INSTRUCTIONAL DESIGN AND ASSESSMENT

Emotional Intelligence Instruction in a Pharmacy Communications Course

Elaine Lust, PharmD, and Frances C. Moore, PharmD
Creighton University School of Pharmacy and Health Professions


Objectives. To determine the benefits of incorporating emotional intelligence instruction into a required pharmacy communications course.

Design. Specific learning objectives were developed based upon the emotional intelligence framework and how it can be applied to pharmacy practice. Qualitative data on student perceptions were collected and analyzed using theme analysis.

Assessment. Students found instruction on emotional intelligence to be a positive experience. Students reported learning the taxonomy of emotional intelligence – a concept that previously was difficult for them to articulate or describe, and could use this knowledge in future pharmacy management situations. Students also recognized that their new knowledge of emotional intelligence would lead to better patient outcomes.

Conclusion. Students had positive perceptions of the importance of emotional intelligence. They valued its inclusion in the pharmacy curriculum and saw practical applications of emotional intelligence to the practice of pharmacy.

Keywords: emotional intelligence, communication, empathy, social skills

INTRODUCTION

The concepts of emotional intelligence are well publicized and utilized within the business community of corporate America.1-3 The literature reveals recent applications of emotional intelligence competencies and how they can be used for assessment, education, and training of healthcare professionals. This manuscript describes pharmacy student evaluation and perceptions of instruction on emotional intelligence competencies in a pharmacy communications course.

What is emotional intelligence? Daniel Goleman defines it as the ability to manage feelings so that they are expressed appropriately and effectively, enabling people to work together smoothly toward their common goals.4 Early work by Bar-on5 and Salovey and Mayer6 is credited with the development of the theory behind emotional intelligence. A review of their work and that of others in the field provides a comprehensive overview.1-8 Mayer and Salovey’s published works on emotional intelligence are extensive and serve as excellent background reading for an in-depth assessment of the theories, constructs, applications, and beliefs surrounding this topic.9-15

In his book Working with Emotional Intelligence, Goleman4 details the emotional competencies that are needed for emotional intelligence. An emotional competence is a learned capability based upon emotional intelligence that results in outstanding performance at work.4 Working with Emotional Intelligence provides a framework that details 5 specific dimensions of emotional intelligence. Each dimension has core competencies. Persons who understand and apply these competencies typically enjoy success in their workplace, regardless of the specific career or field.4,7 Some perceive emotional intelligence competencies similar to interpersonal communication skills. The word “intelligence” when used by Goleman4 may have a different meanings for some readers as it may be interpreted using the historical definition of intelligence.

The 5 domains of Goleman’s emotional intelligence framework4 are briefly described:

- Self-awareness; recognizing one’s internal states and personal abilities. Key competencies are emotional awareness, self assessment, and self-confidence.
- Self-regulation; managing one’s emotional state. Key competencies are self-control, being trustworthy, conscientious in one’s work, flexible/adaptable, and creative/innovative.
• Motivation; emotional factors that help one reach their goals. Key competencies are achievement drive, commitment, taking initiative, and being optimistic.
• Empathy; awareness of the feelings and needs of others. Key competencies are the ability to understand and empathize with others, developing others, having a service orientation, leveraging diversity, and being politically aware.
• Social Skills; a diverse skill set used to induce desirable responses in others. Key competencies are influence, verbal and non-verbal communication skills, ability to manage conflict, being a leader, influencing change, building personal or team bonds, collaboration/cooperation with others, and team work capabilities.

In 2002, Goleman modified his original emotional intelligence framework and grouped the competencies into 4 domains: self-awareness, self-management, social awareness, and relationship management.8 The new grouping reflects categories that are specific to self-awareness and awareness of others. The new grouping also includes self-recognition and social recognition; and self-management and relationship management.8

Why is emotional intelligence being embraced by many within the workforce? Goleman cites a national survey of what employers are looking for in entry-level employees. The skills and competencies most desired are communication skills, adaptability, personal management, group and interpersonal effectiveness/teamwork, and effectiveness in the organization as evidence by leadership potential.4 The concept of emotional intelligence supports the survey findings, and Goleman reports that the emotional competencies are found to be twice as important in contributing to workplace excellence as pure intellect and expertise.4 The skill sets identified in the employee survey are applicable and highly valued in any pharmacy setting. Common synonyms used for emotional intelligence are “interpersonal communication skills,” “soft skills,” and “people skills.” Browsing the employment opportunities section of the American Association of Colleges of Pharmacy (AACP) monthly news publications reveal that interpersonal and communication skills are frequently requested qualifications for positions in pharmacy practice and academia.

Literature from other healthcare professions reports on the various applications of emotional intelligence. Nursing appears to be one of the first medical professions to embrace the concept of emotional intelligence and the potential benefits it offers to their students and ultimately to patients. Several articles report on the use of emotional intelligence in the education and training process for nursing students.16-20 In one article, Evans and Allen conclude “The inclusion of emotional education in the curriculum empowers students to manage situations that may be highly charged emotionally. If they are able to deal with their own feelings well, they will be able to deal with others confidently, competently and safely.”16 A similar conclusion is made by McQueen, reporting “an analysis of the literature suggests that the modern demands of nursing draw on the skills of emotional intelligence to meet the needs of direct patient care and cooperative negotiations with the multidisciplinary team.”20 Medical academia has documentation of measuring emotional intelligence in its applicants.21 Pharmacy academia has only recently applied the emotional intelligence framework and related competencies to its curriculum.22-24

Pharmacy academia recognizes the importance of effective communication skills reflected by the inclusion of didactic and/or laboratory communications courses in the curriculum. Recent changes in the North American Pharmacist Licensure Examination (NAPLEX) blueprint are reflective of the need to place more emphasis on communication skills.25 Communication is also a recurring theme in the 2004 Center for the Advancement of Pharmaceutical Education (CAPE) educational outcomes, again pointing to the importance of effective communication skills in pharmacy graduates.26

The emotional intelligence framework, specifically the 2 social competencies of social skills and empathy, provide implicit and explicit support for why these skills are so critical in communicating and working well with others. The social skill competency encompasses communication skills, conflict management, leadership, collaboration and cooperation and team capabilities. These qualities are useful in any pharmacy practice environment. Students who have a skill set in conflict management are better prepared to manage ongoing conflicts between their patients and third-party payers, or manage conflict between nurses and pharmacists that can occur in large healthcare institutions. Students who possess skills that enable them to work cooperatively and effectively with other health care providers while working as a team to manage a patient’s care are highly valued.

Instruction on empathy and why this competency is critical for pharmacists is routinely included in didactic communication courses. Empathy is required to be able to sense other persons’ feelings and perspectives and to take an active interest in their concerns.4 Empathy is necessary to be able to read a group’s emotional currents and underlying power relationships.4 Empathy is a crucial aspect of emotional intelligence and it is known to contribute to professional success.5 Medical academia has recognized the need to train their students to be more empathic and
sensitive in their patient interactions.\textsuperscript{27} Structured courses on communication and empathy reportedly aid students in recognizing empathic responses and increased empathic listening in pharmacy students.\textsuperscript{28} For example, students who are empathetic are ideally more adept at working with patients who may be concerned about the cost of medications. Students who are empathetic are more adept at reading the undercurrents of a multidisciplinary team when participating in clinical rounds in an intensive care unit and can use this competency to work for the best interest of the patient.

The goal of introducing instruction on emotional intelligence into a required pharmacy communications course was to expose students to a framework that describes specific competencies needed for professional success. Several of the emotional intelligence competencies (empathy, communication skills, interpersonal behaviors) are objectives for the current communications course. In the experience of the instructors, students have struggled with the theoretical nature of the course content and need a more practical understanding of this knowledge and these skills and their ultimate value to a competent pharmacist. We hypothesized that students would have positive perceptions of the emotional intelligence framework and its overall usefulness and applicability to the practice of pharmacy.

Beginning in 2004, the summer and fall course offerings of PHA 320, Pharmacy Communications, a required course in the first-professional year, adopted Working with Emotional Intelligence\textsuperscript{4} to provide explicit instruction on the emotional competence framework and how it applies to the practice of pharmacy. Qualitative data were gathered on students’ (n = 52 web students, n = 55 campus students) perceptions of the value, applicability, and usefulness of emotional intelligence instruction when incorporated into the communication course curriculum.

DESIGN

Learning Objectives

Table 1 lists the learning objectives of the emotional intelligence content for the course. Specific learning objectives were developed based upon the emotional intelligence framework and how it can be applied to pharmacy practice. The instructors utilized the first 9 chapters in the book, which provided comprehensive instruction on what emotional intelligence is, why it is important, the 5 dimensions of emotional intelligence, and the 25 supporting competencies.

Educational Environment

The first half of the course content focused on emotional intelligence instruction described in this manuscript and the second half of the course content focused on knowledge and skills needed for effective patient counseling (3 prime questions, final verification, communication with special patient populations, assertiveness, conducting patient interviews, and medication history). However, it is important for instructors to tie the emotional intelligence content to the patient counseling content and give students the opportunity to practically apply emotional intelligence competencies. Patient counseling scenarios were conducted utilizing video-recorded counseling interactions between students and standardized patients. Standardized patients used for the video-recorded patient counseling scenarios were cued to be argumentative, weepy, or sad, and prompted to ask specific questions. The recordings were then reviewed by the instructors with the students, noting the presence or absence of empathic statements, use of verbal and nonverbal communications skills, as well as use of 3 prime questions and final verification. Students received verbal and written feedback on their performance and were given opportunities for retrospective reflection. Additionally the instructors role-modeled alternative counseling scenarios.

Placement of emotional intelligence instruction within the communication course was logical due to the similar content (interpersonal communication skills), overlapping topics (empathy, conflict resolution), and the structured opportunity for students to practically apply skills learned during simulated patient interactions.

Pedagogy/Andragogy

The instructors deferred to the experts in emotional intelligence who have researched the psychological, psychobiological, and neurological foundations of emotional intelligence.\textsuperscript{2-15,29,30} Cognitive learning and emotional learning occur in different parts of the brain. Competencies such as empathy or flexibility involve the brain circuitry that directs the feeling or emotional center of the brain, the amygdala, which differs from cognitive abilities that draw upon the neocortex.\textsuperscript{3,4,6} Emotional competencies depend on emotional learning as well as cognitive learning.\textsuperscript{6}

Guidelines for social and emotional learning\textsuperscript{6} written by Cherniss et al were utilized for the emotional intelligence instruction in this course. The 4 processes used to provide instruction to students in emotional intelligence are described below and were slightly modified to reflect application to pharmacy academia and pharmacy practice.

(1) Preparation phase. The preparation phase requires the instructor to assess personal strengths and limitations with regard to providing instruction on emotional intelligence topics, clearly communicating to students the reasoning for including emotional intelligence...
instruction in the curriculum, encouraging student participation and feedback, and gauging the readiness of the students as a group to be responsive to the concept of emotional intelligence

(2) Training phase. The training phase requires the instructor to have a clear understanding of constructs of emotional intelligence in order to develop clear learning objectives for the course, provide opportunities for students to practically apply emotional intelligence competencies, and provide insight on the applicability of the emotional intelligence dimensions and competencies to students based upon real-life pharmacy practice experience.

(3) Transfer phase. The transfer phase requires the instructor to thoughtfully develop testing and assessment methods related to the emotional intelligence content using real-world pharmacy scenarios.

(4) Evaluation phase. The evaluation phase requires the instructor to assess and evaluate the outcomes of emotional intelligence instruction using qualitative data collected from students on their perceptions of the usefulness, applicability, and importance of emotional intelligence as future pharmacy practitioners.

Evaluation/Assessment Methods

Given the relative newness of this topic to pharmacy academia and the lack of valid or reliable pharmacy-specific instruments to measure the strengths or weaknesses of students’ emotional competencies, qualitative measures were used to evaluate this new teaching material and test the hypothesis. There is no tool available to quantify or identify changes in emotional intelligence competencies specific to pharmacy students. Tools are available

Table 1. Learning Objectives for Emotional Intelligence Coursework

<table>
<thead>
<tr>
<th>Learning Objective</th>
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<tbody>
<tr>
<td>Describe what emotional intelligence is, and what it is not.</td>
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<tr>
<td>List and describe 5 abilities that employers want in their employees and relate how each of those 5 abilities would apply to a pharmacy practice setting (retail, hospital, or clinical).</td>
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<td>Define an emotional competence.</td>
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<td>Explain the relationship between these 5 dimensions of emotional intelligence and the 25 supporting emotional competencies.</td>
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<td>Explain the need for, and advantages of, emotional competence in an entry level job (i.e., staff pharmacist) and at the highest leadership/job performance level (i.e., Executive Director of the American Pharmacists Association).</td>
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<tr>
<td>Discuss the emotional dimension of self-awareness and the three emotional competencies that make up this category.</td>
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<td>Relate how self-confidence would be beneficial to the Director of Pharmacy in a large hospital.</td>
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<tr>
<td>Discuss the emotional dimension of self-regulation and the five emotional competencies that make up this category.</td>
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<td>List and describe the characteristics of self-control and why it is described as an “invisible” skill.</td>
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<td>“The principle of remaining calm despite provocation applies to anyone who routinely faces obnoxious or agitated people on the job” is a quote from the book. Apply that skill to the work environment of a busy retail pharmacy filling 700 prescriptions per day.</td>
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<tr>
<td>List and describe the characteristics of conscientiousness and how people who excel at this competence behave.</td>
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<td>Relate how the competence of “being organized and careful in their work” would apply to any pharmacist.</td>
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<tr>
<td>Discuss the emotional dimension of motivation and the four emotional competencies that make up this category.</td>
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<td>One characteristic of people who are emotionally competent in achievement is “pursue information to reduce uncertainty and find ways to do better”. Relate this competence to a pharmacist working in a drug information center at a large medical university.</td>
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<td>Relate how the emotional competencies of initiative and optimism would benefit you if elected as an officer for your pharmacy class.</td>
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<td>Recall the descriptors of people who lack initiative. Be able to recognize characteristics of a person (i.e. a pharmacy technician) who is working under your supervision and who is clearly lacking initiative.</td>
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<tr>
<td>Describe what empathy is and what it is not.</td>
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<tr>
<td>Discuss the emotional dimension of empathy and the five emotional competencies that make up this category.</td>
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<tr>
<td>Relate how empathy is critical for superior performance wherever the job focus is on people.</td>
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<td>Relate how political awareness would be a beneficial competency to a clinical pharmacist who rounds with a team of health care professionals on a daily basis.</td>
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<tr>
<td>Discuss the emotional dimension of social skills.</td>
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<tr>
<td>Describe the qualities of a person who is adept at influence. Relate how this competency could benefit a pharmacy manager.</td>
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<tr>
<td>Describe the characteristics of people who are competent in communication skills. Relate how these characteristics would benefit the pharmacist who manages a staff of 20.</td>
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<tr>
<td>Relate how “keeping cool” and “staying collected” could benefit a pharmacist who provides clinical services to the intensive care/critical care floor of a large hospital.</td>
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<tr>
<td>Describe the characteristics of a person competent in conflict resolution. Relate how these skills could assist a pharmacist when dealing with a patient about the failure of his insurance company to pay for his new prescription medication.</td>
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to assess emotional intelligence changes or parameters for any occupational setting, but none are specific to practice environment skills for health care providers in general or for pharmacists.

Qualitative data collected from 2 reflective questions and student feedback from end-of-semester course evaluations provided the means to assess student’s perceptions on the inclusion of emotional intelligence instruction in the course. The first reflective question, “Describe how information from the emotional intelligence book will assist you in becoming a successful health care professional,” was intended to gather student thoughts on the value, usefulness, and applicability of the emotional intelligence competencies to becoming a successful pharmacist.

The second reflective item, “Describe how your communication skills have changed since the beginning of the course,” was intended to solicit students’ thoughts on specific new knowledge gained from the course. Free text commentary from the course evaluation item, “Describe how this course assisted you in your learning,” also provided valuable qualitative data about student perceptions of the course material.

An additional method of assessment used was test question responses from the first formative examination. The examination utilized essay questions to evaluate the student’s ability to describe, relate, or explain specific emotional intelligence dimensions or competencies and apply them to pharmacy practice scenarios. The instructors felt the best testing method to assess knowledge and attitudes reflective of emotional intelligence was essay-type questions that required students to apply the competencies to current pharmacy practice scenarios, ones that students would likely encounter in any pharmacy practice environment. The first examination comprised 25% of the students’ final course grade. The examination contained 33 essay questions. A scoring guide was used to fairly evaluate and grade each response since there was the potential for large variances between students.

**ASSESSMENT**

Responses to the reflective item, “Describe how information from the emotional intelligence book will assist you in becoming a successful health care professional,” were positive. A majority of the students enjoyed receiving instruction from *Working with Emotional Intelligence* and commented that it helped them in their personal and professional development. Web-based students felt the examples used in the book were helpful and highly applicable to current work as pharmacy interns and while completing site visits in the early experience courses. Students’ assessed their strengths and weaknesses in emotional intelligence and provided lengthy commentary about situations at work or home where they could have had different behaviors if they had been aware of their weaknesses. Interestingly, students also reported the ability to detect deficiencies or weakness in emotional intelligence in others, such as coworkers, peers, and immediate family members. A theme emerged within the essays in which students realized that competency in emotional intelligence was very important and would be a necessary component for their professional success, focusing specifically on the importance of good social skills and empathy. Students felt they had learned an important taxonomy – the specific terms of emotional intelligence – an area that had previously been difficult for them to articulate or describe, and that they could use this knowledge in future management situations. Perhaps one of the most important themes that evolved was that their new knowledge of emotional intelligence would help them to work for better patient outcomes and/or better serve their patients.

In response to the item, “Describe how your communication skills have changed since the beginning of the course,” students conveyed their awareness of the importance of communication skills. While a majority of students reported their communication skills had increased or improved, others reported theirs were evolving and/or that they needed to change current communication practices. Students were appreciative of the new knowledge gained in communication skills and recognized that they needed to practically apply their newly acquired skills to become more polished. Several students shared narratives of how they applied emotional intelligence competencies in their current work environments and how supervisors or employers had subsequently commended their improved skill set. Lastly, 50% of students reported increases in their self-esteem, self-confidence, and active-listening skills.

The responses from the free-text commentary in the course evaluations followed similar themes from the reflective questions. A majority of students reported enjoying the course and appreciated the direct ties to the “real-life” practice of pharmacy. Positive references to the inclusion of emotional intelligence instruction and the use of the required book dominated the free-text commentary on the course evaluation.

The data collected for the theme analysis were qualitative in nature, not quantitative. Qualitative data were utilized because the authors desired to gauge student perceptions from a first-time teaching innovation. The need for more specific outcome measurers is acknowledged and and changes are planned for future course offerings.

**DISCUSSION**

We hypothesized that students would have positive perceptions of the emotional intelligence framework and
some campus-based and approximately one third felt the author could have been more concise. The instructors feel that the lower average age of campus students combined with fewer "real-world" working experiences contributed to less appreciation for the value of the examples given in the book compared to Web-based students. Third, campus students took this course before taking early experience courses and lacked exposure to a practice environment in which to adequately frame emotional competencies in a pharmacy workplace.

Some campus-based students felt the book had more business applications than pharmacy applications. While that is true, it is the responsibility of the instructors to help student's bridge the gap between business and pharmacy practice and provide explicit instruction on the advantages of emotional intelligence. Differences in teaching styles between the 2 instructors may have also contributed to these perceptions. The concept of offering emotional intelligence instruction was new to both faculty members, but the method of content delivery (campus vs. Web) and individual teaching style may have contributed to the differing student perceptions. The differences reported between campus and Web-based students is worthy of further investigation and study.

What is the value of these findings to mainstream pharmacy or to seasoned faculty members? The value resides in the production of a graduate who has gained new insight into their emotional competencies by studying emotional intelligence in a required communications course. What is even more encouraging is that pharmacy students recognize the value and benefits that they offer to their patients when they are in control of their emotions and the importance of empathy in becoming a caring professional to all patient populations they serve.

The focus on emotional intelligence competencies should not minimize or overshadow the importance of clinical knowledge to the competent practice of pharmacy, but rather underscore the fact that other skills can be employed to assist pharmacy graduates in being successful. Pharmacy students tend to focus on strict clinical and therapeutic knowledge bases provided to them via the pharmacy curriculum, and overlook other skills sets that clearly contribute to their development as a competent pharmacist. Students professed a realization that effective social skills, emotional control, and empathy are critical to the profession of pharmacy. Preventing and resolving pharmaceutical-related problems in the interest of best patient care require skills and behaviors such as conflict resolution, empathy, and the ability to communicate with genuine feelings of sincerity.

Pharmacy academia needs to be mindful of the potential for professional success of its graduates and empower them with the knowledge, skills, and attitudes that contribute to this success. The doctor of pharmacy degree is a versatile degree and graduates can practice in a number of different settings. Instilling the knowledge, skills, and attitudes required for emotional intelligence could potentially benefit graduates by supporting them in their professional success. Nursing academia reports instruction on emotional intelligence to their students ultimately serves the best interest of patients. There is the potential for pharmacy academia to see similar results.

Instruction on the topic of emotional intelligence is new to pharmacy. Emotional intelligence and its applications have enjoyed success in corporate business models. The content described in this manuscript was well suited to placement in the communications course given the overlap and similarity of materials focusing on interpersonal
communication skills, empathy, and conflict resolution. Students reported that situations encountered in the early experience sequence provided them with opportunities to apply emotional intelligence competencies in their immediate environment. The emotional intelligence instruction provides an excellent background to the required pharmacy management course that typically follows the communications course. An obvious application of emotional intelligence competencies could occur during experiential rotations where students are place in constantly changing practice environments that require self-awareness, social awareness, and relationship management.

The instructors realized a need to frame the emotional intelligence competencies in the context of the practice of pharmacy and illustrated explicit examples from real pharmacy working environments. Doing so was critical to enhancing student’s appreciation for the importance of “soft skills” or emotional intelligence competencies in the workplace. Otherwise, the business world applications of emotional intelligence tended to overshadow the applicability of emotional intelligence to clinical pharmacy practice. Given the positive student perceptions generated by the first offering of emotional intelligence instruction in the required communications course, the instructors plan to continue this subject in future course offerings. One challenge to overcome is the identification of a valid and reliable tool to quantify specific changes in emotional intelligence in students within the context of pharmacy practice. In consultation with TalentSmart, a leading provider of cutting-edge assessment tools for leadership and employee development, the authors have designed a tool to measure learning outcomes for emotional intelligence instruction in future course offerings.

Other possible measurement tools to assess the skills of pharmacy graduates would include longitudinal studies of students 5 or 10 years after graduation to assess if and how they are using the emotional intelligence framework learned in the communications course in their current or past pharmacy position(s). Or, questions designed to gauge on-the-job usefulness or professional successes as a result of emotional intelligence instruction could be added to survey instruments sent to pharmacy graduates.

The Emotional Intelligence Consortium provides a wealth of resources specific to the topic. The web site provides references, reports, guidelines, definitions, links to other emotional intelligence sites, and print/text resources, and serves as an outlet for scholarly activities/efforts specific to emotional intelligence. A number of measurement tools are described at the consortium site and are available for further investigation. Six Seconds is an other web site that lists resources, publications, training symposiums, and current applications of emotional intelligence in organizations and primary education. Six Seconds has expanded its emotional intelligence offerings to include a site for healthcare professionals that has an emphasis on delivering emotional intelligence training to nursing professionals within healthcare organizations.

**SUMMARY**

Taking a cue from the business world, the instructors saw value in providing emotional intelligence instruction to pharmacy students. The instructors found teaching these skills to future pharmacists to be enjoyable. Given the positive perceptions of the first classes of students to receive such instruction, the innovation will be continued for the foreseeable future. However, the need for quantitative data assessing learning outcomes is acknowledged and will be incorporated into future course offerings.

**REFERENCES**