



# Strengthening emotional and social competence: undergraduate health professions students

## Stärkung emotionaler und sozialer Kompetenzen bei Bachelorstudierenden in Gesundheitsberufen

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### Abstract

Emotional and social competencies are important skills to cultivate in developing leaders. This study examined pre-post findings from the Hay Group Emotional and Social Competence Inventory among 18 undergraduate students enrolled in a leadership programme while they concurrently completed their traditional academic courses. Correlations and paired t-tests were conducted using Statistical Package of Social Sciences 20.0 for data analysis. Statistical significance was found in students' self-assessed functional behaviour in a number of competencies — emotional self-awareness, positive outlook, empathy, organisational awareness, coach and mentor, systems thinking, and pattern recognition. Pedagogical strategies that intentionally focus on development of emotional and social competencies aid in students' abilities to understand, internalise, and make use of skills essential to a variety of leadership roles, specifically, how they are able to relate effectively with others. Graduating students who are better prepared to serve in leadership roles — on teams and in the community are an investment in the future of healthcare.

### Abstract

Emotionale und soziale Kompetenzen sind wichtig für zukünftige Führungskräfte. Die vorliegende Studie untersucht die Pre-Post-Ergebnisse des Hay Group Emotional and Social Competence Inventory bei 18 Bachelorstudierenden, die während dem Studium einen Führungskurs besuchten. Korrelationen und T-Tests für abhängige Stichproben wurden mit SPSS 20.0 durchgeführt. Signifikante Ergebnisse zeigten sich in einer Reihe von selbst eingeschätzten Kompetenzen: emotionales Selbstbewusstsein, Optimismus, Empathie, Organisationsbewusstsein, Coach und Mentor, Denken in Systemen, Mustererkennung. Pädagogische Strategien, die auf die Entwicklung von sozialen und emotionalen Kompetenzen fokussieren, fördern die Fähigkeiten von Studierenden, Kompetenzen für verschiedene Führungsrollen zu verstehen, internalisieren und anzuwenden, insbesondere hinsichtlich der effektiven Beziehungsgestaltung zu anderen. Absolventen/-innen, die für Führungsaufgaben im Team und im Gesundheitssystem vorbereitet sind, sind eine Investition in die Zukunft der Gesundheitsversorgung.

### Keywords

emotional competence – social competence – leadership – undergraduate health professions

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Emotionale Kompetenzen – Soziale Kompetenzen – Führung – Bachelorstudierende Gesundheitsberufe

Individuals who possess high levels of emotional and social competence are often hailed as effective leaders (Sadri, 2012). Given the fact that the Institute of Medicine stated that 'the need for leaders is too great to leave their emergence to chance' (Czabanowska, Malho, Schröder-Bäck, Popa, & Burazeri, 2014, p. 1), intentional steps

must be taken to cultivate needed skills among nursing and health professions students. These students will be on the front lines of delivering health services and/or engaging in health-promoting roles within complex environments and with interdisciplinary teams. To operate effectively in our contemporary healthcare settings and promote



professional success, students will need enhanced emotional and social competence skills, especially since George (2000) stated leadership is an 'emotion laden process' (p. 1046). Nurses and other health professionals must be able to demonstrate the ability to communicate their vision or goal to others, cultivate willing support for this vision, as well as empower others by way of their passion and teamwork to step-up and take on leadership roles (Blumenthal, Bernard, Bohen, & Bohmer, 2012). Management skills also relevant to leaders include: establishing and effectively communicating work goals, plans, and targets; developing work budgets; employing qualified personnel; delegating work in an effective manner; monitoring work performance, and addressing issues that surface in real time. Taken together, 'leadership and management skills are closely interrelated processes' and complementary constructs (Blumenthal et al., 2012, p. 513).

Emotional competency focuses on one's capacity to identify, understand, use, and practice emotional information regarding self in a manner that promotes effective, exemplary performance (Hall, 2014). Consequently, students learn to become more self-aware of their emotions and to regulate their external manifestation of emotions. Social competency examines how the individual recognises, realises, and employs emotional information concerning others that facilitates effective or exceptional performance (Hall, 2014). As a result, students are able to distinguish social information in the environment; this supports social awareness (e.g., 'empathy, service orientation, and organisational awareness') and promotes effective management of relationships (e.g., 'developing others, exerting influence, conflict management, inspirational leadership, supporting change, and demonstrating teamwork and collaboration', (Hall, 2014, p. 35). Given this essential role of emotions, emotional and social competencies are quite relevant in the leadership development process (Walter, Cole, & Humphrey, 2011). This paper will describe the pre-test and post-test findings from an application of the Hay Group Emotional and Social Competence Inventory to a cohort of undergraduate students pursuing a degree in the health professions. The students had enrolled voluntarily in a 9-month leadership programme which fundamentally recognises skill development for students to serve as both a manager and a leader in their respective roles in pursuit of promoting optimal patient care for today and what will be needed in the future.

As indicated by Goleman (2004), traditional leadership characteristics including vision, intelligence, and persistence are important elements of effective leadership, nevertheless these qualities are insufficient. In order for individuals to attain true leadership effectiveness, strong levels of emotional competence are necessary including self-awareness, self-regulation, motivation,

empathy, and social skills (Eronini, 2015; Goleman, 2004). While emotional and social competences are positive attributes, few undergraduate programs provide intentional, meaningful education for their students in this area (Kasler, Hen, & Nov, 2013). Furthermore, there are insufficient courses that engage students in an interdisciplinary manner when cultivating these skills; quite often students are educated in silos learning with students in their own discipline.

## METHODOLOGY

This study used a pre-post survey design which administered the Hay Group Emotional and Social Competence Inventory (ESCI; HayGroup, n.d.) in September 2013 (Time 1) and again in May 2014 (Time 2). All participants were involved in a 9-month voluntary leadership programme (23 September 2013 to 4 June 2014). This leadership programme consisted of three courses: course 1 focused on authentic leadership development with significant self-introspection which allowed for self-awareness and self-knowledge about one's identity, beliefs, and vision to effect useful change and recognise these characteristics in others; also, consideration for how all identity is shaped by the intersection of race, ethnicity, gender, and socioeconomic status was examined; course 2 aimed to enhance students' abilities to work more effectively in groups and to lead teams to effect change as individuals and collectively with other individuals or groups recognising the role that power, privilege, and other characteristics play in these networks; and course 3 engaged students in service-learning projects, promoting community health in meaningful ways that value culture, community members, critical consciousness, and leadership for social transformation related to their work in the community. Using a social justice lens, this leadership programme encouraged students to understand the embodiment of self which included enhancing their self-awareness and interpersonal skills and challenging each student's ability to become comfortable with discomfort. These courses included didactic and experiential components; courses were taken consecutively while students concurrently completed their regular coursework towards earning their degree. Undergraduate students from three disciplines engaged in the study including nursing, health services administration, and health sciences.

Learning strategies used were student-centred and action-oriented. Examples of student activities included engaging in: (1) small group projects, (2) a cultural autobiography and cultural journey map, (3) media presentations (Technology, Entertainment and Design (TED Talk), YouTube, and movies) to stimulate discussion, (4) reflective debriefings, (5) fishbowl exercises, (6) diversity leadership panels, (7) leadership briefs, (8) cross-cultural



leadership interviews, (9) round table debates, (10) providing and receiving feedback, (11) development and implementation of an individual professional development plan, (12) individual mentorship, and (13) leader-based simulation and standardised patient case scenarios.

## SETTING

This study took place at a large private university in the north-eastern region of the United States. All participants were recruited from an undergraduate programme within the College of Nursing and Health Professions.

## PARTICIPANTS

University Institutional Review Board clearance was awarded prior to recruitment. Participants were recruited through flyers disseminated through the University's email system. Participants who responded to the flyer were extended an invitation to the programme if they were also: (1) committed to taking all three courses consecutively; (2) not in jeopardy of course failure with their normal academic courses; (3) willing to be courageous and humble in exploring their leadership skills and competencies as well as complete the Hay Group Social and Emotional Competence Inventory at Time 1 and Time 2; (4) agreeable to discuss and challenge their perspectives on leadership from a social justice perspective; (5) willing to write a brief essay indicating the reason why they wanted to enroll in the program; and (6) agreeable to engage in a personal interview to meet with course faculty. There were 18 participants who completed the entire programme during the 2013–2014 time frame.

## INSTRUMENT

The researcher(s) used the Emotional and Social Competency Inventory, University Edition (ESCI-U), co-designed by Daniel Goleman and Richard Boyatzis for this study (Boyatzis, n.d.). The ESCI-U is a 72-item self-report assessment used for evaluating college and/or graduate level students and the participants' self-regulation abilities with recognising, managing, and motivating their emotions. In addition, this tool is designed to show a participant's social abilities about being aware and having respect for the feelings of others (Boyatzis, n.d.). The ESCI-U concentrates on 12 areas of emotional and social competence. These competencies include: (1) emotional self-awareness, (2) emotional self-control, (3) adaptability, (4) achievement orientation, (5) positive outlook, (6) empathy, (7) organisational awareness, (8) coach and mentor, (9) inspirational leadership, (10) influence, (11) conflict management,

and (12) teamwork; within four categories: (1) self-awareness, (2) self-management, (3) social awareness, and (4) relationship management; and two cognitive dimensions: (1) systems thinking and (2) pattern recognition (Boyatzis, n.d.). Specific meanings of each competency, category, and dimension are described in Table 1.

Recent studies declared that the ESCI-U assessment has high reliability (0.83), a strong Cronbach's  $\alpha$  (0.74–0.93), and good divergent validity (Boyatzis, n.d.; Sharma, 2012; Shanmugasundaram & Mohamad, 2011). The scoring of this self-reporting tool is achieved by a Likert scale ranging in choice responses of: 1 (never), 2 (rarely), 3 (sometimes), 4 (often), and 5 (consistently). These choices are related to a participant's thoughts and actions towards self and others. The ESCI-I inventory strives to attain four goals for participants, that are as follows: (1) foster leadership and coaching abilities, (2) introduce and use professional assessments and concepts, (3) improve awareness about group dynamics, and (4) recognise one's role in preparing, planning, and managing self-growth (Boyatzis, n.d.). This assessment also aims to develop student participants, document students' outcomes, identify students' new skill sets learned during the course of their educational career, and provide feedback to necessary academic parties at student participants' educational institution as a means of supporting students and the affiliated educational organisations (Boyatzis, n.d.).

## DATA ANALYSIS

Upon completion of the participants' inventories, the researcher(s) hand-scored the research assessment results. During data analysis, all guidelines specified in the ESCI-U instruction manual, were followed for retrieving results. The data was coded numerically using the Statistical Package of Social Sciences 20.0 database for the ESCI-U and reported in aggregate form in order to preserve the participants' confidentiality.

## RESULTS

The researchers(s) implemented a paired samples t-test to determine if there was statistical significance among student participants' emotional and social competence abilities at the onset (pre-test, September 2013) and again at the termination (post-test, May 2014). Student participants' ESCI-U pre and post summary results of means, standard deviation, and paired samples correlation significance are displayed in Table 2. Collectively, all result scores of the participants confirmed either the choice response of 'sometimes' or 'often' indicating a minimal shift between pre and post test results. The pre and post outcome of data results include: (1) emotional



Table 1: ESCI-U Category, Competency, and Dimension Definitions\*

Categories, Competencies and Dimension	Definitions
SELF-AWARENESS CATEGORY	<i>Awareness of personal thoughts, feelings, emotional state, mental capability, preferences, resources and intuitions.</i>
Emotional Self-Awareness	<ul style="list-style-type: none"> <li>Capacity to know personal emotions and their effects and impact on self.</li> </ul>
SELF-MANAGEMENT CATEGORY	<i>Regulation of personal thoughts, feelings, emotional state, mental capability, resources and impulses.</i>
'Achievement Orientation	<ul style="list-style-type: none"> <li>Self-improvement ability, ambition and drive to succeed, determination for excellence.</li> </ul>
Adaptability	<ul style="list-style-type: none"> <li>Malleable in the adverse situations and/or conditions of change.</li> </ul>
Emotional Self-Control	<ul style="list-style-type: none"> <li>Ability to manage personal unexpected, disruptive emotions and control impulses.</li> </ul>
Positive Outlook	<ul style="list-style-type: none"> <li>Upholding an optimistic stance regarding life and the future.</li> </ul>
SOCIAL AWARENESS CATEGORY	<i>Awareness of the feelings, needs, and concerns of others.</i>
Empathy	<ul style="list-style-type: none"> <li>Taking an interest in the needs, feelings, and perspectives of others and actively supporting others in the process.</li> </ul>
Organizational Awareness	<ul style="list-style-type: none"> <li>Insightful of others in relation to group dynamics and relationships.</li> </ul>
RELATIONAL MANAGEMENT CATEGORY	<i>Ability to instruct and maintain desired outcomes of others.</i>
Conflict Management	<ul style="list-style-type: none"> <li>Skilled in problem solving. Negotiation capabilities. Facilitates resolution of disagreements.</li> </ul>
Coach & Mentor	<ul style="list-style-type: none"> <li>Acknowledges the skills of others, expresses validation and encouragement and demonstrates support during developmental process when appropriate.</li> </ul>
Influence	<ul style="list-style-type: none"> <li>The power to encourage others, which impacts outcomes.</li> </ul>
Inspirational Leadership	<ul style="list-style-type: none"> <li>Influences others, motivates and guides others and facilitates positive communication with others.</li> </ul>
Teamwork	<ul style="list-style-type: none"> <li>Capable of working with a team in a group environment for the purpose of achieving shared objectives.</li> </ul>
COGNITIVE DIMENSION	<i>Capable of learning new things and recalling information.</i>
Systems Thinking	<ul style="list-style-type: none"> <li>Knowledge of all relevant factors and current relationships when considering the comprehension of a phenomenon/event/outcome.</li> </ul>
Pattern Recognition	<ul style="list-style-type: none"> <li>Recognizing themes and patterns in a situation, item, event, phenomenon, and/or outcome.</li> </ul>

self-awareness, pre (3.87), post (4.11), (2) achievement orientation, pre (4.40), post (4.24), (3) adaptability, pre (4.14), post (4.29), (4) emotional self-control, pre (4.03), post (4.21), (5) positive outlook, pre (4.08), post (4.22), (6) empathy, pre (4.20), post (4.03), (7) organisational awareness, pre (4.29), post, (4.34), (8) conflict management, pre (3.94), post (3.98), (9) coach and mentor, pre (3.81), post (4.00), (10) influence, pre (3.78), post (3.82), (11) inspirational leadership, pre (3.87), post (3.81), (12) teamwork, pre (4.38), post (4.46), (13) systems thinking, pre (3.70), post (4.01) and (14) pattern recognition, pre (3.43), post (3.87). There was statistical significance at the  $p < 0.05$  level (two-tailed) found within

the outcome data for emotional self-awareness (0.041), systems thinking (0.044) and pattern recognition (0.006). Also, paired sample correlations indicated statistical significance at the  $p < 0.05$  level for emotional self-awareness (0.001), positive outlook (0.006), empathy (0.046), organisational awareness (0.017) and coach and mentor (0.028).

## DISCUSSION AND LIMITATIONS

This study evaluated changes in emotional and social competencies by using pre-test and post-test findings from the ESCI-U assessment tool with students



Table 2: ESCI-U 2013-2014, Pre-Post Assessment Summary Results

1=Never, 2= Rarely, 3= Sometimes, 4= Often 5= Consistently

\*Correlation is significant, 0.05 level (two-tailed) for all pre-post measures

	<b>Means</b>		<b>Standard Deviation</b>		<b>Significance</b>	
	Pre	Post	Pre	Post	Correlation	2-tailed t-test
<b>SELF AWARENESS</b>						
Emotional Self Awareness	3.87	4.11	.51	.68	.001*	.041*
<b>SELF MANAGEMENT</b>						
Achievement Orientation	4.40	4.24	.39	.45	.519	.240
Adaptability	4.14	4.29	.33	.43	.688	.252
Emotional Self Control	4.03	4.21	.44	.52	.428	.233
Positive Outlook	4.08	4.22	.56	.59	.006*	.256
<b>SOCIAL AWARENESS</b>						
Empathy	4.20	4.03	.56	.55	.046*	.229
Organizational Awareness	4.29	4.34	.39	.46	.017*	.608
<b>RELATIONSHIP MANAGEMENT</b>						
Conflict Management	3.94	3.98	.35	.40	.072	.730
Coach & Mentor	3.81	4.00	.46	.47	.028*	.086
Influence	3.78	3.82	.39	.44	.268	.712
Inspirational Leadership	3.87	3.81	.44	.64	.082	.701
Teamwork	4.38	4.46	.36	.48	.091	.493
<b>COGNITIVE</b>						
Systems Thinking	3.70	4.01	.41	.37	.404	.044*
Pattern Recognition	3.43	3.87	.60	.44	.115	.006*

who participated in a 9-month undergraduate health professions leadership programme. Cultivation of emotional and social competencies is viewed as a necessity when supporting development of leadership skills. These competencies are no longer ‘nice to have’ (Eronini, 2015, p. 5); rather, they are the ‘sine qua non of leadership’ (Eronini, 2015, p. 6). The study’s results demonstrated change in self-assessment for some of the competencies at the conclusion of the academic training program.

Studies that have addressed learning or measuring emotional and social competencies — sometimes referred to as ‘non-technical skills’ or ‘soft skills’ — have often resided in self-contained arenas exclusive of the interdisciplinary field of health professions. For example, undergraduate and graduate school business/management programs and private-sector organisations have become increasingly focused on the value of these skills for leadership performance (McEnrue & Groves, 2010). Nursing programs have recognised the value of emotional and social competencies for nursing performance (Beauvais, Brady, O’Shea, & Griffin, 2011; Cerit & Beser, 2014), and medical schools realised the benefits of these

skills for enhancing the physician-patient relationship (Cherry, 2012). In our increasingly complex healthcare environment, however, interdisciplinary training in and experience with these skills in early (undergraduate) professional levels would advantage all health professions’ interactions for the ultimate benefit of patient care.

Specifically, this study’s outcomes have demonstrated that changes in emotional and social competency scores generated minimal albeit significant change in students’ self-assessed functional behaviour in a number of competencies. Two-tailed significance was found in the two cluster categories of Self-Awareness and Cognitive Function. Emotional self-awareness (which also showed pre-survey and post-survey correlation significance) improved, underscoring the leadership program’s emphasis on reflective practice. Reflective practice affords increased understanding of personal knowledge, professional learning, and appropriateness of action and conduct (Morgan, 2009). The leadership programme promoted this skill through activities such as cultural autobiographies, small group projects, and reflective debriefings. Given the fast-paced and ever-changing healthcare landscape, skillful reflection





requires discipline and dedication to achieve personal and professional growth.

The two-tailed significant cognitive outcomes in this study included competency improvements in both systems thinking and pattern recognition. Systems thinking instruction benefits healthcare professionals with its guided focus on the ‘big picture’ as it applies to circumstantial consequences. Applying systems thinking enhances the understanding of interdependent structures of social systems and their interconnectedness (Bleich, 2014). Through this competency, cause and effect as well as downstream and upstream influencers receive consideration for their impact on health (Bleich, 2014; Krumholz, 2014). For example, students in the leadership programme observed a community health centre which has been recognised as a national model for integrating non-medical determinants of health into the care paradigm.

Likewise, gaining the cognitive competency of pattern recognition affords the learner the ability to identify regularities and processes that represent a cohesive, reliable form. This competency aids in decision-making by drawing upon personal experience and intuitive insights. Pattern recognition represents the basis for conceptualisation, understanding themes, and making critical connections between associated factors (Coakley & Scoble, 2003). For example, the leadership programme’s use of simulation and standardised patient case scenarios involved the application of diagnostic skills (or recognising clinical patterns). Students gained the tools to recognise the link between declining non-urgent emergency room utilisation and notable trends towards increases in population health insurance coverage.

Self-awareness precedes self-management by bringing insight to the health professional that is necessary for self-management and change to take place (Skovholt, Grier, & Hanson, 2001). In turn, improvement in self-management competencies requires a multistep dedicated process. Personal goal setting follows self-awareness, an objective which the leadership programme addressed with the creation of each student’s individual professional development plan. Just one competency in the Self-Management cluster — positive outlook — resulted in statistically significant improvement. Reasoning here points to the fact that students who chose the leadership programme, had done so for their high interest in and high aspirations for their own future careers. No significant change was evident for the other Self-Management cluster competencies: achievement orientation, adaptability, and emotional self-control.

The leadership program’s course meetings served to inform organisational awareness, a significantly correlated competency with these students. The class process enhanced intragroup cohesion. The opportunity to reflect upon each meeting session afforded the students

a ‘real time’ learning perspective on group dynamics. Students shared in the responsibility for the weekly group meetings and contributed to creating the *ground rules* for their classroom experience that would govern their group interactions. The leadership programme students gained awareness about organisations from observation, modelling, and conformance to the agreed upon norms — outcomes that have been identified in other group dynamics studies (Peterson, 2012).

Finally, the coach and mentor competency produced significant correlation results comparing the pre-test and post-test ESCI-U survey scores. The leadership program’s mentor- mentee matching process entailed mentor recruitment, mentor biographical descriptions, and student opportunities to acquaint themselves with those health professionals before selecting a personal mentor. In the program, the onus for building the mentor-mentee relationship fell largely to the students. For some, that relationship has continued beyond the completion of the leadership program.

No significant outcomes resulted for the other emotional and social competencies in the Relationship Management cluster evaluated in the ESCI-U survey. Those competencies included achievement orientation, adaptability, emotional self-control, conflict management, influence, inspirational leadership, and teamwork.

Some study limitations deserve discussion, along with corresponding recommendations for future research. No data is currently available on the staying power or continued use of the competencies the leadership students gained from the program. The sample size for this study was necessarily limited by the class size for the leadership program. A larger sample in the future could provide more robust findings which could then be used to revise or plan additional leadership programme components. Furthermore, the students enrolled in this leadership programme were all self-selected. These students chose to enhance their skills with the three- quarter elective course series that other students did not choose — they either may not have been aware of or may have had less interest in this leadership development class. Thus, the competencies evaluated with the ESCI-U survey for this health professions leadership programme provided only one perspective on methods of developing leadership skills with undergraduate students.

For more than a decade and a half, the literature has been rife with calls for innovative healthcare leadership (Corrigan, Eden, Smith, NetLibrary, & Institute of Medicine Committee on Enhancing Federal Healthcare Quality Programs, 2003; McLaughlin, 2011) and interdisciplinary health professionals education (Willems, Waxman, Bacon, Smith, & Kitto, 2013). More recently, the importance of non-technical competencies for healthcare and other professional leadership roles has



gained focus (Holerby, 2015; Moriates, Dohan, Spetz, & Sawaya, 2014; Sadri, 2012). Despite the consensus on these priorities, few undergraduate programs have employed interdisciplinary directed leadership training for undergraduate health professions students. This study has addressed that gap in the current literature.

## IMPLICATIONS FOR EDUCATION AND LEADERSHIP

In today's ever-changing healthcare environment serving diverse populations, promoting emotional and social competencies during the undergraduate experience could have significant implications, as health professionals with these skills can favourably impact the future workforce, inform how future health professionals respond and conduct themselves, and influence how they work in interdisciplinary teams (Eronini, 2015). Volberding and Baghurst (2015) reported that during a time when social and emotional competencies are lacking in society and in the health professions, it is essential for educators to intentionally promote learning and evaluation of social and emotional competencies among students in undergraduate health professions. This is particularly important given their daily work with patients, families, and fellow colleagues in highly stressful and challenging environments. Carr and Volberding (2012) found that our generation of students and young professionals are lacking in communication as well as social and decision-making skills. Moreover, they lack discipline and empathy while being highly anxious and self-absorbed. Consequently, these attributes may lead to an inability to adequately moderate emotions and work effectively with others who may be from distinctly different cultural backgrounds (Volberding & Baghurst (2015). All health professionals start as health professions students where educators are expected to develop their students' analytical and cognitive skills. However, to assure future success in contemporary leadership and management roles, educators must offer intentional, systematic instruction and teaching strategies that emphasise critical consciousness and generate strong emotional and social competencies.

Management and leadership roles are intricately interrelated and complementary; however, excelling in these areas is dependent on one's level of emotional and social skills (Kumar, Adhish, & Deoki, 2014). Management, which centres on the art of managing, can involve directing or supervising something as well as thoughtful and prudent use of resources to accomplish a goal and maintain stability (Kumar et al., 2014). In addition, management tends to be based on hierarchical positions and often uses a transactional leadership style. However, leadership is about influencing a group of individuals or an organisation to at least achieve and preferably surpass intended outcomes. Creating and translating the mission or

vision for a group or organisation are essential leadership skills (Kumar et al., 2014). Furthermore, leadership tends to be based on transforming and developing organisations and individuals by cultivating the right environment, anticipating future, and adapting the organisation for such growth. Thus, maintaining the status quo is not a central goal; rather, effective leadership and management occur on a broad continuum of 'complementary, and mutually dependent, behaviours' (Blumenthal et al., 2012, p. 514). Quite interestingly, Kumar, Adhish, and Deoki (2014) cite Kotter who asserts that today, "Most organizations are overmanaged and underled (p. 15)."

Taken together, maximising the effectiveness of future health professionals requires a more integrated approach to teaching, practicing, and evaluating social and emotional competencies. It is essential for educators to develop more refined emotional and social competencies as part of health professionals' preparation for leadership in the healthcare arena and given the complex healthcare environment in which they will work. Development and application of emotional and social competencies in academia for these students is important given both the leadership and managerial roles they will most likely undertake in varied contexts as well as demands for new ways of accountability and manner in which teams are required to work together to achieve optimal outcomes regardless of patient and community-related complexities. Educators will need to be creative and offer strong, visionary leadership in academia to turn this tide in the healthcare environment. However, with sustained effort and systematic evaluative practices, organisational leaders, that is, those who are leading the way in healthcare education, who pursue this change, will graduate more emotionally and socially competent health professionals who will serve as managers on teams and leaders in health systems (Webb, 2009). We must invest in our students — they are the future of healthcare.

## CONCLUSIONS

In order to prepare undergraduate students who will enter into the health professions to operate effectively in a complex, interdisciplinary healthcare environment, there is a need for enhanced leadership skills that are centred on emotional and social competencies. Given that few undergraduate programs provide intentional, meaningful education for their students in this area and particularly in an interdisciplinary manner, this study has described efforts to address this need. Moreover, study outcomes demonstrated that the leadership programme intervention generated minimal albeit significant change in students' self-assessed functional behaviour in a number of competencies. The results have suggested improvements in systems thinking, pattern recognition, organisational awareness, and coach and mentor competencies.



An important study finding has shown that emotional self-awareness has improved, which underscores the leadership program's emphasis on reflective practice. The aim of the reflective practice experience for students was to produce insights relevant for the development of a broader context, deeper understanding, and effective

employment of emotional and social competencies. Further, the goal for development of these competencies was to facilitate knowledge development that moved beyond mere academic awareness to a strong healthcare professional with the needed skills to provide strong leadership and management.

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