

Selecting Career Assessments

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Let's assume you're the one responsible for selecting career assessments. You may be working for a school district, a college or university, or an organization, or you may own a career consulting practice. With all the assessments available to you, you're wondering where to begin. Like all career professionals, you want the very best for your clients. Above all, you want the results of the assessments you choose to be helpful.

Selecting career assessments often is a balancing act—between cost, certification requirements, reliability and validity, and the needs of clients and employing organizations. But you can't even begin to contemplate this balance until you have the answers to some basic questions about the assessments you are considering. To get those answers, you could spend a weekend flipping through your old assessment and evaluation textbooks or perusing *Standards for Educational and Psychological Testing*.¹ But that's not how most counselors like to spend their weekends!

¹ From American Educational Research Association, American Psychological Association, and the National Council on Measurement in Education. Washington, DC: 1999.

Begin by getting some basic information

Answering some key questions before you start your in-depth research will reduce the amount of time you'll need to spend with publishers' catalogs and in online stores—time that could be better spent with your clients.

1. *How big is your budget?* Considering that career assessments range in cost from free off the Web to more than \$3,500 per administration, the answer to this question will focus your search right away.
2. *Who are the potential respondents?* You will want to know the respondents' reading and education levels, their facility with English, and any other factors that may influence your decision.
3. *What will the results be used for?* Are you looking for a questionnaire with which to begin the career exploration process with clients? Or a sophisticated tool that predicts occupational choice? Do you need an interest assessment to be used in a university career guidance class? Or a personality assessment for organizational career development?
4. *How much time do you want the testing to take?* There are two things to consider here: time to administer and time to interpret. And you want the testing and the interpretation to occur as close together as possible.
5. *How will assessment results be communicated to respondents?* Some assessments lend themselves well to group interpretation. Others are more appropriate for one-on-one interpretation. Still others are self-scored.
6. *Who will interpret the results?* Assessments are rated according to the complexity of their content. Some are self-explanatory, while others require a licensed psychologist to explain the results. Most fall in between these two extremes.

Narrow down the possibilities

You now have the answers to some basic questions about your organization, your clients, and the circumstances for testing. This information will be helpful as you compare one assessment with another. But as we said earlier, there are hundreds of assessments from which to choose. Where do you start? Answering the following questions will help you narrow your selection.

- *Who publishes career assessments?* If you were to Google "publishers of career assessments," you would get millions of results! But there are really only a few publishers of reputable career and psychological assessments.
- *How do you know if a publisher is reputable?* Reputable publishers have a Web presence, publish catalogs, and have knowledgeable representatives who can answer questions about the reliability and validity of the instruments you are considering, as well as your practical questions about cost and ordering information. They also have customer service representatives who can help with questions after you have made your purchase.
- *What do other users say?* If possible, benchmark evaluation criteria that are similar to yours and ask users' opinions about the pros and cons of instruments they have used.
- *What do the experts say?* Read reviews of assessments by objective evaluators. Reviews of most major career assessments can be found at Buros (www.unl.edu/buros) and in refereed journals such as the *Journal of Career Assessment*.²

2 Published by Sage Publications, Bethesda, MD. www.sagepublications.com

It's time to start your list

By now you probably have five or six assessments in mind, and maybe as many publishers. And you know your requirements. It's time to start contacting publishers and asking your questions. First, find the representative who handles career assessments for your type of setting. Then ask that person the questions that follow in the order of their importance to you. An evaluation worksheet is provided at the end of this paper that will help you organize the information you are gathering. Duplicate and fill out the worksheet for each instrument you are considering.

1. *What does test X measure?* You have already determined where the assessments you are considering will fit into your career development program, so you know whether you are looking for a measure of interests, values, personality, skills, or something else.
2. *How much does it cost?* There is a staggering variety in the quality of assessments available to career counselors. Both research and graphics sophistication to improve usability increase an instrument's cost. As the saying goes, you get what you pay for, and poorly developed, less expensive assessments can do more harm than good to your clients. As you consider the cost question, be sure to factor in licensing and leasing costs, expenditures for special equipment and/or software, administrative time for scoring, and postage expense for shipping and scoring, along with the obvious cost per administration.
3. *For what audience is the assessment intended?* What is the reading level of the instrument and support materials? Is the content relevant to your clients? These questions are usually considered together, as they all relate to the appropriateness of assessments for your clients.

Most career assessments are written at approximately an eighth-grade reading level, but in some cases the conceptual level is higher or lower. You don't want to insult respondents with assessments that are too simple or frustrate them with assessments that are beyond their capabilities and needs.

The content should draw on the experience of potential respondents. This question has to do with the "fairness" of the assessment. It is difficult to obtain accurate results for an instrument whose content isn't familiar to users.

4. *How much time is required?* Factors include:
 - How long it takes for the typical respondent to answer the questions. Note: Having more items tends to increase the reliability of results.
 - How long it takes to obtain the results. The sooner results are available for interpretation after completion of assessments, the better.
 - How long it takes to interpret the results.
5. *What is the format of the assessment and interpretive materials?* Clients have varying expectations of career exploration materials. College and university students tend to prefer an online interactive format with immediate results. Older adults may be more comfortable with a pencil-and-paper response format. Some respondents expect color and slick graphics; others care only about data and depth. Respondents tend to give more credibility to computer-scored results than to self-scored results, although even this varies by school/work setting.
6. *Is a manual available that covers useful information for the test user and evidence of the instrument's reliability and validity?* STOP! If this information isn't readily available, you don't need to consider that assessment any further.
7. *When were the instrument and the manual published?* In career development, perhaps more than in other fields, keeping current is critical.
8. *What training is required to purchase and interpret the assessment?* Most publishers have a system for rating their assessments according to the complexity of content and depth of information. For instance:

- *A-level assessments* such as questionnaires and checklists carry no restrictions and provide general information.
- *B-level assessments*, including most of the standardized interest inventories used in career counseling, usually require the completion of a college course in psychometrics or an equivalent qualifying program. These instruments tend to provide the counselor with normative information that can contribute significantly to the prediction of occupational choice.
- *C-level assessments*, often used in clinical settings, require an advanced degree and/or licensing in counseling or a related field. They are used primarily in clinical practice.

Reputable publishers are concerned with the potential harm to respondents that can result from lack of proper user certification. They clearly state user certification for each instrument they publish and require verification of certification at the time of purchase.

There are some technical considerations too

In order to evaluate the psychometric properties (qualitative value) of career assessments, you will need to refer to the publisher's manual for information on test users and evidence of the instrument's reliability and validity. These technical considerations tell you how much trust you can place in respondents' results. Without evidence of an instrument's reliability and validity, the results will likely not be helpful for your clients.

Evaluating the technical properties of career assessments requires an understanding of some basic psychometric statistics—not always the favorite subject of counselors. It may not be surprising to you that research on personality classification systems such as Holland's RIASEC framework and Jung's mental functions as represented by the *Myers-Briggs Type Indicator*®

(MBTI®) instrument confirms that “helpers”—people who are attracted to occupations such as counseling and teaching—are not naturally attracted to statistics, research, and psychometrics. And yet assessments are a vital component of any career counselor's tool bag.

Students and other clients often ask questions such as, “How likely is it that my results will come out the same if I take this test again?” and, “What is the test really doing?” These are questions about the assessment's reliability and validity, and knowing the answers not only ensures that you're selecting career assessments that really “work”, but also increases your credibility in the eyes of more technically inclined respondents—your business and engineering clients, for instance. The basics are presented here. If your curiosity is piqued or your employment setting demands a more technical knowledge base, there are hundreds of psychometric references at your disposal.³

The first technical consideration in evaluating assessments is an instrument's *reliability*—how likely it is that respondents will get the same results if they take the assessment again. If a test isn't reliable, the results are little more than random and certainly can't be trusted.

You should be able to find data on an assessment's reliability in its manual or in a summary statement issued by the publisher. Look for both internal consistency and test-retest reliability correlation coefficients for each type of scale on the assessment and for client groups that are similar to yours. Correlation coefficients range from 0.0 to 1.0. The higher the coefficient, the more likely the test results are to remain stable. The standard of excellence is at least .80.

Once you have established that an assessment is sufficiently reliable, you are ready to consider whether the assessment actually does what it claims to do—its *validity*. Evidence of validity is a little more complex than evidence of reliability, as we can't rely exclusively on one statistic for its evaluation. Determining an instrument's validity is

3 Two of the most widely used psychometric references are *A Counselor's Guide to Career Assessment Instruments* (Kapes and Whitfield 2002), published by the National Career Development Association, and the seventh edition of *Psychological Testing* (Anastasi and Urbina 1997), published by Prentice Hall.

like putting together the pieces of a huge puzzle—collecting pieces of information from a variety of research studies, each of which contributes to our understanding of what the test measures. For that reason, you won't see correlation coefficients in the .80s and .90s. They may even be as low as .20. In fact many validity studies don't include correlation statistics at all, but rely instead on expert opinions and ratings. It is beyond the scope of this article to cover all the forms and statistical variations of validity. Here are just a few examples of the kinds of evidence you would expect to be included in the manuals for career assessments.

- *Content validity.* You won't find a statistic for content validity. You are more likely to find reviews by panels of experts or a narrative in the assessment's manual describing the content domain of the instrument. You want to be sure that the full domain is covered. For instance, if a personality inventory based on Holland's theory of personality types and work environments gives short shrift to the Realistic category because it doesn't want to offend university-level respondents, it isn't covering the RIASEC content domain adequately.
- *Construct validity.* The manual should provide evidence of the *construct* that is being measured. You might find correlation studies between a new instrument and an older "tried-and-true" one that has already been validated. You might also find correlation studies between respondents' scores on a particular scale and some outside criteria such as professors' ratings. Students' scores on a hypothetical measure of "wanting to work with people" might be correlated with professors' ratings on a scale of "gregariousness", looking for significant correlations.
- *Predictive validity.* Some assessments claim to predict future behavior. In such cases the manuals should describe long-range studies that support their claim, and you should be able to find continuing evidence in refereed journals.

No assessment is perfectly valid or reliable. There is always some error that may muddy the waters—attributable to either the instrument or the behavior of the respondent. Clients' responses may

be affected by misreading a question, accidentally clicking the wrong button on a computerized inventory, or being in an unusual mood due to events that occurred just prior to testing.

Personality assessments do not usually publish statistics for this error, but for any measure of aptitude/ability, a standard error of measurement, or SEM, should be clearly stated in the manual.

Finally, any instrument that is reliable and valid, and that claims to be *normative*, should compare respondents to groups that are broadly representative and meaningful to the issue in question. The assessment might answer questions such as, "How much interest do I have in helping others compared to people in general?" or, "How similar am I to typical engineers or architects?"

A manual for a normative instrument should thoroughly describe the groups with whom respondents are being compared—by age range, gender and ethnic distribution, educational level, geographic representation, and so on—and the norms should be as current as possible. As a rule of thumb, norm groups should be sized in the region of at least 100.

Some career assessments do not compare respondents with norm groups and have the individual respondent as their only frame of reference. For instance, respondents might be asked to answer questions that indicate their level of interest in several categories to see which categories are the most attractive to them. Their responses are tallied to determine which categories come out the highest, rather than comparing their levels of interest with those of others. Non-normative instruments are usually classified as A-level and do not provide the depth of information that can be obtained from carefully normed assessments.

Summary

It was suggested early in this paper that selecting career assessments can be and often is a balancing act—between cost, certification requirements, reliability and validity, and the needs of your clients and employing organizations. And before you can even contemplate such balance you must have the answers to the basic questions that have been covered here. You should be able to answer most of them by looking at publishers' catalogs or manuals. Two forms follow that are designed to streamline your questioning: a checklist to evaluate publishers' answers to your questions and a summary worksheet to duplicate for each instrument you are considering.

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About the author

Judith Grutter was a career development program consultant and trainer for over 40 years, and founder of GS Consultants, Inc. in South Lake Tahoe, California. She received her MS degree in counseling from California State University, Los Angeles, and completed the course work for her doctorate in higher education, work, and adult development at UCLA.

A National Certified Counselor (NCC) and Master Career Counselor (MCC), Ms Grutter developed and coordinated the graduate programs in career counseling at California State University, Northridge. She was on the adjunct faculty of CSUN, as well as the John F. Kennedy University Graduate School of Management and the MBTI® certifying faculty of the American Management Association.

A recognized authority on the uses of assessment in career counseling and consulting, Ms Grutter consulted regularly with business, industry, education, and government on programs and issues related to career selection, satisfaction, and transition. She coauthored the Strong Interest Inventory® Interpretive Report, the Strong Interest Inventory® User's Guide, the Combined Strong and MBTI® Career Report, and Where Do I Go Next? Using Your Strong Results to Manage Your Career. She also wrote the American Management Association MBTI® Certification Program, Making It in Today's Organizations Using the Strong and MBTI®, and Career Exploration for College Students Using the Strong and MBTI® Tools.

A past president of the California Career Development Association, Ms Grutter received the National Career Development Association's Career Counselor of the Year Award, the California Career Development Association's 2004 Lifetime Achievement Award, and the Judith Grutter Practitioner of the Year Award, awarded in 1996 and named in her honor.



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Evaluation worksheet

Instrument _____

Publisher _____

Contact person _____

What it measures _____

Cost _____

Intended audience _____

Reading level _____

Relevance of content _____

Time to administer _____ To obtain results _____ To interpret _____

Format _____

Certification level: A _____ B _____ C _____

Reliability: _____

Validity: _____

Norms: _____

Notes: _____

CAREER ASSESSMENT CHECKLIST

| Instrument | Practical Concerns | | | | | | | | Technical Concerns | | | | | | | |
|------------|--------------------|------|---------------|----------------------|---------------|--------|------------------|---------------------|--------------------|----------|-------|-------|--|--|--|--|
| | What It Measures | Cost | Reading Level | Relevance of Content | Time Required | Format | Current (Yes/No) | Certification Level | Reliability | Validity | Norms | Notes | | | | |
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