

Using Noncognitive Variables in Advising Nontraditional Students

William E. Sedlacek, University of Maryland, College Park

Advisors who work with students from culturally diverse backgrounds need to consider, in addition to such traditional variables as academic ability and financial need, nontraditional variables that deal with cultural and racial background. Two case studies allow advisors to try applying various noncognitive variables in advising situations.

Academic advising is an important but complicated function in higher education. It is important because the quality of advising directly affects student progress. It is complicated because good advisors must not only understand the rules, regulations, and academic requirements of the institution but they must also understand the context of their students. That is, advisors must understand the variables that affect students' lives. These include not only such traditional variables as academic ability and financial need, they also include less traditional ones, those that deal with cultural and racial background. The nontraditional variables become crucial when advisors interact with students who come from culturally diverse backgrounds.

Many articles discuss strategies or issues concerning retention and orientation (e.g., Garnett, 1990; Whitaker & Roberts, 1990), but few seem to offer comprehensive models to approach advising, particularly for nontraditional students. For purposes of this article nontraditional students include women, cultural/racial minorities, international students, older students, and so on. Thus, nontraditional students are those other than white, upper-middle class males, the group for whom most of our higher education system has been designed.

Recently much attention in the higher education literature has been devoted to the retention of students, particularly nontraditional students (e.g., Sedlacek, 1987, 1989). A model for considering attributes that lead to the success or failure of nontraditional students has been developed and used in admissions and post-matriculation programs (Sedlacek, 1987, 1989; Sedlacek & Brooks, 1976; Tracey & Sedlacek, 1984, 1985, 1987, 1989). These studies and many others have generally shown that traditional measures such as standardized tests and

prior grades are of limited utility in working with nontraditional students. Nontraditional students show their abilities in other ways. Table 1 defines the eight noncognitive variables in the model.

Westbrook and Sedlacek (1988) concluded that students can be advised using the list of variables by identifying student behaviors associated with good or poor performance on each of the eight (see Table 2).

Traditional Versus Nontraditional Approaches

Standardized tests such as the ACT or SAT were designed to predict first year grades at a time when most students were white, male, and upper-middle class. The tests have performed this function fairly well for these students throughout the years and still do (Sedlacek, 1989). As colleges and universities have admitted more females and students with a wider range of cultural, racial, and socioeconomic characteristics, standardized tests have not correlated as well with freshman grades for these groups.

Generally these tests were not designed to correlate with grades beyond the first year, with retention in any year, or with graduation and success beyond college. They tend not to correlate well with these factors for any group, including white, upper-middle class males (Sedlacek, 1989). In the case of students from racial and cultural minority groups, the SAT is virtually unrelated to these factors.

Why do standardized tests not relate to measures of student success beyond the first year? Aside from not being designed to do so, these tests measure only one aspect of intelligence: analytic ability (Sternberg, 1985, 1986). Sternberg defines analytic ability as one's capacity to interpret information in a well-defined and unchanging context. He feels standardized tests generally do not measure synthetic ability or systemic ability, the two other components of intelligence he identifies. Students with synthetic ability are able to interpret information in changing contexts. They can easily shift from one perspective to another. They are creative

TABLE 1
Noncognitive Variables for Diagnosis in Advising Nontraditional Students

I.	Positive self-concept or confidence. Strong self-feeling, strength of character. Determination, independence.
II.	Realistic self-appraisal, especially academic. Recognizes and accepts any deficiencies and works hard at self-development. Recognizes need to broaden his/her individuality.
III.	Understands and deals with racism. Realist based upon personal experience of racism. Is committed to fighting to improve existing system. Not submissive to existing wrongs, nor hostile to society, nor a "cop-out." Able to handle racist system. Asserts school or organization role to fight racism.
IV.	Prefers long-range goals to short-term or immediate needs. Able to respond to deferred gratification.
V.	Availability of strong support person to whom to turn in crises.
VI.	Successful leadership experience in any area pertinent to his/her background (gang leader, church, sports, noneducational groups, etc.)
VII.	Demonstrated community service. Has involvement in his/her cultural community.
VIII.	Knowledge acquired in a field. Unusual and/or culturally related ways of obtaining information and demonstrating knowledge. Field itself may be nontraditional.

and are likely to be the best researchers or contributors to their fields. Students with systemic intelligence know how to interpret and use the system or environment to their advantage. They are "street-wise."

Most educators would agree that synthetic and systemic intelligence come into play more in subsequent years because upper-level courses tend to require students to write more, discuss more, and one hopes, think more. Analytic skills, as defined by Sternberg, appear less useful by themselves beyond the first year.

The noncognitive variable system noted in Tables 1 and 2 appears to measure synthetic and systemic ability. Thus, the task for the advisor is to tap the student's full range of abilities by doing all the assessments necessary. Students show abilities in different ways. Nontraditional students tend to need synthetic and systemic abilities to survive more than do traditional students. For instance, realistic self-appraisal appears to be a synthetic ability while handling racism shows a systemic ability. Equality, in advising as in other areas, should be equality of outcome not process. If, to do our best job, we need to assess different ways of showing abilities for different students, let's do it.

Using the Noncognitive Model

The Noncognitive Questionnaire (NCQ)

The NCQ was developed by Tracey and Sed-

lacek (1984, 1985, 1987, 1989) and yields a score for each scale. A manual for the NCQ is available (Ablar, Sedlacek, & Tracey, 1991). An advisor in collaboration with, or independent of, the admissions function can develop a profile of strengths and weaknesses of a student and advise accordingly.

Interviewing

Whether or not one employs the NCQ, would be relatively easy common for an advisor to interview students to make an original diagnosis of their noncognitive variable abilities or to probe certain areas more deeply. While a wide variety of interviewing methods would be useful, Westbrook and Sedlacek (1988) recommend a set of principles developed by Bingham and More (1959) (see Table 3).

To assess noncognitive variables, an advisor should listen carefully in a kind of scanning posture using Table 2. As a student touches on something that appears relevant, it should be probed using Principle 6 (Table 3). Questions can be phrased more directly if this scanning procedure does not yield enough information, providing rapport is sufficiently established (Principle 5, Table 3). For instance, the question of how a student finds the interracial environment at the school might be asked directly if the issue has not come up otherwise.

Another key feature in Table 3 is Principle

TABLE 2
Profiles of High and Low Scorers on Noncognitive Questionnaire

	High Score	Low Score
1. Positive Self-Concept or Confidence	Feels confident of making it through graduation. Makes positive statements about him/herself. Expects to do well in academic and nonacademic areas. Assumes he/she can handle new situations or challenges.	Can express reason(s) why he/she might have to leave school. Not sure he/she has ability to make it. Feels other students are better than he/she is. Expects to get marginal grades. Feels he/she will have trouble balancing personal and academic life. Avoids new challenges or situations.
2. Realistic Self-Appraisal	Appreciates and accepts rewards as well as consequences of poor performance. Understands that reinforcement is imperfect and does not overreact to positive or negative feedback. Has developed a system of using feedback to alter behavior.	Not sure how evaluations are done in school. Overreacts to most recent reinforcement (positive or negative), rather than seeing it in a larger context. Does not know how he/she is doing in class until grades are out. Does not have a good idea of how peers would rate his/her performance.
3. Understands and Deals With Racism	Understands the role of the "system" in his/her life and how it treats nontraditional persons, often unintentionally. Has developed a method of assessing the cultural/racial demands of the system and responding accordingly—assertively, if the gain is worth it, passively if the gain is small or the situation is ambiguous. Does not blame others for his/her problems or appear as a "Pollyanna" who does not see racism.	Not sure how the "system" works. Preoccupied with racism or does not feel racism exists. Blames others for problems. Reacts with same intensity to large and small issues concerned with race/culture. Does not have a method of successfully handling racism that does not interfere with personal and academic development.
4. Prefers Long-Range to Short-Term or Immediate Needs	Can set goals and proceed for some time without reinforcement. Shows patience. Can see partial fulfillment of a longer term goal. Is future and past oriented and does not just see immediate issues or problems. Shows evidence of planning in academic and nonacademic areas.	Lack of evidence of setting and accomplishing goals. Likely to proceed without clear direction. Relies on others to determine outcomes. Lives in present. Does not have a plan for approaching a course, school in general, an activity, etc. Goals that are stated are vague and unrealistic.

(Continued)

TABLE 2 (Continued)

	High Score	Low Score
5. Availability of Strong Support Person	Has identified and received help, support, and encouragement from one or more specific individuals. Does not rely solely on his/her own resources to solve problems. Is not a "loner." Willing to admit that he/she needs help when appropriate.	No evidence of turning to others for help. No single support person, mentor, or close advisor can be identified. Does not talk about his/her problems. Feels he/she can handle things on his/her own. Access to previous support person may be reduced or eliminated. Is not aware of the importance of a support person.
6. Successful Leadership Experience	Has shown evidence of influencing others in academic or nonacademic areas. Comfortable providing advice and direction to others. Has served as mediator in disputes or disagreements among colleagues. Comfortable taking action where called for.	No evidence that others turn to him/her for advice or direction. Nonassertive. Does not take initiative. Overly cautious. Avoids controversy. Not well known by peers.
7. Demonstrated Community Service	Identified with a group that is cultural, racial, and/or geographic. Has specific and long-term relationships in a community. Has been active in community activities over a period of time. Has accomplished specific goals in a community setting.	No involvement in cultural, racial or geographical group or community. Limited activities of any kind. Fringe member of group(s). Engages more in solitary rather than group activities (academic or nonacademic).
8. Knowledge Acquired in a Field	Knows about a field or area that he/she has not formally studied in school. Has a nontraditional, possibly culturally or racially based, view of a field. Has developed innovative ways to acquire information about a given subject or field.	Appears to know little about areas he/she has not studied in school. No evidence of learning from community or nonacademic activities. Traditional in approach to learning. Has not received credit-by-examination for courses. Not aware of credit-by-examination possibilities.

Note. From *Noncognitive Questionnaire Users' Manual* by R. M. Abler, W. E. Sedlacek, and T. J. Tracey, 1991, College Park: University of Maryland. Reprinted by permission.

TABLE 3
Principles of Interviewing for Noncognitive Variable Diagnosis

1. *Provide conditions conducive to good interviews.*
The school atmosphere should reflect an orientation toward the individual, a flexible curriculum and instructional methods, and general use of grades and data in ways that will encourage students to seek personal help.
2. *Assemble and relate to the problem all the facts available.*
Ideally a cumulative personnel record should be accessible to student service workers.
3. *Meet the interviewee cordially.*
The friendly spirit needs to be natural, but not condescending or patronizing, and in harmony with the interviewer's personality.
4. *Begin the interview with a topic that is secondary but of interest to the interviewer and of potential interest to the interviewee.*
Before the main issue is approached, rapport may be built by encouraging a short period during which the interviewer and interviewee can discuss an issue that is of common interest to them.
5. *Approach the problem as soon as rapport is assumed.*
Ask the student for a statement of the problem as he/she sees it.
6. *Uncover the real difficulties.*
Listen to the obvious problems but watch for clues pointing to the real problems often existing behind them.
7. *Isolate the central problem by asking the interviewee questions that direct his/her attention to salient issues.*
Give the student a chance to put several sets of facts together to reach new conclusions about the problems.
8. *Do not embarrass the interviewee unnecessarily.*
To make it easy for the student to disclose essential material, do not pry into matters not related to the problems at hand.
9. *Face the facts professionally.*
Do not betray surprise, shock, or emotional tension at disclosures.
10. *Observe closely the student's behavior.*
As a natural manifestation of your interest while listening, you may give attention to the student's mannerisms and facial expressions (e.g., the student may be noticed giving poor eye contact).
11. *Avoid putting the student on the defensive.*
In case of resistance, resulting particularly from a difference of opinion, yield as much as possible.
12. *Alleviate the shock of disillusionment.*
Identifying the student's misinformation, error, or difficulty as similar to that of many other persons often helps to allay chagrin, shock, embarrassment, or new fears.
13. *Establish a reputation for being helpful and fair and for keeping confidences.*
Personal information should be kept confidential without exception.
14. *Give advice sparingly, if at all.*
If your advice is requested, you may say you would rather not advise, but you can review the relevant circumstances and encourage the student to formulate his/her own conclusions.
15. *Give information as needed.*
Unless you feel the student would be better served by being required to search out essential information for him/herself, you may feel free to supply facts about educational or vocational opportunities or requirements.
16. *Make certain that all vital considerations relevant to a decision are brought forward.*
If you expect interviews to go beyond one, you may need to develop a list of the many essential points to be reviewed.

(Continued)

TABLE 3 (Continued)

17. *Present alternatives for the interviewee's consideration.*
Possible courses of action may be proposed without the implication that you are trying to impose your own views.
18. *Make other services available to the interviewee.*
Refer to librarians, professors, clinicians, and any other experts who can help the interviewee gain insight into his/her problems.
19. *Let the interviewee formulate his/her conclusions or plans of action.*
The interviewee's program of action must grow out of his/her thinking.
20. *Achieve something definite.*
Do not let the interview close until recognizable progress has been made and agreements reached on at least the next step.
21. *Make subsequent interviews easy.*
Do not attempt to move too fast.

Note. Modified from *How to Interview* (pp. 240-243) by W. V. D. Bingham and B. V. Moore, 1959, New York: Harper.

CASE STUDY 1 Sara Davis

Sara Davis is a Black student who is a junior. She started her courses but now has begun to slip in everything. Sara has SAT scores of 420 math and 600 verbal.

Sara went to an inner-city high school, and she always read the material assigned and performed well on the tests. When Sara was not doing her course assignments, she was always busy working, taking care of her brothers and sisters, or studying ballet—a field she almost pursued seriously. She decided that ballet was an impractical career given her financial needs and the difficulties of succeeding in that field.

She had always performed well in her science courses in high school and college; consequently, her advisor suggested that she consider a career in medicine, and she switched to pre-med. Medicine offered her a real opportunity for a career beyond anything she had thought of previously, and she was recruited by a nearby medical school.

As Sara began her first year in pre-med, she did fairly well on the early material but gradually seemed to be falling further and further behind. As Sara discussed the courses with her peers, she found that many knew more about the course content than she did. Many worked in labs or on science-related projects currently or had done so before they came to college.

What really surprised Sara was that one of the other Black pre-med students was working at a walk-in medical checkup and first aid program several blocks away from where she lived. Another student had learned information and procedures that went beyond what was covered in the book.

18, making referrals. It is particularly important that advisors have extensive and current information on where advisees go for further information or assistance. In many instances it may be best to make an initial diagnosis of shortcomings on one of the noncognitive variables and refer the student to someone else to resolve the

problem. It is often difficult for the same person to uncover an issue and then try to resolve it.

Case Studies

Case Studies 1 and 2 allow you to try your hand at uncovering noncognitive variables that

may be a problem for a nontraditional student. Both are real cases (with names changed) and are from a workshop developed by Westbrook and Sedlacek (1988). Before reading the discussion on each case, use Table 2, and see if you can determine the major noncognitive variable problem for the student.

Sara Davis (Case Study 1)

Sara illustrates the dilemma of many students who come to an academic area via a nontraditional route. She had not been thinking about medicine for many years like some of her colleagues. She had not really shown interest in medicine, but because it seemed financially rewarding and because she was recruited into

medicine, she moved in that direction. However, she had not learned from community or nonacademic activities and was a mismatch. Unless she was given information or help in understanding that she had not had the same experiences as traditional students and may not have been encouraged to pursue her interests, we are doing her a disservice. She needed some good vocational counseling, and her major noncognitive variable problem was in the "knowledge acquired in a field" area.

Sara's advisor diagnosed her dilemma and referred her to the counseling center for vocational counseling. She decided to stick with ballet, eventually went on to graduate school, and is currently teaching and performing.

CASE STUDY 2

Joe Martin

Joe Martin is an Hispanic, second year graduate student who got through his first year in fine shape and is doing passable work in his second year but is considering leaving school because he is lonely and unhappy.

Joe's parents were born in Mexico and originally came to this country illegally as migrant workers. Joe was born in the United States and was bilingual in his early years. He was called Jose until his parents moved to the Midwest just as he started junior high school. Joe was bright and had always been a good student, but he was not comfortable being singled out as a Chicano. So he worked hard at disguising his accent and started calling himself Joe and pronouncing the family name in English rather than Spanish.

He loved his parents but he avoided having his friends meet them because their English was poor and they were clearly Chicanos.

Joe was smart enough to get a scholarship to a school away from home and took the opportunity to move away from any identification as a Chicano. While this served him fairly well as an undergraduate, he was somewhat lonely and felt removed from the other students. His father died while he was in college; he chose not to return for the funeral.

Joe got the opportunity to go to graduate school in a state with a large Hispanic population. He did not think about this much even when he arrived and saw that there were a number of Chicanos enrolled. He did not foresee any immediate problems.

As the first year students got to know one another better, Joe sensed that he was not like any of the other students. The Chicano student group was active and provided many academic and nonacademic services for the students, but Joe was not comfortable with declaring himself a Chicano and joining them.

At the same time Joe was not comfortable with the Anglo students whose families, backgrounds, and interests were much different from his. He stayed to himself and did reasonably well. However, when he started his second year, somehow it came out that he was a Chicano, and he felt really embarrassed and isolated. He felt that people were laughing at him and did not respect him. He felt so bad about things that he was about to leave school under the pretext that he was more interested in working full-time.

Joe Martin (Case Study 2)

Because Jose decided to "pass" and deny his Chicano background, he lost a needed community resource. Community support is vital to nontraditional students; loners have great difficulty. Mallinckrodt and Sedlacek (1987) showed that Black students who used campus gyms and student unions were more likely to stay in school than those who did not. Such was not the case for white students. The white students had a larger community that accepted them on campus. The Black students did not and had to develop one for themselves.

Jose's advisor put him in touch with someone in the campus activities office who gradually involved him in Chicano student activities. Jose earned a master's degree and works for an electronics company.

Conclusions

Noncognitive variables can be used by advisors to greatly enhance their ability to advise nontraditional students. They can be used along with whatever other variables, models, or techniques are employed in whatever role or type of advising is involved. Students can be worked with to improve their development on any of the dimensions (Westbrook & Sedlacek, 1988). Advisors who use the **system** can expect to obtain better student outcomes in terms of grades, retention, and satisfaction, as well as greater self-satisfaction in employing something systematic with demonstrated validity in an area that often produces confusion and anxiety.

References

- Abler, R. M., Sedlacek, W. E., & Tracey, T. J. (1991). *Noncognitive Questionnaire Users' Manual*. College Park: University of Maryland.
- Garnett, D. T. (1990). Retention strategies for high-risk students at a four-year university. *NACADA Journal*, 10(1), 22-25.
- Mallinckrodt, B., & Sedlacek, W. E. (1987). Student retention and the use of campus facilities by race. *National Association of Student Personnel Administrators Journal*, 24(3), 28-32.
- Sedlacek, W. E. (1987). Blacks in white colleges and universities: Twenty years of research. *Journal of College Student Personnel*, 28, 484-495.
- Sedlacek, W. E. (1989). Noncognitive indicators of student success. *Journal of College Admissions*, 1, 2-9.
- Sedlacek, W. E., & Brooks, G. C., Jr. (1976). *Racism in American education: A model for change*. Chicago: Nelson-Hall.
- Sternberg, R. J. (1985). *Beyond IQ*. London: Cambridge University Press.
- Sternberg, R. J. (1986). What would better intelligence tests look like? In *Measures in the college admissions process* (pp. 146-150). New York: The College Entrance Examination Board.
- Tracey, T. J., & Sedlacek, W. E. (1984). Noncognitive variables in predicting academic success by race. *Measurement and Evaluation in Guidance*, 16, 172-178.
- Tracey, T. J., & Sedlacek, W. E. (1985). The relationship of noncognitive variables to academic success: A longitudinal comparison by race. *Journal of College Student Personnel*, 26, 405-410.
- Tracey, T. J., & Sedlacek, W. E. (1987). Prediction of college graduation using noncognitive variables by race. *Measurement and Evaluation in Counseling and Development*, 19, 177-184.
- Tracey, T. J., & Sedlacek, W. E. (1989). Factor structure of the Noncognitive Questionnaire—Revised across samples of black and white college students. *Educational and Psychological Measurement*, 49, 637-648.
- Westbrook, F. W., & Sedlacek, W. E. (1988). Workshop on using noncognitive variables with minority students in higher education. *Journal for Specialists in Group Work*, 13, 82-89.
- Whitaker, V. W., & Roberts, F. L. (1990). Applying values and lifestyles psychographics to parental involvement in college and university orientation. *NACADA Journal*, 10(1), 41-46.

William Sedlacek is Professor of Education and Assistant Director of the Counseling Center for Testing, Research, and Data Processing. Copies of the Noncognitive Questionnaire are available from him at the Counseling Center, University of Maryland, College Park, MD 20742-8111.