

Professional Attitudes and Behaviors: The “A’s and B’s” of Professionalism¹

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Although professionalism is an elusive concept, it is defined by sets of attitudes and behaviors specific to professions. Further defining and describing these professional attitudes and behaviors - the “As and Bs” of professionalism - will help academic programs to develop and measure them in their students. The development of professional attitudes and demonstration of professional behaviors are key factors in the practice of pharmaceutical care and maintenance of pharmacy’s status as a trusted and respected profession. This paper offers definitions of professionalism, professional attitudes and professional behaviors, describes their specific components, identifies educational impacts upon them, shares ideas on how to foster and measure them, and describe barriers to their development. Most of the paper will discuss these issues in relation to students in academic programs; where appropriate, however, the discussion will also involve faculty members and other personnel.

INTRODUCTION

You know it when you see it. You certainly know it when you see its antithesis. And you know it when you are expecting to see it, but do not. It is an elusive concept with numerous definitions and interpretations. It is a term that is often used in occupational and professional circles, and it is difficult to measure. It can determine success in one’s career, as well as elevate or erode one’s occupation or profession. It is the cornerstone of every member of every profession; it is professionalism.

Can professionalism be developed and measured in professional academic programs? We know that these programs help to professionally socialize students, but the level of practice to which students are being socialized varies (1-5). Are students being socialized to the ideals of the profession or to the current state of practice? If the feeling is that students are socialized to the current state of practice in the profession, which may be less than ideal, it stands to reason that academic programs can develop programs and cultures to enhance students’ professionalism. The purpose of this paper is to offer definitions of professionalism, professional attitudes and professional behaviors, describe their specific components, identify educational impacts upon them, share ideas on how to foster and measure them, and describe barriers to their development. Most of the paper will discuss these issues in relation to students in academic programs; where appropriate, however, the discussion will also involve faculty members and other personnel.

BACKGROUND

To begin to positively affect the professional socialization of students in academic programs, schools must understand what professional socialization entails. Merton defined socialization “process by which people selectively acquire the values and attitudes, the interests, skills and knowledge—in short, the culture—current in the groups of which they are, or seek to become a member”(1). He applied his definition to the field of

medicine, and used the term professional socialization to describe the transformation of medical students into physicians.

If development of professional attitudes and behaviors is a large part of the professional socialization process, it is important to further define and explore these concepts as the first step — the “As and Bs” — of creating programs to develop and measure them. The following section will offer possible definitions of professionalism, professional attitudes and professional behavior.

Definitions of Professionalism

Merriam-Webster’s defines professionalism as a “set of attitudes and behaviors believed to be appropriate to a particular occupation”(6). A recent white paper on professionalism defined it as “the active demonstration of the traits of a professional”(7). Others have described professionalism as “constituting those attitudes and behavior that serve to maintain patient interest above [physician] self-interest,” and “displaying values, beliefs and attitudes that put the needs of another above your personal needs”(8,9). It has also been written that:

“Professionalism is displayed in the way pharmacists conduct themselves in professional situations. This definition implies a demeanor that is created through a combination of behaviors, including courtesy and politeness when dealing with patients, peers, and other health care professionals. Pharmacists should consistently display respect for others and maintain appropriate boundaries of privacy and discretion.

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Whether dealing with patients or interacting with others on a health care team, it is important to possess—and display—an empathetic manner.”(10)

Although these definitions are described in behavioral terms, the origin of professionalism was based on somewhat different attributes. From social science literature of the 1950's and 1960's, levels of professionalism were based on the possession of certain characteristics. Social scientists described professions as possessing sets of structural and attitudinal attributes that set them apart from occupations(11-16). Structural attributes of professions and professionals include:

- specialized body of knowledge and skills
- unique socialization of student members
- licensure/certification
- professional associations
- governance by peers
- social prestige
- vital service to society
- code of ethics
- autonomy
- equivalence of members, and
- special relationship with clients.

Attitudinal attributes of professionals were described as:

- use of the professional organization as a major reference, *i.e.*, using professional colleagues as the major source of professional ideas and judgments in practice
- belief in service to the public, *i.e.*, one's professional practice is indispensable to society and benefits the public
- belief in self-regulation, *i.e.*, one's peers are the best qualified to judge one's work
- sense of calling to the field, *i.e.*, dedication to the profession regardless of extrinsic rewards
- autonomy, *i.e.*, one can make professional decisions without external pressures from clients, non-professionals, and employers.

Why are these definitions pertinent to the profession of pharmacy and pharmacy education? Several reasons: based on the level of possession of these structural attributes, pharmacy has been described as a “quasi-profession” — not fully possessing some of these attributes, such as autonomy or equivalence of members(17-20). However, as the profession moves toward the standard of practice being that of pharmaceutical care — focusing on “the patient” as opposed to “the product” — the profession will be moving toward a more “professional” status. It would also stand to reason that members of the profession would also need to achieve a more “professional” status to fully practice pharmaceutical care through the possession of these structural and attitudinal attributes as well as the behaviors described in previous definitions. Additionally, to maintain the trust and respect that has been historically afforded to the profession by the public, pharmacists need to keep professionalism as the basis of all professional activities — especially in light of those changes in the health care delivery system that are seemingly less professional.

Thirdly, it is incumbent upon all schools and colleges of pharmacy to help our students become professionals. The more precisely we can understand professionalism and come to consensus on its definitions, the more strategically we can determine how to develop and measure it in our programs. Lastly,

all of these descriptions of professionalism can be somewhat confusing for those trying to define it, develop it, and measure it. A broader definition that encompasses all of the aforementioned characteristics is the possession and/or demonstration of structural, attitudinal and behavioral attributes of a profession and its members. Specific definitions of these categories of attributes can then be defined for various professions.

Definitions of Professional Attitudes and Behaviors

As stated in several of the definitions above, professionalism is comprised of attitudes and behaviors. Attitudes are often described and measured because of their relationship to behaviors. Psychological literature of the 1970's purported a “theory of reasoned action” which, in simplified terms, states that one's beliefs shape one's attitudes which in turn can predict one's behavior toward which the belief and attitude are directed(21). Fishbein defined beliefs as “hypotheses concerning the nature of an object or class,” attitudes as “learned predispositions to respond to an object or class of objects,” and behaviors as “actions in response to an object or class of objects”(22). To contrast these definitions to those from a non-psychological reference, a belief is defined as “a state of mind or habit in which trust or confidence is placed in some person or thing,” an attitude is defined as “a mental position, feeling or emotion with regard to a fact or state,” and behavior is defined as “the manner of conducting oneself” (6).

To extrapolate these definitions to those of professional attitudes and behaviors, a professional attitude could be defined as a predisposition, feeling, emotion, or thought that upholds the ideals of a profession and serves as the basis for professional behavior. Professional behavior can also be described as “behavioral professionalism” — behaving in a manner to achieve optimal outcomes in professional tasks and interactions(23). Specific attributes of behavioral professionalism have been described and will be discussed further below(24). These definitions of professional attitudes and behaviors can serve as the basis for helping us to determine the components of these concepts.

COMPONENTS OF PROFESSIONAL ATTITUDES AND BEHAVIORS

The next step of developing and measuring professional attitudes and behaviors in our educational programs is to determine their components. During the 2000 American Association of Colleges of Pharmacy (AACP) Teachers' Seminar, participants were asked to identify some professional attitudes and their corresponding behaviors(Table I). It is important to note that these attitudes and behaviors are appropriate for students as well as faculty members, although some may be more applicable to one party more than the other.

Similarly to these attitudes and behaviors, others have been described for health professionals - you do not need to “reinvent the wheel” when trying to identify professional attitudes and behaviors. For example, the American Board of Internal Medicine described these elements of professionalism for internal medicine physicians and physicians-in-training including(8):

- altruism - putting patients' best interests first
- accountability - to patients, to society, and to their profession
- excellence - exceeding expectations and commitment to lifelong learning
- duty - commitment to service in the community and pro-

Table I. Examples of professional attitudes and corresponding behaviors for pharmacy students^a

Attitude	Behavior
Accountability	Takes responsibility for actions
Caring	Volunteering Acts of service
Desire for self-improvement	Continued learning Self-instruction
Diversity	Fair treatment of all people regardless of demographic characteristics
Honesty	Behaviors that demonstrate honesty and trustworthiness
Open-minded	Increased receptiveness to new ideas
Respect	Dresses appropriately Punctual Maintains confidentiality
Responsibility to learn	Comes to class prepared Actively participates in class activities, such as engages in discussion
Team player	Engages in constructive peer assessment Accepts and applies constructive critique
Values new experiences	Desire to seek out and take on new challenges

^aSubmitted by participants in the 2000 AACP Teachers' Seminar on Developing Professional Attitudes and Behaviors.

- professional organizations
- honor and integrity - adhering to personal and professional codes, being fair, truthful, straightforward, and meeting commitments
- respect for others - all patients and their families, all colleagues and other health professionals

Additionally, some key documents in pharmacy literature define standards for pharmacists' and pharmacy students' attitudes and behaviors. Three of these were appended to the White Paper on Pharmacy Student Professionalism(7). The Oath of a Pharmacist pledges service to humankind, application of one's knowledge, experience and skills to patient care, lifelong learning, maintenance of high principles, and advocating positive change in the profession. Similarly, the Code of Ethics for Pharmacists uses language about a covenantal relationship with patients, promoting patient welfare, respecting patient autonomy and dignity, acting with honesty and integrity, maintaining professional competence, respecting others' values and abilities, serving individual and societal needs and seeking justice in distribution of health resources. The Pledge of Professionalism was written specifically for pharmacy students; it contains tenets similar to those described above in the context of developing and practicing these values while a pharmacy student.

The AACP Center for Advancement of Pharmaceutical Education (CAPE) Educational Outcomes further identify attitudinal and behavioral components in the context of providing pharmaceutical care, critical thinking skills, valuing and ethical decision making, social and contextual awareness, social responsibility, and self-learning abilities. Specific language regarding these attitudinal and behavioral components can be found in the document itself(25). The American Council on Pharmaceutical Education (ACPE) Accreditation Standards effective July 1, 2000, also contain language about professional attitudes and behaviors for students as well as faculty but they are not explicitly defined(26).

Lastly, most schools and colleges of pharmacy have written codes of conduct or ethics as well as curricular outcomes that may contain language about professional attitudes and behaviors. The more explicitly these attitudes and behaviors are defined, the more easily they can be identified, developed and assessed. What does "integrity" look like? How is it

demonstrated? What does "respect" look like? How is it demonstrated? The Behavioral Professionalism Assessment instrument attempted to more fully describe these for pharmacy students participating on experiential rotations(24). It was recently adapted for use in the classroom (Appendix A). Use of this instrument is discussed later in this paper.

Participants in the 2000 AACP Teachers' Seminar were asked to review the documents mentioned above in relation to identifying components of professional attitudes and behaviors. Some thoughts that came from a resultant discussion included: there is a need for statements to be written in the affirmative as opposed to negative (with regard to student ethics and conduct codes); behaviors are implied in those documents but they need to be more explicit; there is variability in definitions and a need for clarification; students think the expectations are external; students' responsibility is not clearly defined; pharmacy education needs a unified, program-specific language; and, what are legal requirements/restrictions that schools must follow in relation to student attitudes and behaviors? Most of these comments reinforce the need to clearly define and explain expectations for professional attitudes and behaviors.

IDENTIFYING EDUCATIONAL IMPACTS ON STUDENTS' PROFESSIONAL ATTITUDES AND BEHAVIORS

Once professional attitudes and behaviors have been defined and explicitly described, the next step to developing and measuring these is to determine where in our academic programs we can have the most impact. Professional socialization literature tells us that the factors that have had the greatest influence on students' attitudes and behaviors are: the values and behaviors that students bring into professional programs, role models in the professional and academic environments, and the environments themselves(27-33). It is important to remember that students can be "negatively" socialized just as easily as they can be "positively" socialized. If a student comes into a program with values incompatible with those of the profession and the academic program, has negative role models and learns to practice in an unprofessional environment, there is a probability that student will neither develop nor exhibit a high level of professionalism.

Schools and colleges of pharmacy do have some control

with regard to these influential factors. More “personal” admissions processes can help us to identify students’ attitudes as well as some personality traits, communication skills and other abilities. Students’ role models come in the form of more senior students, teaching assistants, faculty members, staff, administrators and preceptors. With regard to these individuals, schools have somewhat limited control. We need to ask ourselves “are these parties serving as positive professional role models for our students?” If the answer is no, then why not? What can the school do to enhance the professionalism of these role models in their interactions with our students? Lastly, schools have some control over the learning environment. How professional are our classrooms and laboratories? faculty members’ offices? the physical building(s) itself? How professional are the experiential settings in which are students are practicing? These questions need to be answered to be able to establish programs to foster professional attitudes and behaviors.

The White Paper on Pharmacy Student Professionalism outlined recommendations for students, educators and practitioners to help enhance pharmacy students’ professionalism(7). In the section for educators, four phases of the educational process were discussed where schools could help to identify, develop and enhance student professionalism: recruitment, admissions, educational programs, and the interface with practice. Under the broad category of educational programs, schools should think specifically about those aspects which most affect student life: didactic courses, student services and advising programs, and extracurricular activities. What can schools do in relation to these aspects of academic life to enhance student professionalism? Some answers to this question are described in the following section.

FOSTERING PROFESSIONAL ATTITUDES AND BEHAVIORS IN THE ACADEMIC ENVIRONMENT

The discussion above gives us some ideas of areas in which academic programs may be able to have a positive influence on student professionalism. Although there is not a body of literature that conclusively offers proven methods for enhancing student professionalism, factors described above have been identified as potentially having the most influence on students as they develop into professionals. This section describes some ideas and examples of how schools can foster professional attitudes and behaviors in their academic programs.

School-wide Initiatives

Does your school’s mission statement include any language with regard to the components of professionalism, professional attitudes and/or behaviors? what about the school’s auricular and programmatic outcomes? code of ethics or conduct? If so, what sorts of activities in the school help to achieve these goals and outcomes? To illustrate the use of these documents to help guide schools’ activities, consider a school’s curricular outcomes. These outcomes should serve as the goals of which academic programs are trying to achieve, *i.e.*, they should help faculty members to design and improve new and existing courses to develop and demonstrate achievement of the school’s outcomes. In the University of Colorado School of Pharmacy’s General and Pharmacy-specific auricular outcomes for the entry-level PharmD program, there is language about student demonstration of effective interpersonal and interprofessional interactions, self-assessment and self-directed learning, and professional and social responsibility, all of which could be considered aspects of professionalism. To help develop and assess these student outcomes and others, a series

of courses was created in the entry-level PharmD program: Professional Skills Development(34). The course is described more fully in the didactic section below.

Another illustration of a school-wide document used to “enhance” professionalism involves the school’s code of ethics/conduct. Students are usually introduced to the “code” when they enter an academic program — explanation of the contents found in the code can be as varied as discussion and role-play of its contents to no explanation whatsoever. It is the use of the code in day-to-day academic life, however, that can help it to play an influential role in student professionalism - unfortunately, it is usually in the negative sense. If a violation of the code occurs, a student is usually brought before an ethics and conduct committee to determine that student’s penalty and plan of action. Probably the most common violation handled in most schools is that of academic dishonesty. But what happens if a student violates an affective professional behavior? For example, if a student is observed blatantly disrespecting a fellow student or faculty member, is that student brought before the ethics and conduct committee to determine a course of action? Enforcement of all aspects of an ethics and conduct code, not just those that are more tangible, is essential to demonstrate the importance of adherence to the code.

Drake University College of Pharmacy and Health Sciences, Midwestern University Chicago College of Pharmacy, and University of the Pacific School of Pharmacy and Health Sciences (UOP) are examples of schools working on aspects of professionalism on a school-wide basis. The student affairs committee at Drake drafted a “Professionalism Statement” that defined professionalism, described programs at the College that helped students to develop their professionalism (auricular and extracurricular), and made recommendations for faculty and administrators to further promote professionalism within the College. At Midwestern, a task force explored the problem of unruly student behavior in the classroom and made recommendations to help faculty members respond to these behaviors. The final report of the task force included a definition as well as prevalence, causes and solutions of unruly behavior, a summary of data collected from the College’s students and faculty about student behavior in the classroom, and recommendations of the task force to the College to address and improve this area. UOP has implemented several school-wide projects to enhance student professionalism such as orientation, mentorship, and early experience programs(35-36).

Additional ideas that were offered from participants in the 2000 AACP Teachers’ Seminar were: scholarships and awards that reward professional behavior should be created; schools should use their university’s policy on disruptive behaviors; students should help to identify disruptive behaviors in the classroom; external speakers should be used in student seminars to help identify disruptive behaviors and teach students about professional attitudes and behaviors; and, communication among schools about individual students should increase.

Student Services and Advising Programs

What are your student services and advising programs doing to foster student professionalism? Are there personnel to help students with academic as well as personal or behavioral difficulties? Do students’ advisors help them to develop professionally in addition to getting them registered for the upcoming semester’s courses? Are there professional mentorship and assistance programs in place for students? What sorts of career development opportunities are available? Is the stu-

dent services “office” or environment professional? For what reasons do students interface with this office/department/personnel? ACPE Accreditation Standard No. 15 pertains to the organization of student affairs within a college or school of pharmacy and states:

“. . .development and provision of student services, [should include] activities intended to develop professional attitudes, ethics, and behaviors and to otherwise foster the professionalization of students.”(37)

It is important that schools review their student services and affairs activities to see where improvements can be made to enhance student professionalism.

Recruitment.

How do your recruitment materials and processes demonstrate professionalism of the academic programs and of the profession? In order to recruit applicants with “exceptional professional potential,” the White Paper on Pharmacy Student Professionalism recommended emphasizing the professional roles of students and pharmacists during open houses and other recruitment events, incorporating professional codes into recruitment literature (such as the Oath of a Pharmacist, Code of Ethics and Pledge of Professionalism), informing “feeder” programs of the qualities desired in pharmacists and pharmacy students, and encouraging potential applicants to get involved in student professional organizations, if possible(7).

Admissions.

Many schools have looked beyond traditional admissions criteria such as grade point average and Pharmacy College Admissions Test (PCAT) scores as the best measures of applicant’s potential and appropriateness for admission to a professional program. Numerous schools have incorporated personal interviews, group interaction activities, essays, various inventories and external recommendations as features of the applications admissions processes. Others have included demonstration of involvement in organizational activities, previous pharmacy experience and/or community service as criteria for application and admission. This movement to collect more qualitative data in addition to traditional, quantitative data may be partially facilitated by the revised ACPE Accreditation Standards(38). Guideline 16.3 reads:

“Admissions criteria, policies, and procedures should give consideration not only to scholastic accomplishments, but also to other factors such as motivation, industry, and communication capabilities that show the student’s potential to become a life-long learner and an effective professional. Efforts should be made in the selection of students to foster diversity.”

The White Paper on Pharmacy Student Professionalism presented several recommendations for schools to consider when reviewing their admissions processes(7). There is also a substantial body of pharmacy literature related to admissions processes and predictors of performance in academic programs(39-53). When reading some of these studies, however, ask yourself if the definition of “performance” used in the study included the demonstration of student professionalism.

Didactic Program

If your school has an orientation program for new stu-

dents, this is an excellent opportunity to begin the discussion and development of professionalism. During these introductory programs, many schools discuss the roles and responsibilities of pharmacists including the Oath of a Pharmacist and Code of Ethics for Pharmacists. Several schools also have students recite the Pledge of Professionalism for pharmacy students and have them sign a document that contains this Pledge. A number of schools’ orientation programs culminate in a “white coat ceremony” where students receive their white lab coats from a high-level school administrator or pharmacy organization leader as friends and family look on(54-55). Other schools utilize a white coat ceremony in a similar fashion but later in the curriculum, such as the beginning of the third professional year.

This year, the University of Colorado School of Pharmacy had first-year students create their own class pledge of professionalism — this not only got them to discuss, as a class, what they valued as professional pharmacy students, but enhanced their feeling of ownership in the document. Students then signed a large version of the document during a white coat ceremony; the document now hangs in the School’s Pharmaceutical Care Learning Center. In a similar vein, some medical school programs have an incoming class of students create their class’ mission statement to be displayed prominently in the school.

Orientation programs may also provide opportunities to introduce professional behaviors such as effective communication skills, teamwork, valuing diversity, time management, and participation in professional organizations(55). It is important to remember, however, that repetition and longevity are key - emphases on student and faculty professionalism need to be threaded throughout a school’s programs, and not just occur in the beginning.

In the “regular” classroom, development and assessment of professional attitudes and behaviors may be more difficult. Most courses are based on a particular body of knowledge that does not easily lend itself to the incorporation of “professionalism” activities. But if we think about certain attitudes and behaviors such as self-directed learning, teamwork, community service and participation in professional organizations, for example, what sorts of activities can we build into our courses that can enhance these? Assignments that require students to research information outside of class notes or texts, group exams and projects, service-learning or other community outreach activity, and rescheduling of exams so that students can professional organization meetings are all examples of helping to develop and foster professional behaviors in students.

Then there is the issue of day-to-day behaviors of students in the classroom. We certainly notice when students behave unprofessionally - we usually respond (or don’t!) based on our experience and personalities. Much has been written about this topic — how an instructor can “set the tone” in the classroom as well as respond to unruly or uncivil student behavior(56-59). Some of the literature on this topic also discusses the professional behavior or lack thereof, of faculty members. But what can faculty members do to encourage and reinforce positive professional classroom behavior? If there are procedures in place where students are penalized for displaying unprofessional behavior, is there also a system that rewards students for displaying exemplary professional behavior?

Although it may be difficult to implement professionalism-building activities into well-established content-based courses, there are opportunities to create didactic curricula that are specifically designed to develop student professionalism in

the context of pharmacy practice. Some schools have implemented pharmaceutical care courses and/or laboratories. For example, the Professional Skills Development course series at the University of Colorado (mentioned above) is an abilities-based, active learning course that integrates concurrent course information in the context of pharmacy practice as well as helps students develop certain professional behaviors(34). Since each session of the course meets with approximately thirty students at a time, instructors have the opportunity to get to know students and observe their classroom behaviors on a regular basis. There are course outcomes related to student professionalism as well as other language in the syllabus that describes expectations for student performance in the course (such as adhering to a professional dress code). The course also utilizes peer assessment of students' teamwork behaviors, as many of the activities are conducted in small groups.

To identify and help students to develop professional behaviors, instructors in the course assessed students based on their observations in class using the modified-for-classroom-use Behavioral Professionalism Assessment form (see Appendix A). Students also completed the assessment for themselves. Then instructors met with each student individually to discuss their respective evaluations. Following the meeting, students wrote a "plan of action"; a report of how they planned to improve their weaknesses with regard to professional behavior in the classroom. A few months later, students meet with instructors individually again to discuss improvements in the student's behavior or lack thereof, based on the student's original plan. This process seemed to be an effective tool to help students identify their strengths and weaknesses in this area.

This is just one of many examples of a didactic approach to helping students develop professional attitudes and behaviors. Other didactic examples include:

- As part of a communications course practicum, students are required to participate in a university, College, or program committee (Drake University College of Pharmacy)
- A capstone course that covers topics such as leadership and change in the profession — student behaviors are observed and some are assessed through "objective structured clinical exams" [OSCEs] (Ohio Northern University College of Pharmacy)
- As an assignment, students write a SOAP note about themselves and faculty review (Midwestern University College of Pharmacy-Glendale), and
- Student discussions about what constitutes professional behavior or lack of it (schools and colleges of pharmacy at University of New Mexico, Washington State University, Hampton University, Florida A & M University and Massachusetts College of Pharmacy).

Many other programs offer or require courses in ethics as well as service-learning; these types of courses also help to develop students' professional attitudes and behaviors.

Experiential Programs

It is during experiential training programs where the "rubber hits the road" - the behaviors students may demonstrate in practice after graduation are likely displayed during their experiential rotations. Most schools employ some sort of behavioral evaluation of students while they are participating in experiential rotations, but the specificity of these evaluations, how they are used and how they are weighted in the overall evaluation of

the student varies widely. As mentioned previously, if the desired student behaviors are clearly expressed in specific terms it is much easier to evaluate them and determine where students' strengths and weaknesses lie. To illustrate a non-example, if a student receives a "good" rating on an evaluation criterion "demonstrates professionalism," what does that mean for the student? What evidence did the preceptor use to evaluate the student? What does a student need to do in order to achieve an "excellent" rating? These questions are possibly left unanswered because of the ambiguity of the rating process and language used.

To more effectively develop and measure students' professional behavior during experiential rotations, several things need to occur:

- **Professional role models:** Preceptors, residents and others with whom the students are working should demonstrate the desired professional behaviors.
- **Professional practice environments:** Practice environments of the rotations should also display professionalism.
- **Clear expectations and evaluation methods:** Expectations for student behavior and the method(s) in which they are evaluated or assessed need to be made explicit to them.
- **Inter-rater reliability:** For those who are completing the evaluations of the students, it needs to be understood how to use the evaluation instruments correctly. For example, a particular evaluation instrument includes a criterion about "professional attire" and utilizes a rating scale of "below expectations," "meets expectations," or "exceeds expectations." Are all preceptors in agreement as to what each of the ratings mean with regard to that criterion? One method to help achieve this inter-rater reliability is to have your preceptors create the evaluation tools together, or at minimum, get them together to discuss appropriate use of the school's evaluation tools.
- **Weight of behavioral evaluation:** Does evaluation of students' professional behavior have sufficient weighting in the overall evaluation process so that students and preceptors take it seriously?
- **Early identification:** Is there any form of behavioral assessment prior to the end of the rotation so that strengths and weaknesses can be identified earlier? Better yet, are there behavioral evaluations associated with early practice experiences in the curriculum? For those of you who work in experiential program offices, you have probably had a preceptor call to express concern about a student's behavior — chances are that the student's behavior had not been previously identified by the school as being problematic, or if it was, possibly no intervention occurred. As more schools implement practice experiences earlier in their curricula, identification of students' strengths and weaknesses with regard to professional behavior can occur earlier in our programs and perhaps in a more systematic fashion.
- **Preceptor discussion with students regarding professional behavior:** Perhaps most effective are preceptors' individual discussions with students about behavioral issues. Are preceptors willing and able to address a student's behavioral strengths and weaknesses with that student? Is there a systematic process in place for preceptors to do this?

In addition to these suggestions, the White Paper on Pharmacy

Student Professionalism recommends specific activities to enhance the professionalism of preceptors, which would in turn help to enhance student professionalism(7).

Extracurricular Activities

An obvious component of students' professional development is involvement in pharmacy organizations. Some schools automatically enroll students into a student pharmacy organization upon admission to the school - the membership dues are part of the students' professional fees. Others highly promote student involvement in a variety of extracurricular activities and try to arrange curricular schedules to foster this participation. Under the ACPE Accreditation Standard that describes student/faculty relationships, Guideline 22.1 states(60):

“Faculty should actively encourage student involvement in various professional organizations, serves as role models, and support student attendance at national, state, and local meetings. Organized efforts should exist to broaden the horizons of students, including scientific inquiry, scholarly concern for the profession, and post-graduate education and training, through such means as guest lecturers, and participation in curricular and extracurricular activities.”

It is important that the leadership of student organizations ensures that their organization's activities help to foster professionalism in its members and avoid those activities that may erode it.

In addition to the “traditional” extracurricular activities such a student pharmacy organizations, many schools have developed other programs to help develop professional attitudes and behaviors in students. Examples of these include:

- School-wide seminars with nationally recognized leaders in the profession and other prominent speakers (Drake University, Purdue University, University of Colorado, St. Louis College of Pharmacy)
- Pharmacy Leadership Forum - a program designed to enhance students' leadership skills by exposing them to, and/or having them participate in, corporate management, civic government, and community service projects (Auburn University)
- Cybermentorship - students are paired with a pharmacist via email to converse on a regular basis (University of the Pacific)

Related to mentorship, other good ideas include the use of senior students as tutors and mentors to junior students, as well as the use of pharmacists in “live” mentorship roles. These types of activities can enhance the professionalism of both parties involved.

These are just a few examples of how students' professional attitudes and behaviors may be developed and fostered in academic programs. Ideas also exist on how to get professional associations and the pharmaceutical industry to aid in these efforts(61). If a school implements some of these ideas and wants to evaluate their effectiveness, how can those efforts be measured?

MEASUREMENT OF PROFESSIONAL ATTITUDES AND BEHAVIORS

How do we know if the activities described in the previous section are achieving their desired outcomes? How can we valid-

ly and reliably assess students' professional development? There is no single tool to help us answer this question. There is, however, an educational research process called triangulation - collection and analysis of different types of data to determine if common themes exist - that can help us measure our students' professional development. An example of triangulation for this purpose would include collection and analysis of student perception and self-report data as well as observational data from various sources, collected at various times in the student's career (such as entering, mid-point, and exit levels).

Attitudinal Data

Student “attitude” data have been traditionally collected via self-administered questionnaires to determine attitudes toward many different referents such as the profession of pharmacy, pharmacy curricula, professional commitment and the provision of pharmaceutical care(62-68). One of the more popular instruments used to measure student professionalism was Hall's Professional Inventory. This 50-item questionnaire measures attitudinal attributes of professionalism described in the introduction of this paper. This instrument is NOT appropriate to use with students for several reasons: it was created for use with practicing members of occupations and professions, it only measures the six attitudinal attributes of professionals as defined by Hall, and psychometric analysis of its use with other populations have yielded different results from its original testing.

There are, however, better instruments that have been used more recently with pharmacy students to measure certain attitudinal aspects of their professionalism. Beck and colleagues at Auburn created and tested a 19-item scale to help measure students' professionalism(69-70). Six of the items measured professionalism (related to autonomy, career commitment and value of self-learning), ten measured attitudes toward clinical practice and three measured motivation to learn. Their instrument performed better psychometrically than two others administered concurrently. Chisholm and colleagues at the University of Georgia have been testing and validating a scale to measure students' attitudes toward performing pharmaceutical care(68,71). Three subscales within the instrument measure professional benefit, professional duty and return on effort. The instrument has performed well psychometrically in student populations thus far.

To find other instruments used to measure student attitudes, one need only do a literature search using key words like “student attitudes.” In selecting the appropriate instruments to use, ask yourself: “what questions do I want to answer with data collected with this particular instrument?” And, “Has the instrument been shown to have an acceptable level of psychometric quality?” Also remind yourself that the reason we often evaluate student attitudes toward a particular referent is that these attitudes may possibly predict student behavior toward that referent. Answering these questions can help you determine the appropriate instrument to use or whether you want to use a self-administered instrument at all.

Behavioral Data

Behavioral data on students are captured most often in two ways: (i) student self-report (how they have behaved in certain situations or how they predict they would behave in certain situations; and (ii) observation by others. The most reliable of these data sources is usually observational data, but they are also usually more difficult to collect. Student self-report data can come in many forms, such as completed questionnaires or

portfolios. Observational data most often come from using an instrument to evaluate performance based on observations of the subject, such as a preceptor evaluating a student's performance on rotation. Anecdotal data can also be used to a certain extent to help assess student behavior, but they should not be the only data used.

As mentioned previously, one instrument that has been developed for observational use with pharmacy students is the Behavioral Professionalism Assessment form(24). The form was originally designed to use with students participating on experiential rotations. It was recently modified for use in an active learning classroom environment. Although the instrument has performed well psychometrically thus far, the rating scale could be somewhat problematic. Both versions of the 25-item instrument utilize a Likert-type 1-5 rating scale (1 = unsatisfactory/needs significant improvement, 5 = outstanding/could serve as a model) and an "N" rating (not enough evidence to evaluate). Some users may equate the numerical ratings with a grade or score as opposed to a level of quality of performance; because of this, some thought is being given to testing the instrument with a text-based "quality" rating scale or a frequency scale. Additionally, using a numerical rating scale with descriptors only provides valid data if the users of the scale are interpreting it in the same manner, or if the ratings descriptors are expressed so clearly that misinterpretation is unlikely to occur.

In some medical schools, an approach to identifying negative behaviors is used. At the University of New Mexico, medical faculty and residents used a pocket-sized card, the Noncognitive Skills Evaluation Form, to identify students who may be having difficulties in any of these seven behavioral dimensions: reliability and responsibility, maturity, critique, communication skills, honesty and integrity, respect for patients, and chemical dependency/mood disorder(72). Students who were identified as having difficulties in any of those areas were followed up for intervention. Faculty members at the University of California-San Francisco developed a similar system using their "physicianship report," which includes four categories of unprofessional behavior: unmet professional responsibility, lack of effort toward self improvement and adaptability, diminished relationships with patients and families, and diminished relationships with members of the health care team. If students receive a report of unprofessional behavior from two or more clerkships, they are placed on academic probation and provided with counseling services and faculty mentorship to improve their behaviors(73).

BARRIERS TO DEVELOPMENT AND MEASUREMENT OF PROFESSIONAL ATTITUDES AND BEHAVIORS

Part of the process of implementing change in an institution's culture involves identifying barriers to that implementation. Just as there are many barriers faced in pharmacy practice for the implementation of pharmaceutical care, there are many challenges in trying to enhance the level of professionalism in students and faculty in our academic institutions.

Faculty Members, Staff, Administrators, Instructors

One obvious barrier may be a lack of professionalism among some personnel with whom our students interact. They may not serve as positive role models of professionalism for any number of reasons: inappropriate attire, unprofessional behavior toward students and colleagues, lack of care taken in teaching and other activities that involve students, lack of participation in service activities, and the list goes on. Additionally,

these personnel serve as barriers in their lack of support for implementation of professionalism-enhancing activities conducted by personnel. Some may even serve "as eroders"; telling students, for instance, that because they are the first academic class in a new curriculum, they are the "guinea pigs."

Students

If the students entering our programs already exhibit unprofessional behaviors, the school may have a more difficult time developing those students' professionalism. An analogous situation occurs when programs admit students with poor communication skills — it is more difficult to help those students achieve the communication outcomes of our programs than those who enter with more effective communication skills. If the students in the current program exhibit unprofessional behaviors, the problem is compounded; peer mentoring as well as senior-student junior-student mentoring can have powerful influences on incoming and existing students - positive and negative. Lastly, if students do not support professionalism-related activities in the school, that may affect their participation as well as that of their peers.

School Environment

Although the personnel and students in the school are the keys to creating a professional culture, there may also be some "macro-factors" that exist as barriers to professionalism. Are the educational processes through which students must navigate well-organized and efficient? How does the school communicate with its students? Processes such as course registration, purchase/retrieval of texts and course materials, and receipt of grades all reflect on the professionalism of the school.

The facilities of the school also reflect on its professionalism. Is the learning environment professional? Are classrooms, equipment and materials updated and reflect professional practice? In general, does the environment of the school encourage students to achieve their full professional potential? Or does the environment reflect that students just pass their courses, take the boards, then leave to make a big salary? Although resources are not always plentiful, it is important that the school itself present an image of professionalism to help foster professionalism in its students and personnel.

Practice Environment

The fact that pharmacy practice in many environments does not reflect the level of professionalism we would like to instill in our students is not new news(74-77). It is also not new news that many students in our programs enter with pharmacy technician experience and continue to work in these jobs during their academic careers. This feature differentiates pharmacy from many other professions - students can "apprentice" with practitioners before entering the professional program and can continue these apprenticeships during their academic programs. Most of the environments in which this professional socialization of our students takes place are practice settings not affiliated with the school. Thus, schools cannot be assured of the quality of the experience their students are receiving. If these practitioners, other personnel, and practice environments do not enhance the professionalism of our students, then school programs may be even more challenged to develop professionalism in our students.

CONCLUSION

Professional attitudes and behaviors, the "As and Bs" of professionalism, are critical to the survival and enhancement of professions and professionals, yet are as difficult to describe as

they are to develop and measure. This paper attempted to define and describe these components of professionalism, identify those factors that have the greatest influence on them, provide ideas on how to develop and measure them, and discuss barriers to these efforts. With continued progress in the area of developing professional attitudes and behaviors in our students, we will not only make the academic environment more professional but help to enhance the professionalism of future practitioners of pharmaceutical care.

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3. Student produces quality work, *i.e.*, tasks and assignments are complete, accurate, and meet their respective objectives.
 4. Student is empathetic, *i.e.*, demonstrates appreciation of others' positions; attempts to identify with others' perspectives; demonstrates consideration towards others.
 5. Student behaves in an ethical manner, *i.e.*, acts in the best interest of others; acts in accord with the Student Ethics and Conduct Code.
 6. Student communicates articulately, *i.e.*, clearly communicates thoughts; uses appropriate terminology and vocabulary for intended audience.
 7. Student is punctual, *i.e.*, arrives to class and meetings early or on time; meets deadlines for completion of tasks and responsibilities.
 8. Student uses time efficiently, *i.e.*, allocates and utilizes appropriate amounts of time to fulfill responsibilities; utilizes others' time wisely.
 9. Student is self-directed in undertaking tasks, *i.e.*, after initial instruction of tasks/assignments/responsibilities, initiates activities to complete them; self-motivated; functions independently.
 10. Student handles stress; *i.e.*, remains clam, levelheaded, and composed in critical, stressful, or difficult situations.
 11. Student is respectful, *i.e.*, demonstrates regard for self, standardized patients, peers, TA's, faculty, staff and university property.
 12. Student communicates using appropriate body language, *i.e.*, utilizes gestures and mannerisms that enhance formal and informal communication.
 13. Student demonstrates accountability, *i.e.*, holds oneself liable for tasks/ duties/responsibilities that he/she is responsible; does not blame others for mistakes or mishaps, nor avoids responsibilities.
 14. Student prioritizes responsibilities effectively, *i.e.*, organizes and approaches multiple tasks and assignments in a manner to produce desired outcomes.
 15. Student accepts and applies constructive criticism, *i.e.*, responds openly and positively to feedback; modifies behavior if necessary.
 16. Student puts others' needs above his/her own, *i.e.*, demonstrates an attitude of service by taking the necessary time and actions to help others; gives of oneself to benefit others.
 17. Student is nonjudgmental, *i.e.*, demonstrates an attitude of open-mindedness towards others and situations; does not "stereotype" others or prejudge situations.
 18. Student communicates assertively, *i.e.*, actively and appropriately engages in dialogue or discussion; not afraid to provide his/her viewpoint.
 19. Student is an active learner, *i.e.*, seeks knowledge; asks questions; searches for information; takes responsibility for own learning.
 20. Student is cooperative, *i.e.*, non-argumentative; willing and helpful.
 21. Student is diplomatic, *i.e.*, is fair and tactful in all dealings with standardized patients, peers, TA's, faculty, and staff.
 22. Student "follows through" with responsibilities, *i.e.*, if task is left incomplete or problem is not resolved, student seeks aid.
 23. Student wears appropriate attire, *i.e.*, adheres to dress code; as outlined in the course syllabus.
 24. Student demonstrates confidence, *i.e.*, acts and communicates in a self-assured manner, yet with modesty and humility.
 25. Student demonstrates a desire to exceed expectations, *i.e.*, goes "above and beyond the call of duty"; attempts to exceed minimal standards and requirements for tasks/assignments/responsibilities.

APPENDIX A. ITEMS FROM PROFESSIONAL BEHAVIOR ASSESSMENT FORM

Item Numbers and Descriptors

1. Student is reliable and dependable, *i.e.*, can be counted on to fulfill responsibilities and meet expectations.
 2. Student practices personal hygiene, *i.e.*, maintains personal health and grooming habits acceptable to practice setting.
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