The relevance of assessing attention or concentration skills for personnel selection is discussed, and how a person's interpersonal characteristics are influenced by and influence attentional skills is explored. Scales in the Theory Attentional and Interpersonal Style (TAIS) inventory developed by Robert Nideffer are described. The interaction of dimensions of concentration results in four different attentional styles: (1) broad-external; (2) broad-internal; (3) narrow-internal; and (4) narrow-external. The two narrow styles have been combined in the TAIS to form a scale called "Focused" concentration. For each of the attentional scales, there is a related scale that indicates what is likely to cause attentional error. Eleven different interpersonal styles have been identified and are evaluated through the TAIS. Examples depict the use of the TAIS in a personnel promotion decision and in personnel selection. The TAIS is a valid and reliable instrument for measuring attentional and interpersonal skills and characteristics that can be useful in personnel decisions. (Contains three figures and two references.)
Assessing Attentional Skills
And Interpersonal Style For Selection

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Introduction

The Theory of Attentional and Interpersonal Style was developed by Dr. Robert Nideffer, an ABPP Diplomate in Clinical Psychology. The theory, model and assessment process can be used effectively to structure interviews and observe behavior in order to predict under what circumstances people will perform well and what will likely cause performance errors. This information can also be used when performance problems are occurring and their cause(s) need to be identified.

Relevance of the Assessment

In this paper I will discuss the relevance of assessing attention or concentration skills for selection; and will discuss how a person’s interpersonal characteristics are influenced by and influence attentional skills. I will describe the scales in The Attentional and Interpersonal Style (TAIS) inventory, which was developed by Dr. Nideffer. I will conclude with an example of how TAIS was used in the selection of a police candidate.

Every work situation emphasizes different attentional or concentration skills. So too each of us has different attentional strengths. Our attentional styles are composed of a state (learned component) and a trait (genetic/biochemical) component. The greater the attentional strength, the greater the trait component and the more you will engage in the attentional style, independent of the performance situation.

Errors are made because we rely too heavily on our dominant attentional style. This is much more likely to happen when our level of arousal gets too high or too low for the performance situation. It is at these times our greatest asset, attentionally, becomes our greatest liability. If your attentional strength is the ability to analyze and plan, you inevitably make mistakes because you become overly analytical, failing to pay adequate attention to the world around you.

If your greatest strength is the ability to read and react to the world around you, the error you will most likely make is the one of failing to look before leaping. It is the error you make when you promise something you can’t yet deliver. It is the error of answering a question before you have thought through the answer.

If your greatest strength is the ability to narrow concentration, to focus on an issue and stick with it, there will be times when you become rigid and inflexible, stubborn and insensitive to possible alternatives.

Psychological research, beginning in the late 1960s and continuing through the present, have provided direct evidence of the link between changes in physiology, as a function of increasing or decreasing arousal, and the ability to concentrate. Those changes have critical implications for performance.

Mistakes are inevitable. An important point to keep in mind is the fact that the mistake itself is less important than how you react to the mistake once it occurs. It is your level of confidence, and ability to control anxiety and physiological arousal, once a mistake is made, which dictates not only immediate performance, but also determines the likelihood that you will be successful in the future.

Changes in arousal affect concentration skills and the ability to shift from one attentional style to another. If you wish to prevent problems and/or recover quickly from mistakes, you must be able to anticipate those environmental and/or interpersonal situations which are likely to increase or decrease your level of arousal leading to performance difficulties.

There are several performance relevant behaviors, Dr. Nideffer calls interpersonal style, which not only allow you to predict which situations will be stressful, but also allow you to predict how you or anyone else will behave under pressure. These interpersonal styles, like attentional styles, are more or less trait like, depending upon genetic factors and your level of arousal.

Two points to remember. First, as arousal increases, you become controlled by your dominant attentional and inter-
personal styles. Second, for each of us, there are different patterns of attentional and interpersonal styles which are more trait like and therefore more predictive of our behavior.

If you are one of the people questioning whether or not it is possible to reliably and accurately predict behavior, take a moment to look around. Look at the outstanding successes and failures in the areas that you are familiar with. It doesn’t matter if you are looking at political, athletic, business, sales, social or family situations. What you will see is that the winners are those individuals who are more capable of anticipating and predicting what is going to happen in the world around them.

If one of those individuals, who knows what to say and do, is capable of articulating or “operationally defining” just what it is that allows them to understand, predict, and control behavior, they can provide us with a framework that we can use to enhance our own abilities. The Theory of Attentional and Interpersonal Style represents an attempt to provide you with just such a framework, which, when used properly, can be a valuable asset in the selection process.

The Theory of Attentional and Interpersonal Style

Attentional Skills

Your focus of concentration can be broad or narrow, external or internal. The interaction of these two dimensions of concentration create four different attentional styles.

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<td>&quot;STREET SENSE&quot;</td>
<td>ANALYZE AND PLAN</td>
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You use a broad-external focus of attention to rapidly assess surroundings. It is this type of concentration that allows great athletes to anticipate and instinctively react to the moves of teammates or opponents.

Politicians, sales people, teachers, and police officers use this style to read the nonverbal behaviors of others. This lets them anticipate objections and reactions. It is a broad-external focus that allows the salesperson to quickly size up a sales prospect and to know when to close.

You use a broad-internal focus of attention to analyze and plan. It is this type of concentration that leads to creative problem solving in business, to the development of long-range goals and game plans in sports, and to the ability to organize thoughts on essay exams in school. It is your analytical ability which allows you to learn from the past, and to use that information to anticipate and predict the future.

You use a narrow-internal focus to systematically rehearse and problem solve. Math calculations and the logical thought processes computer programmers go through to write a program to someone else’s specifications require a narrow internal focus.

The mental rehearsal of a performance sequence like hitting a golf ball, or delivering a speech, requires a narrow-internal focus of concentration.
You use a narrow-external focus of attention to implement programs or take some course of action. A surgeon narrows and focuses to avoid distraction at a critical time. You need to narrow external focus to keep a hyperactive child or an over-ideational employee on tract.

Narrow-internal and narrow-external have been combined to a single scale called Focused concentration. High scorers are good at narrowing their focus of attention, either externally or internally, as the situation demands. High scorers are good at following through, attending to details, and working to perfect things. This focus is important in situations requiring quality control and/or the perfection of a skill.

Although you need to be able to develop all four types of attention, different performance situations make different attentional demands. Academic situations place a heavy demand on your ability to develop a broad-internal focus, and demand little in the way of environmental awareness. Most sport settings are just the opposite, requiring an external focus of attention so you can react instinctively. Management positions require a great deal of shifting between an external and an internal focus.

Under optimal conditions, you have the ability to develop the types of concentration required by almost any performance situation. Your ability to perform up to your potential, however, is affected by two things: 1) Your dominant attentional style, and 2) Your level of arousal and self-confidence within the performance setting.

Attentional Distractors and Errors

For each of the attentional scales, there is a related scale which indicates what is likely to cause an attentional error and the likelihood of it occurring.

People who score high on external distractibility make mistakes because they become distracted by task irrelevant external cues. These individuals have a broad-external focus when it is inappropriate. The higher the broad-external score is relative to the external distractibility the more effective the individual is when it comes to responding to external cues.

High scorers on internal distractibility make mistakes because they become distracted at critical times by their own thoughts and feelings. They fail to narrow attention and/or to shift to an external focus when they should. The higher the broad-internal score is relative to the internal distractibility, the more effective the individual is when it comes to analyzing and planning.

High scorers on reduced flexibility make mistakes because attention narrows and becomes so focused either on external information or internal information, they fail to shift attention in response to changing performance demands. The higher the focused score is relative to reduced flexibility, the less likely these errors of under-inclusion are to occur.

Interpersonal Style

Changes in arousal affect concentration skills and the ability to shift from one attentional style to another. If you wish to prevent problems and/or recover quickly from mistakes, you must be able to anticipate those environmental and/or interpersonal situations which are likely to increase or decrease your level of arousal leading to performance difficulties.

There are several performance relevant behaviors, I’ll call interpersonal styles, which not only allow you to predict which situations will be stressful, but also allow you to predict how you or anyone else will behave under pressure. These interpersonal styles, like attentional styles, are more or less trait like depending upon genetic factors and your level of arousal. Remember: As arousal increases, you become controlled by your dominant attentional and interpersonal styles. Remember too, that for each of us, there are different patterns of attentional and interpersonal styles which are more trait like and therefore more predictive of our behavior.
The interpersonal styles or behavioral characteristics which seem most consistently relevant to performance and are often trait like include: 1) Need for diversity and change; 2) Behavioral impulsivity; 3) Need for control or leadership; 4) Self-confidence; 5) Physical orientation and competitiveness; 6) Speed of decision making; 7) Extrovertedness; 8) Introvertedness; 9) Intellectual expressiveness; 10) Confrontiveness, and; 11) Supportiveness. Let me address each of these in more detail.

**Need for Diversity and Change:** The need for stimulation and change is trait like for some of us. There are those who are extremely active mentally and physically, seeming to need constant stimulation, becoming easily bored and continually looking for new challenges. Then there are others who are just the opposite, focused and methodical, preferring to do one thing at a time, and sticking with something until it’s perfect.

**Behavior or Impulse Control:** The extent to which you control your behavior and play by the rules can also be trait like. We all know people who “play by the rules” no matter how ridiculous, insensitive, and/or inappropriate those rules might be. We also know people who are just the opposite. Individuals who behave as if societies rules were made to be broken. Individuals who “do their own thing no matter what others might think.” Therefore, the higher someone’s score is, the more impulsive they are. The lower their score, the more conventional or practical they tend to be.

**Need for Control/Leadership:** Many highly successful business leaders and politicians have such a strong need for leadership; they have to be in control in virtually every situation. It doesn’t matter if they’re at work, home, or on the tennis court, they have to be the boss. There are others of us who are the opposite. No matter how highly qualified we are, we avoid assuming a leadership role.

**Self-Confidence/Self-Esteem:** Self-confidence and self-esteem too, can be trait like. Perhaps you are an individual who appears confident, independent of the situation and independent of your level of skill. Or you may be filled with doubts in a wide range of situations, even though you’ve demonstrated your competence time and time again.

**Physical Orientation:** Competitiveness in general and physical competitiveness in particular is another behavior that can be trait like. There are people who won’t even run a few steps to catch a bus. If a situation requires physical activity or competitiveness, they avoid it. For others, competition is a way of life, they’re physically active, and turn even the mildest social game into a “must win” situation.

**Speed of Decision Making:** Are you a quick decision maker? There are those of us who make instantaneous decisions, no matter how important or potentially disastrous the consequences of a wrong choice might be. At the other end of the spectrum are people who agonize over inconsequential things. People who become extremely anxious when pressed to make a decision. The higher the score, the slower a person is about making decisions. People with very high scores will often worry about their decisions even after they have made them.

**Extroversion:** Are you one of those extroverts, who needs the company of others so much that you have difficulty spending more than a few minutes without talking to another person? Highly extroverted people get their energy from other people. They like to be with people in order to verbalize their thoughts.

**Introversion:** The opposite of extroversion is introversion, the enjoyment of personal space and privacy, and the need for time alone. There are some of us who have such a strong need for space that we avoid contact with others when ever possible.

Contrary to the belief that you are either extroverted or introverted, there are many people who have equal or almost equal preferences and tendencies. They may enjoy expressing themselves and sharing information, but they also like the quiet time when alone. They often use that introverted time to plan for the future or complete work that needs to be done.

**Expression of Ideas:** The expression of thoughts and ideas in front of others is also a trait like characteristic for many of us. Some of us will dominate conversations and group discussions whether we know what we are talking about or not. Others of us are so intimidated and afraid to speak in front of groups, we’re almost mute. Don’t get
this confused with extroversion and introversion. It is different.

**Positive and Negative Affect Expression:** Our emotional expressions can be angry and confrontive or encouraging and supportive. Some of us express both types of emotions so freely we seem incapable of withholding our feelings. Others express very little affect. Then, there are those dominated by one type of affective expression. Some who are critical, unable to be supportive, and others who are supportive yet unable to set limits. These are two independent scales called Expression of Criticism and Expression of Support.

Each of us has some of these attentional and interpersonal characteristics which are trait like enough under pressure to predict our behavior. For example, do you have such a high need for control that you try to take charge even when the situation indicates you should allow others to lead? Are you so verbal you can't keep quiet? Are you so introverted you're unable to socialize?

To improve your ability to understand, predict, and control performance relevant behavior, you need to assess those attentional and interpersonal characteristics just identified. *The Attentional and Interpersonal Style* inventory or TAIS was designed to provide you with a tool to make the assessment.

**TAIS Results**

Let me share two examples of how TAIS scores were used. One is a promotional example and the other was where TAIS was used in the selection of a police candidate.

**Promotion Decision**

Jim is the head of sales in a small company. He has some (relatively little) administrative responsibilities for two other sales people in the organization. The president of the company is about to elevate him to the role of vice president, and to move the current vice president into another senior position. The president has been extremely impressed with Jim and is wondering about his appropriateness for the position of vice president within the company.

Jim has been the top sales person in the company for the past three years. He is a very bright, articulate 35 year old and he enjoys his job. He relates well to everyone in the organization and, in many senses, seems like the ideal person for the position of vice president. In that role, Jim would report to the president. He could continue some of his involvement in sales, but he would have a much greater administrative role as well. Jim would have the heads of sales, service, administration and production reporting to him. Initial discussions with Jim indicate that he is interested in exploring the possibility, but he is not overly enthusiastic.
The chart above shows the attentional and interpersonal strengths and weaknesses Jim brings to the job.

Typically, individuals who score as Jim has enjoy the challenge and excitement afforded by decision making situations. If he is as effective as he has indicated, he will not make many mistakes. Those he makes, however, are likely to be because he reacted too quickly.

Leadership and competitiveness can be seen as positive attributes. The need for managers and executives to be in control of themselves and the situation when negotiating, selling, directing, etc., is critical. Although this characteristic is desirable under most circumstances, scores as high as Jim's may lead to conflict. This is especially true if he views the people that he reports to as less competent than he is.

For someone like Jim, the enjoyment of diversity and a challenge may result in a “letting go” of more routine activities. In the interview it would be important for you to try and determine the extent to which past work history and/or relations to others have been marked by failures to follow through on promises.

When Jim was asked about his reservations regarding the new position, he indicated that he wasn't sure that he wanted all of the administrative responsibility. He enjoyed his sales job and the freedom that gave him. He felt that he was primarily responsible for himself. As an administrator, he wondered if he would have the patience to work with some of his friends if he felt responsible for their output. In addition, although Jim felt he could work quite well with the existing president, he was not so confident about his ability to work with the current vice president. Ultimately, Jim made the decision that he did not want to be considered for the job.
Sharon is a 25 year old high school graduate who wants to join the police force. Before providing additional information about Sharon, consider the following four questions with respect to her TAIS scores.

1. Will this individual be likely to abuse her authority?
2. Will this individual fit into the department?
3. Is the individual likely to become a psychological casualty, going on disability after a year or two on the force?
4. Is this individual likely to panic under fire?

Sharon graduated from high school 6 years ago. Since graduating, she has worked as a waitress and as a bartender in several different restaurants. She has a good work history and has always been interested in police work. She is not married, but has dated a great deal. Although she has no criminal record, she has been friendly with some of the members of an outlaw motorcycle gang.

In the interview, Sharon tells you that she is in control and that she can handle herself. She describes, with obvious enjoyment, her involvement in the study of Karate and the two times she used it successfully to defend herself against drunks. When asked if she can think of anything that might be difficult for her to deal with as a police officer, she says “No.” She feels quite confident that she can do anything asked of her and that she can be successful in
any situation.

When any assessment is used, the results must be consensually validated. With that being the case, the next question is, "Does Sharon's behavior and responses in the interview fit with her scores on the TAIS profile?"

Following are the concerns that were generated by the computer.

- Sharon may become frustrated and stressed by delays and/or interference with her ability to make decisions and/or to move on as quickly as she would like.

- Scores as high as Sharon's on the leadership and confidence factors (Broad External Awareness, Broad Internal/Conceptual, Control, Self Esteem, Physical Competitiveness) suggest authority conflicts are possible. She should be asked how she manages to control her frustration and anger when her authority and/or freedom are threatened.

- Sharon's enjoyment of challenges may result in her neglecting the more routine aspects of police work.

- Sharon's high score on the behavior control scale is cause for concern. She may be prone to impulsive behavior and/or to poorly thought out responses. Interview questions should examine the accuracy of this interpretation of her score.

- This individual has indicated that she is more willing to express her ideas, to set limits on others, and to express her anger more than 90 percent of the police officers tested. With a score this high, a question should be raised regarding control over anger in the past.

In this case, the TAIS profile was a valuable tool for uncovering areas of concern that might not have been detected by other routine selection procedures.

Conclusions

You can responsibly use assessment instruments in the selection process. It is important to focus on the reason for testing.

Testing is conducted for a reason and you need to be able to translate that reason into a set of performance relevant behaviors. When testing is used for selection, it is important that the behavioral demands of the job be clearly identified. The attentional and interpersonal characteristics presented in this paper are performance relevant and provide a framework with which to identify job specific performance demands.

The Attentional and Interpersonal Style (TAIS) inventory is a valid and reliable instrument for measuring attentional and interpersonal skills and characteristics that can help determine the degree of match or mismatch with a job.

References
