# Aptitude Measurement May Lead to Happier Career Choice, Change

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***Are you a generalist or specialist? An introvert or extrovert? Structuralist or abstractionist? Generalist-introvert or specialist-extrovert?***

SCENARIO: A 17-year-old boy is attempting to fill out a college applications during his senior year in high school. He comes to the part about major field and future job plans. He stares at the space blankly, not believing he already has to make a decision. Sure, he's thought about what he might like to do, but that was mostly dreaming.

Remembering the dreams sets off another spate of glittering futures: Lifesaving doctor, great criminal lawyer, award-winning architect, Nobel Peace Prize-winning college professor – almost every profession swims before his eyes in surreal procession. Fired with ambition, he hastily scribbles doctor in the blank – after all, it's a well-known fact they rake in the cash.

SCENARIO: A 35-year-old nurse, an intensive care unit supervisor, decides to take a few days off from work. She can't understand her increasing irritability with the patients, and her peers and herself. After all, she's helping sick people and fulfilling a lifetime dream at the same time. But reading temperatures and blood pressure levels isn't exactly the same as curing cancer and seeking soloutions to crib death and other medical mysteries. She's come as far as she can in a nursing career, and still satisfaction eludes her.

The two hypothetical situations illustrate how important appropriate job choices are to lifetime success, fulfillment and happiness.

In both cases, in-depth evaluation of individual aptitudes and proclivities could have steered them into happier job situations.

With his fantasies, the high school student could perhaps be a better writer than a doctor, and not have gotten three ulcers in the process of painfully learning all the math and science necessary for medical school acceptance.

And perhaps the nurse got carried away with helping the sick in choosing that profession. Research might have been a better job choice.

But most often people do not know themselves or their abilities well enough to make a wise choice. And that's why the Aptitude Inventory Measurement Service (AIMS) is here.

AIMS is a non-profit educational / research foundation in Dallas dedicated to helping people unhappy with present occupations or high school and college students faced with difficult career choices. AIMS was established in 1976 by Irvin C. Shambaugh, chief scientist and director of research for AIMS, and John W. Gaston, director. Brenda Smith joined AIMS as senior administrator.

AIMS, through a series of aptitude tests generally completed in three half-day sessions, seeks to discover the inherent, natural abilities of an individual, and uses the information to determine what vocations one should follow for satisfaction, what occupational pitfalls to avoid, what college majors to study, what sort of schools to attend, or what hobbies or avocations to be considered.

Mrs. Smith and the foundation tests about 75 to 100 people a month. "About half of our clients are high school or college students, and the others are people unhappy

with their jobs and are seeking ways to alter their career or job.

Following the testing sessions and a conference with the client to investigate alternatives and direction, clients are followed up over a long period of time for research purposes and to gauge the effectiveness of the testing.

The tests consist of about 20 different aptitudes (instrument dexterity, color perception, perceptual speed, timbre discrimination, design preference, etc.) General knowledge and interest tests are also given. The knowledge test includes vocabulary skills (from which AIMS can predict Scholastic Aptitude Test verbal scores necessary for college admission) and a special Southwest vocabulary comparision. Mrs. Smith said the regional comparisons are necessary because Southwesterners tend to score lower than the national average in this category.

"If you score high in a particular aptitude, you need to use that aptitude in your work," said Mrs. Smith. "If you don't it's easy to become disgruntled. Unused aptitudes tend to bother people. People in their 30s, 40s, and 50s usually find they have very strong abilities they are not even using."

She noted a person does not need to be trained in a specific area to have the aptitude. "Aptitude is innate ability. A mechanic and a surgeon may use the same set of aptitudes, such as dexterity, three-dimensional thinking and diagnostic thinking. The knowledge is just different."

In the follow-up procedures AIMS conducts, Mrs. Smith said they have fond that older people, especially men, are often not able to take advantage of the testing because a transition might upset family and financial responsibilities.

"Younger people can use our services more effectively. A high school student coming to AIMS for testing could be provided with good direction and avoid aimless wandering in college," she said.

She cited one example of a Texas A&M University electrical engineering major who was having difficulty and disliked his chosen field. After testing, he switched to architectural engineering. "It made all the difference in the world," she said. "His grades went from C's to A's."

Mrs. Smith said public schools cannot be entirely blamed for not providing more specific career development programs because similar testing by schools would be prohibitive financially and temporally. "It's difficult for a school to subject a student to 12 hours of testing and then discuss alternatives in a lengthy session on a one-to-one basis. Schools, however, do offer achievement and interest tests."

One of the major indicators in the tests is the determination whether the client is a generalist or specialist.

A generalist is a person who needs a broad background in which to work and communicates with people on a day-to-day basis. Generalists are good at coordinating other people and think on the same wave-length as other people. Generalists are good at public relations, sales positions and teaching.

A specialist, on the other hand, tends to have a unique frame of reference, and views the world through totally different eyes than the rest of his fellows. They do well in creative writing, as artists and performers, and specialized areas of medicine, law and science. The term specialist implies these people need a special education and are the best at what they do – perfectionists in fact.

Mrs. Smith said about one-fourth of AIMS' clients are specialists, while the remaining three-fourths are generalists. "But it is not necessarily easier to guide specialists into specific job areas. Sometimes the specialist thinks something is wrong with him, but it's just the way he

views the world. Once a specialist finds his calling, he just pours himself into his work."

Another pivotal determination in AIMS' testing is the introvert or extrovert frame of reference.

Extroverts are outgoing, uninhibited and usually have a large number of acquaintances. The extrovert generalist is exemplified by a sales person, while the extrovert specialist is best illustrated by performers and some politicians.

Introverts are reserved, detached, aloof and are likely to have just a few close friends. An example of an introvert generalist is a supervisor who can put a distance between himself and his subordinates to maintain authority. Introvert specialists are typified by a science researcher.

The frame of reference denotation is pursued a step further with determination of structural or abstract concepts.

Structuralists are adept at three-dimensional thinking, can read blueprints, contour maps and X-rays well and are usually happiest in medicine, engineering, architecture or building and construction.

Those with abstract frames of reference work in terms of words, ideas and concepts. Lawyers, accountants, writers and teachers represent abstract professions.

Mrs. Smith noted generalist-specialist and structural-abstract levels are constant throughout a person's life, but the introvert-extrovert classification can shift or change.

And aptitudes are also permanent traits. According to Mr. Shambaugh, "One of the important principles which AIMS tries to convey to its clients is that each aptitude is both a curse and a blessing. It facilitates success in some areas, while handicapping you in others. Perhaps nowhere is this bipolar nature more apparent than in abstract-structural dichotomy."

With genetic inheritance as a premise, then 75% of all females are abstract in concept, with only 25% as structuralists. Males divide evenly between the two. The propensity in either direction is a genetic trait with mothers determining sons structural or abstract abilities, while both parents contribute to a daughter's ability.

Mrs. Smith discussed other aptitudes which measure affinity for particular kinds of jobs.

Ideaphoria, or the flow of ideas, is measured to determine how quickly a person can generate ideas and think up examples. Elementary school teachers, salesmen, creative writers and advertisers are frequently high ideaphoria scorers. Mrs. Smith said a dentist does not have a natural outlet for this aptitude.

Diagnostic thinking is a person's problem-solving ability – the ability to take many factors into consideration in a given situation, see a relationship, and come to a conclusion. Doctors and lawyers use diagnostic thinking, while salesmen, as a rule, score low. "If he scores high, it's likely he's unhappy in his work," said Mrs. Smith. "The possible exception for sales in this category is technical sales."

Perceptual speed, the speed with which a person's eyes focus on details when doing paperwork, is important primarily in school work. If a student scores low in this aptitude, he will probably have difficulty going to a large school where most performance is based on paper work. Accounting and bookkeeping require high levels of perceptual speed. An employer would also want a secretary with a high level of perceptual speed.

Mrs. Smith said AIMS' research has revealed some basic trends between males and females taking the tests. "Women score high in more aptitudes than men. We do not know exactly why, but maybe in the past men had to concentrate strictly on their work, while women were open to more

experiences. Men will usually score higher than women on structural visualization."

She said, based strictly on aptitude scores, women should make better executives than men. "But men hold the majority of those jobs because of cultural background, education, and emotional training. This trend might change as our culture changes."

But of AIMS' clients, women are the most willing to radically change jobs, again because men bear the brunt of family and financial responsibilities. And many women coming to AIMS are middle-aged, with children in college, and feel a need to become involved in something for themselves.

"We do caution people, especially those over 30, to go about a job change very carefully," said Mrs. Smith. "You should never go about anything like this too fast."

And as women become more and more involved in careers, rather than jobs, said Mrs. Smith, a problem has resulted in women becoming involved in careers for which they are not suited. "This draws a lot of criticism of women. It used to be we tested more teenage boys than girls, but it's beginning to even out now. People are thinking about their daughters as well as their sons having a career."

Some of the job changes, based on AIMS counseling, have resulted in a middle-aged woman accountant packing up and moving to New Mexico to work as an artist, a doctor becoming an insurance company executive, a lawyer going into real estate sales and a restaurant owner launching a building and construction business.

Mrs. Smith said one small Dallas company owner put his employees through the testing so they could be placed in the most effective positions. "The company was small and flexible enough so job duties could be applicable to a person's aptitudes. This company also rearranged the offices on the basis of the testing by placing the introverts in the rear of the building, with the extroverts up front. Everyone was happier as a result."