

Communication Apprehension in Pharmacy Students: A National Study¹

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In 1979 Baldwin *et al.* suggested a phenomenon known as communication apprehension (CA) as a contributing factor predisposing pharmacists to avoid communication. Communication apprehension is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons." The original study with pharmacy students reported that the rate of high communication apprehension in pharmacy students was 20 percent, similar to the distribution of the trait in the general population, but later studies reported a high CA rate of 25 percent among pharmacy students. Bulk mailings were made to participating pharmacy schools nationally. Students were asked to complete a questionnaire which included the Personal Report of Communication Apprehension, three items on attitude towards communication, and three questions on shyness. Shyness is a broader construct than CA and could be caused by a desire for solitude, CA, and/or a skills deficiency. The final report is based on responses from 10,004 pharmacy students from 51 (71.8 percent) schools of pharmacy. Approximately 1 in 5 pharmacy students is highly communication apprehensive, similar to the general population percentage. Variability exists on a school-by-school basis. Over a third (34.4 percent) of the pharmacy students classified themselves as shy, compared to a population norm of 35 percent. Sixty-three percent of the high CA students were shy, and fourteen percent of all students were both high CA and shy. Approximately 5 percent of the population were high CA, shy, and did not consider it a problem. These students apparently simply avoid communication and its resultant anxiety. The more anxiety a communication context produces, the less importance a student attaches to that type of communication. An attempt is made to match the perceived importance of a communication context with their own cognitions. It appears that at least one in five, and possibly as high as one in three, pharmacy students will tend to avoid communication. Systematic desensitization is the recommended treatment for the high CA student.

A communications gap exists between pharmacists and patients. Only a limited amount of pharmacist-patient communication takes place, although a need for, and desirability of such communication is stressed in professional pharmacy journals. Colleges of pharmacy have reacted to this perceived deficiency by instituting coursework in communication skills and by stressing the health care and professional benefits of communication. The first approach assumes deficient pharmacist communication skills. The second approach assumes knowledge and attitude change will lead to a behavioral change.

In 1979 Baldwin *et al.* suggested communication apprehension (CA) as a contributing factor predisposing pharmacists to

avoid patient communication(1). Projecting from previous research, these authors suggested that "a pharmacist with high CA would not only be unwilling to perform a very significant portion of her or his professional role, but that even when attempts are made to fulfill that role, the probability of success is very low."

Four constructs internal to an individual, all of which result in the avoidance of communication, are described in communication theory: (i) communication apprehension; (ii) reticence; (iii) unwillingness to communicate; and (iv) shyness. Unwillingness to communicate is viewed as a global predisposition, a general avoidance of communication, no matter what the reason for that avoidance, which could include communication apprehension, reticence, and/or shyness(2,3). Reticence is assumed to be primarily a problem of deficient communication skills(2,4). Communication apprehension, as con-

¹ Supported by a Special Projects grant from the AACP Council of Sections through the American Foundation for Pharmaceutical Education.

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ceptualized by McCroskey(5), is defined as "an individual's level of fear or anxiety associated with either real or anticipated communication with another person or persons." Shyness is a broader construct than either reticence or CA, spanning "a wide behavioral-emotional continuum"(6). At one end of this continuum are shy persons who prefer solitude. "Such persons may have a personality problem or no problem at all(2)." Shyness is seen as the tendency to talk and engage in communication with others less than the norm which may result from high CA, lack of verbal skills, or other causal factors(7). Although causal differences between the constructs are posited, distinctions are difficult to establish empirically since the constructs overlap and result in the same behavior, *i.e.*, avoidance of communication(2).

Baldwin, *et al.* reported that the "stable, enduring" nature of CA(1), which indicated that the high CA pharmacy student upon graduation was likely to conform to the traditional stereotype of the pharmacist hiding from the public in the prescription department(8,9). This stereotype would suggest that individuals with high CA might be attracted to the pharmacy profession(1,10). The original West Virginia data reported that the number of high communicative apprehensive pharmacy students was approximately 20 percent, similar to the distribution of the trait in the adult population. Unpublished data with subsequent classes at West Virginia and in other pharmacy schools suggested a higher rate. Later studies reported 25 percent of the pharmacy students were severely communicative apprehensive(11,12). Speculation as to the reasons for this high proportion centered on admissions policies, specifically pre-admission interviews and the declining applicant pool which has led to a high accepted/applied ratio.

STUDY OBJECTIVES

This study was undertaken with four specific objectives:

1. To measure communication apprehension in pharmacy students on a national basis;
2. To determine the extent of the problem in our pharmacy students;
3. To analyze the relationship between curricular and admissions structures and the extent of communication apprehension; and
4. To suggest methods to alleviate the problem, if a problem exists.

METHODOLOGY

During August and September, 1981 letters were mailed to a designated faculty member at each of the 71 schools of pharmacy in the continental United States, soliciting his or her assistance in conducting the study. This letter briefly described the study, indicated AACP funding, and the mode of questionnaire administration. If no response was received from the designated individual within a month, attempts were made to contact her or him by telephone.

During the fall of 1981, bulk mailings were made to 63 schools of pharmacy which had agreed to participate. Each mailing consisted of a cover letter, and coordinator questionnaire and sufficient student questionnaires for the school's enrollment.

The cover letter described the student questionnaire, gave instructions for its administration (classroom distribution, voluntary participation, assurance of anonymity, and estimated time to complete), and asked the faculty member to complete the coordinator questionnaire. The coordinator questionnaire asked questions regarding the existence of communication

courses in the curriculum, types of admissions criteria employed, curricular configuration, and the number of students who applied, were accepted, and were presently enrolled in each current class. The student questionnaire (Appendix A) contained demographic items (age, sex, race, year of graduation, degree expected), the 24 item PRCA (Personal Report of Communication Apprehension), three items on attitude towards communication, and three questions concerning shyness.

The PRCA is the most widely used measure of CA and has been demonstrated to be highly reliable and valid(1,13,14). Although it is a self-report measure of cognition not a measure of actual behavior, there is a high degree of association between PRCA score and communication behavior.

Shyness is also measured by self-report, with individuals dichotomized as shy or not-shy(15). In a validation study, individuals who called themselves shy were labeled as shy by trained observers 67 percent of the time(16). Self-report of shyness appears to be effective and appropriate "since it does not exclude those who feel they have a problem but do not exhibit either inept behavior or physical signs of tension"(2).

The present study used Zimbardo's shyness identification procedure(15), dichotomous measures which allowed students to be classified into four shyness levels:

Shyness level 1: Student is not shy now, and never was.

Shyness level 2: Student is not shy now, but once was.

Shyness level 3: Student is shy now, but does not consider it a problem.

Shyness level 4: Student is shy now, and considers it a problem.

Three items on the survey instrument examined the perceived importance of communication. Students were asked to rate interpersonal, group, and public speaking forms of communication as: (i) not important, (ii) moderately important, and (iii) very important to the pharmacy profession. Students were also asked to indicate whether they had taken or were currently taking a public speaking course or oral communication course.

Completed questionnaires were returned in bulk by participating schools. Telephone follow-up was attempted with those faculty members from whom questionnaires had not been received as of January, 1982. Completed questionnaires were computer analyzed as they were received.

RESULTS AND DISCUSSION

Description of Final Sample. Sixty-three schools of pharmacy agreed to participate in the study, and were mailed a total of 21,640 student questionnaires. Of the eight schools not sent questionnaires, four coordinators could not be identified by telephone follow-up, and four declined to participate, citing school policies or administrative constraints.

Fifty-two schools submitted 10,233 usable completed questionnaires, of which 10,004 from 51 schools were analyzed (one school's 229 completed questionnaires were received in late June, after computer analysis for this report was completed). All statistics in the tables are adjusted for missing data. Of the other 11 schools not represented, one school declined to participate because of an administrative barrier, one set was apparently lost in the return mail, and the remainder were either not reached by telephone follow-up and/or did not follow through on the promised completion.

Published enrollment figures(17) indicated 24,669 students enrolled in pharmacy schools seeking their first degree in pharmacy, and 464 students possessing a BS in Pharmacy seeking a PharmD degree. This would indicate that our final

analyzed sample represents 11.8 percent of pharmacy schools and approximately 40 percent of the pharmacy student population.

This percentage may be an underestimate of the number of potential student respondents. Typically, a large percentage of students in their final professional year are involved in externships or clerkships, and thus not accessible for questionnaire administration through regular classroom procedures.

Nonresponse Bias. A number of techniques are used to measure the possibility of nonresponse errors(18-20). The most popular method is based upon demographic characteristics of respondents and nonrespondents. However, current demographic data on the nation's pharmacy students simply are not available. The most current data are for 1980(17). Even over the past year, the male-female ratio has changed considerably. Therefore, demographic methods are not usable. Since the survey instrument was made available to literally every pharmacy student, not simply a random sample, one is fairly safe in assuming that, unless regions of the country are not represented, the respondents are representative of the population. The final data include respondents from all geographical regions.

To determine if nonresponse error is a problem, a third methodological approach is possible. "A . . . way by which the adjustment is sometimes made involves keeping track of those responding to the initial contact, the first follow-up, the second follow-up, and so on. The mean of a variable (or variables, or other appropriate statistics) is then calculated, and each subgroup is compared to determine if any statistically significant differences emerge as a function of the difficulty experienced in making contact. If not, the variable mean from the respondents is assumed equal to the mean for those responding. This inferential method is particularly valuable in mail surveys, where it is an easy task to identify those responding to the first mailing. . . and so on"(18).

After 5,000 responses were received, telephone follow-up to nonresponding schools began. Respondents were divided into prefollow-up and postfollow-up groups. Table I summarizes the statistical comparisons between the groups. No statistical differences were found. Although this approach to test for nonresponse error is not absolutely conclusive, it may be inferred that the characteristics of nonrespondents appear to be reasonably similar to those of the respondents.

Because of the manner in which the survey instrument was administered, nonresponse was more a function of the school and coordinator than of pharmacy students. Finally, it should be reiterated that this was a population survey.

Communication Apprehension. For pharmacy students the PRCA mean score and standard deviation was 65.15 and 16.28, respectively ($N=9,830$). These numbers compare favorably to general population figures ($N \geq 40,000$) of 65.6 and 14.1. Pharmacy students appear to be "normal" relative to the popu-

TABLE I. Several characteristics of respondents over time.

Approximate N	PRCA Score		Sex ^a	Mean Age	Shy ^b
	Mean	S.D.			
5,000	65.37	16.08	1.51	22.29	1.66
8,500	65.06	16.24	1.50	22.31	1.66
10,000	65.15	16.29	1.50	22.29	1.66

^a1 = Male; 2 = Female
^b1 = Yes; 2 = No

lation in general in terms of communication apprehension. However, there is greater variability in the pharmacy student data.

Mean PRCA scores from the participating schools ranged from 57.24 to 69.14 (Table II). One of five individuals (20 percent) in the general population is highly communication apprehensive (PRCA score ≥ 79)(14). The present data indicate 19.5 percent of the pharmacy students studied would be classified as high communication apprehensives (PRCA score ≥ 79).

TABLE II. Summary data on communication apprehension and shyness by school

School	Mean PRCA score	Proportion of high CA students	Proportion of shy students	Proportion of students in shy level 4
1	64.70	20.53	39.33	17.45
2	67.49	21.21	39.90	19.29
3	66.46	22.39	32.83	16.56
4	64.45	19.27	32.81	17.62
5	66.87	24.09	38.35	21.81
6	66.55	22.84	35.43	17.60
7	62.63	10.98	28.66	12.43
8	64.34	15.32	36.80	18.40
9	65.52	18.85	38.56	16.38
10	64.46	18.87	34.11	16.90
11	64.76	18.92	28.34	12.90
12	63.44	19.26	32.09	15.04
13	63.02	15.47	29.44	17.22
14	64.02	16.67	27.71	24.39
15	57.24	4.08	36.00	20.41
16	63.37	13.30	31.75	11.23
17	67.47	24.52	31.51	18.41
18	67.20	20.59	40.29	20.69
19	65.17	18.58	35.97	11.79
20	67.51	21.31	36.07	21.31
21	66.00	20.92	38.31	21.57
22	66.81	22.22	41.73	21.77
23	66.92	21.13	34.25	17.24
24	64.50	14.60	36.03	14.40
25	63.29	15.58	28.19	16.44
26	68.64	28.15	41.85	22.18
27	65.48	19.70	32.09	15.04
28	63.92	14.94	31.21	18.13
29	66.96	22.49	36.17	17.74
30	61.94	13.37	29.90	18.72
31	64.54	14.82	41.46	13.75
32	62.30	14.40	30.20	13.83
33	65.62	18.37	33.00	18.00
34	67.04	25.83	38.81	22.26
35	63.87	20.57	30.93	18.28
36	66.52	22.36	36.67	17.80
37	63.68	15.95	31.52	18.90
38	61.29	12.35	32.86	18.11
39	62.35	20.43	40.24	22.22
40	64.41	17.47	28.76	19.11
41	63.61	13.33	33.89	22.47
42	69.10	28.91	37.84	24.83
43	63.52	20.00	38.10	23.33
44	64.95	18.75	26.98	12.90
45	69.14	25.35	38.03	21.13
46	69.01	27.50	36.98	15.13
47	67.88	26.04	43.62	25.53
48	63.88	17.53	35.14	21.32
49	65.08	21.21	36.03	19.40
50	66.23	20.32	33.98	22.62
51	67.80	23.53	39.22	16.33
Average	65.15	19.50	34.40	18.31

Although this figure appears normal, the proportion of high CA students at participating schools ranged from 4 percent to 29 percent.

Differences in PRCA scores were examined in terms of sex, race, and rural-urban background (Tables III, IV AND V). Although there are statistically significant differences for all three variables, caution in interpretation of the results is necessary. It is quite easy to demonstrate statistically significant differences with such large sample sizes. The important question is: are these differences "clinically" or pragmatically useful? In regard to sex, both male and female respondent PRCA scores are certainly in the normal range even though males have significantly lower PRCA scores than females.

TABLE III. PRCA scores of male and female respondents

Sex	N	PRCA score	Student t
Male	4894	63.90	7.70 ^a
Female	4910	66.42	

^aP<0.0001

TABLE IV. Race/ethnic group PRCA scores of respondents

Race/ethnic group	N	PRCA score	F
White	8437	65.02	28.13 ^a
Black	393	59.87	
Oriental	467	71.18	
Native American	53	67.32	
Hispanic	189	67.62	

^aP<0.0001

TABLE V. Town size of respondents and PRCA scores

Town size	N	PRCA score	F
Farm	642	67.28	6.88 ^a
Under 5,000	1725	65.66	
5,000—50,000	3631	65.42	
Large city or suburb	3600	64.43	

^aP<0.0002

TABLE VI. Shyness level and mean PRCA scores

Shyness level	N	PRCA score	F
1	1879	55.45	1230.60 ^a
2	4436	60.92	
3	1516	72.24	
4	1756	79.81	

^aP<0.0001

Analysis of variance (ANOVA) showed statistically significant differences in race/ethnic group. Blacks were the lowest apprehensives; orientals were the highest. It is possible that blacks in pharmacy schools may come from middle class or upper middle class backgrounds, and are not necessarily rep-

resentative or typical of black students in general. Since oriental cultures do not value "talk" as much as does American culture, it is not surprising that orientals had the highest PRCA mean score as a group. In the home, the oriental student is not encouraged to be highly verbal and vocal, yet outside the home these behaviors are valued. Communication apprehension may result from conflicting cultural values.

Although ANOVA demonstrated statistically significant differences in PRCA scores based on town size, the mean PRCA scores are all within two units of the general population mean. For all practical purposes, there are no real differences in these scores. The statistical significance is more an artifact of the large sample size.

Communication Apprehension and Shyness. Over a third (34.4 percent) of the respondents said they were currently shy (Table II). This compares to a general population norm of 35-40 percent. Forty-six percent of those who considered themselves *shy now* said it wasn't a problem. This result is particularly disturbing since these people will not actively engage in communication with others. They seek to enter a profession which professes high value given to a patient counseling role, yet these individuals don't perceive their shyness as a problem.

Table VI illustrates the strong relationship between shyness level and PRCA score. Those students in Shyness level 4 (currently *shy, problem*) have PRCA scores (on the average) that classify them as high apprehensives. Students in Shyness level 3 (currently *shy, but not a problem*) have CA scores that are considerably higher than general population norms.

Table VII examines the relationship between communication apprehension and shyness in a somewhat different manner. Three levels of communication apprehension were cross-tabulated with the four shyness levels. Seventy percent of the high CA students were shy. A total of 1350 students (14 percent) were both highly communication apprehensive and shy. However, 442 of these students did not consider their shyness to be a problem. This finding is especially curious since their PRCA score classifies them as individuals who are highly anxious about communicating. It is quite possible that these individuals don't consider their shyness (or CA) a problem since they simply avoid communication situations and hence the resultant anxiety.

The Spearman correlation coefficient (0.458) for the data in Table VII indicates a positive relationship between shyness and communication apprehension. Since shyness may result from personal preference, anxiety and/or a skills problem, all of the variability in the data will not be explained. To reiterate, shyness and communication apprehension are two different constructs, even though the resultant behavioral manifestations (avoidance of communication situations) may be the same(2).

Communication Apprehension and Perceived Importance of Communication. Tables VIII, IX and X present the relationship between PRCA scores and perceived importance of various types of communication. A consistent observation is that those individuals who valued each type of oral communication as "very important" had the lowest mean PRCA scores. The more threatening or anxiety producing the communication situation (interpersonal is less threatening than group which is less threatening than public speaking), the lower the PRCA score for the "very important" category. With the exception of one category of interpersonal communication, the lower the importance assigned, the higher the PRCA scores. The interpretation is that the higher the amount of anxiety produced by a communication context for an individual, the less that type of

TABLE VII. Communication apprehension level and shyness level

Frequency Percent Row Percent Column Percent	Shyness level				Total
	Not shy now, never was	Not shy now used to be shy	Shy now, not a problem	Shy now, is a problem	
	1	2	3	4	
1 PRCA < 52	739 7.71 38.25 39.33	1075 11.21 55.64 24.23	83 0.87 4.30 5.47	35 0.37 1.81 1.99	1932 20.15
2 PRCA < 51 & PRCA < 80	1046 10.91 18.05 55.67	2944 30.70 50.79 66.37	993 10.36 17.13 65.42	813 8.48 14.03 46.30	5796 60.44
3 PRCA < 79	94 0.98 5.05 5.00	417 4.35 22.41 9.40	442 4.61 23.75 29.12	908 9.47 48.79 51.71	1861 19.41
Total	1879 19.60	4436 46.26	1518 15.83	1756 18.31	9589 ^a 100.00

^aadjusted for missing data.
Spearman Correlation = 0.458.

TABLE VIII. Importance of interpersonal communication and communication apprehension

Importance	N	Mean PRCA score	F
Not important	152	67.58	25.45 ^a
Moderately important	715	69.09	
Very important	8742	67.74	

*P < 0.0001

TABLE IX. Importance of group communication and communication apprehension

Importance	N	Mean PRCA score	F
Not important	544	73.81	291.70 ^a
Moderately important	5667	67.18	
Very important	3387	60.22	

*P < 0.0001

TABLE X. Importance of public speaking and communication apprehension

Importance	N	Mean PRCA score	F
Not important	2043	71.54	322.94 ^a
Moderately important	5277	65.10	
Very important	2275	59.31	

*P < 0.0001

communication will be valued. Both high apprehensives and shy people will value all communication situations less than low apprehensives because of that anxiety. The result makes it easier to understand why over 40 percent of those who consider themselves shy don't consider it a problem. Psychologically, their values and behavior are congruent. Since they don't heavily value communication in various contexts, they don't

engage in those contexts (or vice versa). Therefore, their shyness does not present a problem for them.

Communication Apprehension, Communication Courses, Curricular Structure, and Admissions Procedures. Table XI relates communication apprehension to communication coursework. Students who had taken or were currently taking communication courses (oral or public speaking) had significantly lower communication apprehension levels than those who had not. Either these courses lowered the student's CA level or students with higher CA levels don't seek out these courses. The latter explanation seems more plausible.

Table XII examines the relationship between dominant program arrangement and communication apprehension. The degree of communication apprehension was not related to program configuration, although PharmD program students had lower than average PRCA scores. Also, the self-reported PharmD degree seeking students had lower than average PRCA scores (Table XIII). This was especially true of students seeking postgraduate PharmD degrees. It is reasonable to assume that students entering BS degree programs in pharmacy view the profession much as does the lay public. Indeed, some students

TABLE XI. Communication courses and communication apprehension

Course	N	Mean PRCA score	Student t
Public Speaking			
Yes	3236	62.08	13.22 ^a
No	6587	66.66	
Oral Communication			
Yes	3017	62.66	10.12 ^a
No	6803	66.25	

*P < 0.0001

TABLE XII. Program arrangement and communication apprehension

Program	N	Mean PRCA score	F
1-4:BS degree	2058	65.19	2.14 ^a
0-5: BS degree	1243	65.30	
2-3: BS degree	4951	65.39	
PharmD (first degree)	551	63.55	

^aP<0.092.

may be initially attracted to pharmacy because of a perceived lack of communication. Students pursuing a postgraduate PharmD program could be expected to be more knowledgeable about curriculum components and practice expectations involving communications such as patient counseling, in-service education, hospital rounds with physicians, etc. It is logical that these communication expectations might screen out high CA people and that consequently only those students who had lower levels of anxiety about communicating would be attracted to the postgraduate PharmD.

The coordinator questionnaire sought information on the degree to which various factors were weighted in the admissions decision. Unfortunately, few coordinators were able to supply such information in a quantitative form. For purposes of this research, therefore, this analysis has been eliminated. Any conclusions would have been tenuous, at best due to insufficient data.

CONCLUSIONS

Approximately 1 in 5 pharmacy students (similar to the general population) has high communication apprehension. There is wide variability within and between schools. The proportion of high CA individuals in different schools ranged from 4 percent to nearly 30 percent. These people are likely to become high CA pharmacists who will not actively engage in communication with patients or may be ineffective if they do so.

In addition, over one-third of pharmacy students consider themselves shy. The proportion varies from 25 percent to 42 percent at different schools. Approximately 40 percent of these shy individuals don't consider their shyness a problem even though many of them are highly communication apprehensive. These shy individuals are also likely to avoid communication situations much of the time.

The more anxiety a communication context causes, the less importance a student attaches to that type of communication. It appears an attempt is being made to make the importance of oral communication consistent with the person's cognitions; in effect, to rationalize the avoidance of communication.

Interviews as a part of the admissions process may be partially successful in screening out the extremely high CA applicants, but further investigation is necessary on this aspect.

At least one out of five pharmacy students, and possibly as high as one in three, will avoid communication as far as possible.

SUGGESTED APPROACHES TO SOLUTION OF THE PROBLEM

Three treatment modes for those who avoid communication have been suggested in the literature. "When the nature of the problem is assumed to stem from inadequate communication skills, an intensive skills training program is advocated. Second, when the problem is viewed as anxiety based, relaxation

TABLE XIII. Anticipated degree and communication apprehension

Degree	N	Mean PRCA	F
BS Pharmacy	8723	65.29	4.90 ^a
PharmD	643	63.80	
PharmD (postgraduate)	132	61.12	

^aP<0.0023.

therapy is the proposed solution. Finally, cognition therapy is advocated for those whose problem is presumed to stem from inappropriate cognition about self and communication"(2).

For the one in five pharmacy students who avoid communication, the preferred treatment is systematic desensitization(21). Systematic desensitization is a behavior modification technique involving progressive relaxation juxtaposed with hierarchical anxiety-provoking stimuli. The individual is trained to relax in increasingly difficult situations.

A word of caution. For those who have high CA, systematic desensitization should be provided, and it should be provided before any other component for maximum success. For students without high CA, this component is not relevant.

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APPENDIX A: PHARMACY STUDENT QUESTIONNAIRE

This is an anonymous questionnaire. Please do *not* indicate your name on this form. Please complete all the questions.

- 1-2. Your age _____
3. Your sex (circle one) (1) Male, (2) Female
4. Race/Ethnic group (circle one) (1) White (2) Black (3) Oriental (4) Native American (5) Hispanic (6) Other
5. For most of my life I have lived (circle one):
- (1) On a farm
- (2) In a small town (under 5,000 population)
- (3) In a medium sized town (5,000-50,000 population)
- (4) In a urban area (large city or suburb of a large city)
- (5) Other (please specify) _____

Directions: This instrument is composed of 24 statements concerning your feelings about communication with other people. Please indicate in the space provided the degree to which each statement applies to you by marking whether you (1) Strongly Agree, (2) Agree, (3) Are Undecided, (4) Disagree, or (5) Strongly Disagree with each statement. There are no right or wrong answers. Many of the statements are similar to other statements. Do not be concerned about this. Work quickly, just record your first impression.

- _____ 6. I dislike participating in group discussions.
- _____ 7. Generally, I am comfortable while participating in group discussions.
- _____ 8. I am tense and nervous while participating in group discussions.
- _____ 9. I like to get involved in group discussions.
- _____ 10. Engaging in a group discussion with new people makes me tense and nervous.
- _____ 11. I am calm and relaxed while participating in group discussions.
- _____ 12. Generally, I am nervous when I have to participate in a meeting.
- _____ 13. Usually I am calm and relaxed while participating in meetings.
- _____ 14. I am very calm and relaxed when I am called upon to express an opinion at a meeting.
- _____ 15. I am afraid to express myself at meetings.
- _____ 16. Communicating at meetings usually makes me uncomfortable.
- _____ 17. I am very relaxed when answering questions at a meeting.
- _____ 18. While participating in a conversation with a new acquaintance, I feel very nervous.
- _____ 19. I have no fear of speaking up in conversations.
- _____ 20. Ordinarily I am very tense and nervous in conversations.
- _____ 21. Ordinarily I am very calm and relaxed in conversations.
- _____ 22. While conversing with a new acquaintance, I feel very relaxed.
- _____ 23. I'm afraid to speak up in conversations.
- _____ 24. I have no fear of giving a speech.
- _____ 25. Certain parts of my body feel very tense and rigid while giving a speech.
- _____ 26. I feel relaxed while giving a speech.
- _____ 27. My thoughts become confused and jumbled when I am giving a speech.
- _____ 28. I face the prospect of giving a speech with confidence.
- _____ 29. While giving a speech I get so nervous, I forget facts I really know.

30. Do you presently consider yourself to be a shy person?

- (1) _____ Yes (2) _____ No

31. If you answered "no" to number 30, was there ever a period in your life during which you considered yourself to be a shy person?

- (1) _____ Yes (2) _____ No

32. If you answered "yes" to number 30, do you consider your shyness to be a problem? In other words, would you rather not be shy?
(1) _____ Yes (2) _____ No

Immediate behaviors are those communication behaviors that reduce distance between people. Immediate behaviors may actually decrease the physical distance, or they may decrease the psychological distance. The more immediate a person is the more likely he/she is to communicate at close distances. smile, engage in eye contact, use direct body orientations, use overall body movement and gestures, touch others, relax, and be vocally expressive. In other words, we might say that an immediate person is perceived as friendly and warm.

On the scales below please circle the *number for each pair of adjectives* which best describes your reaction to the following statement:

I am a very immediate person when I am communicating with others.

33. Agree 1 2 3 4 5 6 7 Disagree
34. True 1 2 3 4 5 6 7 False
35. Correct 1 2 3 4 5 6 7 Incorrect
36. Right 1 2 3 4 5 6 7 Wrong
37. Yes 1 2 3 4 5 6 7 No

How important are the following forms of communication in your profession? Please rate using the following: (1) Not important; (2) Moderately important; (3) Very Important.

38. _____ One-to-one interpersonal communication.
39. _____ Group communication.
40. _____ Public speaking.

Please check the course(s) below which you have taken or are currently taking:

41. _____ Public speaking
42. _____ Oral communication

43-44. What year do you anticipate graduation (circle one) 81 82 83 84 85 86 87.

45. What degree will you receive? (circle one)

- (1) BS Pharmacy (2) PharmD (1st degree) (3) PharmD (Postgraduate)
(4) Other _____

A Planned Program for Evaluation and Development of Clinical Pharmacy Faculty

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Institutions facing severe financial retrenchment and demands for accountability and cost effectiveness are concerned with faculty evaluation for promotion and tenure. Faculty evaluation typically falls short as a demonstrated accomplishment, but consistently heads the list of intended purposes at most colleges and universities. The intent is to provide faculty members with information regarding their performance in the areas of: (i) teaching; (ii) service to the institution, community and patient; and (iii) research and scholarly publication. Hopefully, faculty will be motivated and capable of improvement when feedback is received. Occasionally, institutions provide programs and resources to help faculty members improve. This paper describes evaluation and development programs for clinical faculty in the Department of Pharmacy Practice, College of Pharmacy, University of Arizona.

INTRODUCTION

Faculty evaluation occurs in order to make decisions regarding promotion and/or reward and to improve performance—two purposes which should not be mutually exclusive(1). The intent of faculty evaluation is to provide faculty members with information regarding their performance in the areas of: (i) teaching; (ii) service to the institution, community, and patient; and (iii) research and scholarly publication. Hopefully, faculty will be

motivated and capable of improvement when feedback is received.

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² The authors would like to acknowledge the assistance of Robert Dorr and Keith E. Likes for submitting original drafts of the research and service portions of the Guidelines for Promotion and Continuing Appointment document.