This study examined the validity of an instrument designed to measure the effectiveness of faculty advisers to freshmen at a small, private, liberal arts college (approximately 1,100 students). The 19-question Advising Effectiveness Questionnaire (AEQ) was distributed to three successive freshman classes at the end of each academic year. Factor analysis indicated that the AEQ measured students' general level of satisfaction with the advising process and how they perceived the difficulty of their individual adjustment process independent of the advising process. The AEQ was also found to have a high level of reliability and strong face validity, which was further supported by the results of an outcome assessment study which used the AEQ to track improvement in advising. The survey instrument is appended. (MDM)
Evaluating Adviser Effectiveness

George C. Fago
Ursinus College

Running Head: AEQ

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Evaluating Adviser Effectiveness
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For both pragmatic and ethical reasons institutional change in educational programs should be evaluated in terms of outcome. For the sake of students themselves, for their instructors, and for administrators, when programmatic change is instituted, it is important to know what the nature and scope of the resulting effects are. Programmatic changes themselves, however, are typically variable from one institution to another because they arise from needs, problems, and goals that will also vary from one institution to the next. This variability in programmatic change has resulted in a lack of general instruments for outcome assessment; outcome assessment has tended to be idiosyncratic to each individual program for obvious reasons.

Although programmatic change is necessarily particular to each institution, never-the-less programmatic change often involves the need to assess general factors that do transcend institutional considerations. As a case in point, while changes in academic advising programs will typically involve a variety of changes and adjustments that differ across institutions, still there is a need to determine whether these changes have effected any change in the general effectiveness of the advising process. While there is a need for objective assessment instruments for these general factors, few if any such instruments have been developed. Indeed, there has been little discussion regarding what these general educational factors are, much less how they might be reliably and validly measured. For example, while there has been a continuing debate and discussion over the nature and merits of a 'liberal arts' educational program, there is little agreement as to what constitutes such a program or how it compares to other programs.

The instrument to be described was developed in response to a mandate to assess the outcome of an institution-wide change in the handling of freshman advising. The older procedure forced students to declare a major at the beginning of their freshman year. Advising was then handled departmentally and focused exclusively on course selection. In an effort to improve student retention and to facilitate the students' transition into the college setting, a new 'freshman advising' program was developed. The newer program delayed the declaration of major until the end of the freshman year. Advising of freshmen was to be handled by designated 'freshman advisors' who were trained and expected to take a much more holistic approach to the advising process. Advisers were expected to concern themselves not only with academic issues, but with personal and vocational issues as appropriate and needed. Because this represented a major departure from the established advising system, an outcome assessment was mandated. The Adviser Effectiveness Questionnaire was developed as the major tool for this assessment with the explicit goal of assessing the degree of student satisfaction with the advising system.
B. Development of the Questionnaire

The AEQ as it was developed reflected the ways in which the advising process itself had been redefined. Although academics, and in particular course selection, remained as a major area of advising emphasis, three additional areas of advising competence were identified: study skills, career/vocation, and personal counseling. Ideally the freshman advising process as envisioned should incorporate all four of these areas. Advisers first of all must be sensitive to student needs and interests and how best to account for them within a framework of institutional and departmental requirements for graduation, i.e., academic advising. Secondly, for those many students who have yet to identify majors and/or vocational goals, advisers should be equipped to deal with low level career/vocational counseling. Third, advisors should also be ready to deal with problems involving the lack of study skills, since many students seemed to be deficient in this respect. Finally, advisors should also be prepared to deal with low level issues of a personal nature, e.g., homesickness, roommate incompatibility, and performance anxiety.

The AEQ contains nineteen items, ten of which were seen as directly related to the assessment of effectiveness and nine of which were included in an attempt to determine what problems in adjustment the students considered to be important and what problems they felt that advising should specifically address. Most of the items consisted of simple statements to which the students were to rate their degree of agreement on a Likert-type five point scale. The face validity of the items was transparent; e.g., "I am satisfied with the way my advisor handled my questions regarding study skills." These statements were randomly divided into positive and negative statements in order to prevent response bias. In addition, two items were survey-type items designed to determine how frequently the students had met with their advisers and how accessible they felt their advisers to be. The last four items simply asked the students to rate the difficulty of adjustment to each of the four areas previously identified as possibly important to advising effectiveness. The actual scale items are reproduced in the appendix. In the following sections a psychometric evaluation of the instrument is presented utilizing data gathered as part of the outcome assessment of the advising program.

METHODS

Subjects: Three freshmen classes of students were assessed, each at the end of the freshman year. All were students at a small (enrollment approximately 1100 students) private, liberal arts college located in a suburban northeastern area of the country. Samples included both men and women, and in each case included approximately one third (125 respondents) of the freshman class.
Procedure: The AEQ was distributed by the freshmen advisers to the students who then returned them anonymously to the principle investigator. The distribution took place during the second half of the spring semester as part of the process of registration of major. Student participation was voluntary, but the importance of cooperation was stressed by the advisers. The first class assessed constituted a baseline condition, since it was handled by the older advising system. The two subsequent classes were advised under the newer system.

RESULTS

The validity of the instrument was assessed in two major ways. First, student responses to the questionnaire were analyzed for students under the older advising program compared to two classes under the newer program. An item by item analysis indicated that for eighteen of the nineteen items the two classes under the new system differed significantly from the baseline class (p < .05 or greater in all cases) although they did not differ between themselves. The differences were uniformly in a more positive direction. This seeming increase in student satisfaction as measured by the questionnaire was in agreement with a general faculty perception of a higher level of student satisfaction with advising, although this was not quantified. Thus student self-reported response to a program deliberately designed to improve the quality of advising, showed a uniform increase in reported levels of satisfaction with advising. This strongly suggests predictive validity of a sort.

Secondly, in order to investigate the underlying construct validity of the AEQ the data drawn from a single class (N=114?) was analyzed by means of a factor analysis. Using the method of principal components analysis, a scree test indicated that a two factor solution was optimal. Equimax and varimax rotations resulted in identical results. The results of the factor analysis are presented in Table 1, which lists the scale items in the order of the magnitude of their loadings on the two factors respectively. Factor 1 consists of thirteen of the nineteen items; excluding all of the items where students rank the difficulty of adjustment, rating of overall level of happiness with the college, and agreement that more emphasis should be placed on academic counseling. These latter six items constituted the second factor.

| Insert Table 1 about here |

The factor analysis strongly suggests that the AEQ is measuring two independent factors. Factor 1 by inspection appears to reflect the students' global or general level of satisfaction with the advising process. Factor two seems to reflect how
students perceive the difficulty of their individual adjustment process independent of the advising process.

The results of the factor analysis were then taken into consideration in the assessment of the reliability of the AEQ. Since the factor analysis was interpreted as indicating that a subset of thirteen scale items constituted a factor reflecting global satisfaction with advising, instrument reliability was determined for these thirteen items. For the items in question Cronbach’s alpha was computed after the items that had heavily loaded on the factor with a negative correlation had been reverse scored. The reliability coefficient estimated was $r=0.8967$ indicating that the thirteen item scale was highly reliable.

**DISCUSSION**

The psychometric assessment of the AEQ indicates that the instrument does have potential usefulness for the evaluation of undergraduate advising programs. It has a high level of reliability and strong face validity which is further borne out by the results of an outcome assessment study which used the instrument to track improvement in advising. It’s usage with similar undergraduate programs is clearly indicated. Extensions to other programs (e.g., non-residential students) is more problematic.

The results of the factor analysis of the scale are of some additional interest. The original assumption that guided the construction of the scale was that undergraduate advising effectiveness might be a multidimensional construct; i.e., advisers might well be evaluated on a number of independent dimensions. This did not seem to be the case, at least in the sample studied here. Rather the students seemed to view advising globally as a relationship which incorporates a number of aspects simultaneously, and to rate advising accordingly. Advisers seem to be perceived as ‘mentors’ prepared to assist in a variety of ways, as opposed to ‘technicians’ prepared to offer specific services.

Factor 2 is also of interest. This factor consists of the four items where students rank order the difficulty of their personal adjustment in the various spheres, a rating of happiness, and an item regarding the emphasis on academic advising. The fact that these items are independent of factor one suggests that students perceptions of their personal difficulties in adjustment do not color their assessment of the advising process. Interestingly enough, their happiness or lack thereof is correlated with factor 2 (difficulty of personal adjustments) and not with factor 1 (advising effectiveness). Thus students satisfaction with college choice does not seem critically dependent upon the quality of advising (at least for the present sample) but rather depends upon the students own personal adjustment.
REFERENCES

Table 1: Rotated Factor Matrix

<table>
<thead>
<tr>
<th>LABEL</th>
<th>ITEM</th>
<th>FACTOR 1</th>
<th>FACTOR 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMFORT</td>
<td>Comfortable talking with</td>
<td>.83263</td>
<td>-.03519</td>
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<tr>
<td>OVERALL</td>
<td>Overall satisfaction with</td>
<td>.81624</td>
<td>.01369</td>
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<tr>
<td>STUDYSK</td>
<td>Study skill advising satisfaction</td>
<td>.79588</td>
<td>.13915</td>
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<td>ACADEMIC</td>
<td>Academic advising satisfaction</td>
<td>.74741</td>
<td>.04093</td>
</tr>
<tr>
<td>FREQUENC</td>
<td>How frequent were meetings?</td>
<td>-.74399</td>
<td>.05254</td>
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<tr>
<td>PERSONAL</td>
<td>Personal advising satisfaction</td>
<td>.71727</td>
<td>-.11940</td>
</tr>
<tr>
<td>VOCATION</td>
<td>Vocational Advising satisfaction</td>
<td>.66669</td>
<td>-.12145</td>
</tr>
<tr>
<td>RELUCTAN</td>
<td>Reluctant to discuss personal</td>
<td>-.65990</td>
<td>.07245</td>
</tr>
<tr>
<td>ACCESS</td>
<td>How accessible was advisor?</td>
<td>-.64645</td>
<td>-.14490</td>
</tr>
<tr>
<td>PREFERSTUD</td>
<td>Prefer students for advice</td>
<td>-.51407</td>
<td>.39030</td>
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<tr>
<td>EMPVOCAT</td>
<td>More emphasis on vocation</td>
<td>.29106</td>
<td>-.02152</td>
</tr>
<tr>
<td>EMPSTUDY</td>
<td>More emphasis on study skills</td>
<td>-.25595</td>
<td>.02548</td>
</tr>
<tr>
<td>EMPPERS</td>
<td>More emphasis on personal</td>
<td>.15109</td>
<td>-.08556</td>
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<td>RANKADJ</td>
<td>Difficulty of personal adj.</td>
<td>.08288</td>
<td>-.85771</td>
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<tr>
<td>RANKACAD</td>
<td>Difficulty of academic adj.</td>
<td>.02945</td>
<td>.55472</td>
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<tr>
<td>HAPPY</td>
<td>Happy with college choice</td>
<td>-.01775</td>
<td>.50786</td>
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<tr>
<td>RANKVOC</td>
<td>Difficulty of vocational adj.</td>
<td>.12449</td>
<td>.35427</td>
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<tr>
<td>EMPACAD</td>
<td>More emphasis on academics</td>
<td>.15539</td>
<td>-.30074</td>
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<tr>
<td>RANKSKIL</td>
<td>Difficulty of study adj.</td>
<td>-.20802</td>
<td>.27839</td>
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Factor Transformation Matrix

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<th>FACTOR 1</th>
<th>FACTOR 2</th>
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<td>.98815</td>
<td>-.15351</td>
</tr>
<tr>
<td>FACTOR 2</td>
<td>.15351</td>
<td>.98815</td>
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</table>
APPENDIX

Advising Effectiveness Questionnaire

1. How often during the past year did you see your advisor for advice or discussion?
   a. 1 time or less
   b. 2 to 5 times
   c. 6 to 10 times
   d. 11 times or more

2. How accessible was your advisor to you?
   a. very accessible
   b. accessible
   c. neutral
   d. not very accessible
   e. not at all accessible

The freshman year requires the typical student to make many adjustments. The general areas that frequently present problems in adjustment are listed below. Please rank them in terms of how difficult each area was in your own adjustment to college life. Rank each of the following areas on the answer sheet using the following key:
   "a" = the most difficult to adjust to
   "b" = the second most difficult to adjust to
   "c" = the third most difficult to adjust to
   "d" = the easiest to adjust to

3. Study skills
4. Career
5. Academic
6. Personal adjustment

A number of statements dealing with various aspects of the advising process are presented below. For each statement you are to indicate the extent of your agreement or disagreement with the statement by checking the appropriate box with the following key:
   "a" = strongly agree
   "b" = agree
   "c" = neutral
   "d" = disagree
   "e" = strongly disagree

7. I felt comfortable talking with my advisor.
8. I am satisfied with the way my advisor handled my questions regarding career choices and decisions.
9. I am not satisfied with the way my advisor handled my questions regarding career choices and decisions.
10. I am satisfied with the way my advisor handled my questions regarding academic matters such as choice of courses, etc.

11. I am satisfied with the way my advisor handled my questions regarding personal problems.

12. Overall, I am not satisfied with the quality of the advising I received during my freshman year.

13. In general, I am happy with my decision to come to this college.

14. In student advising, more emphasis should be placed on helping students develop more adequate study skills.

15. In student advising, less emphasis should be placed on helping students with career decisions.

16. In student advising, less emphasis should be placed on helping students with academic problems.

17. In student advising, more emphasis should be placed on helping students with personal problems.

18. I am reluctant to talk about personal problems with my advisor.

19. I prefer to go to other students for advice and support.