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THE DEVELOPMENT OF ACADEMIC ADVISING PROGRAMS
Formulating a Valid Model

A nationwide survey was conducted to test the validity of a theoretical model of advising program development. Respondents generally supported the Four Stage Model, which outlines the direction, nature, and scope of changes leading toward an effective advising service. However, the survey revealed disagreement on the stimulus/response relationship outlined in the model, the components of each stage, and the amount of overlap among stages. The model was then adjusted to depict more accurately the sequence of changes common to most advising programs. The revised model provides advisors and administrators with a framework for understanding the process of development and a basis for planning program improvements.

INTRODUCTION

The application of models to academic advising programs is relatively recent, appearing in the literature in the last two decades as programs have become more structured and better organized. Models have been proposed on the formation of developmental advising programs (Dameron & Wolf, 1974; Grites, 1977; Habley, 1984; O'Banion, 1972), types and selection of delivery systems (Crockett, 1982; Hines, 1984; Hines, Krause & Endieveri, 1980), and the organizational forms of advising programs (Habley, 1983; Habley & McCauley, 1987). Models of advising programs tend to focus on the recommended components, the delivery system, or organizational form at one point in time, as though the program were stable and unchanging. Yet researchers are aware that programs are not changeless. Greenwood (1984) suggests a six-step process for improving advising programs, while Holmes, Clarke & Irvine (1983) propose a change strategy to accommodate faculty advisors within the institutional framework. However, a void in the literature exists: an explanation of how a program evolves over time, including the stimuli which lead to program development and the sequence of changes a program undergoes as it becomes more effective.

When a new advising program is established, it usually lacks many of the characteristics Crockett (1985) identifies as necessary for an effective advising program: a well-defined policy statement, an advising coordinator, administrative support, sufficient advisor resources, a training program, and an evaluation system, to name only a few. Those components which are not present in the beginning are added as the program expands and becomes better organized. As the needs of students, advisors, and administrators are identified, the program structure is altered to address the need, services are added, or new strategies are implemented. An effective program evolves over time.

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The hypothesis which became the foundation for this study is that an academic advising program undergoes a predictable, logical sequence of changes as the advising and administrative staff strive to improve it. This hypothesis grew out of firsthand experience with several college advising programs, each in a different phase of development. Through research and observation of the changes occurring in these programs, a pattern of development became evident.

As program administrators focus on similar goals (e.g., providing advising services that facilitate students' personal, educational, and career development), they strengthen the program in predictable ways, responding to needs which are common to most colleges and universities, and using widely available resources and proven strategies. This sequence of changes is portrayed by the Four Stage Model of advising program development. The model illustrates both cause and effect, typical changes, and the general direction in which programs evolve.

A model has no value unless it can demonstrate a certain degree of reliability and validity. The purpose of this study was to test the applicability of the Four Stage Model, to determine how accurately it manifested the actual pattern of changes in college advising programs. After the theoretical model was compared to advising programs in a variety of institutional settings, it was revised to reflect more accurately the sequence of changes common to most programs. The revised model gives advisors and administrators a conceptual framework for understanding the process of development and for planning program improvements.

The Theoretical Model

The Four Stage Model, as originally proposed, depicts a program consisting of minimal advising services (i.e., course selection and schedule planning) and follows it through an orderly sequence of changes to the ultimate goal, a comprehensive and well-organized developmental advising program. The model is shown in Figure 1.

As a simplification and generalization of reality, the Four Stage Model does not illustrate the many variables which can affect the way in which an advising program actually develops: the type of delivery system, scope of the program, type of institution or structure of the college, nature of the stimuli influencing change, and number of years the program has been in operation. Given the complexity of these variables, it is unlikely that any program matches the model in all respects. There might be variations in the order of stages due to the particular stimuli which affect the program (e.g., budget, administrative policy, program goals, personnel, or technology). Any one or a number of these factors could result in the omission of a certain stage or the simultaneous occurrence of two or three stages. However, the assumption behind the theoretical model is that most advising programs, either by design or happenstance, evolve in accordance with the following four stages.

■ **Stage 1: Increasing Access.** As a large number of nontraditional, exploratory, and academically underprepared students enroll in college, there is a need for more advising services. The stimulus for change may be student complaints about the inaccessibility of advisors or the advisors' inability to handle a heavy advisee load. Administrators may respond by hiring more professional or paraprofessional advisors, persuading additional faculty to assume advising responsibilities, or initiating a peer advising system.

■ **Stage 2: Upgrading Services.** In spite of an expanded advising staff, existing services are inadequate for specific groups. Perceptive advisors become concerned about the academically underprepared students who are often placed on probation after one term, as well as the exploratory students who need help with decision making to select a major. Want-

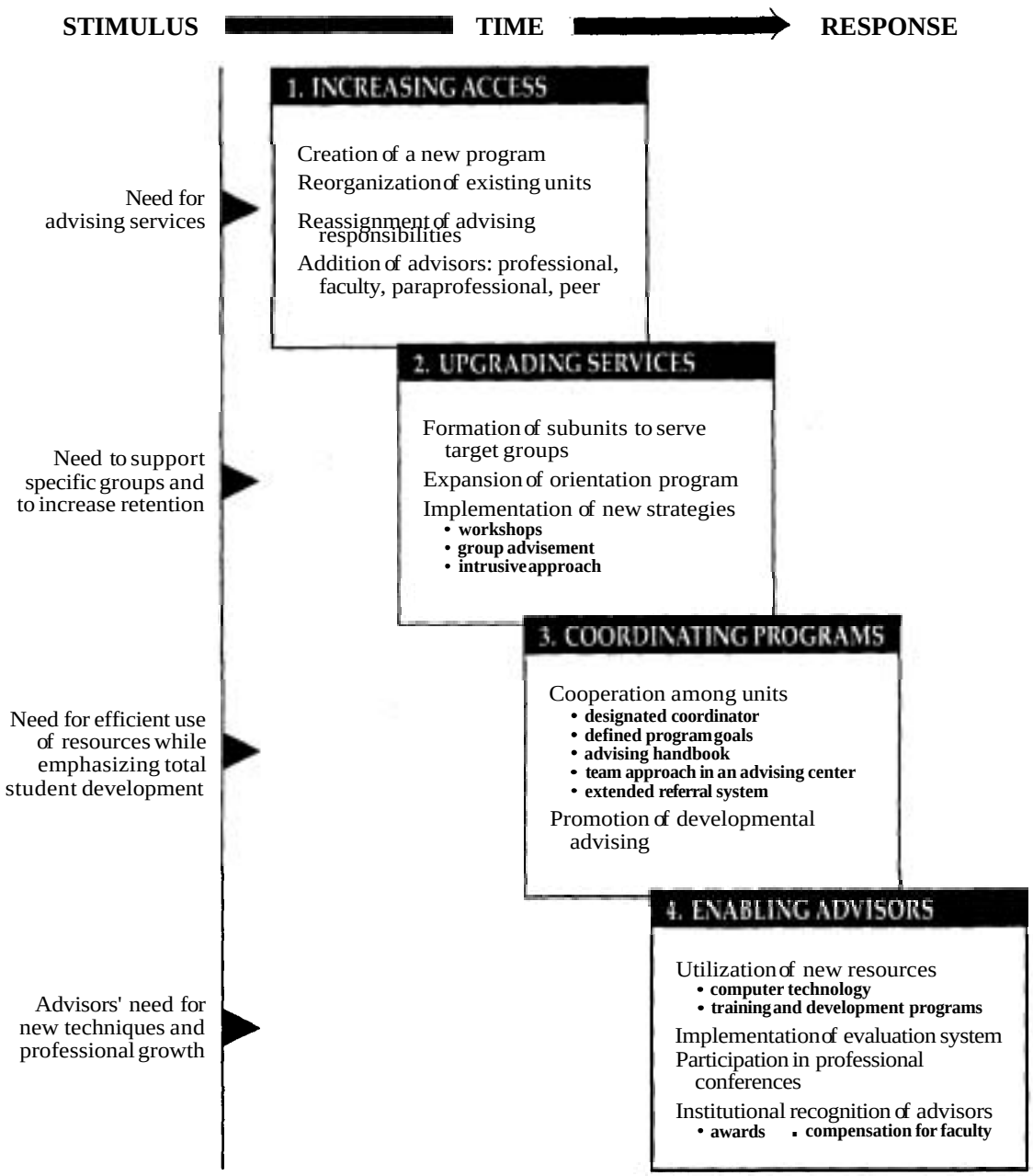

Figure 1. Four Stage Model of Academic Advising Program Development (Theoretical).

ing to assist these and other target groups, advisors implement new strategies, such as workshops, group advising sessions, intrusive approaches, and orientation programs with a specific focus.

Stage 3: Coordinating Programs. Budget cuts may halt the proliferation of creative strategies. Under pressure to use institutional resources more efficiently, administrators begin to coordinate the various advising programs within the college to eliminate duplication or deficiencies within the system. At the same time administrators recognize the role of academic advisement in reducing attrition. The need to increase retention prompts them to support the philosophy of total student development and to provide the means to implement developmental advising for the benefit of all students. Gradually the deans, department chairs, faculty, and professional staff participate in more cooperative efforts to improve advising services. The outcomes of tangible administrative support include clearly defined program goals, the addition of an advising coordinator, faculty/staff advisor meetings, designated liaisons between academic departments and advising centers, a team approach to advising (e.g., faculty participation in an advising center), and an extensive referral network.

Stage 4: Enabling Advisors. The last stage is triggered by advisors' awareness of their own needs for better resources, continuing education, and professional growth. To alleviate advisor stress and burnout or to increase advising knowledge and skills, administrators may encourage (or at least permit) professional development activities, such as courses, workshops, and conferences on academic advising or counseling. Outcomes of professional development include a new advisor training program, an advisor and/or program evaluation system, and greater recognition and rewards for advisors. Increased knowedge of the field may also lead to the use of resources that have not been utilized previously (e.g., an advising handbook, computer technology). The combined effect of these components is to strengthen and energize the total program.

The Four Stage Model represents initial stages of an ongoing process. Changes do not cease when a program evolves to Stage **4.** Since a perfect advising program is impossible to achieve, administrators and advisors will continue to experiment with new approaches, strategies, and resources. Both internal and external factors will contribute to further adjustments and refinements in the system. Not only must the advising program adapt to shifts in the student population and institutional changes but also to developments in the profession. Thus the model remains open-ended.

The Survey

To determine the validity of the Four Stage Model, a one-page questionnaire was constructed to gather information on the similarities and differences between evolving programs and the theoretical model. Participants in the survey were asked to compare the development of the advising program with which they are associated to the sequence of changes outlined by the model. The questionnaire is inserted at the end of this article.

The questionnaire, along with a copy of the model and a description of the stages, was mailed to 200 members of NACADA in January **1987.** Recipients of the questionnaire were selected from the roster of participants at the Tenth National Conference on Academic Advising. Representing all institutional types, one to ten conference participants were selected from each state. The geographical distribution of participants in the survey was limited to a certain extent by the disproportionate number of institutional representatives from states adjacent to the conference site. However, no geographical bias is evident in the distribution of the **91** individuals who responded to the survey. Although ten of the **49** states were not

ACADEMIC ADVISING PROGRAM QUESTIONNAIRE

Indicate the applicability of the Four Stage Model to your advising program by circling the most appropriate response to each of the statements below. You may add a note of explanation to clarify any of your answers.

YES	NO	UNSURE	
Y	N	U	1. Our academic advising program has evolved, or is evolving, stages similar to those presented in the Four Stage Model.
			2. Our advising program is currently in a stage of transition which most closely approximates:
Y	N	U	Stage 1: Increasing Access
Y	N	U	Stage 2: Upgrading Services
Y	N	U	Stage 3: Coordinating Programs
Y	N	U	Stage 4: Enabling Advisors
Y	N	U	A combination of two stages (identify by number): _____
Y	N	U	3. While the stages of the Model are applicable to our advising program, they have occurred in a different order. The correct order is: _____
Y	N	U	4. As our advising program evolved, two or three of the stages occurred simultaneously. The following stages were combined: _____
Y	N	U	5. Two or three of the stages pertain to the development of our advising program, but not all four. Those stages which were omitted or which have not yet occurred include: _____
Y	N	U	6. While there is some similarity between the development of our advising program and the Four Stage Model, there are differences due to: (in the blank provided, list the most significant causes)
Y	N	U	a. Type of delivery system (e.g., counselors, paraprofessionals, advising center): _____
Y	N	U	b. Type of institution or structure of the college (e.g., multicampus community college): _____
Y	N	U	c. Scope of the program (e.g., undeclared majors, entire student body): _____
Y	N	U	d. Stimulus for change (e.g., budget, personnel, technology, administrative policy, program goals): _____
Y	N	U	e. Other: _____
Y	N	U	7. Our advising program is recently established and has not undergone any distinct stages of development.
Y	N	U	8. There is no similarity between the Four Stage Model and the development of our advising program. Explanation: _____

represented, no more than five respondents were from any one state, and each was employed at a different institution. Of the 91 individuals who responded, 90 (45 percent) sent back completed questionnaires that could contribute to this study. As the data were compiled, the responses were analyzed with respect to the theoretical model.

Findings and Discussion

Information obtained through the nationwide survey is presented in five tables. Table 1 reveals a high degree of support for the theoretical model. Nearly three out of four respondents (72.2 percent) affirm that the advising program with which they are associated "has evolved, or is evolving, in stages similar to those presented in the Four Stage Model" (item 1). As might be expected, the applicability of the model is not universal: 17.8 percent of the respondents deny any similarity, while 10 percent are "unsure." When an individual gives an indefinite response, it could indicate a slight degree of similarity between his/her program and the model, a lack of knowledge about the history of the program, a lack of understanding about the model, or a qualitative difference between program and model which makes the question irrelevant.

Nearly all (94.4 percent) of the respondents can identify one stage of the model, or a combination of two or more stages, that resembles their program in its current phase of development (item 2). While 36.7 percent place their program in a single stage, 57.7 percent of the individuals perceive their program either in a transition phase between two stages or an extended phase encompassing two or more stages of the model. almost half (47.8 percent) identify Stage 3 and/or Stage 4 as an accurate description of their program at this time.

Of the respondents who compare the order of stages in the model to the development of their advising program (item 3), nearly half verify the model sequence, while a third perceive a different progression of events. Table 2 shows alternate sequences along with the percentage of respondents selecting each one. No alternate has as much support as does that illustrated by the model. The majority of the respondents suggesting another sequence believe Stage 1 or 2 belongs in first position, while Stage 3 or 4 properly occurs last. In most cases the change involves reversing the first two or last two stages, or altering the position of one stage (e.g., moving Stage 3 to the first position). The order of stages is one aspect of the model on which there is no clear agreement and, in fact, there may be some confusion. Nearly one fourth of the respondents either omit this item or admit that they are unsure about the sequence of changes in the program with which they are associated. Unless the individual has been with the program for several years, he/she is unlikely to know the order of stages.

There is more general agreement on item 4. A majority of the respondents (70.8 percent) believe that the stages do not occur separately but overlap to some extent or occur simultaneously. Only 14.4 percent perceive each stage as distinct from the one which preceded it. Over half (57 percent) of the respondents identify at least one two-stage combination, the most frequent being Stages 2 + 3 (17.8 percent), followed by 1 + 2 (13.3 percent). The general consensus on the simultaneous occurrence of stages suggests that many advising programs develop in an identifiable three-stage sequence, if not two stages. Stage 2 is most likely to be absorbed by another stage, for it is mentioned by 54.4 percent of the respondents in connection with one or two of the other stages. However, there is insufficient agreement on the stage with which it should be linked. The next most frequently combined stage is the third, mentioned by 41.1 percent of the respondents. As with many multiple stage processes, the middle stages in the model are less well-defined than the first and last. It may be appropriate for parts of Stages 2 or 3 to be incorporated into the other stages, thereby producing a three-stage model. Not enough data were collected from this survey to determine which elements of Stage 2, for example, should be redistributed among Stages 1, 3, and 4. This is an obvious area for further investigation.

Table 1

Summary of Responses To Advising Program Questionnaire (given in percentages based on 90 respondents)

Item	Response: Yes	No	Unsure	No response
1. Advising program similar to model	72.2	17.8	10.0	0.0
2. Current stage(s) of the advising program:	94.4	2.2	2.2	1.1
One Stage (N=33):	36.7			
1	4.4			
2	4.4			
3	11.1			
4	16.7			
Combination or transition between two stages (N=40):	44.4			
1 + 2	5.6			
1 + 3	1.1			
1 + 4	1.1			
2 + 3	10.0			
2 + 4	6.7			
3 + 4	20.0			
Combination or transition between three stages (N=9):	10.0			
1 + 2 + 3	4.4			
1 + 2 + 4	0.0			
1 + 3 + 4	1.1			
2 + 3 + 4	4.4			
Combination of four stages (N=3)	3.3			
3. Incorrect order of model stages	32.2	43.3	13.3	11.1
4. Simultaneous occurrence of stages:	70.8	14.4	8.9	6.7
Combination not specified (N=1)	1.1			
Combination of two stages (N=52'):	57.8			
1 + 2	13.3			
1 + 3	3.3	2.2		
1 + 4	2.2			
2 + 4	11.1			
3 + 4	7.8			
Combination of three stages (N=12):	13.3			
1 + 2 + 3	4.4			
1 + 2 + 4	1.1			
1 + 3 + 4	1.1			
2 + 3 + 4	6.7			
Combination of four stages (N=5)	5.6			
5. Stage (s) omitted or yet to occur:	38.9	38.9	10.0	12.2
Stage(s) not specified (N=1)	1.1			
One Stage (N=23):	25.6			
1	5.5			
2	1.1			
3	4.4			
4	13.3	1.1		
Two stages (N=10):	11.1			
1, 2	1.1			
1, 3	0.0			
1, 4	1.1			
2, 3	3.3			
2, 4	1.1			
3, 4	4.4			
Three stages (N=1):	1.1			
1, 2, 3	0.0			
1, 2, 4	1.1			
1, 3, 4	0.0			
2, 3, 4	0.0			
6. Difference between advising program and model attributed to one or more of the following factors				
a. Type of delivery system	42.2	34.4	3.3	20.0
b. Type of institution or structure of college	26.7	41.1	2.2	30.0
c. Scope of the program	38.9	31.1	3.3	26.7
d. Stimulus for change	30.0	36.7	8.9	24.4
e. Other	22.2	37.8	6.7	33.3
7. Recently established, undeveloped program	3.3	87.8	0.0	8.9
8. No similarity between advising program and model	10.0	80.0	5.6	4.4

• More than one response is possible.

Table 2

Proposed Order of Stages
(given in percentages based on 29 affirmative responses to item 3)

Stage 1 occurs first		Stage 2 occurs first	
N = 11	37.9	N = 10	34.5
1, 2, **3,** 4	27.6	2, 1, 3, 4	13.8
1, **3,** 2, 4	6.9	2, 1, 4, 3	3.4
1, **3,** 4, 2	3.4	2, 3, 1, 4	3.4
1, 4, 2, **3**	0.0	2, 3, 4, 1	3.4
1, 4, **3,** 2	0.0	2, 4, 1, 3	3.4
		2, 4, 3, 1	6.9
Stage 3 occurs first		Stage 4 occurs first	
N = 7	24.1	N = 1	3.4
3, 1, 2, 4	24.1	4, 1, 2, 3	3.4
3, 1, 4, 2	0.0	4, 1, 3, 2	0.0
3, 2, 1, 4	6.9	4, 2, 1, 3	0.0
3, 2, 4, 1	3.4	4, 2, 3, 1	0.0
3, 4, 1, 2	0.0	4, 3, 1, 2	0.0
3, 4, 2, 1	0.0	4, 3, 2, 1	0.0

Responses are equally divided on item 5, the omission of a stage. Thirty-five (38.9 percent) of the respondents believe no stage has been omitted in the development of their program, while the same number is convinced that one or more stages has been left out. If a stage has not occurred, its absence may be interpreted in one of three ways: (1) the stage normally occurs later in the process of development and can be anticipated "further down the road;" (2) although omitted from the sequence outlined by the model, the stage may occur later; or (3) that particular stage may never occur. There are several reasons why a stage might be left out of the projected sequence: it was inconsequential within the unique circumstances of that program, the program budget was too restrictive for advising services to be upgraded, the components of that stage were not part of the program goals, or most components of the stage were assimilated by other stages in the change process. Stage 4 is most frequently identified as the missing stage, followed by Stage 3. More than likely, these programs have not progressed to the latter stages of development (interpretation 1). Few of the respondents perceive Stages 1 and 2 as missing. Considering the possibility that these stages might occur in the future, true "omissions" may be rare.

Item 6 of the questionnaire addresses reasons why a program might follow a pattern of development inconsistent with the Four Stage Model. The types of factors identified by respondents are summarized in Table 1 and specified in Table 3. The type of delivery system is the most frequently mentioned factor leading to divergent routes of development. Of the respondents who pinpoint their delivery system as a factor, 27.5 percent are associated with predominantly faculty advisor systems. Given the small sample and diversity of responses, however, it cannot be said that the model is more applicable to any one type of delivery system.

Table 3

Factors Contributing to Differences Between Actual Program Development and the Model (given in percentages based on the number of affirmative responses to variables listed in item 6)

6A. Type of delivery system	
N = 40	
Predominantly faculty	27.5
Advising center	17.5
Predominantly counselors	12.5
Multiple systems	12.5
Professional advisors	5.0
Part-time professionals	5.0
Peer advisors	5.0
Paraprofessionals	0.0
Not specified	15.0
B. Type of institution or structure of college	
N = 24	
College within a university	20.8
Multicampus community college	16.6
Single campus community college	8.3
Multiuniversity	8.3
Public university	8.3
4-year private college	8.3
Military institution	8.3
4-year public college	4.2
Graduate college	4.2
Research institution	4.2
Not specified	8.3
C. Scope of the program	
N = 35	
Entire student body	37.1
Undeclared majors	14.3
Students in one college of a university	11.4
Majors in one department	5.7
All freshmen	5.7
Probationary students	2.8
Transfer vs. certificate students	2.8
Not specified	20.0
D. Stimulus for change	
N = 42*	
Administrative policylconcern	28.6
Budgetlstate support	19.0
Personnelladvisors	16.7
Program goals	14.3
Technology	2.4
All of the above	2.4
Not specified	16.7
E. Other factors	
N = 20	
Factors inherent to the advising program	50.0
Lack of development1 no identifiable stages	
Heavy advisee load	
Recent change in delivery system	
Advisor morale/dissatisfaction	
Lack of correlation between program goals and institutional mission	
Factors external to the advising program	50.0
Lack of support from academic units	
Budgetary cutbacks	
Restructured student services division	
Lack of student interest in advisement	
Curriculum changes	
Shift in administrative support	
New mandatory advisement policy	

* More than one response is possible

The second factor under item 6, type of institution or structure of the college, is generally not perceived as significant with respect to deviation in program development. Thirty percent of the individuals neglected to respond to this item, and 41.4 percent denied that it contributes to differences in the evolution of their program. However, respondents in two nontraditional settings; military and graduate college advising programs, rank this factor as important.

The scope of the advising program seems to have more impact on the way in which a program develops. Thirty-five respondents (38.9 percent) attribute variations in the direction of change to the size or composition of the student group served by the program. Advisee groups range from the entire student body (mentioned by 37.1 percent of those who designate this factor) to majors in one department (5.7 percent) or probationary students (2.8 percent). In a college-wide program, the diversity of students' needs and the large number of advisees undoubtedly affect the course of development. Programs of smaller scope may be equally influenced by this factor; however, small programs are not as widely represented in the survey sample. The limitations of the sample must be taken into account in interpreting these responses.

Less than one third (30 percent) of the respondents focus on the stimulus for change as a reason for differences in program development. The high percentage of individuals who either omit this item (24.4 percent), give an indefinite response (8.9 percent), or a negative response (36.7 percent) suggests any of a number of possibilities: the stimuli prompting change in the program approximate the needs addressed in the model; the stimuli are perceived as playing a minor role in the change process; no single stimulus can be pinpointed for each change in the program; or the concept of stimulus and response is more nebulous than the previously discussed factors. Whatever the reason, this factor is largely ignored. Twenty respondents identify 35 stimuli (in addition to seven individuals who do not label the particular stimulus) which may be grouped into four general clusters, the major one being administrative policy or concern.

Few of the respondents (22 percent) identify other factors (item e) which might account for variations in program development. The significant factors can be divided into two groups: (1) those inherent to the advising program, such as a recent change in the delivery system, heavy advisee load, or lack of program development; and (2) external factors, such as curriculum changes, lack of student interest in advisement, or lack of support from academic units. Internal factors are just as likely to be mentioned as contributing to differences in program development as external factors.

The length of time an advising program has been in operation is not necessarily a critical factor in its development. With increasing awareness of the elements necessary to create an effective advising program, administrators and advisors can design and implement a program that rapidly progresses through the four stages of development. However, time may be relevant to program development in one of the following situations: there is little administrative support during the initial stages; the advising staff does not understand developmental advising; there are insufficient advisors to improve services; or no clearly stated program goals exist. Item 7 on the questionnaire was included to determine how many recently established programs have not undergone the stages of development as set forth in the model. Only three of the 90 programs fall into this category. Unfortunately, the other factors which operate in conjunction with time to prevent program development are not identified.

Eighty percent of the respondents disagree with the last item; that is, they do perceive some similarity between the Four Stage Model and the development of their advising program. Ten percent discern no similarities between their program and the model, while the rest of the respondents are uncertain or silent on this item. Some individuals who responded negatively to item 1 (similarity to the stages) have given the opposite reply to item 8 (similarity in general). Explanations of the nine who claim there is no common ground between the model and their program development are insightful. In four of the programs, the vital components were added but not in the same order or in distinct stages. One respondent felt that the change process was horizontal instead of vertical, while another perceived similar needs but different outcomes. Nonetheless, the overwhelmingly positive response to this itemconfirms the general validity of the model.

The question of whether the model fits advising programs in one type of institution or division more than others is addressed in Table 4. There is no obvious correlation between the institutional setting and the applicability of the model. Approximately two-thirds to three-fourths of the respondents from each type of institution, or division within an institution, perceive similarities in the development of their program and the model. Inequalities within the sample make an exact comparison difficult. For example, 29 respondents are associated with college advising programs within a larger university, whereas only three respondents are associated with department advising programs within a college of a university. A larger sample and more information about each program (e.g., number of students served by the program, type of delivery system, and organizational form) are needed before further correlations can be drawn.

Table 4

Structure of Program and Similarity to Model (given in percentages based on responses to item 1)

	Responses		
Setting of Program*	Similar	Dissimilar	Unsure
University/College Advising Center N=12 (13.3%)	66.7	16.7	16.7
College Program within a University N=29 (32.2%)	72.4	17.2	10.3
Department/Division Program within a College of a Univenity N=3 (3.3%)	66.7	0.0	33.3
4-Year College Advisement Program N=21 (23.3%)	76.2	23.8	0.0
Community College Advisement Program N=13 (14.4%)	76.9	15.4	7.7
Advisement Program Undetermined** N=12 (13.3%)	66.7	16.7	16.7

* Determined from respondent's position within a specific division of an institution.

** Respondents from Student Affairs, Orientation, Registrar's Office, Dean of Students Office

In Tables 5 and 6, the programs which developed in stages similar to those in the model can be contrasted with programs to which the model does not apply (determined from responses to item 1). Notable differences are evident in the response patterns of the individuals associated with these programs, in spite of the disparity in their numbers: 65 whose program development is said to be similar, as opposed to 16 whose program development does not match the model. For ease in discussing the variations in response patterns, the former group of respondents will be referred to as the "similar group," and the latter, the "dissimilar group."

Table 5

Response Pattern of Individuals Whose Program Development is Similar to Model (given in percentages based on the 65 affirmative responses to item 1)

Item	Responses			
	Yes	No	Unsure	No response
2. Current stages(s) of the advising program:	100.0	0.0	0.0	0.0
One stage (N=24):	36.9			
1	1.5			
2	4.6			
3	12.3			
4	18.5			
Combination or transition between two stages (N=31):	47.7			
1 + 2	6.2			
1 + 3	0.0			
1 + 4	1.5			
2 + 3	7.7			
2 + 4	7.7			
3 + 4	24.6			
Combination of three or four stages (N=10)	15.4			
3. Incorrect order of model stages	26.1	49.2	12.3	12.3
4. Simultaneous occurrence of stages	73.8	12.3	9.2	4.6
5. Stage(s) omitted or yet to occur	35.4	46.1	10.8	7.7
6. Differences between advising program and model attributed to one or more of the following factors (N=85 responses):	69.2	20.0	1.5	9.2
a. Type of delivery system	38.5	38.5	3.1	20.0
b. Type of institution or structure of college	23.1	46.2	3.1	27.7
c. Scope of the program	32.3	40.0	4.6	23.1
d. Stimulus for change	24.6	49.2	6.2	20.0
e. Other	12.3	27.7	6.2	53.8
7. Recently established, undeveloped program	0.0	90.8	0.0	9.2
8. No similarity between advising program and model	0.0	92.3	0.0	7.7

All respondents in the similar group identify the current position of their program in the four stage sequence, whereas only 81.3 percent of the dissimilar group do so. Nearly half (49.2 percent) of the similar group detect the four stage sequence of development in their advising program, as opposed to less than one third (31.3 percent) of the dissimilar group. The sequence of stages appears to be a major factor for the lack of "fit" in eight of the dissimilar programs. However, in several of the similar programs, a reversal in the order of two stages is all that is needed to amend the sequence, and this variation does not prevent the respondent's from basically agreeing with the model. This illustrates the impact of perceptual differences on responses to item 3.

Both groups perceive the simultaneous occurrence of stages, but there is a striking difference in the percentage of affirmative responses to item 4: 73.8 percent of the similar group versus 43.8 percent of the dissimilar group. Many respondents in the similar group use the term "overlapping" when identifying a combination of two consecutive stages. This implies the existence of a broad transitional phase between stages, instead of simultaneous occur-

Table 6

Response Pattern of Individuals Whose Program Development Is Not Similar to Model (given in percentages based on the 16 negative responses to item 1)

Item	Response			
	Yes	No	Unsure	No response
2. Current stage(s) of advising program:	81.3	12.5	0.0	6.3
One stage (N=6):	37.5			
1	6.3			
2	6.3			
3	6.3			
4	18.8			
Combination or transition between two stages (N=4):	25.0			
1 + 2	0.0			
1 + 3	0.0			
1 + 4	6.3			
2 + 3	12.5			
2 + 4	0.0			
3 + 4	6.3			
Combination of three or four stages (N=3)	18.8			
3. Incorrect order of model stages	56.3	31.3	12.5	0.0
4. Simultaneous occurrence of stages	43.8	25.0	18.8	12.5
5. Stage(s) omitted or yet to occur	43.8	37.5	6.3	12.5
6. Differences between advising program and model attributed to one or more of the following factors (N=29 responses):	87.5	0.0	0.0	12.5
a. Type of delivery system	37.5	25.0	6.3	31.3
b. Type of institution or structure of college	25.0	31.1	6.3	37.5
c. Scope of the program	37.5	31.3	6.3	25.0
d. Stimulus for change	25.0	6.3	6.3	62.5
e. Other	25.0	6.3	6.3	62.5
7. Recently established, undeveloped program	18.8	68.8	0.0	12.5
8. No similarity between advising program and model	37.5	43.8	18.8	0.0

rence. Even if one stage is totally absorbed by another, this phenomenon does not negate the relevance of the model for the similar group, who perceive at least three distinct stages, if not four. One fourth of the dissimilar group believe that three or four stages should be combined, thereby refuting the concept of sequential change.

More respondents in the similar group (46.1 percent) do *not* believe that a stage has been omitted in the evolution of their program, while more respondents in the dissimilar group (43.8 percent) claim that at least one stage has been left out. There is no consensus among the dissimilar group on the omission of a particular stage, but the responses of the similar group focus on Stage 4.

The dissimilar group is more likely to identify reasons for a divergent path in development than respondents in the similar group (87.5 percent and 69.2 percent, respectively). There are noticeable differences in the factors selected by the two groups. The dissimilar group attributes variations first to the nature of the stimulus (56.3 percent) and secondly to the type of delivery system and scope of the program (both 37.5 percent). In contrast, the similar group attributes differences primarily to the type of delivery system and scope of the program, but to a lesser extent than the dissimilar group.

None of the program in the similar group is underdeveloped due to insufficient time (item 7). As might be expected, the three respondents who attribute a lack of development to the recentness of their program are in the dissimilar group.

In response to the last item, 92.3 percent of the similar group reaffirm that the model is basically an accurate reflection of advising program development. The dissimilar group is divided: 37.5 percent deny any similarity between their program and the model, while 43.8 percent concede that some similarity exists and 18.8 percent are unsure. In the final analysis, seven out of sixteen respondents in the dissimilar group perceive some likeness with the model, but the nature of this similarity is not specified.

What factors account for the incompatibility between the sequential change process outlined by the model and the dissimilar programs? Besides the newly established programs mentioned previously, some programs have been cut back by reduced financial support. A nontraditional setting, such as a military academy, may not be conducive to what could be called a "traditional" pattern of advising program development. While these factors are readily apparent from the questionnaires, other factors probably contributed to the differences. The outcomes for the dissimilar group include an absence of development, no identifiable need/response relationship as defined in the model, or an unsystematic, random change process.

The question of reliability should be addressed here. Would another group of advisors and administrators give the same pattern of responses to items on this questionnaire? There are two kinds of problems in obtaining credible results from a survey such as this. One problem relates to perceptual differences. The way an individual perceives an event has considerable impact on his/her response to any question requiring personal judgment. Past experience, values, and position with respect to the advising system all affect the context in which an individual views the changes taking place in the program. An example of perceptual differences is evident from the questionnaire and a copy that were completed by an academic counselor and an associate dean from the same advising program (only the original was used in this survey). Each respondent had a different perspective on the current stage of program development, the order of previous stages, and the reasons for variations in program development. Only additional testing will prove whether or not these particular survey results can be duplicated.

The second hindrance to reliable survey results is a respondent's tendency to mentally reconstruct an advising program to match the model. A model provides a simple structure for organizing and understanding complex events or processes. If a respondent likes the model, helshe may "see" similarities between the advising program and the model where none exist. This problem is inherent in a survey where the model is presented first. To what extent it has biased the responses is unknown. A more objective approach to the study of program development is to gather the facts first and construct the model afterwards.

The Revised Model

While the advising program survey validates the essence of the theoretical model, the survey also reveals weaknesses in its structure. Respondents support the concept of sequential changes, as well as the general direction of program development, but they disagree on the cause and effect relationship, the exact perimeters of the four stages, and the amount of overlap between any two stages. Consequently, the model has been adjusted so that it more accurately reflects the sequence of events leading toward a well-organized and effective advising program. The revised Four Stage Model is shown in Figure 2.

Aspects of the model that have been changed include: (1) the connection between stimulus and response, (2) the components of each stage, (3) the concept of stages as separate entities, and (4) the dimension of time in program development.

Each stimulus given in the model is an element of the ensuing stage only insofar as it triggers an improvement in the program. The stimuli do not define the outcome, which could be *any* of a number of components listed for each stage. While the stimuli reflect needs that are ordinarily addressed through the next stage, progress could be thwarted by various external or internal barriers (e.g., budget cuts, lack of administrative support, heavy advisee load, or insufficient cooperation among subunits of the system). Thus the connection between stimulus and response is not direct and not necessarily ensured. This tenuous relation is depicted by the lack of a connecting arrow in the revised model.

The outcomes, or elements that comprise each stage, have been expanded and, in some instances, rearranged to better reflect the actual order of events in the evolution of the program. Stage 1 represents the beginning of a new advising program, as well as the addition of advisors to an established program. If the delivery of advising is felt to be inadequate and the system does not meet the students' needs, the responsibility for advisement may be reassigned (e.g., from the academic services division to student services), or the institutional division providing advisement may be reorganized (e.g., a semi-autonomous advising center may be formed within a college dean's office). Stage 2 consists of more than new advising strategies to meet the specific needs of target groups. The advising division may be subdivided into units designed to assist special groups, such as a transfer student center, undecided/exploratory student center, or a preprofessional health advising center. Resources may also be directed toward improving freshman or minority student orientation programs in an effort to attract more new students and to increase retention among certain high-risk groups.

The components of Stages 3 and 4 have not changed significantly. While Stage 2 is frequently characterized by expansion of services, Stage 3 typically involves restraint, that is, more efficient use of existing units, personnel, and resources. If an advising coordinator has been designated, two of his/her responsibilitiesare (1) to oversee cooperative endeavors among the various subunits providing advisement and (2) to promote the general practice of developmental advising, which may have begun in certain subunits during Stage 2. An advising handbook is part of this phase of "outreach" and program coordination. In Stage 4 the focus remains on meeting advisors' needs. This is accomplished through training programs, computer-assisted advisement, the implementation of an evaluation system, opportunities for professional development, and recognition/rewards for advisors.

The revised model reflects a change in the concept of "stage." No longer is each stage considered a separate entity with a definite boundary. Stages are now presented as levels of development along a continuum, and the movement from one level to the next occurs without a break in continuity. The model emphasizes the interconnection and linkage of stages by the removal of the gaps that were shown in the original model.

The final and perhaps the most important way in which the model has been revised is the addition of the time dimension to the process of development. The time variable was essentially ignored in the first version. However, the advising program survey reveals the necessity of incorporating this element so that forward movement can be shown while a program is simultaneously in portions of two or even three stages. Portraying the stages so that they literally overlap at any point in time (the horizontal dimension) allows a program to develop (the vertical dimension) yet to retain components from the previous stage. Because of the proven interrelatedness of the stages, it is possible for a newly established, well-planned program to move relatively quickly through the four levels of development, without remaining

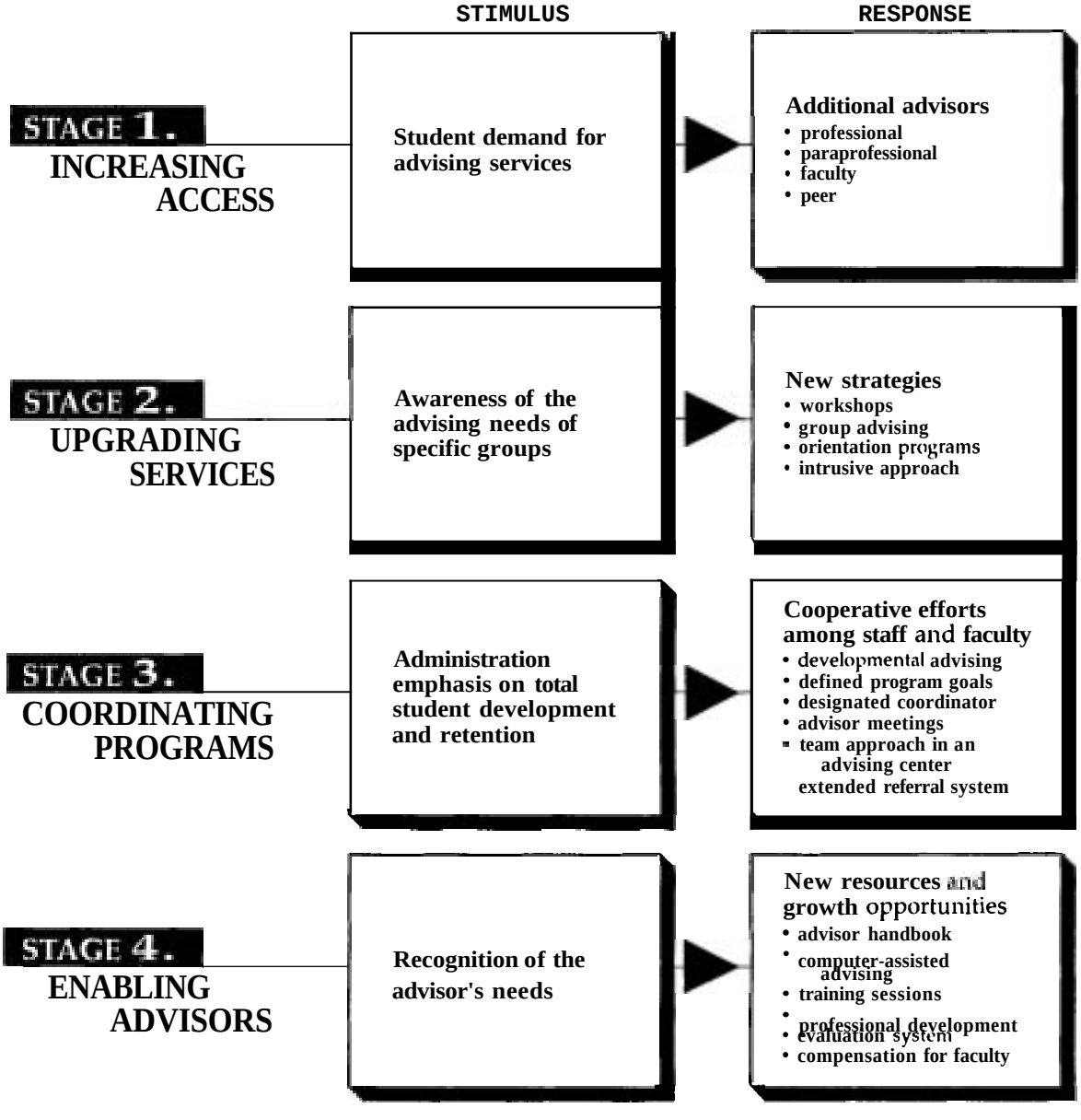

Figure 2. Four Stage Model of Academic Advising Program Development (Revised).

for a period in any one stage. The model also shows that when a program attains Stage 4, the components of Stages 2 and 3 are not eliminated. New advising strategies, along with new ways of coordinating the various parts of the program, are vital aspects of any well-organized, effectively delivered advisement service. From Stage 4, the focus of development shifts back and forth among all stages, depending on the varying needs of students, advisors, administrators, and the institution.

Applications

Through the survey of advising programs, a common path of program development has been verified. Yet every program does not follow the route charted by the Four Stage Model. Several questions remain unanswered after the analysis of data collected from the questionnaires: (1) What are the variables which cause a program to take another direction? (2) What, if any, are the alternate stages of program development? (3) Under what circumstances is one stage of the model omitted? (4) How many components of a stage must be experienced before an individual recognizes that the stage has indeed occurred? (5) Are there additional levels of development beyond Stage 4? Obviously, there is much room for future research in the area of advising program development.

The revised Four Stage Model must be tested to determine whether it has a higher degree of validity than the original version. It is essential that future surveys obtain more information on the programs with which respondents are associated to ascertain the characteristics of programs that do and do not develop according to the model. A questionnaire must be worded in such a way that responses will be more objective (e.g., eliminating the problem wherein one individual's concept of "similarity" is another's idea of "difference"). Questions must be more specific, perhaps focusing on the elements of each stage that have taken place, instead of the stage as a whole. While the findings of this study are significant, the survey represents only a beginning in the investigation of advising program development.

The Four Stage Model can contribute to the advisor's understanding of the way in which programs typically evolve. To a certain extent, it functions as a road map, providing information on location, distance, and direction. Advisors and program coordinators can determine their current position with respect to the prevalent stages of development and can get a sense of the road which lies ahead. The model is descriptive rather than a prescription for development; nonetheless, it suggests an orderly approach for administrators unaware of the potential for program improvement. As an aid for planning, the model indicates the nature and scope of future program needs, facilitating decision making on use of space, advising resources, personnel, and allocation of funds. Coordinators in the process of organizing a cohesive program can select those components of the remaining stages which best meet their needs and goals. The model provides an overall framework for development but allows for variations in accord with the unique circumstances of the particular advising program and institution.

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