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Development of Emotional Intelligence Training for Certified Registered Nurse Anesthetists

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Walden University

2015

Abstract

Development of Emotional Intelligence Training for Certified Registered Nurse

Anesthetists

by

Rickey King

MSNA, Gooding Institute of Nurse Anesthesia, 2006

BSN, Jacksonville University, 2003

ASN, Oklahoma State University, 1988

Project Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Nursing Practice

Walden University

February 2016

Abstract

The operating room is a high stress, high stakes, emotionally charged area with an interdisciplinary team that must work cohesively for the benefit of all. If an operating room staff does not understand those emotions, such a deficit can lead to decreased effective communication and an ineffectual response to problems. Emotional intelligence is a conceptual framework encompassing the ability to identify, assess, perceive, and manage emotions. The research question for this project is aimed at understanding how an educational intervention could help to improve the emotional intelligence of anesthetists and their ability to communicate with other operation room staff to produce effective problem solving. The purpose of this scholarly project was to design a 5-week evidence-based, educational intervention that will be implemented for 16 nurse anesthetists practicing in 3 rural hospitals in Southern Kentucky. The Emotional and Social Competency Inventory – University Edition will be offered to the nurse anesthetists prior to the educational intervention and 6 weeks post implementation to determine impact on the 12 core concepts of emotional intelligence which are categorized under self-awareness, social awareness, self-management, and relationship management. It is hoped that this project will improve emotional intelligence, which directly impacts interdisciplinary communication and produces effective problem solving and improved patient outcomes. The positive social change lies in the ability of the interdisciplinary participants to address stressful events benefitting patients, operating room personnel, and the anesthetist by decreasing negative outcomes and horizontal violence in the operating room.

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Section 1: Overview of the Evidence-Based Project

Introduction

Anesthesia is a stressful and unpredictable profession. Complicated acute and chronic patient conditions can cause anticipated as well as unexpected changes in the status of the patient. The stress of the procedure combined with the sympathetic response blunting of anesthetics can unmask underlying instability of the patient vital signs (Gaba, Fish, & Howard, 1994). Effective communication with theater personnel is paramount to avert a crisis. Anesthetists must be able to communicate effectively with operating room staff, surgeons, other anesthesia providers, supervisors, patients and patient families during stressful and chaotic times (Gaba et al., 1994). The certified registered nurse anesthetist (CRNA) must calmly communicate needs and concerns to other health care providers that may have limited knowledge or opposing priorities. For example, the surgeon's priority may be a nonmoving surgical field. The anesthetist's priority may be to maintain perfusion on a patient that is extremely unstable or in need of resuscitation and must limit the depth of anesthesia until vital signs can be stabilized (Collins, 2013).

The organizational and regulatory edicts that fall within the responsibility of the anesthetists are additional stressors. Time pressure imparted by the surgeon and hospital administration can apply stress to the anesthetist to meet start times and turnover times. The added pressure can cause the anesthetist to skimp on time devoted to assessing the patient (Gaba et al., 1994). Surgeon pressure adding to the time pressure elevates the stress level (Runciman & Merry, 2005). Regulatory standards and requirements add to this environment by requiring

specific interventions and documentation for reimbursement to this chaotic process.

Communication and the ability to identify the mood and emotions of the environment can assist

in a favorable outcome with the satisfaction of all priorities (Gaba et al., 1994). The assessment

of the characteristics could be used to develop an intervention to improve the identified features

and improve the ability to deal with stressful situations.

Problem Statement

An effective understanding of Operating Room (OR) personnel's attempts to

communicate and the CRNAs effective communication skills will improve access to all

resources in the OR environment for a more efficient response to situations. The CRNA should

be able to understand the verbal and nonverbal cues, emotions, and speech to effectively

understand the situation with all players within the OR (Gaba et al., 1994). Then, the CRNA

must be able to communicate their needs effectively to the other members of the OR team to get

the desired response. Though not directly involved in the procedure, the procedure affects the

responsibilities of the CRNA. Being able to use the procedure team resources effectively is

integral to the CRNA being able to handle issues that arise. CRNAs must become a more

integrated member of the OR team.

Goals and Objectives

The goals of this project were to determine if evidence supports the development of a

project to address the CRNAs' ability to improve patient safety outcomes by an enhanced ability

to read the OR environment and to utilize better the available resources. With the

implementation of a future educational intervention to improve the emotional quotient (EQ),

CRNAs will be able to identify the emotional status of the OR personnel to improve communication especially during stressful situations or problems. This improved communication will allow the CRNA to identify earlier these problems, and better utilize the staff resources to better advantage when addressing the problem (Gaba, Fish, & Howard, 1994).

These project objectives center on emotional intelligence (EI) assessment and intervention process. The target CRNA will participate in an EI assessment to be used as baseline information. A 5 week education intervention designed to improve their EQ will be offered to the participating CRNA. A postintervention EI assessment will be provided to the CRNA 6 weeks after the intervention to assess improvement in EQ from the initial assessment (Hay Group, 2014).

Project Question

The rigors and stressors of the clinical aspect of nurse anesthesia practice are difficult to navigate even for experienced anesthetists. Interventions are available to assess the EQ of a group and provide an educational offering to improve the EQ of a group (ESCI, 2014). The future intervention will include a pretest assessment of CRNAs' emotional intelligence. After the initial assessment, an online 5 week EI educational intervention will be offered to the CRNAs. A posttest EI assessment will be provided 6 weeks after completion of the intervention. Group mean scores from the pre- and posttests will be compared to the pretest to assess for improvement in EQ. An increase CRNA EQ will indicate an improvement in the situational awareness that improves the response to issues in the OR and improves communication and increase patient outcomes. Rural Kentucky provides a population of experienced CRNAs in solo

practice to test the concept of an educational intervention designed to improve EI. Will a future emotional intelligence training intervention offered to CRNAs practicing in rural hospital settings in Southern Kentucky increase the EQ of the anesthetists?

Significance of Project

The significance of the project will be in the improved ability of the CRNA to utilize EI to improve communication skills and better address problem situations in the OR. This improved ability will decrease adverse outcomes and improve patient safety (Gaba et al., 1994). Another significant development will be the potential to improve relations and satisfaction with the OR personnel and CRNA, improving work conditions.

Implications for Social Change

When implemented, the project will be designed to improve the ability of practicing CRNAs to increase their EI, to improve their ability to assess the OR environment, and to better identify and solve issues in the OR. The concept of using EI to improve any person's ability to identify others' emotions and use that concept to improve communication, relationships, and problem-solving capabilities can improve society. The concept of improving the interactions with others will allow a person to better influence the interpersonal environment to achieve a mutually beneficial outcome with the interaction (Gaba et al., 1994).

Improving the CRNA's ability to read the emotional environment of the OR personnel may decrease the incidence of poor outcomes in the OR setting. Fewer episodes of problems and an increase in rapid, successful resolution of problems may decrease the angst and anger of the

OR personnel. The calm and professional demeanor of the OR will be less likely to develop into anxiety displaced to other members of the OR and decrease lashing out.

Definitions of Terms

Certified Registered Nurse Anesthetist: A certified registered nurse anesthetist (CRNA) is a registered nurse with education and training in advanced practice in the discipline of nurse anesthesia ("Certified Registered Nurse Anesthetists at a Glance " 2014).

Emotional Intelligence: Emotional Intelligence (EI) is a concept that encompasses perception, self-control, empathy, communication, conflict resolution, and expression (Ioannidou & Konstantikaki, 2008, p. 118).

Emotional Quotient: The Emotional Quotient (EQ) describes the ability to identify, assess, perceive, and manage one's emotions, as well as that of others (Ioannidou & Konstantikaki, 2008, p. 118).

Evidence-Based Practice: Evidence-based practice is the use of researched-based best practice models to guide current clinical practice (Kettner, Moroney, & Martin, 2013, p. 6).

Assumptions and Limitations

The limitations of this project include:

- The small target population makes the results of the EBP difficult to generalize.

- The goal of improved patient safety cannot be quantified or measured in this project. An indirect measurement of increased EQ is used to imply improved ability to deal effectively with OR situations and, thus improve patient safety.

The assumptions of the project include:

- Improved EQ scores will improve the CRNA ability to understand effectively assess the emotional environment of the OR personnel in identifying issues.

- Improved EQ scores will improve the CRNA ability to identify effectively and engage available resources in the OR.

- The CRNA will accept and participate in the project.

- The EI assessment will correctly assess the EQ of the CRNA.

- The EI intervention will improve the EQ of the CRNA participating in the project.

Summary

The stress and unpredictable nature of the OR can provide a complicated environment for the OR team. Unrecognized or poorly communicated problems can lead to ineffective responses and compromise patient outcomes and safety. The global responsibilities of the CRNA require effective communication and use of available resources to avoid poor outcomes. By increasing the EI of the CRNA with an educational intervention, the EQ of the CRNA can improve leading to better communication and resource utilization.

By assessing the EI of CRNAs and providing an educational intervention to improve the EQ of the anesthetist, the resulting improvement in communication and effective use of resources will improve patient safety and outcomes. The use of EI to improve reaction and response to problems in the OR and effectively interact with the human resources in the OR can

provide better problem outcomes. The improved communication and patient outcomes can create a calm environment and diminish episodes of horizontal violence.

Section 2: Review of Scholarly Evidenc**e**

State of Science for Emotional Intelligence in Nursing

An advanced Boolean search for full-text, peer-reviewed journal articles between 2009 and 2014 of MEDLINE and The Cumulative Index to Nursing and Allied Health Literature (CINAHL) databases. The keyword *emotional intelligence* yielded 2,454 results. Adding *nursing* to the search decreased the results to 187. A search of *emotional intelligence* and *nursing education* narrowed the results to 20 articles. The 20 articles were reviewed, and 13 were chosen based on relevance to emotional intelligence (EI) assessment of applicants or use of EI in nursing training programs.

The results were divided into five categories all dealing with nurse training participants or nurse training programs: assessment of nursing trainee EI (n=3), correlation of EI scores and success in the nurse training program (n=5), educational interventions for improving EI scores (n=3), evaluation of EI assessment as tool for recruiting nurse trainees (n=1), and an integrated literature review of EI and nursing (n=1).

Suliman (2010) found no significance in the EI scores of conventional undergraduate nurse trainees and accelerated undergraduate nurse trainees. Beauvais, Stewart, Denisco, and Beauvais (2013) looked at factors of EI and academic success in graduate and undergraduate academic success. Undergraduate success displayed significant correlation with only one of four branches examined; graduate academic success correlated with two branches and total EI scores (Beauvais, Stewart, Denisco, & Beauvais, 2013). In an earlier study, Beauvais, Brady, O'Shea, and Quinn found a significant correlation between EI scores and nursing

performance (2010). The study was the only one found that involved EI and clinical success. Collins (2013) looked at EI scores of nurse anesthesia trainees (SRNAs), success on the National Certifying Exam (NCE), and nurse anesthesia training program grade point average. Results suggested significant EI score predictor of success on the NCE, but not with grade point average. EI was found to be a significant predictor of accelerated nursing students' academic success (Fernandez, Salamonson, & Griffiths, 2012). EI has been involved as a noncognitive predictor of nursing student success in the undergraduate and graduate nursing programs. A significant correlation has been shown especially in graduate nursing students and EI scores.

Though the concept of EI has been around since the 1990's, incorporation of EI assessment or training in anesthesia practice is a very recent phenomenon. As more research is completed on the concept, the nurse training programs are seeking evidence-based practice models to incorporate this knowledge into practical use in the application process and incorporation of EI training into curriculums.

Emotional Intelligence Theory

Emotional Intelligence (EI) is a concept that encompasses perception, self-control, empathy, communication, conflict resolution, and expression (Ioannidou & Konstantikaki, 2008). This concept is measured by an emotional quotient (EQ). The EQ describes the ability to identify, assess, perceive, and manage one's emotions, as well as that of others (Ioannidou & Konstantikaki, 2008). The key concepts of EI are self-awareness, social awareness, self-management, and relationship management (ESCI, 2014). Ball (2013) discusses a correlation between nurses' EI and effectively dealing with difficult situations. The assessment of the EQ of

a CRNA may give insight into the ability of the anesthetist to deal effectively with the intrapersonal, interpersonal, and situational elements of anesthesia practice. By assessing emotional intelligence then implementing a training intervention, the CRNA will be better prepared to understand the situation by effectively reading the emotions involved and developing effective plans to handle the rigors and stress of the clinical practice.

<center>**Evidence-Based Practice Model**</center>

Andragogy is one concept of the principles of adult learning (Belcher, 2012). Belcher (2012) describes some of the aspects of adult learning as delineating the importance of the material being taught, building on experiences, finding common goals between the instruction and learner, and creating an environment that assists the student to be successful (Belcher, 2012). To assist in developing an evidence-based practice (EBP) project to address the issue, a model or framework must be chosen to guide the process to ensure appropriate resources are used and not squandered on a less than successful intervention. Schaffer, Sandau, & Diedrick (2013) posit the EBP model should assist the nurse in completing the project, assist in the critique of the evidence, offer an avenue for implementation of the intervention, and assist in the widespread dissemination of the successful results . The EBP model for the planned intervention must be versatile enough to address patient driven practice, be able to assist a novice practitioner with evaluation of the evidence, assist in the design or path for the intervention, and then guide the nurse in evaluation of the intervention for suitability for larger implementation.

The Academy Center for Evidence-Based Practice (ACE) Star Model of Knowledge Transformation uses a five-step approach that fills the function set forth by Shaffer et al. The

Ace Star Model has been used to improve success on undergraduate NCLEX-RN exam and to

guide EBP into nursing curriculum (Schaffer et al., 2013). Schafer et al. also describes the model

as useful to both individuals and organizations (Schaffer et al., 2013). This ability for an

individual to utilize the model would be beneficial for an individual DNP project.
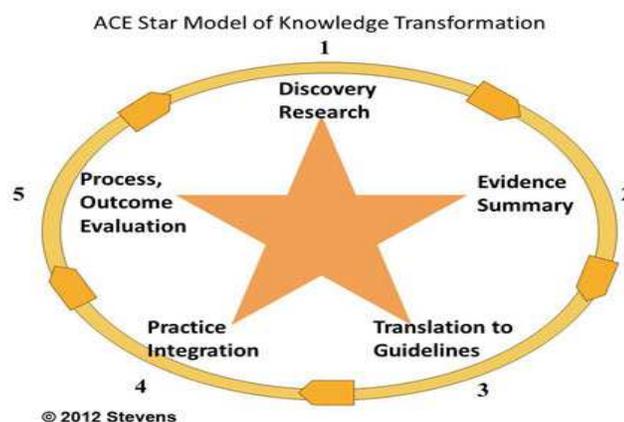
Figure 1. The steps of the ACE Star Model transformation of knowledge into practice.

The ACE Star Model's five steps expand on the four concepts described for EBP models

(see Figure 1). Discovery of new knowledge and summary of evidence will assist the nurse in the

evaluation of the evidence. Translation of evidence into an EBP intervention with integration

into the practice brings new knowledge concepts based on the summary of evidence into the

practice setting. Finally, evaluation of the impact of the intervention on practice will assist in

ascertaining the feasibility of expanding the intervention into a wider theater (Schaffer et al.,

2013). The ACE Star Model can be used as the framework for an EBP intervention aimed at

improving the ability of the CRNA to effectively assess the resources available to effectively

identify and resolve an issue taking place within the OR team environment.

Section 3: Approach

Intervention Instrument

The Emotional and Social Competency Inventory-University Edition (ESCI-U) is a tool offered by the Hay Group. The ESCI-U is a version of the ESCI that is available to universities at a substantially lower cost than to corporations (Hay Group, 2014). The Hay Group is a human resources consultant group that offers internet based tools for businesses and universities to manage better human relations (ESCI, 2014). The ESCI-U is a tool used to assess the anesthetists' EI and offer an EI training program to develop the ability of the CRNA to function in real-world group dynamics (ESCI, 2014). The instrument assesses 12 concepts of EI under four headings. Self-Awareness assesses emotional self-awareness. Social Awareness encompasses empathy and organizational awareness. Self-Management identifies achievement orientation, adaptability, emotional self-control, and positive outlook. Relationship Management encompasses conflict management, coaching and mentoring, influence, inspirational leadership, and teamwork.

The ESCI-U assessment will be offered online to the anesthetists prior to the intervention. The assessment will also be available to the three raters of the CRNA's choice. The assessment consists of 70 questions and will take 15-30 minutes to complete with results available immediately. A copy of the brochure is included as Appendix A. The intervention will be offered online to the anesthetists and consists of five weekly sessions of role-playing with real life scenarios. Each situation requires the CRNA to choose one of the four behaviors to address the scenario. The session finishes by providing the CRNA with information concerning the chosen

response as well as the more EI appropriate response much like a simulation debriefing session. This intervention will be offered to CRNAs practicing at three rural hospitals in Southern Kentucky. Reassessment of EI will occur 6 weeks postintervention and will be compared to the preintervention assessment. The results of each assessment will be shared with the anesthetists individually with an explanation of the results. A group composite report of the group mean scores will be provided to the project manager.

<div align="center">**Revenue and Expense Budget**</div>

The proposal budget is generated from anticipated revenue and expenses. As the project is a proposed intervention, grant monies will not be sought. The project manager will furnish any revenue needed for the budget.

Justification of Revenue and Expenses

Revenue for the budget will be obtained from the project manager (see Table 1). The timeline for obtaining monies from grants is too long for the implementation of the project. As the project will not be associated with any institution or organization, monies will not be available. A discount on room rental may be available from the organization providing the intervention. However, the small sample may not justify a substantial savings.

Table 1

Proposal Revenue

	Line Items	Resources/Expenses	Source
Funding	Monies	$1,186.30	Project Manager
Estimated Total Revenue = $1,186.30			

The project sample will be very small consisting of five certified registered nurse anesthetists (CRNA). Hodges and Videto suggest eliminating excessive portions of the project and excluding or delaying aspects of the project to save expenses (Hodges, 2011, p. 54). The project will be minimal with an assessment, intervention, and postintervention assessment. The assessment of long-term outcomes will not be included in the project due to time and information accessibility concerns.

Expenses for the project include the cost of the intervention, the cost of the needs assessment focus group location, and the location of the pre- and postintervention assessments. Personnel costs are not included as the project manager will be the only worker and, as a student, draws no wages. The CRNA participation will be voluntary and will not be productive time nor will they be compensated for participating in the project. The project manager travel expense will be traveling to the focus group site and pre- and postintervention assessment sites. The distance from the project manager's home to the anticipated site is 12.1 miles (Google Maps, 2014). The number of anticipated round trips will be three for a total of 72.6 miles. Estimated vehicle expenses will be $0.50 per mile for a total of $36.30. Renting the Middlesboro Hospital classroom for the focus group and two assessments is estimated at $150.00. The final expense will be the cost of five interventions that include pre- and posteducation assessment and a 5week online course at $200.00 per intervention (Hay Group, 2014). Total estimated expenses will be $1,186.30 (see Table 2).

Table 2

Proposal Expenses

	Line Items	Resources/Expenses	Source
Educational Program	Pre-Intervention Assessment Education Intervention Post Intervention Assessment	5 X $200.00 = $1,000.00	Hay Group
Travel	Drive from Project Manager's Home to Assessment Site	12.1 miles X 2 = 24.2 miles round trip 24.2 miles X 3 trips = 72.6 miles 72.6 miles X $0.50 per mile = $36.30	Project Manager's vehicle expenses
Location	Rent for Middlesboro Classroom	3 meetings X $50.00 = $150.00	Middlesboro ARH Hospital
Personnel	Project Manager	Not applicable	
Indirect Costs		As Determined by Walden University	Walden University
Estimated Total Expenses = $1,186.30			

Budget Variance

Indirect costs are based on a percentage of the estimated expense and are associated with the sometimes intangible costs involved in doing business such as utilities and other administrative costs (Hodges, 2011). Any expenses from the indirect costs will be in excess of the current estimated budget and will be considered a variance. The resources needed to cover the indirect costs will come from the project manager.

Financial Analysis

A cost-effectiveness analysis of the program will be recommended and will be accomplished by comparing the total cost of the program to any increase in emotional intelligence (EI) when comparing the preintervention assessment with the postintervention assessment. The cost-effective analysis considers the monetary cost and a measurable outcome associated with the intervention ("Economic Analysis Method", 2014). The measurable outcome will be any deviation of the total EI scores. A ratio of the cost of the project to a change in EQ scores of the participants will be considered. The intent will be to illustrate the cost of a program to increase the EQ of the population. The assumption is increasing the EQ of the population will increase the effectiveness of the population to deal with patient issues and improve patient outcomes. However, the narrow 3 month timeline of the project and inability to access the patient outcome information limits the effectiveness of the analysis to compare direct costs with patient outcomes. The indirect method of comparing the cost with increased EQ will be used in the analysis.

Population and Sample

The population involved in this intervention will be practicing CRNAs. The intervention

will be designed to assess and improve the EQ of practicing CRNAs. The proposed sample for

this intervention will include the CRNAs employed by an anesthesia group in Southern West

Virginia and Kentucky. The proposed sample will specifically target the CRNAs practicing in

hospitals in Middlesboro; Harlan; and Hazard, Kentucky. The estimated sample size will be 16

CRNAs. The convenience sample will be chosen from the area surrounding the project manager.

Data Collection

Data collection will be in the form of on online pretest assessment provided by the Hay

Group. The assessment will be offered to the CRNAs at their practice hospital in a classroom

setting. The raters will receive the same assessment to be completed concerning the CRNA. All

information collected will remain confidential, and the Hay Group will provide analysis. The

results of the evaluation will be presented to the subjects confidentially from the Hay Group by

mail. A five-week online intervention will be offered to the participants following the

assessment. A posttest assessment will be offered to participants that have completed the five-

week intervention six weeks after the intervention in the same manner as the pre-test. A sample

copy of the workbook is included as Appendix B. Composite mean scores will be provided to the

project manager for comparison and evaluation of the intervention of the group.

Data Analysis

Reliability for the ESCI was based on 1,022 participants in a pilot study in 2007. Results

can be found in Appendix C. Cronbach's alpha reliability for the 12 competencies of the ESCI

ranged from .87 for Teamwork to .74 for Achievement Orientation and Influence (Boyatzis, 2007). Data analysis of the results of the pretest and posttest will be conducted by the Hay Group. Results of the assessments will be shared with the individual anesthetists after completion of analysis.

Project Evaluation Plan

The one group pre- and posttest evaluation is an impact evaluation process that utilizes the differences in test scores surrounding an intervention for a single group to determine the effectiveness of the intervention. Impact Program Evaluation (IPE) can be used to evaluate episodic programs that address the impact the intervention has on the participants (Kettner, Moroney, & Martin, 2013). The key features of IPE are the timing, issues, and attributions of features (Kettner et al., 2013). Timing is a single intervention concerning the EI of a small sample and any differences noted after a single intervention. The identified DNP project is a single intervention that looks at the group's response to an intervention and not the outcomes produced by the group after the intervention. The small sample size and convenience sampling prohibits generalization of the results. The results of the intervention cannot be generalized and are effective only with this single intervention. The IPE is an appropriate evaluation theory for the identified DNP project.

The IPE will be utilized after the posttest results are analyzed by the Hay Corporation. The pretest assessment will occur in the first week of the project. The posttest will occur 6 weeks after the end of the 5 week intervention. The posttest will be an online assessment of the EQ of the participants of the group. The Hay Group will analyze the results and send the Project

Manager, a report of the group mean scores. The evaluation process will occur after receiving the

results (see Table 3).

Table 3

Expected Timeline for Intervention

	Week1	Week 2-6	Week7-12	Week 13
Pretest	XXXXXXX			
Intervention		XXXXXXX		
Posttest			XXXXXXX	
Evaluation				XXXXXXX

Summary

The instrument for assessment of EI will be the ESCI-U provided and analyzed by the

Hay Group. The ESCI-U measures 12 competencies of EI with 70 questions. The participant

completes one and chooses three individuals known by the participant to complete the tool

referencing the participant. The self-assessment and peer-assessment results are compared and

analyzed by the Hay Group. Following the assessment, the participants will be provided a 5

week educational intervention designed to increase the EQ. A posttest assessment will be

completed 6 weeks after completion of the intervention. The sample will consist of

approximately 16 practicing CRNAs working in three hospitals in Southern Kentucky.

The Hay Group will provide the assessments, intervention, and analysis of the assessments. A report of the group mean scores will be provided to the project manager for evaluation of the intervention. The instrument demonstrated a good to excellent reliability on all of the 12 competencies. A composite report consisting of mean scores for the group will be provided to the project manager for evaluation. Evaluation of the results will utilize the IPE. The key features of the IPE are appropriate for evaluation of a small episodic project.

Section 4: Findings, Discussion, and Implications

Introduction

The purpose of this developmental project was to design an evidence-based intervention to limit detrimental outcomes of events occurring in the OR by improving the ability of the nurse anesthetist to utilize available resources effectively. Effective verbal and nonverbal communication can allow an anesthetist to identify issues, identify available resources, and manage the resources to deal effectively with issues (Gaba, Fish, Howard. 1994).

Emotional intelligence is a concept that encompasses perception, self-control, empathy, communication, conflict resolution, and expression (Ioannidou & Konstantikaki, 2008, p. 118). These concepts of EI can be used to improve the responses to issues by increasing communication, conflict resolution skills, self-control, and expression. Evidence supports the ability to improve EI scores with educational interventions (Beauvais, et al., 2010). Developing an EBP intervention consisting of an assessment of EI among selected nurse anesthetists, providing an educational intervention to improve their EI, and then reassessing their EI can improve scores. The improved EI would indirectly reflect their improved ability to resolve issues and improve patient outcomes.

Discussion of Findings

Evidence supports the incorporation of E I training for those working in high stress areas. Review of the literature and analysis of findings supports EI can be a predictor of success in the stressful environment of nursing programs. As discussed earlier in this manuscript, nursing education has been using EI for several years in many applications. Clinical success and nurse

anesthesia application of EI has been noticeably scarce. The higher levels of evidence may be missing from the search, but the volume of midlevel evidence supports nursing as an appropriate venue in the use of EI.

The implications of the implementation of this EBP project would influence anesthesia practice, anesthesia education, future research in EI, and professional interaction between OR staff members. When implemented, the anticipated results of the intervention could create a paradigm shift from silos of practitioners reacting to issues to teams of practitioners proactively preventing potential problems or better reacting to problems. This improved response could improve patient outcomes, improve staff satisfaction, and decrease horizontal violence within the OR.

Nurse anesthesia education would incorporate the concepts of EI into the curriculum. Continuing education programs would incorporate EI training. Improving emotional intelligence would be taught alongside cognitive intelligence programs. Improved EI scores correlate success with the NCE (Collins, 2013). The use of EI assessment could be used in the selection of applicants for nurse anesthesia education. The program administrators would be able to use the scores to weed out applicants with unfavorable personality characteristics. They could combine cognitive scores and emotional intelligence score to improve selection criteria for entrance. The selection of both emotional and cognitive criteria could improve attrition rates in nurse anesthesia programs as well as certification pass rates.

The intervention could prompt new research into more directions. The bulk of studies are aimed at student nurses and cognitive outcomes such as pass rates. The future of research could

consider the use of EI in nursing practice with directly improving patient outcomes. Research could focus on the development of the ideal characteristics of successful nurse trainees. By selecting applicants with EI characteristics most likely to succeed in nursing programs and coupling with cognitive scores such as grade point average and Graduate Record Examination scores, nursing program administrators could decrease attrition rates while increasing pass rates. More evidence and research is needed but the opportunities to use this complementary method of success prediction are expanding and are becoming more intriguing.

<div align="center">**Implications**</div>

Implications on practice

When this evidence-based intervention project is implemented, the results can be carried into other nurse anesthesia areas. Positive results obtained from the intervention can be used in the nurse anesthesia education practice to screen applicants in conjunction with cognitive tools. Emotional intelligence assessment can be used with the Graduate Record Examination and grade point average to identify applicants most likely to be successful in a nurse anesthesia program. The use of multiple tools to identify applicants with as many skills as possible to successfully complete such a stressful and rigorous program of study can decrease attrition rates and improve graduation rates. The tuition costs will be more effectively utilized by successful students.

Implications on future research

If implementation of the proposal yields a negative result, the EI education should be reconsidered and further studies should be attempted to seek a use of noncognitive aspects of human learning and behavior in improving the healthcare environment.

One of the weaknesses of the proposal was the inability to track the direct outcomes of patient safety and successful resolution of issues. Future studies should consider tracking these outcomes for a more effective measurement of the intervention success. Institutions could be included in the program design to allow the use of the often confidential records and information.

Future studies should consider follow-up with the samples to elicit personal and peer evaluation of the intervention. The follow-up would need to consider the timeline since these issues are rare in occurrence. Enough time would need to be allotted to be able to have a sufficient number of occurrences to evaluate the anesthetists' responses.

Implications on social change

This project was designed to improve the ability of practicing CRNAs to increase their EI, to improve their ability to read the OR environment, and to better identify and solve issues in the OR. The concept of using EI to improve any person's ability to identify others' emotions and use that concept to improve communication, relationships, and problem-solving capabilities can improve society. The concept of improving the interactions with others can allow a person to manipulate better the interpersonal environment to achieve a mutually beneficial outcome with the interaction (Gaba et al., 1994).

By improving the CRNA's ability to read the emotional environment of the OR personnel, the resulting decrease in poor outcomes may decrease the incidence of horizontal violence in the OR setting. Fewer episodes of problems and rapid, successful resolution of problems may decrease the angst and anger of the OR personnel. The calm and professional demeanor of the OR will be less likely to develop into targeted horizontal violence.

Project Strengths and Limitations

Strengths

The future implementation of an EI intervention to indirectly improve patient outcomes by improving communication skills and resource utilization by nurse anesthetists will be a unique use of EI and expand the current direction of future research and EBP use. Most studies of EI are concerned with student nurses and nurse anesthetists. Little literature was found in clinical practice with professional nurses and anesthetists. The next logical step would be to attempt to find the use of EI in practice and in improving patient outcomes.

Limitations and recommendations

Limitations of the EBP intervention are the small and homogenous sample as well as the indirect connection with patient outcomes. The small and homogenous sample of rural Appalachian nurse anesthetists makes it difficult to generalize results.

Recommendations for remediation of limitations

Future research and interventions should use larger and more diverse samples to improve generalizability. Larger organizations can study the effects of EI interventions to improve local patient outcomes. A meta-analysis can be used to link several studies to build a larger more substantial body of evidence to support the use of EI to improve outcomes.

Analysis of Self

As scholar

The efforts provided to develop this EBP intervention process have strengthened my skills and abilities as a scholar and practitioner. My roles as project developer and professional

have also been enhanced. As a scholar, the efforts have improved my knowledge of processes that my experiences have only skimmed. The lessons learned in this process have improved my ability to communicate effectively in written form. The discussion posts and other written assignments have improved my ability to articulate my ideas into a concise and detailed form. I have learned to discover and use available knowledge to solve problems. I use more than the easily available information to justify or support my position. I now analyze issues and develop problem statements to describe an issue as part of a process rather than just an issue for me. I use the EBP process to solve issues even curtailed to address smaller problems. I have learned the process is effective in modified methodology to solve any problem.

As project developer

As a practitioner and program developer, I use the EBP process to identify problems, identify all stakeholders, assess available resources, develop evidence-based interventions, implement the intervention, evaluate the results, and start the process over again. Stagnant processes become ineffective. The process is circular any never ending as described by the ACE Star EBP methodology (Stevens, 2012). The way to keep current and every improving is through these processes. The EBP development used in this project has improved my ability to remain current and relevant in my practice as long as I practice

As practitioner

As the director of a nurse anesthesia program, I have been involved with the profession as a gatekeeper and as a mentor to new nurse anesthetists. The project has allowed me to increase my presence in the profession by creating a new avenue for scholarly development within the

profession and in particularly my practice area. As an educator and program administrator, I develop the process of choosing applicants to enter the program, and have a major vote concerning the acceptance of applicants into the program. I lead by example when attempting to mold the students into professional anesthetists.

Recommendations for future professional development

This project will become the first awkward step in the process of developing a path to using EI in the assessment of applicants, improving clinical practice of the students by increasing their EI, and developing a curriculum that includes EI training and assessment. This process will pave the way to incorporate the use of measurable EI assessment and intervention to improve practice quality and job satisfaction.

Summary

The ability to succeed is not always a product of higher intelligence. Other concepts are involved in the success of individuals. EI is one of the concepts linked to success in nursing education. The concepts of EI assessed are self-awareness, social awareness, self-management, and relationship management. These concepts form the basis of the ability to perceive others emotions, perceive our own emotions, our ability to communicate our needs, and perceive the needs of others. This ability to communicate verbally and non-verbally allows relationship building and conflict resolution. Communication is the cornerstone to resolving conflict and building relationships necessary to resolve issues successfully. Improvement in these skills can improve the ability to resolve issues and improve outcomes.

This project addresses potential patient adverse outcomes by improving nurse anesthetists' ability to communicate effectively with the members of the OR and use available resources to resolve successfully issues in the OR. The project will assess the EI of nurse anesthetists in Southern Kentucky, offer an educational intervention to improve EI, and then reassess their EI six weeks after the intervention. Any improvement in EI will provide an indirect ability to resolve issues in the OR and improve patient outcomes through more effective communication and identification of available resources.

If this developmental project is implemented, it has the potential to open more avenues for research and EBP interventions into the use of EI to improve patient outcomes, improve interprofessional and intra-professional relationships, and decrease horizontal violence in the OR. Better communication skills and perception of others' emotions and needs will decrease conflict and improve working relationships. Education and clinical practice environments can use these concepts to choose applicants who can blend more harmoniously with the practice. Interventions can be designed to remediate personnel who have difficulty forming beneficial relationships. This project can open scholarly and practice avenues for patient outcome improvement and human resources effectiveness.

Section 5: Scholarly Project

Dissemination Plan

The nurse anesthesia discipline has two excellent venues for presentations of research or evidence-based practice project. The professional organization, American Association of Nurse Anesthetists (AANA), publishes a journal aimed at nurse anesthetists. My plan for dissemination

of the proposal is to send the manuscript to the AANA Journal for publication and to apply to the AANA for live presentation at the 2017 Assembly of School Faculty.

The journal is distributed to all members and associate members as a benefit. The journal is published every two months. Only CRNAs are eligible to publish articles in the journal. The audience is homogenous and has very similar education and a very narrow interest. Authors should consider the intended audience when writing the manuscript. Considering the demographics of the audience can ensure the audience is engaged and more likely interested when reading manuscripts that are written an appropriate level (Oermann & Hays, 2011). This journal is an excellent venue for disseminating a manuscript targeting and written by CRNAs.

The second venue for disseminating articles of interest to CRNAs is the professional meetings. The AANA supports three major meetings and several distinct and smaller meetings throughout the year across the country. The AANA Annual Congress targets the membership as a whole. This meeting is an excellent venue for general clinical manuscripts. In February of each year, the Assembly of School Faculty (ASF) targets nurse anesthesia education program administrators, didactic faculty, and clinical faculty. The focus of this meeting is very narrow and presentations can be very technical. The third meeting is the Mid-Year Assembly held in Washington D.C. every April. This meeting is specific as a political action meeting with a focus on nurse anesthesia practice and compensation issues. This venue is also specific in its objectives but targets the general nurse anesthesia population. Each of these meetings allows live presentations and poster presentations.

Nurse anesthesia authors have a variety of methods and venues to disseminate their manuscripts. The AANA Journal allows dissemination to a specific population with similar practice needs. The AANA supported meetings allow the author to target an even narrower population within the discipline. Whether general population, education members, or the politically active members; the CRNA author can disseminate their work in a variety of formats.

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Appendix A: Overview of EI Brochure

How to take a good look inside yourself

It can be a real dilemma. Having read all the research about Emotional Intelligence (EI), the next question is often "How emotionally intelligent am I?" But how can this be measured accurately and reliably, and what can we learn from the experience? One of the most reassuring things about EI is that these competencies, unlike IQ, can be learned and developed. So by discovering how emotionally intelligent we are and understanding the principles involved, we can learn how best to use and develop our abilities.

'Why today's leaders need EI more than ever'

We all know someone who didn't exactly shine at school, but went on to be hugely successful in their chosen careers. The reason is simple: IQ is only one aspect of doing well. The others involve our abilities to empathize, fit in, to understand our self and others. These are the principles which underpin Emotional Intelligence. What's more, numerous studies have shown that it's EI which makes the difference between a highly effective leader and an average one. In today's competitive knowledge-driven organization, leadership is more important than ever. Today's leaders — from top executives to line managers – must have more than just the right technical skills and IQ. They must possess emotional intelligence. Emotionally intelligent leaders help organizations create competitive advantage through:

- increased performance
- enhanced innovation
- effective use of time and resources
- improved motivation & teamwork
- restored trust

Everything you needed to know about measuring EI

There's not much we don't know about Emotional Intelligence. Since our partnership with Daniel Goleman and Richard Boyatzis began over ten years ago, we have been perfecting the way we measure EI, based on decades of research, across hundreds of roles and organizations. The Emotional and Social Competency Inventory (ESCI) is our latest research-based 360   feedback tool.
It describes 12 competencies that differentiate outstanding performers from average performers. We use it when coaching individuals, and in helping teams improve their effectiveness. We never use the ESCI as a selection tool, as it was designed to help develop people.

Designed by experts, used by professionals

- Once accredited and ready to start an assessment, you simply provide us with participant names and e-mail addresses. We e-mail participants a unique login for our Hay Group Surveys website. Participants are asked to nominate who they would like to get feedback from: usually their manager, peers, direct reports and clients/customers.

- All surveys are completed online. As the coach we provide you with access to our site so you can track the progress.

- Once the surveys are completed, we analyze the results and produce the feedback reports. If there is a group, we can produce a team composite report which shows the averaged scores for the group (without showing names, of course). The process is all confidential.

- One thing our clients get really excited about is the verbatim comments section of the report. This is a free text section in the survey where respondents are asked to comment on the participant's key strengths and areas for development. For many this is the first real, confidential feedback they've had.

Making the hard case for the soft stuff

Let's face it, getting the "soft stuff" on the agenda of some senior managers can be tough, but this is no soft option. EI is backed up with decades of excellent research, firmly establishing the credibility and business rationale.

The hard facts and proven benefits allow organizations to explore an area they know is important but often aren't sure how to approach. Additionally, by giving managers and staff a clear framework and set of shared language, you can transform the richness and quality of feedback across the organization.

Appendix B: Sample of EI Workbook

Emotional Intelligence makes the difference in the challenges of academic and working life. By understanding the principles involved, we can learn how best to use and develop our abilities. Your EI will help you in your personal development, independent learning, learning with others and learning in work.
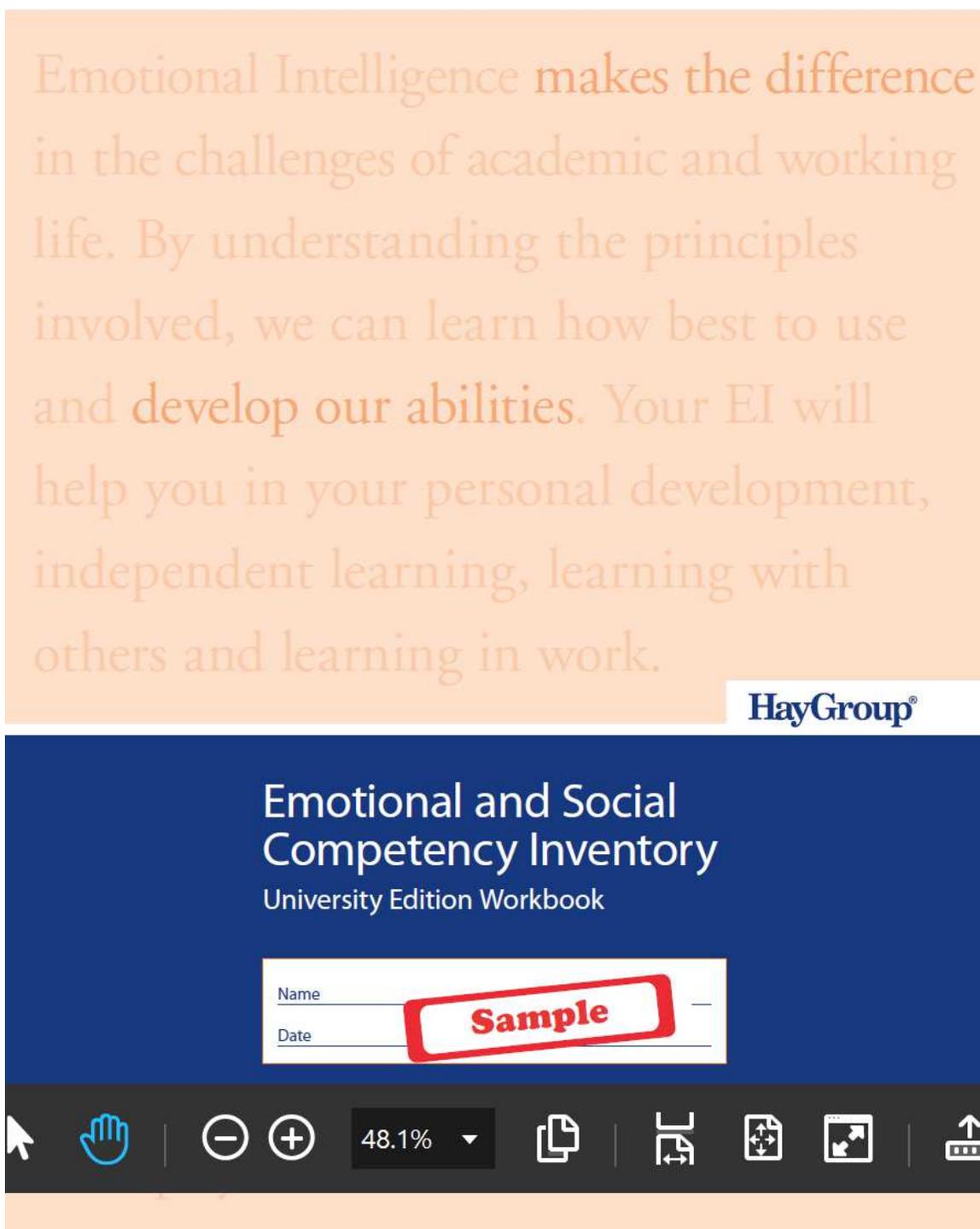
HayGroup®

Emotional and Social Competency Inventory

University Edition Workbook

Name

Date

Sample

48.1%

What is Emotional Intelligence?

Research has shown that Emotional Intelligence, or 'EI' as it is sometimes called, is an important predictor of success.

Emotional Intelligence is the capacity for:
◇ recognizing our own feelings and those of others
◇ motivating ourselves
◇ managing emotions effectively in ourselves and others

An emotional or social competency is a learned capability that contributes to success in all aspects of life.

So what do

Whether you are
through college
a post-graduate
playing a huge p

Your EI compete
◇ work out what
◇ decide upon the learning that will help you get there
◇ draw on your own resources
◇ learn from individuals around you – their successes and their challenges
◇ learn with others in groups
◇ support your friends, colleagues and peers in their learning

If you are working with emotional intelligence as a member of staff in a school, college or university, the Emotional and Social Competency Inventory – University Edition (ESCI-U) will help you to reflect upon your practice in:
◇ planning learning activities and processes that support your students' learning
◇ helping students learn from each other
◇ contributing to and developing within a network of colleagues and peers

What does the ESCI-U cover?

This Workbook will guide you through some steps to enable you to:
◇ identify what you want from your learning
◇ reflect on your EI competencies and how they support your learning
◇ assess your abilities – through your own view and with feedback from others
◇ plan your future development

Contents

The Emotional and Social Intelligence Model

The ESCI-U measures 12 competencies organized into four clusters:

Self-Awareness	Social Awareness
◈ Emotional Self-Awareness	◈ Empathy
	◈ Organizational Awareness

↳ **EI** ↲

Self-Management	Relationship Management
◈ Achievement Orientation	◈ Conflict Management
◈ Adaptability	◈ Coach and Mentor
◈ Emotional Self-Control	◈ Influence
◈ Positive Outlook	◈ Inspirational Leadership
	◈ Teamwork

The clusters of comp[...]
awareness underpins[...]
awareness, which in[...]
relationship manage[...]

Therefore, each one o[...]
competencies is impor[...] Self-Awareness is
particularly important as the foundation for developing and
sustaining EI in the long term.

However, you may not need to demonstrate every
competency to be effective. Indeed, you may feel that some
of the competencies don't apply to your situation or role
right now. Depending on your current situation, or what
you aspire to in the future, there will be a combination of
competencies that you can use to be most effective.

The Cognitive Competencies

The ESCI-U also measures Systems Thinking and Pattern
Recognition. The importance of these competencies has
been realized through nearly four decades of competency
research by Hay Group, Mcber and Boyatzis. Throughout
that research these were the two cognitive competencies
that significantly predicted effectiveness in leadership,
management and professional jobs. Of course, the ESCI-
U focuses on the Emotional Intelligence and Social
Intelligence competencies, but these cognitive competencies
are highly important for audiences in the education sector.
In this tool we are trying to develop the whole person,
including their cognitive ability.

Developing your EI – the Five Discoveries

Making any kind of change in our lives involves breaking
[...] bits that
[...] is all about.

[...] olves
[...] ss of
[...] scoveries'

[...] stions help you start to think through what these
five discoveries mean for you. The rest of this booklet can
help you make each of these discoveries really work for you
and your learning.

We will come back to these five discoveries after you've
thought about your own emotional and social competencies.
But before you do that, it's really worth thinking about what
you want from this learning. That's why we invite you to
respond to the five discoveries now.

For further reading on Boyatzis's Intentional Change
Theory see Goleman, D., Boyatzis, R.E., McKee, A. (2002),
*The New Leaders: Transforming the Art of Leadership into the
Science of Results*, London: Little Brown.

The Five Discoveries exercise

Take some time to think about these questions. We will ask you to come back to them after you have plotted your results.

Discovery 1 – My ideal self

What is my ideal self? What do I want for my future? What kind of person do I want to be? What are my aspirations?

Discovery 2 – My

What is my real self? what ways
do I differ from my i

Discovery 3 – My learning agenda

What is my learning agenda? How can I get closer to my ideal self? How can I build on my strengths? How can I work on a few weaknesses? What do these new behaviors look like for me?

43

Discovery 4 – Experimentation and practice

How can I experiment and practice? What can I do to practice new behaviors? What can I do to experiment and test new approaches?

Discovery 5 – Trusting

Who can I trust to hel...   ...port, ideas and encouragement?

Self-Awareness
Emotional Self-Awareness

This is the ability to understand your own emotions and their effects. It is being able to recognize how you react to cues in the environment and how your emotions affect your performance. It's about knowing your inner resources, abilities and limits. It is based on the desire to receive feedback and new perspectives about yourself, and to be motivated by continuous learning and self-development.

When you demonstrate Emotional Self-Awareness you:

◈ are aware of your own feelings
◈ know why these feelings occur
◈ understand the implications of your emotions
◈ are aware of your strengths and limits
◈ are open to feedback

Self-Awareness is at the heart of the ESCI-U model. It enables us to sustain c
behavior, despite setb

It can be hard wo

Tips for development

◈ Pay attention to the physical changes that accompany your emotions (for example: blushing when embarrassed; heart racing when excited or frightened; sweaty palms when nervous or stressed, etc.). Take note of the links between the physical signs and how you choose to interpret them.

◈ Keep a diary where you write down your responses to events in terms of feelings and physical changes. Look for links between your behaviors, situations and feelings.

◈ Ask for feedback from people who you feel comfortable with. Ask them to tell
bserved
ct on
n your
compare

nd relative
pects of your
life. Think of examples of your behavior that provide evidence to show that your list is a realistic assessment.

How good a at recognizing how I am really feeling?

What triggers an emotional reaction in me?

What do I value? What really matters to me? How might that affect how I feel?
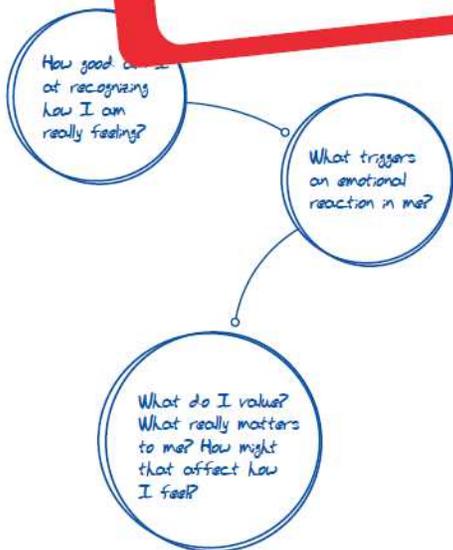
Self-Management
Adaptability

This is the ability to be flexible and work effectively within a variety of changing situations and with different individuals and groups. People with this competency are willing to change their own ideas or perceptions on the basis of new information or evidence. They are able to alter standard procedures when necessary and juggle multiple demands as required.

When you demonstrate Adaptability you

- juggle multiple d
- handle shifting p
- adapt plan
  in situation
- apply stand
- adapt ideas

Developing yo
positively with change. Unexpected change happens to us all, and has a tendency to be out of our control – but we can control our reactions to it. Being able to accept the change, be flexible and adapt to it and then move forward is a real skill.

Tips for development

- ◇ How open are you to new ideas? When faced with a decision to make, course work to complete, projects to plan or presentations to prepare, get into the habit of asking yourself these questions: Is there a different way I could do this? What else could I try? Is there a better way of approaching this?

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  ituations
  ing events
  n as role
  ce of

- your ways of working. What works well for you? What doesn't work well? Are there other ways you haven't tried yet? Try to consider all the options available to you.

- ◇ When your current strategy is not working, stop what you are doing, acknowledge that it is not working and think through the changes you can make to your plans, activities, objectives or behaviors. Be ready and willing to make adjustments that can help you in the long run.

how do I handle change?

how do I respond to ideas that are different to my own?

how well do I choose a different approach when things aren't working

Self-Management
Emotional Self-Control

This is the ability to keep your impulsive feelings and emotions under control. It is being able to restrain negative actions when provoked, when faced with opposition or hostility from others, or when working under pressure.

When you demonstrate Emotional Self-Control you:

◇ deal calmly with stress
◇ display restraint and control your impulses
◇ stay poised and positive, even in difficult moments
◇ are able to get the job done despite feeling negative emotions

The Amygd

The Amygda
centre – save
dangerous wo
flooding the b
needed to prepare for fight or flight. The amygdala reacts in an instant – much faster than the parts of the brain where we process information and make rational informed choices. And although we are developed way beyond our primitive ancestors the amygdala can still hijack our thinking brain – kicking in before we have been able to work out whether our reaction is reasonable or appropriate.

When we practice emotional self-control, we restrain the impulses caused by the emotional brain in order to give the rational brain a chance to deal with the situation and make more effective decisions. By developing your emotional self-awareness you will gain an understanding of what might trigger your emotional reactions – and therefore be able to spot those situations where you may need to use your emotional self-control.

Tips for development

◇ Keep a diary of your emotions and behaviors over a week. Identify occasions when you lost control.

◇ Examine the events that led up to that. Use this process to identify your emotional 'triggers'.

◇ Develop strategies to:
  – avoid your emotional triggers when possible
  – interrupt your automatic response by
    ith
    feel
    g or
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    result be?"

◇ Think about how stressed you are feeling generally in everyday life. If you need to, think about how you can reduce your stress levels (for example, take up physical activities that take your mind off things or provide relaxation; or identify pressures that you can eliminate by planning your work differently or delegating to others).

Social Awareness
Empathy

This competency is about understanding other people. It is the ability to hear and understand accurately the unspoken or partly expressed thoughts, feelings and concerns of others. People with empathy are able to constantly pick up emotional cues. They can appreciate not only *what* people are saying, but also *why* they are saying it.

When you demonstrate Empathy you:

◈ read people's moods or non-verbal cues accurately
◈ respect and relate well to people of diverse backgrounds
◈ listen attentively to others
◈ understand others' perspectives when they are different from your own
◈ understand the reasons for another's actions

Rememb
values thi
observing
to
and

Tips for development

◈ Over the next two weeks think carefully about your interactions with others. Ask yourself these questions:

 – Do I listen actively?
 – Do I pay attention to both verbal cues (tone of voice, speed, loudness, nature of language, etc.) and non-verbal cues (hand gestures, head gestures, direction of eye gaze, leaning forward or backward, etc) in order to identify what is really being said?
 – Do I 'mind-read' and make assumptions (right or wrong)?
 – Do I ask questions to understand what the other person is really saying,
   g?
   back – verbal or non-
   thers know that I am
   rested (for example,
   questions, clarifying

 Can you step into another person's shoes? Do you really understand what a situation feels like for someone else? In order to truly empathize with someone, imagine yourself in his or her position. What do you see? What do you hear? What do you feel? What concerns or thoughts do you have? Practice stepping into the shoes of TV characters, celebrities, friends, tutors, family members. Try to see the world from their point of view.

Who was the last person who I felt really understood me?

how did I know?

what did they say and do?

Relationship Management
Conflict Management

This is the ability to handle difficult individuals, groups of people, or tense situations with diplomacy and tact. This involves coming face-to-face with the conflict rather than trying to avoid it. This competency entails focusing on the issues rather than the people and working to de-escalate the bad feelings.

When you dem

◈ bring disagr
◈ help de
◈ comm
   to all
◈ try to
   everyo
◈ try to r
   involved

But how do you stay impartial and manage conflict without becoming involved in it yourself?

Am I using my self-awareness to monitor my own feelings?

Am I keeping my self-control so I don't make the situation worse?

Am I using my empathy to understand what others are feeling?

Will organizational awareness and adaptability help me to find a solution?
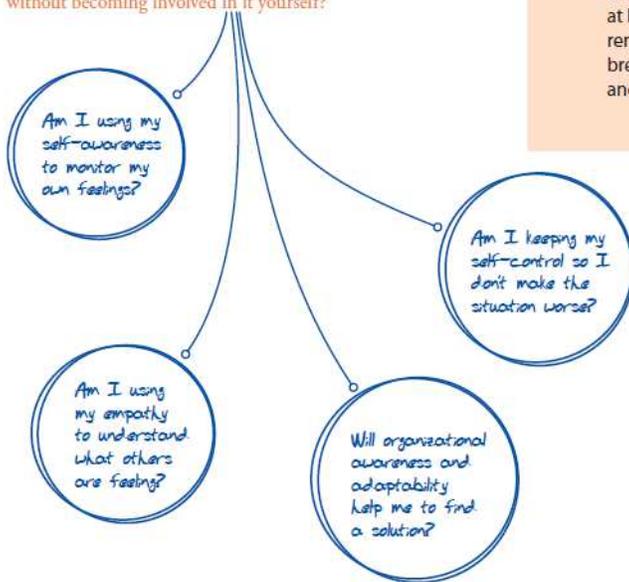
Tips for development

◈ If you sense trouble brewing with someone you work or study with, take steps to bring the disagreement or issue out into the open before it turns into a conflict situation.

◈ If you are with people who are in conflict ... with you, don't be ... they feel the ... es behind the ... icult to resolve ... ers may respond ... to air their ... other people's perspectives in order to understand their views and needs.

◈ If you find yourself in a heated discussion, focus on the issues and don't get personal. Aim your criticisms at behaviors, not individuals. If things remain heated, suggest a 20 minute break to allow everyone to calm down and gather their thoughts.

Coach and Mentor

This competency is the ability to foster the long term learning or development of others. Its focus is on the behaviors involved in developing others, rather than on the formal role of teaching or training. Those who do this well spend time helping people find their own way to excellence through specific feedback on current performance.

When you demonstrate Coaching and Mentoring you:

◇ offer feedb
◇ recognize o
◇ provid
◇ enco
   passi
◇ care a

Rememb
need to
People are very sensitive to receiving feedback – and can find it as difficult to accept the positive as the developmental.

Tips for development

◇ Act as an informal mentor to a new student in your group or to a student in the year below you. Join a volunteer mentoring scheme, if there is one at your institution or school, and gain training in the mentoring process.

◇ Provide constructive feedback to peers
   n as well as you.
   ough:

   lifferently
   uality of their work
   nave that could
   better or more

◇ Take time to talk to others about their aspirations, the things they want to do better, the things they would like to try out, the things they want feedback on.

Sample

Think back to the last time you received feedback that really made a difference to you

What did they say and do?

What impact did it have on you?

Was it a positive experience? What would have made it better?
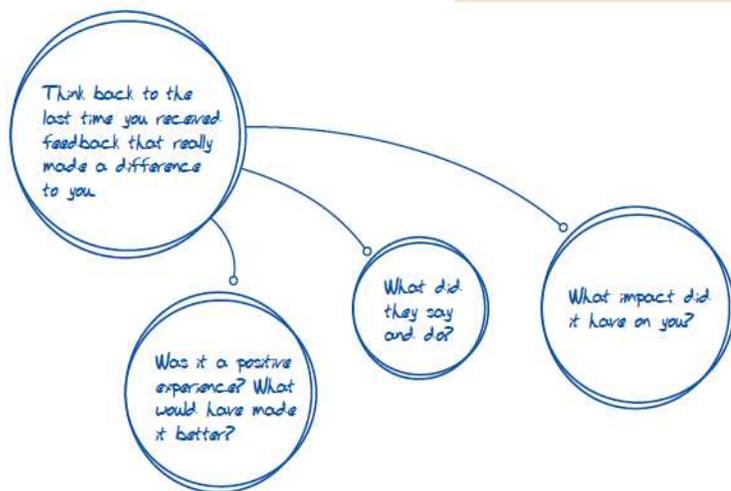
Relationship Management
Inspirational Leadership

This is the ability to take on the role of leader in a group or team. It implies a desire to lead others. Leadership need not come from a position of formal authority – this competency is about the behaviors of leadership, not about being in a formal leadership role. People with this competency work to bring people together to get the job done. They are able to build a strong sense of belonging within the group, leading others to feel that they are part of something bigger than themselves.

When you demonstrate Inspirational Leadership you:

◇ make activities or projects engaging
◇ inspire others
◇ motivate oth
◇ build pride in
◇ lead by

Great lea
They reac
them and

Think of t   you have ever experienced – perhaps a work manager, a teacher or professor who really inspired you, or another student who took the lead in a project or activity and who really motivated you.

Tips for development

◇ Identify a role model who inspires you. Identify the particular behaviors that you find inspiring and try to use similar behaviors yourself.

◇ When working with peers on a group assignment or project:
  – try to convey a sense of purpose and clarity about the group's goals
  – show and share your enthusiasm for the project
  – share your motivation – for example,
            t the outcome if

            ttitude in others.

Sample

What behaviors did they demonstrate?

What did you see them doing?

How did they try and get the best out of people?

What impact did they have on you?

51
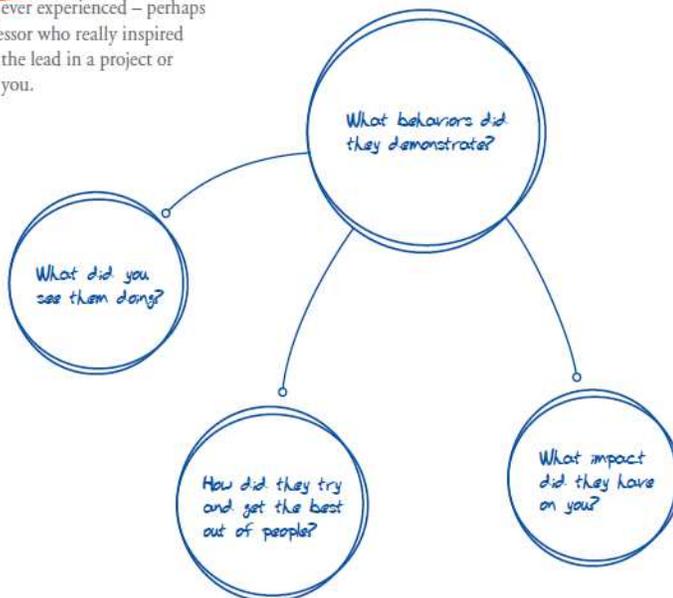
Cognitive Competencies

Systems Thinking

This is the ability to identify the many and various factors that impact upon a complex situation or event. It is recognizing both the causes and effects of actions and outcomes. Systems Thinking is about explaining these interactions in terms others can understand, which may involve the use of diagrams, flow charts, detailed but simple discourse, etc.

When you demonstrate Systems Thinking you:

◈ explain complex events in an understandable way
◈ see situations as a set of cause and effect relationships
◈ explain how interactions result in particular outcomes

Tips for development

◈ Identify a pa...
  involved in t...
  or diffi...
  Spend...
  a diagr...
  event, t...
  impacte...
  Share it...
  experienced it to validate your analysis.

◈ Work with another person who is having difficulty understanding a situation they have found themselves in. Ask questions to understand what is going on. Once you feel you have an understanding of it, play it back to the other person in a way that will aid them in making sense of this complex event.

Pattern Recognition

This competency is about recognizing patterns or trends in random information, events or situations. It is the ability to describe these patterns or trends to others, and to use metaphors or analogies to bring them to life and make them easily understood and recognizable. It is also the ability to see the commonality or similarities among various and often very different situations.

When you demonstrate Pattern Recognition you:

◈ identify patterns and trends within random information
◈ use metaphors or analogies to describe patterns or trends
◈ see similarities across different situations

Tips for development

... you
... tterns
... these
... seeing
... ptualize
... in similar
... ions next time.

◈ Work with another person to help them gain insight into how they are working. Identify two or three things that seem to typify this person's way of working with others. Create a metaphor or an analogy to help them understand how they work and the impact they have on others.

Your Self-Assessment Profile

The first step in developing your EI is to understand how you see yourself and how others see you. How else can you become the person you want to be? This part of the workbook will help you to do that.

You should have been given a booklet called the ESCI-U Self-Assessment Questionnaire. This contains the questions that you need to answer to assess your emotional and social intelligence competencies for yourself.

If you have not already done so, please take some time to follow the instructions in the questionnaire and answer the questions. Then add up the scores down each column (A, B, C, etc) and transfer each score to the equivalent columns in the profile chart.

Now plot each score in the shaded area of the profile chart by drawing a do̶͟͞ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ ̶ competency meets th

For example, if your questionnaire Self-Awareness the shaded area

Complete your cluster of compe

evelopment areas

Once you have looked at your profile consider:

What do you see as your strengths?

What are you most proud of?

How accurately do you feel you have assessed your own emotional and social intelligence?

Does the profile reflect all the skills you need in your educational setting?

Self-Assessment Profile page

	Self-Awareness	Self-Management				Social Awareness		Relationship Management					Cognitive Comptencies	
	A	B	C	D	E	F	G	H	I	J	K	L	M	N

I believe I use this competency:

Consistently — 25, 24, 23, 22, 21
Often — 20, 19, 18, 17
Sometimes — 16, 15, 14, 13, 12, 11
Rarely — 10, 9, 8, 7
Never — 6, 5, 4, 3

Total A	Total B	Total C	Total D	Total E	Total F	Total G	Total H	Total I	Total J	Total K	Total L	Total M	Total N
Emotional Self-Awareness	Achievement Orientation	Adaptability	Emotional Self-Control	Positive Outlook	Empathy	Organizational Awareness	Conflict Management	Coach and Mentor	Influence	Inspirational Leadership	Teamwork	Systems Thinking	Pattern Recognition

Your Feedback Profile

Self-Awareness is at the heart of Emotional Intelligence, and this cluster supports all the other EI competencies. The best way of developing self-awareness is to seek feedback from others. The ESCI-U Feedback Questionnaire, and the Feedback Profile, is an easy way to start this process.

Seeking feedback from others can be challenging, but the rewards for personal development are great. It helps us question our own assumptions about ourselves, see our strengths through others' eyes and learn from others' experiences.

Have I got any Feedback Questionnaires?

If you have not been given any Feedback Questionnaires, you can ask a tutor or colleague to order them by contacting Hay Group. Visit our website www.haygroup.com/tl for more information.

Who should I ask to

You can choose as
ESCI-U Feedback
people who know y
of situations or roles
people whose opinio
would be happy to di   with afterwards –
this will really help if you want to 'reality test' the feedback, or discuss ways to develop your EI competencies.

What if people are reluctant to give me feedback?

People may feel reluctant to give you feedback for a number of reasons. Perhaps they feel it would take too much time. If this is the case, you can reassure them that the questionnaire will only take a few minutes to complete.

Perhaps they don't want you to see how they score your capabilities against the EI competencies. If this is the case, you can ask a fellow student or colleague to collect all the Feedback Questionnaires on your behalf and score them in the Feedback Profile. Ensure that you ask someone who can be trusted to keep each person's feedback confidential. And do remind people that they don't need to put their own name on the front of the ESCI-U Feedback Questionnaire. These steps will ensure that the confidentiality and anonymity of each person who has provided you with feedback is maintained.

How do I score my feedback?

Collect all your completed Feedback Questionnaires, or ask a third party to do so for you..

Go through each one and:

◈ add up the scores for column A and write the total against 'Total A' on the profile opposite
◈ do the same for every other column (B to N) and then divide each total score by the number of completed ESCI-U Feedback Questionnaires
◈ record this average score in the column
◈ plot this average score in the shaded area

What next?

Now you have completed your Self-Assessment Profile, and perhaps your Feedback Profile too, you have more information to support your learning. The next section

ink about
er to return
s like and to

consider:

What are you most proud of?

What do others see as the most important development needs for you?

How accurately do you feel others have assessed your emotional and social intelligence?

Does the profile reflect all the skills you need in your educational setting?

What do the profiles mean for you?

The following questions and suggestions may help you capture your thoughts at this stage:

Think about the real meaning for you behind the scores. For example, for competencies scored:

Consistently
Are these the competencies I most enjoy using? Do they feel most natural to me? How did I get to feel that way about these competencies?

Often
These are solid strengths for me. How else could I apply these strengths? In which other situations, and with which other people, could I use these competencies?

Sometimes
If I carry out this competency some of the time, what stops me doing it more often? Do I do different things in different situations? Do different people see different sides of me?

Rarely
What are the situatio me using it? What are th s when I don't use it?

Never
Does this mea rs ever see me us

Think about what your feedback means for the person you really want to be.

Do your profiles help to clarify things for you? Do they help you identify the capabilities you want to develop?

Use the five discoveries questions again to think this through.

Discovery 1 – My ideal self

What do I really want out of life? What kind of person do I really want to be? What am I aiming for as a person?

When I imagine myself in my ideal

Discovery 2 – My real self

Who am I right now? What do I enjoy? What am I good at? What do I find challenging? How do others see me?

What are my strengths – the things about me that make me close to how I want to be?

What are my learning gaps – the things that I want to develop to be closer to how I want to be?

Discovery 3 – My learning agenda

In the light of what I have learned from my profiles, how can I get closer to my ideal self?
How can I build on my strengths to become even more like my ideal self? How can I work on the gaps?
What do I want to do differently? What are my goals? Which competencies do I want to focus on?

Discovery 4 – Exper¹

What activities can I do
What happens when I
What are the con

Discovery 5 – Trusting relationships

Who might help, support and encourage me now and in the future? What can I learn from them?
What will have a positive and helpful impact on me? What kinds of behaviors do I need from them?
Who can I learn alongside – learning from them and supporting their learning?

Think about what your feedback means for the person you really want to be. Whatever you're learning or whatever you're working on, these five discoveries will help you focus on the things that really matter to you. They'll help you to use your strengths, identify what you need, take risks in your learning and ask for support.

Use them in everything you do.

Sample

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Appendix C: EI Assessment Reliability Study

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The Creation of the Emotional and Social Competency Inventory (ESCI)

Findings from a pilot study to achieve a higher psychometric standard with the ECI

by
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Case Western Reserve University
Department of Human Resources, ESADE

Summary

The challenge

The Emotional Competence Inventory (ECI-2) and the ECI-U (University Version) show acceptable validity and reliability in a variety of studies; in fact, levels that are relatively rare for tests available to most practitioners and consultants. However, there is some criticism of our approach to conceptualizing and measuring EI in the professional research community. In some studies the competency scales do not appear valid as separate scales and the clusters do not differentiate themselves from each other. While this is of less concern to accredited users of the ECI, we decided to seek out a higher psychometric standard.

Our response

We started by re-conceptualizing the tests, both the ECI-2 and the ECI-U, as measures of 'social' and 'emotional' intelligence competencies. We then reviewed every item (360° survey question) and competency scale, applying factor analyses and revising them as necessary to ensure that they identified specific behaviors and were understandable and concise. This resulted in fewer competencies (12 instead of 18) and replaced the ECI-2 algorithm based on developmental levels with a measure based on consistency of behavior. The new instrument resulting from this work, the Emotional and Social Competency Inventory (ESCI), was piloted with a total of 116 participants and 1022 raters in the US and the UK.

The findings

The pilot study affirmed that the ESCI measures the behaviors that matter: those that contribute to effective performance. The psychometric standards achieved in the statistical analyses provided reassurance that the ESCI focuses on behaviors – and the relationships between them – that are observable, recognizable and distinct. The removal of developmental levels delivers a behavioral model which can be applied more satisfactorily to a wide range of work contexts, job roles and levels. The feedback package behind the ESCI will show participants how others experience their behavior in terms of the consistency with which they demonstrate emotional and social intelligence competencies. It will help participants to appreciate their strengths, to recognize how consistently they do certain things, and to identify what they can do more of to be even more effective.

The implications

The outcome of this work for the coaches and practitioners who are accredited to use the ECI is that there is now a choice of instruments. While we are more than pleased with the psychometric goal that the ESCI has attained, and satisfied that the revisions to the items and feedback package ensure even wider applicability, we realize that there are many reasons why practitioners may want to continue to use the ECI-2, or to use both in different circumstances.

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What challenge were we facing?

Since 1970, when the first 'competency study' was conducted, we have established that competencies predict effectiveness in all sorts of management, leadership, and professional roles. This has been shown in a thousand or more empirical studies, which have taken place in many countries. And yet the quest for academic legitimacy and recognition continues.

The ECI-2 and ECI-U show acceptable validity and reliability in a variety of studies. It measures what it's supposed to measure, and it measures it consistently. People doing research with it feel it complements the existing tests of emotional intelligence. As a 360^0 test of competencies it is one of a number in the market, but the only one with some momentum to date.

Coaches using the ECI-2 and ECI-U feel they significantly help their clients and students to examine their emotional, social, and cognitive competencies and to develop them. They offer a number of distinctive features that coaches appreciate and value, like the developmental levels and feedback format. Through the efforts of colleagues at the Hay Group we have run many research projects using the ECI and ECI-U worldwide, and have built an increasing worldwide network of accredited ECI users. This has been good for the field, and has helped many people to appreciate and develop their strengths and talents.

Why does the ECI pose this challenge?

Part of this stems from a conceptual problem that we imposed on the 360^0 instrument. When we use behavioral sources, like comprehensive Behavioral Event Interviews (BEIs) or videotaped simulations, we derive alternate manifestations of the underlying competency. But when we move to a 360^0 test, we are asking untrained informants – not trained coders – to assess an individual and his or her behavior. And when informants are responding they need more guidance. We realized we could offer this guidance by integrating the intent behind a behavior into the wording of each item in the ESCI and ESCI-U.

How big is the challenge?

It is worth noting that the sound levels of validity (i.e. the instrument measures what it is designed to measure) that we have achieved with the ECI-2 and ECI-U are relatively rare for tests available to most practitioners and consultants. Most of the tests currently sold do not have this type of analytic back up. Of course, the tests used primarily in research are a different story. In the EI arena, the MSCEIT shows all of these characteristics, but less predictive validity against performance measures. The EQ-i (Reuven Bar-On's measure which is now a 360^0 as well as self-assessment) shows most of the same dilemmas as the ECI-2 and ECI-U. The Dulewich measure suffers from similar challenges – I don't know about the Fong measure – but less has been published on them. In the competency assessment arena, no tests or measures have successfully overcome all of these challenges, despite hundreds of published studies. So we chose to chase an important standard and goal that most have ducked in the field of practice, and some even in the research.

What did we do to address it?

A re-conceptualization…
We re-conceptualized the tests, both the ECI-2 and the ECI-U, as measures of 'social' and 'emotional' intelligence competencies[1]. We realized the need to differentiate the Self-Awareness, Self-Management and Social

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[1] *Actually, the WSOM and ESADE versions of the ECI-U also include the two major 'cognitive intelligence competencies', namely Systems Thinking and Pattern Recognition*

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Awareness competency clusters from the Relationship Management cluster (previously known as Social Skills). In particular, we wanted to differentiate those competencies that focus on the use of one's ability to understand and use emotions about oneself from the ability to understand and apply emotional understanding when dealing with others. The division between Emotional and Social Intelligence seemed to be the best way to address this. **So the new tests are now called: The Emotional and Social Competency Inventory (ESCI) and The Emotional and Social Competency Inventory – University Version (ESCI-U).**

However, there is some criticism of our approach to conceptualizing and measuring EI in the professional research community, and this has started to affect practitioners. While the detailed research programs and analyses using the ECI-2 and/or ECI-U continue to show reliability and validity, they also indicate instability: that is, the competency scales do not often appear valid as separate scales. In some of these studies the clusters do not differentiate themselves from each other. The major cause is that the scales and clusters are intercorrelated at a high level. This has not been an issue for coaches and practical users of the test, but it does raise questions in the academic community.

…and a re-examination
In addition, we've examined every item (question) and competency scale against three criteria:

- Does it really differentiate from any of the other scales?

- Is it close to the related behavior that we observe in BEIs, videotapes and simulations?

- Can we drop this scale or item in order to achieve greater conciseness?

Some of the existing items and scales were good and some were less so (like many items in Initiative and Conflict Management). Some automatically collapsed into one larger scale in every data set with correlations of .85 to .95 (like Emotional Self-Awareness and Accurate Self-Assessment). So we decided which items to change and sought guidance in changing them by:

- going back to an assortment of actual BEIs, videotapes and simulations to reacquaint ourselves with the actual behavior that we, and others, saw.

- increasing the number of items per scale to 6 for the ESCI (5 plus 1 reverse-scored item in most scales) and 5 for the ESCI-U (because the ESCI-U is hand-scored, reverse-scored items will not be included in the ESCI-U, the same as in the present ECI-U). We do not expand the length of the test, which is at a burdensome maximum already, because the total number of competency scales is reduced.

- revisiting the wording of the items for each scale to ensure considerable overlap in language and concepts.

- using statistical results from many analyses of doctoral students in their dissertations, as well as detailed exploratory and confirmatory factor analyses.

A statistical review of scale structure, reliability and validity…
To increase the reliability[2] in terms of Exploratory and Confirmatory Factor Analysis and Item Response Theory, and in the hope of establishing better divergent validity[3] of the scales and clusters, we needed to include more items per scale.

Three data analyses were used in our work on scale redesign:

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[2] *The extent to which the instrument yields consistent results with repeated use.*
[3] *The extent to which the instrument yields results that indicate different, distinguishable competencies and clusters of competencies.*

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1. The correlation matrix of the scales by Steve Wolff in the November, 2005 Technical Manual (n = 21,256);

2. The Exploratory Factor Analysis by Boyatzis and Sala, 2004 (n ~ 6,500);

3. The correlation matrix generated from the factor scores of the Confirmatory Factor Analysis scale correlations by Joan Manuel Battista, 2005 (n ~ 6,500).

In addition, reliability calculated with Cronbach's alpha was used.

…and revisions to the competency scales

To take into account the high intercorrelation among certain scales, and to help create more divergent validity among the scales and clusters (but keep the time burden of test completion the same as it is now) we reduced the number of competencies to 12. The ESCI competencies are now:

- Emotional Self-Awareness: Recognizing one's emotions and their effects

- Emotional Self-Control: Keeping disruptive emotions and impulses in check

- Adaptability: Flexibility in handling change

- Achievement Orientation: Striving to improve or meeting a standard of excellence

- Positive Outlook: Persistence in pursuing goals despite obstacles and setbacks

- Empathy: Sensing others' feelings and perspectives, and taking an active interest in their concerns

- Organizational Awareness: Reading a group's emotional currents and power relationships

- Coach and Mentor: Sensing others' development needs and bolstering their abilities

- Inspirational Leadership: Inspiring and guiding individuals and groups

- Influence: Wielding effective tactics for persuasion

- Conflict Management: Negotiating and resolving disagreements

- Teamwork: Working with others toward shared goals. Creating group synergy in pursuing collective goals.

See Appendix 1 for an outline of the thinking behind the removal, merging or change of some of the ECI-2 competencies, and Appendix 2 for the revisions made to the ECI-U competencies.

Removal of developmental levels…

We dropped the competency developmental levels. This was a direct result of revising the wording of items for each scale to ensure overlap in language and concepts, and the consequence has been the ESCI's improved psychometric rigor.

This does not affect the ESCI-U because the ECI-U doesn't use developmental levels.

Competency levels can be helpful in capturing desired behaviors in a tailored competency model for a specific client. But when moving to generic models that should be valid across different roles and contexts, it becomes harder to apply them meaningfully for participants. Many accredited coaches also reported that their clients'

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attempts to transform scores from the item responses to the levels often distracted from the true purpose of the coaching process.
Why does the ECI pose this challenge?

Those who find the developmental levels critical can continue to use the ECI-2.

…and removal of target levels
The removal of developmental levels results in the removal of the algorithm that lies behind the ECI-2 and therefore the removal of a target level for each competency. Instead, competency scores are presented in terms of consistency of demonstration (from 'Never' to 'Consistently') and summarized as an average score. In the future we are considering re-introducing tipping points (points on the scale that differentiate performance for each competency) once we have collected and analyzed a larger, representative sample with performance data.

As a proxy for tipping points, norms for the ESCI will be established on the basis of frequency of demonstration of the competencies by the sample population – participants will be able to compare their score against the 25th to 75th percentile range. Initially the sample population will consist of the pilot group, but it will grow with the use of the instrument. When sufficient data have been generated, norms will be re-calculated and re-applied.

And, finally, testing of all these changes in a pilot study

A pilot study was conducted with a total of 116 participants (79 from the U.S. and 37 from the U.K.) and 1022 raters (810 from the US and 212 from the UK).

Raters were asked to fill out the pilot ESCI and provide feedback on the questions and the instrument as a whole. The intended number of items per competency in the final instrument was six; however, the pilot study contained an extra two items per competency. This allowed us to choose the best six items and eliminate the poorer ones. In choosing the final items we tried to maintain one reverse-scored item per competency. Reverse-scored items are useful to break up the rhythm in answering questions – they help to ensure that raters read and carefully consider each item. Once we selected the best six items, we examined raters' comments to clarify and improve the wording of any items that users indicated were problematic.

What did we conclude from the pilot?

The ESCI Model
The revised model of emotional and social intelligence emerging from our research contains 12 competencies organized into four clusters: Self-Awareness, Self-Management, Social Awareness, and Relationship Management. These clusters are the same as the ECI-2.

Self-Awareness concerns knowing one's internal states, preferences, resources and intuitions[4].

Self-Management refers to managing one's internal states, impulses and resources.

Social Awareness refers to how people handle relationships and awareness of others' feelings, needs and concerns.

Relationship Management concerns the skill or adeptness at inducing desirable responses in others.

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[4]Although self-awareness serves as a foundation for the other clusters of competencies, ECI-2 scores often showed lower scores for self-awareness than for the competencies that theoretically build upon it. This is because it is difficult for raters to assess a person's self-awareness. In the ESCI we attempted to correct this issue by re-wording the items to reflect behaviors that would be more visible

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ESCI Pilot Model

Self-Awareness
- Emotional Self-Awareness

Self-Management
- Achievement Orientation
- Adaptability
- Emotional Self-Control
- Positive Outlook

Social Awareness
- Empathy
- Organizational Awareness

Relationship Management
- Conflict Management
- Coach and Mentor
- Influence
- Inspirational Leadership
- Teamwork
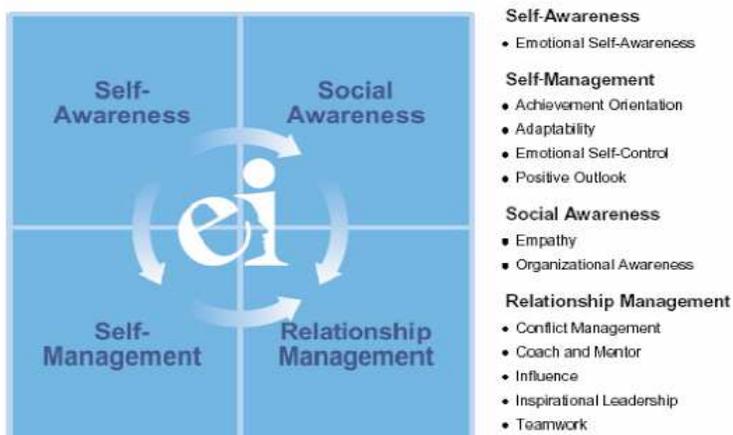
Psychometric properties: Reliability

The reliability of the scales in the ESCI remains comparable with the ECI-2. Table 1 shows the reliabilities for each competency and provides a comparison with the most similar ECI-2 competencies. These numbers are based on the pilot study, which contained 1022 raters.

Table 1: Cronbach's Alpha Reliability for ESCI Competencies

Cronbach's Alpha Reliability for ESCI Competencies		Cronbach's Alpha Reliability[5] for the most similar ECI-2 Competencies	
Emotional Self-Awareness	.83	Emotional Self-Awareness	.87
Achievement Orientation	.74	Achievement Orientation	.77
Adaptability	.76	Adaptability	.73
Emotional Self-Control	.80	Emotional Self-Control	.83
Positive Outlook	.76	Optimism	.75
Empathy	.79	Empathy	.80
Organizational Awareness	.76	Organizational Awareness	.80
Conflict Management	.84	Conflict Management	.73
Coach and Mentor	.83	Developing Others	.85
Influence	.74	Influence	.76
Inspirational Leadership	.79	Inspirational Leadership	.86
Teamwork	.87	Teamwork & Collaboration	.75

[5] Total Others Ratings (N = 22,089), as referenced in the ECI Technical Manual November 2005.

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Psychometric properties: Factor Analysis

A principal axis Exploratory Factor Analysis with promax rotation[6] showed the factor analytic properties of the instrument to be outstanding. Table 2 shows a summary of the results of the factor analysis.

Table 2: Summary of Factor Analysis Results

Competency	Summary of Factor Analysis Results
Emotional Self-Awareness	All questions loaded on expected factor
Achievement Orientation	4 of 6 questions loaded on expected factor
Adaptability	All questions loaded on expected factor
Emotional Self-Control	All questions loaded on expected factor
Positive Outlook	All questions loaded on expected factor
Empathy	All questions loaded on expected factor
Organizational Awareness	All questions loaded on expected factor
Conflict Management	All questions loaded on expected factor
Coach and Mentor	5 of 6 questions loaded on expected factor
Influence	5 of 6 questions loaded on expected factor
Inspirational Leadership	All questions loaded on expected factor
Teamwork	All questions loaded on expected factor

The ESCI as a new instrument

Naming the new instrument ESCI recognizes the fact that it measures both emotional intelligence competencies (i.e. those in the self-awareness and self-management clusters) and social competencies (i.e. those in the social awareness cluster and the relationship management cluster).

The pilot study has reaffirmed that the ESCI measures the behaviors that matter: those that contribute to emotionally and socially effective performance. The psychometric standards achieved in the statistical analyses provide reassurance that the ESCI focuses on behaviors – and the relationship between them – that are observable, recognizable and distinct.

Item choice and wording

The final items (a total of 72) were drawn from a larger number of piloted items (96), allowing us to select the most valid and reliable ones. In the final version of the ESCI:

- each competency scale has five items and most have an additional reverse-scored item.

- the items in each competency contain a key word or phrase to link all items in a scale. This is often related to the intent of the expressed competency or the central concept of the competency. This means that the instrument is easier to understand and complete, enhancing the credibility and usefulness of participants' feedback data.

The removal of developmental levels (resulting from the re-wording of items) delivers a behavioral model which can be applied more satisfactorily to a wide range of work contexts, job roles and levels.

6 See G. Buchanan and M. Seligman (eds.), Explanatory Style (Hillsdale, NJ: Lawrence Erlbaum.)

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The ESCI feedback package

After completing the ESCI and seeking feedback from others, participants will receive an ESCI feedback report which, as with the ECI-2, provides the basis for a coaching conversation. The feedback package behind the ESCI will show participants how others experience their behavior in terms of the consistency with which they demonstrate emotional and social intelligence competencies.

The format of the feedback report, and the removal of developmental levels, will free participants from the performance anxiety that can result from comparing their data to a set of target levels: levels which may or may not be relevant to their job roles. Instead, it encourages participants to appreciate their strengths, to recognize how consistently they do certain things, and to identify what they can do more of to be even more effective.

What does this mean for users of our EI instruments?

Choosing between the ECI-2 and the ESCI

The outcome of this work for the coaches and practitioners who are accredited to use the ECI is that there is now a choice of instruments. While we are more than pleased with the psychometric goal that the ESCI has attained, and satisfied that the revisions to the items and feedback package ensure even wider applicability, we realize that there are many reasons why practitioners may want to continue to use the ECI-2, or to use both in different circumstances.

The ESCI will be of particular value when working with clients for whom:

- the statistical rigor of the instrument is critical (i.e. university and college faculty who may want to study feedback data in detail or track it over time).

- the algorithm, developmental levels and target levels may detract from the coaching conversations they need to have about their personal strengths and aspirations.

- the focus on 12 competencies (instead of the ECI-2's 18) provides the basis for more meaningful coaching conversations.

- improving their performance by being more consistent in a range of behaviors makes more sense than increasing the complexity of specific behaviors – doing more of what you already do well is a great way to become more effective!

However, the ECI-2 will meet the needs of clients who:

- need to make comparisons between current feedback data and previous ECI feedback.

- want to compare composite data, across a group of participants, to previous ECI feedback for the same or different groups.

- find the ECI-2 developmental levels useful and applicable to their organization.

- need the credibility that comes from the large database behind the ECI-2, and are unwilling to wait for the ESCI database to grow sufficiently to meet their needs.

Because of the fundamental similarities between the ESCI and the ECI-2, minimal additional training will be required to equip practitioners and coaches with the knowledge required to deliver either instrument.

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Appendix 1: Changes to the competency scales in the ECI-2

Emotional Self-Awareness *as the result of merging it and* Accurate Self-Assessment

These two scales were highly correlated in data analyses and dissertation samples. They tend not to be distinguished from each other in coaching (i.e. a person showing one high but needing to work on the other). They always align with the same factor in Factor Analyses. In other words, they seem to be two aspects of the same 'thing'. The resulting scale is called **Emotional Self-Awareness** because that seems to be the core of the 'thing'.

Dropping Self-Confidence

Self-Confidence is not distinguishable from Achievement Orientation and the Self-Management cluster in these analyses and earlier ones. Its correlations with other scales are not high, but it does not add significant value, either conceptually or practically. In coaching, Self-Confidence is often better determined by the relative position of the person's Self-Assessment as compared to the Other-Assessments, than by the scale score itself. Lastly, when used in other cultures, it is likely to cause consternation and confusion. Cultural norms seem to affect expression of Self-Confidence to a great deal. Accredited coaches in other countries have claimed that, in their culture, several of the items are more indicative of arrogance or discourteous behavior.

Achievement Orientation *as the result of merging it and* Initiative

These two scales align with the same factors in the Factor Analyses and show high correlation. Initiative shows poor reliability and stability. Several of the items seem to trigger in respondents the achievement imagery of improving performance.

Changing the name of the Optimism *scale to* Positive Outlook

Optimism is a trait. Seligman and others have shown that repeatedly[7]. By having it with the same label we may confuse personality traits with EI and behavioral competencies. But a positive view of life and the future seems to be a distinct disposition. Some people clearly express positive views about the future and others do not. So rather than drop it, my recommendation is to change the name to allow for a more direct observation of behavior and minimize confusion with the trait.

Dropping Transparency

This scale does not distinguish itself statistically. It aligns with one group of scales in one analysis and then another group in another data set. It does not give us a clear benefit empirically and is of limited use in coaching. Although the characteristics of authenticity and congruence are important to leaders and managers, it seems they prove too tricky to observe and assess within one behavioral competency.

Dropping Service Orientation

This competency seems to be the application of Empathy to clients and customers. Statistically it stands out from Empathy and Organizational Awareness, the other two major competencies in the Social Awareness cluster. But since it seems to be a sensitivity or role orientation characteristic it has limited value in coaching, in comparison to these other two. Thus, for the sake of parsimony, it was dropped.

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[7]*See G. Buchanan and M. Seligman (eds.), Explanatory Style (Hillsdale, NJ: Lawrence Erlbaum.)*

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Dropping Change Catalyst

This scale is highly correlated with Achievement Orientation. It aligns with it in the Factor Analyses. It seems to be a consequence of other competencies being used in a situation, or of a disposition to want to change things.

Changing the name of Developing Others *to* Coach and Mentor

The term Coach and Mentor more accurately reflects the essence of the Developing Others, when taking into account the changes made to the item wording for this competency. In addition, it seemed a better description of what effective leaders do.

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Appendix 2: Changes to the competency scales in the ECI-U

Drop Trustworthiness *and* Conscientiousness *from the ESCI-U*

In contrast to the executive or experienced managerial audience for the ESCI, undergraduates or graduate students are often reliability challenged! In discussions with many faculty, we can attest to the widely shared observation that we need to be helping some students understand that they are supposed to live up to promises made, get to class on time, show up for work when they say they will, and not cheat on tests or borrow papers from friends. But Trustworthiness and Conscientiousness don't seem to predict effectiveness, just presence (or attendance), so we dropped them.

Drop Communication

Communication ability is a major concern and development target for undergraduates and MBAs. It is less relevant for graduate students with work experience, but that is not the major market for the ESCI-U, as I understand it. It is also a competency on which schools and programs can show significant value-added in the outcome research and they can develop courses, workshops and training programs to enhance it. The results of competency development on this scale are easily observed by others: teachers, faculty, and recruiters. But communication is a big area in itself, and it can be assessed in other ways more directly than through a 360° test. So, for parsimony, we dropped it.

Maintain the cognitive cluster of Systems Thinking *and* Pattern Recognition *for the ESCI-U WSOM and ESADE versions*

Collegiate audiences, whether using the ESCI-U for classes and student development or for outcome assessment, are as concerned with cognitive competency development as emotional and social competency development. In most schools, faculty are more concerned about cognitive development. Especially for the outcome assessment applications, inclusion of these two cognitive competencies strengthens the researcher's ability to provide useful feedback to the program and school. These two competencies clearly align with separate factors in the factor analyses.

Merge a few items from Cultural Awareness *into the* Empathy *scale*

We had reinserted this scale into the ECI-U because of the developmental agenda of many programs – to help students learn to appreciate and understand people who are different from them. But it really is an advanced application of Empathy. If a student is low on it, do they really need another scale to show them that others think they are prejudiced? Wouldn't that emerge from the Empathy scale, especially if it included an item or two related to this area?