EXECUTIVE SUMMARY of The Profile™ Technical Manual

THE PROFILE

Executive Summary

5205 Lake Shore Drive • Waco, Texas 76710-1732
254.751.1644 • www.profilesinternational.com
INTRODUCTION

These days when it so easy to duplicate products and undercut prices, the key strategic advantage for most companies is the performance of their employees. Employees who are well matched to their position have higher attendance records, less turnover, higher job satisfaction and superior job performance. Both the employee and the employer share the benefits of enhanced person-job fit.

As part of the Profiles International, Inc., line of products for employers, The Profile is designed to facilitate achieving the best possible job fit. Our clients use The Profile to make effective job placements, develop effective work teams, to design optimal training programs based on the trainees’ style of learning, to help supervisors determine which approach will work best when working with a particular employee for working with each employee, to help develop succession plans, etc.

The Profile is a psychometric instrument whose roots extend over the last twenty-five years. More than twenty thousand job applicants and incumbents have participated in its development. These sample groups represent a diverse cross section of ages, ethnic groups, income levels, educational levels, job titles, companies and industries. The Profile is the product of collaboration between several test development psychologists and specialists coordinated by Profiles International, Inc.

The Profile investigates several areas (Behavioral Traits, Occupational Interests, and Thinking Style) as a part of evaluating how an individual fits into a particular job. By reviewing broad areas of occupational interests, behavioral traits and thinking style, we expand our ability to discover which areas will be most effective in determining job fit for a given position. By attending to each of the three areas, we enhance the opportunity to identify the factors that will lead to the best job fit.

USING JOB MATCH PATTERNS

The job match process for The Profile represents an effective approach that minimizes the time required to efficiently describe jobs, people, and their degree of match. The descriptive process usually starts by examining the score pattern of those who are most successful within a position. This pattern of scores across the various dimensions measured by The Profile serves as the initial “success profile” upon which the job matching is based.

The Profile allows concurrent study of those incumbents available, job requirement assessments by those who know the job, and a combination of these. Even with a small sample, you will have a good place to start the process and an approach that will allow further refinement of the job pattern with ongoing evaluation. It should be noted that this initial success profile is continuously updated as more empirical information becomes available. It is important in assisting a client in continually maintaining the job relevance of the process by which employees are placed.
Based on this “success pattern” knowledge of what is necessary for success in a position, we can build a job match pattern for each factor. This pattern consists of a range along each scale where the scores of the most effective performers tend to fall. Because they are not absolute, the typical pattern will be three to five units wide. The farther outside this range (job pattern) a score falls, the less likely there will be a good fit of that individual to the job in regard to that particular factor. In the reports, job match is reported as a percent match to a specific job pattern. This allows for a variation between persons who may still share a good job fit to a position.

By using a job pattern, it becomes easy to quickly identify where individuals will tend to fit well into positions, and where they might have adjustments to make. This information is important for both job placement and job training.

The scores on each scale of The Profile are reported on a STEN scale starting with a one at the low end and going to a ten on the high end. The raw scores have been normed so that the distribution of scores for the typical working population will fall on each scale with a normal distribution. In other words, on each scale about 2/3rds of the scores will fall at 4, 5, 6 or 7, and as you move toward either end of the scale, the frequency of scores will taper off.

Once a good Job Match Pattern has been established, it may be used to evaluate the match to that job for anyone who has taken The Profile. The Job Pattern is composed of a range of scores for each scale. This range represents the area where those who are expected to fit most easily into the job will score. The farther outside this range (pattern) a score falls, the less likely there will be a good fit of that individual to the job in regard to that particular factor. As mentioned earlier, job match is reported as a percent match to a specific job pattern.

The range of reported job matches will be from 25% to 95%. A match will be provided for each of the three sections (Thinking Style, Occupational Information, and Behavioral Traits), and for the total match. The higher the match reported, the higher the expectancy that individual will fit well into the job under consideration.

While this job pattern approach to matching individuals to a job provides information of great value and should be a major part of the placement decision, remember that the results from any test should never make up more than a third of the final decision.

This pattern of scores across the various dimensions measured by The Profile serves as the initial “success profile” upon which the job matching is based. The pattern consists of a range along each scale where the scores of the most effective performers tend to fall. In the reports, job match is reported as a percent match to a specific job pattern. This information is important for both job placement and job training.
THE THREE SECTIONS OF THE PROFILE

The Behavioral Traits Section

Description

The Behavioral Traits section consists of nine Behavioral Traits scales and a Distortion scale. They are Energy Level, Assertiveness, Sociability, Manageability, Attitude, Decisiveness, Accommodation, Independence and Objective Judgement. A description of each is found in the technical manual and in the User’s Guide for The Profile.

The research for this section spans some twenty years. Between 1992 and 1998 alone, more than 12,000 job applicants and incumbents were administered the Behavioral Traits scales. The Technical Report summarized the results of a dozen validation projects which examined the relationship between the Behavioral Traits scales and a diverse range of criteria.

The results of these projects provide consistent and substantial support for the predictive validity of Behavioral Traits section. Correlation between Behavioral Traits scale scores and measures of sales success, management performance, customer service, conscientiousness, turnover and organizational status were consistently in the mid-40’s.

As an example of findings, the Energy Level scale and Assertiveness scale tend to be significantly related to sales success, management performance and organizational status. The Behavioral Traits section Attitude scale, Accommodating scale and Judgement scale tend to be significantly related to customer service effectiveness, employee conscientiousness and turnover.

Reliability

Reliability refers to how consistently an assessment measures what it measures. Acceptable levels are generally acceptable if .70 or higher. Two methods were used to measure the internal consistency reliability of the Behavioral Traits scales: coefficient alpha and split-half reliability analysis.

Reliabilities for the nine Behavioral Traits scales for a sample of 2950 job applicants and incumbents were computed. Coefficient alpha reliabilities for the nine Behavioral Traits scales for a sample of 2950 job applicants and incumbents averaged .78, ranging from a low of .75 for the Energy Level and Judgement scales, to a high of .84 for the People Orientation scale.

The split-half reliabilities for the nine Behavioral Traits scales for the same sample of 2950 job applicants and incumbents range from a low of .72 for the Judgement scale to a
EXECUTIVE SUMMARY of The Profile™ Technical Manual

high of .82 for the People Orientation scale. The average split-half reliability was .78 for the nine Behavioral Traits scales.

Both analyses indicate that the nine Behavioral Traits scales are reliable and produce consistent results.

Validity

With regard to the internal validity of the Behavioral Traits section, an analysis of the correlation among the Behavioral Traits scales indicated a pattern of converging and diverging relationships that are clearly consistent with expectations based on the constructs being measured.

Studies have shown that the Behavioral Traits scales are effective in making placements for a good job fit. To summarize the results of some of the studies reported in the technical manual:

- High positive correlation between related scales.
- Negative correlation between polar opposite scales.
- Insignificant correlation between unrelated scales.
- Good correlation between scale scores and measures of job performance

In summary, statistical analysis of Behavioral Traits section clearly indicate that it consists of nine scales that provide a highly reliable and accurate measure of dimensions of normal adult personality that are useful for predicting a number of important business-related criteria.

The Occupational Interest Section

Description

It can be argued that the greater the degree of similarity between a person’s occupational interest and the interest called for in the job, the more likely it is that there will be a successful match and that the person will be more satisfied, remain in their job and perform the job well. The results of our studies clearly supports this “Best Fit” job screening and placement strategy.

The Occupational Interest Section contains 84 occupational titles and was specifically developed to measure an individual’s level of interest in the six major occupational themes. The six occupational themes are Enterprising, Financial/Administrative, People Service, Technical, Mechanical and Creative. They are also described in both the technical manual and the User’s Guide for The Profile.
Reliability

Coefficient alpha is a statistical measure of reliability. The higher a test’s coefficient alpha, the more consistent the questions are for that test. Coefficient alphas for the Occupational Interests scales range from .77 to .88. The average coefficient alpha for the six occupational scales is .84.

Validity

A diverse range of relevant criterion groups such as sales, financial, construction and architects tend to have occupational interest profiles that are consistent with the scale meanings. In addition, work outcome measures such as turnover and work performance have been demonstrated to be significantly related to Occupational Interest Section scale scores.

Analysis of the Occupational Interest Section has indicated the following:

♦ The Occupational Interest Section contains six scales which are internally consistent and independent from each other.

♦ The Occupational Interest Section is a highly reliable measuring instrument.

♦ The Occupational Interest Section has been shown to categorize or classify job applicants and employed individuals in ways which are consistent with the scale meanings.

♦ High point scale profiles have been shown to be significantly related to specific occupational groups.

♦ The Occupational Interest Section has been shown to predict statistically significant differences in average scale scores for diverse occupational groups and for work outcome measures.

The Thinking Style Section

Description

The Learning Index score in the Thinking Style section is a composite of four sub-scales: Verbal Skill, Verbal Reasoning, Numerical Ability and Numeric Reasoning. It is an index of expected learning, reasoning and problem solving ability. Typically, the more easily an individual processes information, the greater the pace at which they may learn those skills that are used on the job. Often, maximizing that learning means finding the approach that will make the most of their available learning skills.

The relationship between Thinking Style section scores and job performance criteria has been demonstrated across a variety of positions in different industries. In the
EXECUTIVE SUMMARY of The Profile™ Technical Manual

development of The Profile, 3,260 individuals have been sampled in 52 studies examining 110 job titles in 15 industries. The results reported support the effectiveness of scores on the Thinking Style section in predicting job performance.

In studies performed where the entire set of individual scores was considered through building an overall composite profile resulting in a profile score and/or general rating, the Thinking Style section scores demonstrated no adverse impact on any protected group.

AN ILLUSTRATION OF THE PROFILE AT WORK

A study for a large, nationwide sales company is presented in the technical manual as a typical application for The Profile. The results demonstrate how The Profile produces information that significantly improves the employee selection and placement process within an organization. More importantly, this process improvement saves companies a substantial amount of money and time.

The employer initially provided a list of the 12 top performers so that they could be used to develop the Job Pattern. The criterion was from an in-house process that the company routinely uses to assess the performance of their sales people.

The standard software was utilized to build a Job Pattern using the 12 top performers. This was done using the software’s integral Concurrent Study process. The resulting Top Performer Job Pattern was used for all subsequent job matching.

All subjects (Ss) were matched against the resulting Top Performer Job Pattern with a 79% or greater matched selected as an acceptable matching point. Analysis yielded the following results:

- Of those twelve performers identified by the employer, 92% matched the pattern at or above the matching point.
- Of the 15 bottom performers (as identified by the employer), only 20% matched the pattern at or above the matching point.
- Of the remaining Ss who were identified as performing in the middle range, approximately one-half matched the pattern at or above the matching point (selection rate, 52%).

To summarize the study:

- Approximately 9 out of 10 the top performers were selected as a good match to the Job Pattern while 4 out of 5 of the poor performers were not selected.
- While only 54% of the current sales people were selected as a good match to the Job Pattern, 92% of the most successful sales persons were included in that selected group, and only 20% of those who seem to be challenged by the position were included.
More than half of the group of salespersons selected were proven top performers (52%).

SUMMARY AND CONCLUSIONS—THE PROFILE

In conclusion, the concurrent and predictive validity data summarized in the technical manual consistently support the thesis that employees well matched with their occupations and with the organizations in which they are employed are inclined to be satisfied, to remain with their employer, and to be productive employees. A diverse range of relevant criterion groups such as sales, financial, management and supervisors tend to have profiles that are predicted and are consistent with the scale meanings.

Work outcome measures such as turnover and work performance have also been demonstrated to be significantly related to scale scores. The Profile provides accurate and useful information for pre-employment screening and placement, and for occupational and career guidance.

The Profile is designed to facilitate placing persons in the best jobs by building Job Match Patterns and using an Overall Match percentage when reviewing an individual for possible placement. By building Job Match Patterns with either actual top performers (concurrent study method) or by analysis of a job by those who know the job well (job performance survey method), a valid job pattern may be developed.

Because the overall match to a Job Match Pattern blends information about an individual’s fit in thinking style, occupational interests and behavioral traits, the impact of any one scale is only a small portion of the total. This helps protect against introducing any disparate impact into the placement process.

Taken all together, the full process used with The Profile is designed to understand what is required for success in a job, and then know how well a given individual will fit into that job. Those who use The Profile to know what is relevant for success in a position, and to measure those things well, enjoy success in making good job placements. As we said on page one of this summary, the key strategic advantage for most companies is the performance of their employees.