

## RESEARCH ARTICLES

### Student Attitudes, Values, and Beliefs Regarding Professionalism

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**Objectives.** To determine student agreement with objectives in our college professionalism curricular competency statement and to identify student perceptions about professional behavior within the college of pharmacy.

**Methods.** Two hundred forty students (60 per curricular year) were randomly selected to participate in a cross-sectional survey. A 5-point Likert scale (strongly disagree to strongly agree) was used to rate 42 survey items.

**Results.** Survey response rates by professional year (1 to 4) were 43 (71.1%), 47 (78.3%), 47 (78.3%), and 40 (66.7%). Agreement rates for survey items related to the college professional competency objectives varied from 79% to 100%. Third-year students had lower agreement rates than first-year students for 5 of 8 statements related to professionalism within the College.

**Conclusion.** Students agreed that objectives listed in the college professional curricular competency reflected behaviors consistent with pharmacy professionals. Students agreed that the College should and did teach professionalism, and that the words and actions of faculty members' and themselves conveyed professionalism. In comparison, students, particularly those in their third year, believed that their classmates' words and actions less often conveyed professionalism.

**Keywords:** professionalism, pharmacy students, attitude

## INTRODUCTION

An increased interest in professionalism has emerged among healthcare disciplines in recent years.<sup>1-5</sup> Within the profession of pharmacy, this interest has led to the development of position papers such as the White Paper on Pharmacy Student Professionalism,<sup>1</sup> the American Association of Colleges of Pharmacy (AACP) Excellence Paper on Student Professionalism,<sup>2</sup> and the Pharmacy Professionalism Toolkit for Students and Faculty.<sup>3</sup> Many colleges and schools of pharmacy have attempted to emphasize the importance of student professional development by establishing ceremonies and policies that place value on professional behavior and appearance such as white coat ceremonies, pinning ceremonies and codes of professional conduct.

Within the AACP Excellence Paper on Student Professionalism, Hammer and colleagues developed a model for student professional development in the 21st Century that identified the following critical influences: school culture and environment, faculty and preceptor instruc-

tion and guidance, professional competence, mentoring and modeling, extracurricular activities, communication, empathy, and personal values.<sup>2</sup>

During the 2003 AACP Institute Meeting, an ad hoc faculty committee from The University of Georgia College of Pharmacy (UGA COP) identified terminal objectives and enabling objectives for a new curricular competency on professionalism that incorporated many of the influences identified by Hammer and colleagues. The process for developing the framework of the objectives consisted of members identifying attributes of a pharmacy professional and reflecting on past instances of unprofessional student behavior within and outside the classroom setting. These attributes were grouped in similar categories and formatted into terminal objectives and enabling objectives using Simpson's (psychomotor) and Bloom's (cognitive) taxonomies in a manner consistent with our existing curricular statements. Subsequent meetings of the ad hoc committee refined the document and added operational definitions for all objectives. After receiving faculty input, the professionalism competency was amended and adopted by faculty vote in the fall of 2003. It became a recognized part of the curriculum in fall 2004.<sup>5</sup> (Appendix 1) Following adoption of the professionalism competency, a volunteer student/faculty

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committee developed a professionalism policy during the 2003-2004 academic year. This policy, designed to evaluate, track, and remediate unprofessional student behaviors and attitudes, was accepted by faculty vote in spring 2004 (Appendix 2).<sup>5</sup>

With this being accomplished, the UGA COP now has a document stating the professional attitudes, values, and beliefs that the faculty feels best represent those consistent with being a pharmacist. However, it was not known whether the students also shared the same attitudes, values, and beliefs about professionalism. In order to examine this issue, we conducted a student survey to determine their level of agreement with the established terminal objectives and enabling objectives and to identify whether students felt the ideals of professionalism were conveyed by college faculty and students. It was felt that this research would be important to identify areas in which faculty and student attitudes, values, and beliefs on professionalism differed and to determine whether our school culture fostered student professionalization.

## **METHODS**

Two hundred forty students (60 per curricular year) were randomly selected to participate in this cross sectional survey between weeks 5 and 10 of the fall 2003 semester. After receiving approval from The University of Georgia institutional review board, an e-mail that outlined the basis of the research proposal and invited their voluntary participation in the survey process was sent to all selected students. *Web-CT*, an Internet-based system, was used to post the survey instrument and collect results in an anonymous fashion. Midway during the 5-week data collection process, a second e-mail was sent to all students reminding them of the ongoing survey and once again requesting their participation in the survey process.

Within the survey instrument, students were asked to rate 2 series of statements regarding professionalism. A 5-point Likert scale, ranging from "strongly disagree" to "strongly agree" was used in both instances. The first series consisted of 34 statements abstracted from the terminal objectives and enabling objectives of the professionalism competency (Table 1). For each of these statements, students were asked to rate the degree that the statement described attributes of a pharmacy professional. In the second series, students were asked to rate 8 statements designed to identify the degree to which professionalism exists within the UGA COP. Students rated whether the UGA COP should teach and does teach professionalism and the degree to which the words and actions of their peers, the faculty members, and themselves convey the importance of professionalism.

Agreement rate, which was defined as the percentage of subjects responding either agree or strongly agree was used to categorize data. Survey data were analyzed using the Kruskal-Wallis test for differences among multiple groups of non-parametric data. Post hoc analyses were performed using serial Mann Whitney U tests to determine which groups differed significantly on individual items. The a-priori  $p$  value was established at  $p < 0.05$ . Statistical analysis performed took into account differences in the quantity of agree and strongly agree responses when calculating significance.

## **RESULTS**

Of the 240 students selected to participate, 177 completed the survey (74%). Response rates by cohort were 43 first-year students (71.7%), 47 second-year students (78.3%), 47 third-year students (78.3%), and 40 fourth-year students (66.7%). Table 2 outlines the demographics of the study sample. No differences were detected in gender, race, or marital status of students in the 4 groups. The gender and race demographics of students responding reflected the overall demographics of the UGA COP student body. With regard to student age, differences were noted only in the 26-30 years age bracket, in which the second-, third-, and fourth-year classes had significantly higher percentages of respondents in this age category than the first-year class ( $p = 0.003$ ).

### **Professional Attributes of a Pharmacist**

There were high rates of agreement (range 79%-100%) among all curricular cohorts for survey items relating to the curricular professionalism objectives (Table 3). Cross-class statistical differences were noted in only 4 of the 34 statements. These items were: complies with regulations regarding confidentiality of information, formulates constructive evaluations of others' performance, displays a positive attitude when receiving constructive criticism, and identifies instances when one's values and motivation are in conflict with those of the patient.

When examining results based upon gender, differences were noted in 18 of the 34 statements (Table 4). Males had higher agreement response rates than females for only 3 statements: communicates effectively with faculty, staff, peers, patients, and other health care professionals; demonstrates regard for persons in authority in classroom, laboratory and clinical settings; and performs pharmaceutical care responsibilities in a timely manner. Females responded higher than males in 4 statements relating to time management, 2 statements relating to professional attire and grooming, and 2 statements relating to maintaining required records. Other statements in which females responded higher than males dealt with

Table 1. Enabling and Terminal Objectives Statements Regarding Professionalism

<b>Curricular Objective</b>	<b>Survey Statement</b>
EO 10.1.1	Interacts effectively in the classroom, laboratory and clinical setting
EO 10.1.2	Communicates effectively with faculty, staff, peers, patients and other health care professionals
EO 10.1.2.1	Demonstrates skills of conflict resolution
EO 10.1.2.2	Formulates constructive evaluations of others' performance
EO 10.1.2.3	Displays a positive attitude when receiving constructive criticism
EO 10.1.2.4	Formulates written communications with professional content and tone
EO 10.1.2.5	Demonstrates confidence in actions and communications
EO 10.1.3	Demonstrates regard for persons in authority in classroom, laboratory and clinical settings
EO 10.1.4	Demonstrates dependability to carry out responsibilities
EO 10.1.5	Differentiates appropriate interpersonal interactions with respect to culture, race, religion, ethnic origin, and gender
EO 10.1.6	Demonstrates regard for differing values and abilities among peers, other health care professionals, and patients
EO 10.1.7	Acts with honesty and integrity in academic matters and professional relationships
EO 10.1.7.1	Demonstrates an attitude of service by putting others' needs above one's own
EO 10.1.7.2	Demonstrates a desire to exceed expectations
EO 10.1.8	Promotes appropriate drug-taking behavior
EO 10.1.9	Demonstrates professional interactions with patients
EO 10.1.9.1	Understands the covenantal relationship between a pharmacist and patient
EO 10.1.9.2	Identifies instances when one's values and motivation are in conflict with those of the patient
EO 10.1.9.3	Relates to patients in a caring and compassionate manner
EO 10.1.9.4	Demonstrates ethical standards related to pharmacy practice
EO 10.1.10	Exhibits fitting behavior when representing the UGA College of Pharmacy in extracurricular activities and professional meetings
EO 10.2.1	Adheres to established times for classes, laboratories, clerkships and meetings
EO 10.2.2	Complies with established verbal and written deadlines
EO 10.2.3	Responds to requests (written, verbal, e-mail, telephone calls) in a timely fashion
EO 10.2.4	Performs pharmaceutical care responsibilities in a timely manner
EO 10.3.1	Dresses appropriately in classroom, laboratory clinical and professional settings
EO 10.3.2	Maintains personal hygiene and grooming appropriate to the academic or professional environment
TO 10.4	Complies with student health requirements for working with patients in various health care environments
TO 10.5	Maintains appropriate records (e.g. intern license, CPR certification, immunizations, insurance, skills) to demonstrate professional competence
TO 10.6	Complies with regulations regarding confidentiality of information
EO 10.7.1	Utilizes time efficiently
EO 10.7.2	Demonstrates self-direction in completing assignments
EO 10.7.3	Demonstrates accountability for decisions
EO 10.7.4	Demonstrates characteristics of lifelong learning

areas of professional communications, dependability, diversity, and service to others.

As demonstrated in Table 2, there were extremely small numbers of respondents classified as either African American (n = 8), other (n = 8) or Hispanic (n = 1). Consequently, when comparing agreement rate differences based on race, we only felt confident in results obtained between Caucasian (n = 142) and Asian (n = 21) populations.

There were 4 statements in which differences in agreement rates between Caucasian and Asian populations reached statistical significance. These were: demonstrates confidence in actions and communications (99.3% agreement rate among Caucasians vs 85.7% among Asians,  $p = 0.005$ ), demonstrates dependability to carry out responsibilities (99.3% agreement rate among Caucasians vs 100% among Asians,  $p < 0.001$ ), complies with regulations

Table 2. Demographics of Respondents to a Survey Concerning Pharmacy Students' Attitudes, Values, and Beliefs Regarding Professionalism

Variable	First Year n = 43 No. (%)	Second Year n = 47 No. (%)	Third Year n = 47 No. (%)	Fourth Year n = 40 No. (%)	P*
Age					
17 to 20 years	12 (28)	1 (2)	0 (0)	0 (0)	NS
21 to 25 years	25 (58)	35 (74)	35 (74)	30 (75)	NS
26 to 30 years	6 (14)	8 (17)	7 (15)	8 (20)	0.002 <sup>†</sup>
31 to 35 years	0 (0)	2 (4)	3 (6)	1 (3)	NS
36 to 40 years	0 (0)	0 (0)	1 (2)	1 (3)	NS
>40 years	0 (0)	1 (2)	0 (0)	0 (0)	NS
Unknown	0 (0)	0 (0)	1 (2)	0 (0)	NS
Gender					
Female	30 (70)	37 (79)	34 (72)	23 (58)	NS
Male	13 (30)	10 (21)	13 (28)	17 (42)	NS
Race					
Caucasian	35 (81)	37 (79)	35 (75)	35 (88)	NS
Asian	6 (14)	7 (15)	6 (13)	2 (5)	NS
African American	1 (2)	0 (0)	4 (9)	0 (0)	NS
Hispanic	0 (0)	1 (2)	0 (0)	0 (0)	NS
Native American	0 (0)	0 (0)	0 (0)	0 (0)	NS
Other	1 (2)	2 (4)	2 (4)	3 (8)	NS
Marital Status					
Single	35 (81)	37 (79)	34 (72)	29 (73)	NS
Married	8 (19)	10 (21)	12 (26)	11 (27)	NS
Divorced	0 (0)	0 (0)	1 (2)	0 (0)	NS
Widowed	0 (0)	0 (0)	0 (0)	0 (0)	NS

\*Kruskal-Wallis

<sup>†</sup>Post Hoc Analysis by Serial Mann Whitney U test ( $p \leq 0.003$ , 4th, 3rd, 2nd vs 1st)

NS = Not Significant

regarding confidentiality of information (99.3% agreement rate among Caucasians vs 100% among Asians,  $p < 0.001$ ) and demonstrates accountability for decisions (99.3% agreement rate among Caucasian vs 95.2% among Asians,  $p = 0.042$ ).

### Professionalism Within UGA COP

Figures 1 and 2 demonstrate the agreement rates between cohorts for part 2 of the survey concerning professionalism within UGA COP. Cross-class differences were found for the following statements: UGA COP should teach principles of professionalism related to pharmacy practice ( $p = 0.04$ , first vs third year), UGA COP does teach principles of professionalism related to pharmacy practice ( $p = 0.007$ , first vs third year), UGA COP faculty members actions convey the importance of professionalism as related to pharmacy practice ( $p = 0.025$ , first vs third year and  $p = 0.044$  first vs fourth year), my fellow students' words convey the importance of profes-

sionalism as related to pharmacy practice ( $p = 0.002$ , first vs third year), and my fellow students' actions convey the importance of professionalism as related to pharmacy practice ( $p = 0.003$ , first vs third year). Although not statistically significant, agreement rates regarding professionalism issues within UGA COP tended to decline over the first 3 curricular years and then rebound in the fourth year except in responses related to the professionalism of the students' own words and actions. When examining the results based upon gender, females had higher agreement rates than males for the statement, "The COP should teach professionalism" (92.5% males vs 96% of females,  $p = 0.001$ ). No other gender differences were noted.

### DISCUSSION

Professional socialization within pharmacy has been described by Chalmers et al as "the general process whereby students learn about the professional role of pharmacists and the expectations of performance in that

Table 3. Comparison of Agreement Rates by Curricular Year for Items on A Survey Concerning Pharmacy Students' Attitudes, Values, and Beliefs Regarding Professionalism

Survey Items	Curricular Year				P
	1st	2nd	3rd	4th	
Interacts effectively in the classroom, laboratory and clinical setting	100	100	100	98	NS
Communicates effectively with faculty, staff, peers, patients and other health care professionals	100	100	100	98	NS
Demonstrates skills of conflict resolution	91	100	100	95	NS
Formulates constructive evaluations of others' performance	84	83	87	93	
Displays a positive attitude when receiving constructive criticism	98	98	96	98	4th vs 1st, $p = 0.05$
Formulates written communications with professional content and tone	93	96	92	93	NS
Demonstrates confidence in actions and communications	98	96	100	98	NS
Demonstrates regard for persons in authority in classroom, laboratory and clinical settings	100	100	94	95	NS
Demonstrates dependability to carry out responsibilities	100	100	100	98	NS
Differentiates appropriate interpersonal interactions with respect to culture, race, religion, ethnic origin, and gender	95	94	96	93	NS
Demonstrates regard for differing values and abilities among peers, other health care professionals, and patients	98	98	100	95	NS
Acts with honesty and integrity in academic matters and professional relationships	100	100	100	100	NS
Demonstrates an attitude of service by putting others' needs above one's own	93	89	89	88	NS
Demonstrates a desire to exceed expectations	98	100	96	88	NS
Promotes appropriate drug-taking behavior	93	98	98	93	NS
Demonstrates professional interactions with patients	98	100	100	100	NS
Understands the covenantal relationship between a pharmacist and patient	95	98	96	98	NS
Identifies instances when one's values and motivation are in conflict with those of the patient	88	79	92	98	
Relates to patients in a caring and compassionate manner	100	98	100	100	NS
Demonstrates ethical standards related to pharmacy practice	100	100	98	100	NS
Exhibits fitting behavior when representing the UGA College of Pharmacy in extracurricular activities and professional meetings	100	100	98	93	NS
Adheres to established times for classes, laboratories, clerkships and meetings	98	98	98	95	NS
Complies with established verbal and written deadlines	100	98	100	98	NS
Responds to requests (written, verbal, e-mail, telephone calls) in a timely fashion	98	96	98	98	NS
Performs pharmaceutical care responsibilities in a timely manner	98	100	100	98	NS
Dresses appropriately in classroom, laboratory clinical and professional settings	84	89	98	85	NS
Maintains personal hygiene and grooming appropriate to the academic or professional environment	100	98	98	98	NS
Complies with student health requirements for working with patients in various health care environments	98	100	98	98	NS
Maintains appropriate records (e.g. intern license, CPR certification, immunizations, insurance, skills) to demonstrate professional competence	98	98	100	98	NS
Complies with regulations regarding confidentiality of information	98	96	100	98	3rd vs 2nd, $p < 0.005$ 3rd vs 4th, $p < 0.005$
Utilizes time efficiently	95	96	87	88	NS
Demonstrates self-direction in completing assignments	98	100	100	98	NS
Demonstrates accountability for decisions	98	100	100	98	NS
Demonstrates characteristics of lifelong learning	100	96	98	95	NS

Table 4. Comparison of Agreement Rates by Gender for Items on A Survey Concerning Pharmacy Students' Attitudes, Values, and Beliefs Regarding Professionalism

<b>Survey Items</b>	<b>Male (53)</b>	<b>Female (124)</b>	<b>P</b>
Interacts effectively in the classroom, laboratory and clinical setting	94.3	98.4	NS
Communicates effectively with faculty, staff, peers, patients and other health care professionals	100	99.2	0.031
Demonstrates skills of conflict resolution	96.2	96.8	NS
Formulates constructive evaluations of others' performance	84.9	87.1	NS
Displays a positive attitude when receiving constructive criticism	96.2	97.6	NS
Formulates written communications with professional content and tone	92.5	93.5	0.003
Demonstrates confidence in actions and communications	98.1	96.8	NS
Demonstrates regard for persons in authority in classroom, laboratory and clinical settings	98.1	96.8	0.047
Demonstrates dependability to carry out responsibilities	98.1	100	0.042
Differentiates appropriate interpersonal interactions with respect to culture, race, religion, ethnic origin, and gender	90.6	96	NS
Demonstrates regard for differing values and abilities among peers, other health care professionals, and patients	94.3	99.2	0.001
Acts with honesty and integrity in academic matters and professional relationships	100	100	0.039
Demonstrates an attitude of service by putting others' needs above one's own	83	92.7	0.009
Demonstrates a desire to exceed expectations	94.3	96	NS
Promotes appropriate drug-taking behavior	96.2	95.2	NS
Demonstrates professional interactions with patients	100	99.2	NS
Understands the covenantal relationship between a pharmacist and patient	96.2	96.8	0.014
Identifies instances when one's values and motivation are in conflict with those of the patient	90.6	87.9	NS
Relates to patients in a caring and compassionate manner	100	99.2	NS
Demonstrates ethical standards related to pharmacy practice	100	99.2	NS
Exhibits fitting behavior when representing the UGA College of Pharmacy in extracurricular activities and professional meetings	98.1	97.6	NS
Adheres to established times for classes, laboratories, clerkships and meetings	94.3	98.4	<0.001
Complies with established verbal and written deadlines	96.2	100	0.008
Responds to requests (written, verbal, e-mail, telephone calls) in a timely fashion	92.5	99.2	0.001
Performs pharmaceutical care responsibilities in a timely manner	100	98.4	0.04
Dresses appropriately in classroom, laboratory clinical and professional settings	81.1	92.7	0.041
Maintains personal hygiene and grooming appropriate to the academic or professional environment	98.1	99.2	0.002
Complies with student health requirements for working with patients in various health care environments	98.1	99.2	0.002
Maintains appropriate records (e.g. intern license, CPR certification, immunizations, insurance, skills) to demonstrate professional competence	96.2	99.2	<0.001
Complies with regulations regarding confidentiality of information	98.1	100	0.001
Utilizes time efficiently	88.7	92.7	<0.001
Demonstrates self-direction in completing assignments	96.2	100	NS
Demonstrates accountability for decisions	100	98.4	NS
Demonstrates characteristics of lifelong learning	96.2	97.6	NS

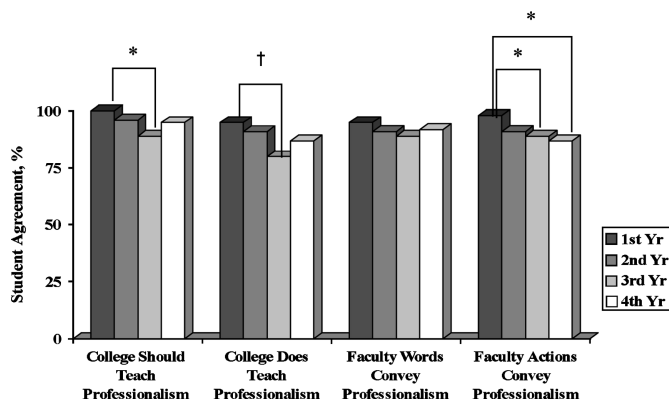


Figure 1. Pharmacy students' rates of agreement (percent who agree and strongly agree) with statements concerning professionalism within UGA College of Pharmacy and among its faculty members. Post-hoc analysis by serial Mann Whitney U test. (\* =  $p < 0.05$ , † =  $p < 0.01$ )

role.”<sup>6</sup> Factors affecting the socialization process include individual student values, individual reason for selecting pharmacy as a profession, role models (including faculty members and practicing pharmacists), ideology of the College of Pharmacy, curricular content and design, past and current practical experiences, and peer effects.<sup>6,7</sup> In an effort to establish student expectations and promote professional behavior, the UGA COP developed and adopted a professionalism competency for the curriculum that contained traits identified in the medical literature. Some of these traits include: accountability, responsibility, honesty, integrity, moral standards, maturity, respect for others, altruism, duty, interpersonal skills, covenantal patient relationship, absence of impairment, self-improvement, leadership, and excellence.<sup>1,4,8</sup>

Within the UGA COP curriculum, student professional development is fostered through participation in introductory and advanced practice experience programs, completion of certain didactic courses, and involvement in pharmacy organizations. Introductory practice experi-

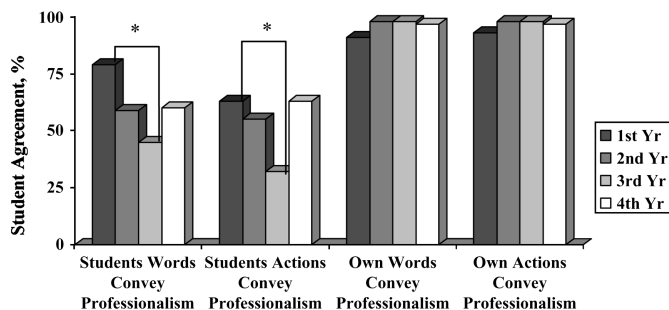


Figure 2. Pharmacy students' rates of agreement (percent who agree and strongly agree) with statements concerning professionalism among their classmates and themselves. Post-hoc analysis by serial Mann Whitney U test. (\* =  $p < 0.05$ , † =  $p < 0.01$ )

ences, woven throughout didactic course offerings in the first 3 years, focus mainly on development of communication, patient care, and time management skills. Due to course placement, these experiences are designed to reinforce learned material and provide exposure to a variety of practice sites, healthcare providers, and patient situations. Didactic coursework incorporating issues of professional development include: *Introduction to Pharmacy* (year 1), *Pharmacy Intercommunications* (year 1), *Pharmacy Skills Lab I and II* (year 1), *Pharmacy Seminar* (year 2), and *Pharmacy Law and Ethics* (year 3). In addition to introductory practice experiences and didactic coursework in the first 3 curricular years, students are exposed to a variety of student pharmacy organizations through participation in the “Organizational Hour,” which is set aside weekly in their course schedule. Throughout the fourth curricular year, students complete 40 weeks (eight 5-week courses) of advanced pharmacy practice experiences, which provide opportunities for application and demonstration of professional attitudes, values, and behaviors.

Based upon the findings, students generally have high levels of agreement that all terminal objectives and enabling objective statements included in the survey instrument represent attitudes, values, and behaviors associated with pharmacy professionals. Significant differences among curricular year cohorts were found in 4 terminal objectives and enabling objectives statements, which could indicate areas within the curriculum that need more attention. In particular, fourth-year students, as compared to first- and second-year students, more strongly agreed that formulating constructive evaluations of others performance and identifying instances when one's values and motivation are in conflict with those of the patient were traits consistent with pharmacy professionals. Students in the earlier curricular years may not perceive these traits to be of as much importance relative to their counterparts who are further along in their professional training simply by virtue of them having less experience demonstrating the value of these encounters, having fewer small group experiences, and having fewer opportunities to participate in direct patient care activities. Interestingly first-year students had higher agreement rates than fourth-year students that displaying a positive attitude when receiving constructive criticism was an important trait of a pharmacy professional. One explanation for this observation could be that early in their pharmacy education, students recognize they have much to learn, and are more accepting of constructive criticism than students in their final year of training.

Overall, female respondents had higher agreement rates than male respondents on survey items related to the professional competency terminal objectives and

enabling objectives. For the statements in which differences in responses were found between genders, the majority dealt with issues related to time management, communication, record management, professional dress, and service to others. Females, in particular, had higher agreement rates for statements relating to time management, record management, professional dress, and service to others. Reasons for these findings are unclear but could have an impact on workplace issues due to the large percentage of female students enrolled in pharmacy programs in this country.

In evaluating observed differences between Caucasian and Asian respondents, 4 statements reached statistical significance. Differences in agreement response rates ranged between 0.7% and 4.1% for 3 of the 4 statements. Due to the small number of Asian respondents, the value of the statistical significance is questionable. The difference in agreement rates for the remaining statement, "Demonstrates confidence in actions and communications," could be explained either by cultural or primary language differences. Since no specific data were obtained related to these areas, it was not possible to draw firm conclusions.

The second objective of the study was to identify whether students felt UGA COP should and does teach principles of professionalism and also whether they felt that the words and actions of the faculty members, the words and actions of their peers, and their own words and actions conveyed the importance of professionalism. In analyzing these data, several trends became apparent. Third-year students had lower agreement rates when compared to first-year students for 4 of 8 survey questions regarding professionalism issues within UGA COP (Figure 1). Although not statistically significant, agreement rates tended to decline over the first 3 curricular years and then increase somewhat for fourth-year respondents. Hornosty described a similar pattern in Canadian pharmacy students where idealistic views regarding pharmacy professionalism were highest for first-year students, waned during years 2 and 3, and then rebounded during the latter portion of the third year and peaked prior to graduation.<sup>9</sup> He described this decline as the cynical period during which professional idealism decreases as classroom demands and conflicts between ideals being taught in school and the realities practiced in the work environment increase. The second observed trend was that all classes had lower agreement rates concerning questions about the professional behavior of their fellow students. In particular, at least 37% of respondents in each class felt their fellow classmates' actions did not convey a proper regard for the importance of professionalism. When asked did their classmates' words convey the

importance of professionalism, a minimum of 21% of respondents per class did not agree. One possible explanation of this result is that students impose a more rigid expectation of professionalism on their classmates than they do on themselves. An alternate explanation could be that self-assessment of one's own professional behavior could be inflated. Within the literature, it has been noted that the self-assessment of professional behavior can be an unreliable measure leading either to over- or underestimation of actual performance.<sup>10,11</sup> Self-assessment is most accurate when used as a process rather than a solitary assessment of knowledge or performance.<sup>11</sup> A final explanation for the results may be that students evaluated their peers negatively based on conspicuous unprofessional behaviors displayed by small numbers of their classmates.

High levels of agreement that the principles of professionalism should be taught by the College of Pharmacy were found among curricular year cohorts. Similarly, students agreed that these principles are currently being taught by the College, although the third-year cohort had a lower rate of agreement than the first-year cohort. Since role models impact professional socialization of students, it was important to identify whether students felt that faculty members' words and actions conveyed the importance of professionalism. Once again, there were high levels of agreement that both faculty members' words and actions conveyed the importance of professionalism. Third- and fourth-year students had lower agreement rates than first-year students regarding faculty members' actions conveying the importance of professionalism, although agreement rates were 87% or higher. Possibly, the agreement rate of fourth-year students was lower because only 12% of clerkships are taught by full-time UGA COP faculty members; thus, these students had limited faculty interaction during the advanced pharmacy practice experience year. Another possible explanation for the decline is that these students saw their preceptors as faculty members and that within the practice setting, preceptors displayed behaviors that were not consistent with student ideals of professionalism. A third possibility is that early in the professional curriculum, students perceived their faculty members as infallible, but once they had associated with these faculty member for several years they began to know them as individuals and witnessed their flaws.

Although this study revealed insights on pharmacy student beliefs about professionalism, the study did have limitations. First, the study only dealt with a subset of students at a specific point in their academic careers. If the study design had been longitudinal, and the same groups of students were surveyed annually as they progressed through the program, different results might



have been observed. Researchers chose to include 60 subjects per class, as opposed to including the entire student body, in an effort to obtain equal response rates per class. At the time of the study, per class enrollment numbers varied from 105 to 136 students. A random sample size of 60 students per class included a representative group of students enrolled in the doctor of pharmacy program. A second limitation is that only summative assessments of professionalism within the UGA COP were surveyed. As a result, we did not identify individual characteristics or definitions that students utilized to determine the presence or absence of professional behavior in faculty members, fellow students, and themselves. A third limitation was the inability to elicit the actual age of students because of limitations in the software used to create the survey instrument. *Web CT* limits the number of answer choices per question, and since the enrolled student body varied in age from 18 to 60 years, we were only able to include age ranges. However, *Web CT* was chosen because the majority of fourth-year students were based off-campus and its use may have been responsible for the high survey response rates. Lastly, this survey did not determine whether the participants had previous college degrees or previous careers, or if they were active in professional organizations. One could postulate that students who were pursuing a PharmD as a second degree or pharmacy as a second career, or those active in professional societies may be different enough to constitute a separate population with different beliefs regarding professionalism than their classmates without these life experiences.

## CONCLUSION

Students agreed that the terminal and enabling objectives of the University of Georgia College of Pharmacy's newly adopted professionalism curricular competency were consistent with what it means to be a pharmacy professional. Four objectives were identified for which student agreement rates differed among the 4 curricular year cohorts. Eighteen of thirty-four statements demonstrated differences based upon gender. These differences suggest areas where increased emphasis earlier in the curriculum may benefit students.

With regards to professionalism issues within the college, students agreed that the UGA COP should and does teach principles of professionalism. Similarly, students agreed that their words and actions and those of faculty members conveyed the importance of professionalism. Students felt that their classmates' words and actions conveyed the importance of professionalism less than their own words and actions. Third-year students in particular had lower agreement rates than first-year students with regard to the professional behaviors of faculty members

and classmates. A subsequent longitudinal study would be beneficial in determining whether idealistic views on professionalism truly decline throughout the professional training or whether these findings were due to particular class attitudes or dynamics. Elucidation of specific factors leading to the perceived decline in professional attitudes and behaviors among our students during the curriculum, especially within in the third year, is essential to developing a college culture that fosters professional development.

There are plans to share the study findings with the Dean's Student Advisory Council and Faculty Affairs committee to determine what measures should be taken to further investigate the results. From a curricular standpoint, the UGA COP is in the process of mapping the professionalism terminal objectives and enabling objectives to existing courses to determine whether there is a need to modify courses or add opportunities to emphasize professional development. Special attention will be paid to the timing of professionalism topics to ensure that students receive consistent professional development throughout the curriculum.

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Appendix 1. UGA COP Professionalism Competency Statement

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**Demonstrate Professional Behaviors and Values**

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TO 10.1	(Characterization) Display professional behavior toward faculty, staff, peers, patients, and other health professionals in the classroom, laboratory, and clinical settings.
EO 10.1.1	(Organization) Modify behavior to interact effectively in classroom, laboratory and clinical settings.
EO 10.1.2	(Organization) Modify behavior to communicate effectively with faculty, staff, peers, patients, and other health professionals.
EO 10.1.2.1	(Organization) Demonstrate skills of conflict resolution.
EO 10.1.2.2	(Synthesis) Formulate constructive evaluation of others' performance.
EO 10.1.2.3	(Organization) Display positive attitude when receiving constructive criticism.
EO 10.1.2.4	(Valuing) Formulate written communications with professional content and tone.
EO 10.1.2.5	(Organization) Demonstrate confidence in actions and communications.
EO 10.1.3	(Organization) Show regard for persons in authority in classroom, laboratory, and clinical settings.
EO 10.1.4	(Organization) Demonstrate dependability to carry out responsibilities.
EO 10.1.5	(Valuing) Differentiate appropriate interpersonal interactions with respect to culture, race, religion, ethnic origin, and gender.
EO 10.1.6	(Organization) Demonstrate regard for differing values and abilities among peers, other health care professionals, and patients.
EO 10.1.7	(Characterization) Act with honesty and integrity in academic matters and professional relationships.
EO 10.1.7.1	(Characterization) Demonstrate attitude of service by putting others' needs above one's own.
EO 10.1.7.2	(Characterization) Demonstrate a desire to exceed expectations.
EO 10.1.8	(Characterization) Promote appropriate drug-taking behavior.
EO 10.1.9	(Characterization) Demonstrate professional interactions with patients.
EO 10.1.9.1	(Comprehension) Describe the covenantal relationship between a pharmacist and patient.
EO 10.1.9.2	(Analysis) Identify instances when one's values and motivation are in conflict with those of the patient.
EO 10.1.9.3	(Organization) Relate to patients in a caring and compassionate manner.
EO 10.1.9.4	(Organization) Demonstrate ethical standards related to pharmacy practice.
EO 10.1.10	(Characterization) Exhibit fitting behavior when representing the University of Georgia College of Pharmacy in extracurricular activities and professional meetings outside the College of Pharmacy.
TO 10.2	(Characterization) Demonstrate punctuality in academic and professional environments.
EO 10.2.1	(Responding) Adhere to established times for classes, laboratories, clerkships, and meetings.
EO 10.2.2	(Responding) Comply with established verbal and written deadlines.
EO 10.2.3	(Responding) Respond to requests (written requests, verbal questions, e-mails, telephone calls) in a timely fashion.
EO 10.2.4	(Responding) Perform pharmaceutical care responsibilities in a timely manner.
TO 10.3	(Characterization) Maintain a professional appearance when representing the College of Pharmacy.
EO 10.3.1	(Valuing) Modify dress appropriate to classroom, laboratory, clinical, and professional settings.
EO 10.3.2	(Valuing) Maintain personal hygiene and grooming appropriate to the academic or professional environment.
TO 10.4	(Responding) Comply with student health requirements for working with patients in various health care environments.
TO 10.5	(Organization) Maintain appropriate records (e.g. intern license, CPR certification, immunizations, insurance, skills) to demonstrate professional competence.
TO 10.6	(Responding) Comply with federal, state, University, College of Pharmacy and institutional requirements regarding confidentiality of information
TO 10.7	(Characterization) Produce quality work in academic and professional settings
EO 10.7.1	(Organization) Utilize time efficiently.
EO 10.7.2	(Organization) Demonstrate self-direction in completing assignments.
EO 10.7.3	(Characterization) Demonstrate accountability for decisions.
EO 10.7.4	(Characterization) Demonstrate characteristics of lifelong learning.

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## Appendix 2. UGA Policy on Student Professionalism

### **Fulfilling Professionalism Requirements in the Doctor of Pharmacy Curriculum**

In a professional school, the curriculum of study consists of knowledge, skills, abilities, and attitudes/behaviors. The curricular goals and objectives of the Doctor of Pharmacy program at the University of Georgia College of Pharmacy are articulated in the document entitled, *Competency Statements, Terminal Objectives, and Enabling Objectives for the Doctor of Pharmacy Program*. Procedures for addressing academic competency and progression associated with students' knowledge, skills, and abilities are addressed in the College's Progression Policy. Procedures for addressing attitudes, i.e., professional competency, are addressed by the following policy.

Professional behavior is expected among all students of the University of Georgia College of Pharmacy in order to fulfill curricular requirements for graduation. Professional attitudes/behaviors, as well as examples of unprofessional behavior, are discussed with students during Orientation, stated in various course syllabi, and reinforced at selected points throughout the academic year. Students who exhibit appropriate behaviors/attitudes progress in the professional components of the curriculum, whereas students who do not display competence in professional behaviors and attitudes are subject to informal and/or formal corrective action.

Any student, faculty, staff member, or individual associated with the College's academic programs may report a student for lack of professional behavior to the Assistant Dean for Student Affairs. Under usual circumstances, the incident should have been brought to the student's attention and resolution attempted before reporting the incident to the Assistant Dean.

Upon receiving a report regarding unprofessional behavior, the Assistant Dean will determine the legitimacy of the report in accordance with his/her interpretation of Competency Statement 10 (in the College's document on educational outcomes, *Competency Statements, Terminal Objectives, and Enabling Objectives for the Doctor of Pharmacy Program*), the severity of the incident, and the urgency by which it needs to be addressed administratively. Depending on the nature of the behavior, the Assistant Dean may act on a single behavioral report or wait to act until he/she receives multiple reports of unprofessional behavior on a student. Once the Assistant Dean determines that administrative action is warranted, each case will be addressed in the following manner:

1. For the first action to address unprofessional behavior, the Assistant Dean will meet with the student to counsel him/her on the seriousness of the behavior and the potential consequences to the student of such actions, including potential dismissal from the College of Pharmacy for repeated unprofessional behavior. The discussion will also include strategies to correct the behavior or address the problem. Following the session, the student and Assistant Dean will sign and date a statement acknowledging the student's behavior and his/her awareness of potential consequences for similar behavior in the future. The Assistant Dean will notify the person(s) who initiated the complaint that the student has been counseled.
2. For the next reported offense, the Assistant Dean will notify the student and the chair of College of Pharmacy Professionalism Committee. The student will appear before the Professionalism Committee to discuss the behavior. Following this session, the committee may recommend to the Associate Dean that the student be placed on professional probation in the College of Pharmacy, a final warning of the impending consequences of a third offense.
3. For subsequent problems with professionalism, the Assistant Dean will notify the student and the Professionalism Committee. After meeting with the student, the Professionalism Committee will recommend to the Associate Dean an appropriate course of action. The outcome will be based on the type of unprofessional behavior and whether this is a new behavior problem or continuation of an ongoing problem. Possible outcomes will be professional probation, continued professional probation, suspension from the Doctor of Pharmacy program for up to one year, or dismissal from the College of Pharmacy. Students who receive continued professional probation or suspension will be dismissed from the College of Pharmacy upon further problems with unprofessional behavior.
4. Students may appeal decisions of the Professionalism Committee to the Dean of the College of Pharmacy.