires the individual to have a high level of self-control, consider some of the following questions:

- What do you do when you get frustrated with others? Tell me about a time when you were frustrated with a coworker.
- Give me an example of when you maintained your composure in a difficult situation.
- Give me an example of a time when you were angry with someone at work. What did you do?
- Describe a previous work experience that had you frequently dealing with upset people.
- What experience have you had dealing with irate customers?
- Tell me about a time when you had to deal with an upset customer. What did you do? What were the results? How did you feel afterwards?

Stress Tolerance

If the job requires frequently results in a high level of stress, consider some of the following questions:

- What do you do to alleviate stress?
- How do you tolerate stress?
- Name a time when you had to work under extreme stress.
- What types of activities do you find stressful?
- Name a time when you had difficulty coping with stressful tasks. What did you do to get yourself through that time?
- What type of stress do you find very hard to deal with?
- Are there stressful activities that you can not cope with? What are they?
- What do you find to be the most stressful?
- What kinds of extreme stress have you had to work under?
- What have been some of the most stressful things you have been involved in?

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