

Does Feedback Increase Students' Emotional Intelligence?

Barbara Burgess-Wilkerson, Winthrop University

Keith Benson, Winthrop University

Steven Frankforter, Winthrop University

This study investigates the extent to which emotional intelligence can be successfully developed through a semester-long classroom intervention and self-directed learning process among students in a college of business administration. We found that with emotional intelligence training, all students experienced improvement between the administrations of pre-tests and post-tests. This result also held regardless of maturity level (undergraduate or graduate student status), or gender.

For most of the past century, the intelligence quotient (IQ) test was the primary method to gauge intelligence and was often used as a predictor for success in the corporate world. Many human resource managers correlated grade point average with IQ, which explains why grade point average was often a requirement in the job application process. However, research in the 1980's found that cognitive ability, as demonstrated on IQ tests, did not represent a comprehensive picture of human intellect. For example, Hunter and Hunter (1984) found that IQ accounts for approximately only 25 percent of the variance in career success, while Sternberg (1996) pointed out that studies vary and that IQ may account for only about 10 percent of the variance in career success. The question then arose: if IQ is not a very reliable predictor for career success, then what is?

Salovey and Mayer's (1990) study of social (non-cognitive) intelligence presented a framework for emotional intelligence (EI), which was based on the ability to regulate one's emotion and accurately monitoring other's emotions. Goleman (1995) examined the relationship between traditional cognitive IQ tests and success in the workplace, finding that IQ by itself was not a good predictor of job performance. Cherniss (2000) found that EI is critical for effective work performance. A national survey found four in ten workers were not able to work cooperatively with fellow-employees and only 19 percent of entry-level applicants have sufficient self-discipline in work habits (Harris Education Research Council, 1991). Considering such findings, perhaps business schools should consider incorporating emotional intelligence development into their curriculums. In this study, we examine whether emotional intelligence feedback can increase students' emotional intelligence.

REVIEW OF LITERATURE

Thorndike and Stein (1937) stated that social intelligence is the ability to understand others and act wisely in human relations. Emotional intelligence builds on this concept. According to Salovey and Mayer (1990) Emotional intelligence is "a form of social intelligence that involves the ability to monitor one's own and other's feelings and emotions, to discriminate among them, and to use this information to guide one's thinking and action" (1990:185). Goleman (1995) found that emotional intelligence is a more important determinant of management success than technical expertise or cognitive ability. There is recognition among researchers and practitioners that emotions play a large role in organizational life. For example, emotional intelligence is a key area to help accountants perform better (Akers & Porter, 2003). Additionally, Goleman, Boyatzis, and McKee (2002) found that partners in a large public accounting firm with strong self-management and social skills achieved a 390 percent incremental annual profit versus a 50 percent increase for partners with strong analytical skills.

In a study of MBA students, Boyatzis, Stubbs, and Taylor, (2002) concluded that MBA programs should put forth a concerted effort to integrate emotional intelligence training using a more non-traditional holistic approach to positively impact employment outcomes. Research indicates a positive correlation between emotional intelligence and cognitive-based performance among college students. Lam and Kirby (2002) ascertained the level to which emotional intelligence accounts for increases in individual cognitive-based performance above the level attributable to general intelligence. They found a positive correlation existed in three of the four emotional intelligence subscales; overall EI, perceiving emotions, and regulating emotions.

A survey of employers conducted by the National Association of Colleges and Employers found that employers rated interpersonal skills as the most desired skill of recent graduates (Shivpuri & Kim, 2004). In a study of accounting students, Bay and McKeage (2006) found the average accounting students did not have a high level of emotional intelligence, and given the critical role of emotional intelligence in career success, those students were ill-prepared

for their futures. They argue that emotional intelligence has relevance for accountants in the areas of decision-making and also suggests that emotional intelligence is a variable that may explain the gap between ethical understanding and ethical behavior in the workplace. While graduates of business programs may be technically prepared for their disciplines, they are not necessarily prepared for the emotional aspects of work. Esmond-Kiger, Tucker, and Yost (2006) revealed that although accounting students on average have higher GPAs than non-accounting counterparts, they reported lower levels of emotional intelligence. They recommend the incorporation of emotional intelligence training into the accounting.

The American College Personnel Association called for a response to the mounting evidence of the importance of emotional intelligence in academic and career success and advocated the promotion of a student development model of learning that incorporates emotional intelligence competencies, through engagement in applied research efforts to promote holistic learning through an integrated learning community commonly referred to as Student Learning Imperative, which places student development on par with student learning (Low, Lomax, Jackson & Nelson, 2004).

Hypotheses

Business schools are creatively infusing emotional intelligence into the business curriculum as a holistic approach to promote student professional development. In one instance emotional intelligence theory was infused into a school's business communication curriculum as a strategy for developing interpersonal and intrapersonal communications more effectively (Myers & Tucker, 2005). Vandervoort (2006) advocates improving student emotional intelligence because those with higher self-knowledge tend to make better career choices, have less behavioral/emotional problems, and have higher scores on standardized achievement tests.

The purpose of this study is to investigate the extent to which emotional intelligence can be developed through a semester-long classroom intervention and self-directed learning process among selected students in a College of Business Administration. We predict that emotional intelligence feedback will increase student scores on EI tests. We also predict that both graduate and undergraduate students will improve their EI scores. Finally, we predict that both male and female students will improve their EI scores. Accordingly, we offer the following hypotheses:

- H1: Emotional intelligence feedback will result in increases in student emotional intelligence scores.
- H2: Emotional intelligence feedback will result in increases for both graduate and undergraduate student emotional intelligence scores.
- H3: Emotional intelligence feedback will result in increases for both male and female student emotional intelligence scores.

DESIGN OF THE STUDY

Participants and Assessment Tool

Students in two graduate and one undergraduate course at a university in the southeastern United States during the fall semester of 2009 were informed of the opportunity to participate in an emotional intelligence project. The study included 121 students. There were 77 undergraduate and 44 graduate students, whose age ranged from 19 to 47, with an average age of 23. All undergraduate students were either juniors or seniors. Sixty-two students were female and 59 were male. Participants took the Emotional Intelligence Quotient Higher Education Edition (EQIHed) online self-assessment before intervention as a pre-test and then near the end of the semester, after intervention as a post-test. The EQIHed is a self-reporting instrument developed by Bar-On (2000) to measure an array of non-cognitive capabilities, competencies and skills based on the construct model of social and emotional intelligence.

The assessment tool is divided into five general components along with several subcomponents. The first general component, intrapersonal, included measures of self-regard, emotional self-awareness, assertiveness, independence, and self-actualization. The second, interpersonal, included empathy, social responsibility, and interpersonal relationship. The third, stress management, included stress tolerance, and impulse control. The fourth, adaptability, included reality testing, flexibility, and problem-solving. Finally, general mood, included optimism and happiness (Mayer, Caruso & Salovey, 2000). Table 1 below shows the variable definitions for the EQIHed report from BarOn Emotional Intelligence Quotient Technical Manual.

We reviewed the MHS testing instructions and Internal Review Board (IRB) consent policies for optimal understanding of participation requirements and confidentiality. Each student participant received a passcode and instructions for accessing the EQIHed protocol through the MHS website. There was no time limit for completion of the EQIHed assessment, though the average time was 15 minutes. When the duration of the assessment was under

10 minutes it was flagged in the scoring organizer for follow-up with the student. Three possible sources of bias were controlled for. First, a positive impression score, to detect the feigning of enhanced emotional functioning. Next, a negative impression score, to detect imulation or malingering. And last, an inconsistency index, to identify respondents who contradict themselves or respond randomly. In no case did any respondents in this study have bias scores that exceeded the critical values set forth by the BarOn Emotional Intelligence Quotient Technical Manual.

Table 1: Variable Definitions

Variable	Variable Name	Variable Definition
T	Total Emotional Intelligence	A general indication of a respondent's level of emotional intelligent.
INTRA	Intrapersonal	It determines how in touch with your feelings you are, how good you feel about yourself and about what you're doing in life.
REG	Self Regard	The ability to respect and accept oneself as basically good.
AW	Emotional self-awareness	The ability to recognize one's feelings.
ASS	Assertiveness	The ability to express feelings, beliefs and thoughts and defend one's rights in a non-destructive manner.
IND	Independence	The ability to be self-directed and self-controlled.
ACT	Self-Actualization	The ability to realize one potential capacities.
INTER	Interpersonal	Concerns what are known as people skills.
EMP	Empathy	The ability to be aware of, understand, and appreciate the feelings of others.
SOC	Social responsibility	The ability to demonstrate oneself as a cooperative, contributing, and constructive member of one's social group.
INTREL	Interpersonal relationship	The ability to establish and maintain mutually satisfying relationships that are characterized by intimacy and by giving and receiving affection.
SMGMT	Stress management	Concerns the ability to withstand stress without caving in, falling apart, or losing control.
STOL	Stress tolerance	The ability to withstand adverse events and stressful situations by actively and positively coping with stress.
IMP	Impulse control	The ability to resist or delay an impulse, drive, or temptation to act.
ADA	Adaptability	Concerns the ability to size up and respond to a wide range of difficult situations.
REAL	Reality testing	The ability to assess the correspondence between what is expected and what objectively exists.
FLEX	Flexibility	The ability to adjust one's emotions, thoughts, and behaviors to changing situations and conditions.
PRSol	Problem solving	The ability to identify and define problems as well as to generate and implement potentially effective solutions.
MOOD	General mood	Concerns your overall outlook on life, your ability to enjoy yourself and others and your overall feelings of contentment or dissatisfaction
OPT	Optimism	The ability to look at the brighter side of life.
HAP	Happiness	The ability to feel satisfied with one's life, to enjoy oneself and others, and to have fun.

Intervention

Participants were provided a copy of the Emotional Competence Framework from the Consortium for Research on Emotional Intelligence in Organizations as part of a group discussion to fully comprehend the scope of emotional intelligence. Assessment instructions and passcodes were emailed to participants with a deadline of one week for pre-test completion. After completing the initial assessment, students received a Student Summary Reports, which included a four page summary of the three highest and two lowest scores. After one week, participants received a Student Comprehensive Report containing an 18-page report of all scale and subscale results, instructions for interpretation, and instructions for the in-class coaching session.

The coaching session was designed to achieve the following goals: to understand the meaning of the EI scales and sub-scales and related scores, to receive assistance in identifying strengths and growth areas for future development, and to develop a 30 day plan for self-improvement. In-class discussions addressed the impact of emotional intelligence in academic and career success, relationships, family life, and overall emotional well-being. Proposed self-improvement plans were reviewed to ensure feasibility, measurability, and appropriateness on a set limit of two intervention areas. Individuals were also provided an opportunity for individual counseling and coaching to address anxieties or concerns regarding any aspect of the report.

Throughout the semester, on-going classroom discussions emphasized the relevance of emotional intelligence in the academic, professional and social realms. At the end of the semester, the EQIHed test was re-administered online. Participants were instructed to conduct a comparative analysis of pre- and post-test scores to ascertain the extent to which EI scored increased, decreased or remained unchanged. Students were assigned to write a self-analysis paper that included the outcomes of the 30 day plan: their pre- and post-test scores, the details of the 30-day intervention, measurable and qualitative outcomes, and future plans.

Results

We computed descriptive statistics for the pre-test and the post-test for the population of 121 students. Table 2 shows the pre-test descriptive statistics and Table 3 shows the post-test descriptive statistics.

Table 2: Pre-Test Descriptive Statistics

Variable	n	Minimum	Maximum	Mean	Std. Deviation
T1	121	62	131	102.81	11.921
INTRA1	121	58	130	102.99	13.158
REG1	121	58	127	105.39	11.982
AW1	121	61	129	102.12	14.284
ASS1	121	62	130	102.21	14.134
IND1	121	52	126	99.64	14.605
ACT1	121	40	126	102.20	13.910
INTER1	121	67	127	101.73	12.774
EMP1	121	66	123	98.81	14.069
SOC1	121	63	120	99.74	13.958
INTREL1	121	66	127	104.14	12.691
SMGMT1	121	67	128	102.79	12.430
STOL1	121	57	130	98.92	14.216
IMP1	121	58	129	105.88	13.042
ADA1	121	64	133	102.01	12.397
REAL1	121	63	130	101.4	13.063
FLEX1	121	55	131	102.99	12.238
PRSOL1	121	63	126	100.83	13.188
MOOD1	121	62	125	103.75	10.988
OPT1	121	59	124	100.30	12.333
HAP1	121	72	123	106.48	10.708

Table 3: Post-Test Descriptive Statistics

T2	121	77	134	110.74	11.153
INTRA2	121	74	132	110.67	10.815
REG2	121	80	129	110.07	10.446
AW2	121	67	132	109.73	13.702
ASS2	121	68	130	108.96	11.825
IND2	121	62	126	104.14	13.160
ACT2	121	68	124	108.43	10.774
INTER2	121	60	127	107.12	12.840
EMP2	121	48	123	104.53	14.663
SOC2	121	52	123	103.00	13.729
INTREL2	121	73	128	109.34	11.246
SMGMT2	121	76	132	108.17	11.039
STOL2	121	67	133	107.04	13.207
IMP2	121	76	129	107.24	11.505
ADA2	121	82	139	109.95	11.912
REAL2	121	75	132	107.08	12.088
FLEX2	121	74	136	108.17	13.170
PRSOL2	121	70	130	109.75	11.727
MOOD2	121	63	132	110.29	10.403
OPT2	121	55	128	108.08	12.781
HAP2	121	70	128	111.18	9.335

We analyzed student pre-test and post-test scores using a paired sample t-test. Table 4 reports EI difference t-statistics and statistical significance levels for all 121 students. A negative t-statistic shows improvement from the pre-test to the post-test assessment, while a positive t-statistic would show decline from the pre-test to the post-test. Nineteen of the 20 EI subscores showed statistically significance increases of at least $P < .05$ for students from the pre-test to the post-test. The only variable not showing improvement was impulse control. The EI total score improved by $P < .001$. These results confirm H1, that intervention does increase a students' emotional intelligence.

The study then focused on whether maturity level, as demonstrated by student status (undergraduate or graduate), influenced EI development. Table 5 reports EI difference t-statistics and statistical significance for undergraduate students. The total EI score and 16 of the 20 EI subscores showed statistically significance increases of at least $P < .05$ for undergraduate students from the pre-test to the post-test. The variables not showing improvement were independence, social responsibility, impulse control, and flexibility.

Table 4: EI Difference T-Statistics and Statistical Significance Levels for All 121 Students

		Paired Differences					t	df	Sig.
						95% Confidence Interval of the Difference			
		Mean Diff.	Std. Dev	Std. Error Mean	Lower	Upper			
Pair 1	T1 – T2	-7.926	11.130	1.012	-9.929	-5.922	-7.833	120	.000
Pair 2	Intra1 - Intra2	-7.678	10.871	.988	-9.634	-5.721	-7.769	120	.000
Pair 3	Reg1 - Reg2	-4.678	9.416	.856	-6.372	-2.983	-5.465	120	.000
Pair 4	Aw1 - Aw2	-7.612	13.577	1.234	-10.055	-5.168	-6.167	120	.000
Pair 5	Ass1 - Ass2	-6.744	12.389	1.126	-8.974	-4.514	-5.988	120	.000
Pair 6	Ind1 - Ind2	-4.504	11.693	1.063	-6.609	-2.399	-4.237	120	.000
Pair 7	Act1 - Act2	-6.231	12.327	1.121	-8.450	-4.013	-5.560	120	.000
Pair 8	Inter1 - Inter2	-5.397	11.731	1.066	-7.508	-3.285	-5.061	120	.000
Pair 9	Emp1 - Emp2	-5.719	13.091	1.190	-8.075	-3.363	-4.806	120	.000
Pair 10	Soc1 - Soc2	-3.256	12.253	1.114	-5.462	-1.051	-2.923	120	.004
Pair 11	Intrel1 - Inter2	-2.983	13.317	1.211	-5.380	-.586	-2.464	120	.015
Pair 12	Smgmt1 - Smgmt2	-5.372	10.304	.937	-7.227	-3.517	-5.735	120	.000
Pair 13	Stol1 - Stol2	-8.124	11.196	1.018	-10.139	-6.109	-7.982	120	.000
Pair 14	Imp1 - Imp2	-1.364	10.773	.979	-3.303	.576	-1.392	120	.166
Pair 15	Ada1 - Ada2	-7.942	12.267	1.115	-10.150	-5.734	-7.122	120	.000
Pair 16	Real1 - Real2	-5.678	12.658	1.151	-7.956	-3.399	-4.934	120	.000
Pair 17	Flex1 - Flex2	-5.174	12.911	1.174	-7.497	-2.850	-4.408	120	.000
Pair 18	Prsol1 - Prsol2	-8.926	13.212	1.201	-11.304	-6.547	-7.431	120	.000
Pair 19	Mood1 - Mood2	-6.537	10.174	.925	-8.368	-4.706	-7.068	120	.000
Pair 20	Opt1 - Opt2	-7.785	11.703	1.064	-9.892	-5.679	-7.317	120	.000
Pair 21	Hap1 - Hap2	-4.702	10.133	.921	-6.526	-2.879	-5.105	120	.000

Table 5: EI Difference T-Statistics And Statistical Significance Levels For Undergraduate Students

		Paired Differences					t	df	Sig.
						95 % Confidence Interval of the Difference			
		Mean	Std. Dev	Std. Error Mean	Lower	Upper			
Pair 1	T1 – T2	-5.584	10.992	1.253	-8.079	-3.090	-4.458	76	.000
Pair 2	Intra1 - Intra2	-5.571	10.717	1.221	-8.004	-3.139	-4.562	76	.000
Pair 3	Reg1 - Reg2	-3.091	8.768	.999	-5.081	-1.101	-3.093	76	.003
Pair 4	Aw1 - Aw2	-4.701	13.726	1.564	-7.817	-1.586	-3.006	76	.004
Pair 5	Ass1 - Ass2	-5.312	11.374	1.296	-7.893	-2.730	-4.098	76	.000
Pair 6	Ind1 - Ind2	-2.286	11.042	1.258	-4.792	.220	-1.816	76	.073
Pair 7	Act1 - Act2	-5.987	13.948	1.589	-9.153	-2.821	-3.767	76	.000
Pair 8	Inter1 - Inter2	-2.948	12.276	1.399	-5.734	-.162	-2.107	76	.038
Pair 9	Emp1 - Emp2	-3.286	13.763	1.568	-6.410	-.162	-2.095	76	.040
Pair 10	Soc1 - Soc2	-1.403	13.455	1.533	-4.456	1.651	-.915	76	.363
Pair 11	Intrel1 - Inter2	-2.649	11.414	1.301	-5.240	-.059	-2.037	76	.045
Pair 12	Smgmt1 - Smgmt2	-3.091	9.852	1.123	-5.327	-.855	-2.753	76	.007
Pair 13	Stol1 - Stol2	-6.221	11.260	1.283	-8.776	-3.665	-4.848	76	.000
Pair 14	Imp1 - Imp2	.662	9.104	1.038	-1.404	2.729	.638	76	.525
Pair 15	Ada1 - Ada2	-5.896	12.178	1.388	-8.660	-3.132	-4.248	76	.000
Pair 16	Real1 - Real2	-3.610	12.998	1.481	-6.561	-.660	-2.437	76	.017
Pair 17	Flex1 - Flex2	-2.636	12.514	1.426	-5.477	.204	-1.849	76	.068
Pair 18	Prsol1 - Prsol2	-8.468	13.409	1.528	-11.511	-5.424	-5.541	76	.000
Pair 19	Mood1 - Mood2	-5.883	10.162	1.158	-8.190	-3.577	-5.080	76	.000
Pair 20	Opt1 - Opt2	-7.299	12.440	1.418	-10.122	-4.475	-5.148	76	.000
Pair 21	Hap1 - Hap2	-3.844	9.919	1.130	-6.096	-1.593	-3.401	76	.001

Table 6 reports EI difference t-statistics and statistical significance levels for graduate students. The total EI score and all 20 EI subscores showed statistically significance increases of $P < .05$ for graduate students from the pre-test to the post-test. While the results for undergraduates were not as uniform as for graduate student participants, both groups total scores improved by at least $P < .001$. While results are somewhat consistent with previous research that suggests that older cohorts tend to score higher on EI than younger cohorts (Webb, 2009), we conclude that there is support for H2 because total EI scores improved for both undergraduate and graduate students.

		Paired Differences							
					95 % Confidence Interval of the Difference				
		Mean	Std. Dev	Std. Error Mean	Lower	Upper	t	df	Sig.
Pair 1	T1 – T2	-12.023	10.254	1.546	-15.140	-8.905	-7.778	43	.000
Pair 2	Intra1 - Intra2	-11.364	10.244	1.544	-14.478	-8.249	-7.358	43	.000
Pair 3	Reg1 - Reg2	-7.455	9.957	1.501	-10.482	-4.427	-4.966	43	.000
Pair 4	Aw1 - Aw2	-12.705	11.820	1.782	-16.298	-9.111	-7.130	43	.000
Pair 5	Ass1 - Ass2	-9.250	13.769	2.076	-13.436	-5.064	-4.456	43	.000
Pair 6	Ind1 - Ind2	-8.386	11.911	1.796	-12.008	-4.765	-4.670	43	.000
Pair 7	Act1 - Act2	-6.659	8.942	1.348	-9.378	-3.941	-4.940	43	.000
Pair 8	Inter1 - Inter2	-9.682	9.388	1.415	-12.569	-6.828	-6.841	43	.000
Pair 9	Emp1 - Emp2	-9.977	10.691	1.612	-13.228	-6.727	-6.190	43	.000
Pair 10	Soc1 - Soc2	-6.500	9.062	1.366	-9.255	-3.745	-4.758	43	.000
Pair 11	Intrel1 - Intrel2	-9.659	9.753	1.470	-12.624	-6.694	-6.570	43	.000
Pair 12	Smgmt1 - Smgmt2	-9.364	9.956	1.501	-12.391	-6.337	-6.239	43	.000
Pair 13	Stol1 - Stol2	-11.455	10.387	1.566	-14.612	-8.297	-7.315	43	.000
Pair 14	Imp1 - Imp2	-4.909	12.538	1.890	-8.721	-1.097	-2.597	43	.013
Pair 15	Ada1 - Ada2	-11.523	11.715	1.766	-15.084	-7.961	-6.525	43	.000
Pair 16	Real1 - Real2	-9.295	11.292	1.702	-12.729	-5.862	-5.460	43	.000
Pair 17	Flex1 - Flex2	-9.614	12.518	1.887	-13.420	-5.808	-5.094	43	.000
Pair 18	Prsol1 - Prsol2	-9.727	12.975	1.956	-13.672	-5.783	-4.973	43	.000
Pair 19	Mood1 - Mood2	-7.682	10.209	1.539	-10.786	-4.578	-4.991	43	.000
Pair 20	Opt1 - Opt2	-8.636	10.370	1.563	-11.789	-5.484	-5.524	43	.000
Pair 21	Hap1 - Hap2	-6.205	10.440	1.574	-9.379	-3.030	-3.942	43	.000

The study then focused on whether gender influenced EI development. Table 7 reports EI difference t-statistics and statistical significance for female students. The total EI score and 18 of the 20 EI subscores showed statistically significance increases of at least $P < .05$ for female students from the pre-test to the post-test. The variables not showing improvement were social responsibility and impulse control.

Table 8 reports EI difference t-statistics and statistical significance levels for male students. The total EI score and 18 of the 20 EI subscores showed statistically significance increases of $P < .05$ for male students from the pre-test to the post-test. The variables not showing improvement were interpersonal relationship and impulse control. While the results for female and male students were not completely identical, both groups' total scores improved by at least $P < .001$. Therefore, we conclude that there is support for H3 because total EI scores improved for both female and male students.

Table 7: EI Difference T-Statistics and Statistical Significance Levels for Female Students

		Paired Differences							
					95 % Confidence Interval of the Difference				
		Mean	Std. Dev	Std. Error Mean	Lower	Upper	t	df	Sig.
Pair 1	T1 – T2	-6.758	11.719	1.488	-9.734	-3.782	-4.541	61	.000
Pair 2	Intra1 - Intra2	-6.581	11.793	1.498	-9.575	-3.586	-4.394	61	.000
Pair 3	Reg1 - Reg2	-4.161	8.679	1.102	-6.365	-1.957	-3.776	61	.000
Pair 4	Aw1 - Aw2	-4.806	14.077	1.788	-8.381	-1.232	-2.689	61	.009
Pair 5	Ass1 - Ass2	-7.032	13.080	1.661	-10.354	-3.711	-4.233	61	.000
Pair 6	Ind1 - Ind2	-3.758	12.999	1.651	-7.059	-.457	-2.276	61	.026
Pair 7	Act1 - Act2	-5.968	13.377	1.699	-9.365	-2.571	-3.513	61	.001
Pair 8	Inter1 - Inter2	-4.194	10.635	1.651	-6.894	-1.493	-3.105	61	.003
Pair 9	Emp1 - Emp2	-4.500	10.773	1.368	-7.236	-1.764	-3.289	61	.002
Pair 10	Soc1 - Soc2	-2.355	10.416	1.323	-5.000	.290	-1.780	61	.080
Pair 11	Intrel1 - Intrel2	-4.065	11.443	1.453	-6.971	-1.158	-2.797	61	.007
Pair 12	Smgmt1 - Smgmt2	-4.903	10.368	1.317	-7.536	-2.270	-3.724	61	.000
Pair 13	Stol1 - Stol2	-7.839	12.467	1.583	-11.005	-4.673	-4.951	61	.000
Pair 14	Imp1 - Imp2	-.758	8.702	1.105	-2.968	1.452	-.686	61	.495
Pair 15	Ada1 - Ada2	-6.387	12.607	1.601	-9.589	-3.186	-3.989	61	.000
Pair 16	Real1 - Real2	-3.903	12.520	1.590	-7.083	-.724	-2.455	61	.017
Pair 17	Flex1 - Flex2	-4.194	13.254	1.683	-7.559	-.828	-2.491	61	.015
Pair 18	Prsol1 - Prsol2	-8.016	12.381	1.572	-11.160	-4.872	-5.098	61	.000
Pair 19	Mood1 - Mood2	-6.742	9.554	1.213	-9.168	-4.316	-5.556	61	.000
Pair 20	Opt1 - Opt2	-8.403	10.836	1.376	-11.155	-5.651	-6.106	61	.000
Pair 21	Hap1 - Hap2	-4.419	9.382	1.191	-6.802	-2.037	-3.709	61	.000

Table 8: EI Difference T-Statistics and Statistical Significance Levels for Male Students

		Paired Differences					t	df	Sig.
		95 % Confidence Interval of the Difference							
		Mean	S.D.	S.E.	Lower	Upper			
Pair 1	T1 – T2	-9.153	10.433	1.358	-11.781	-6.434	-6.738	58	.000
Pair 2	Intra1 - Intra2	-8.831	9.777	1.273	-11.378	-6.283	-6.937	58	.000
Pair 3	Reg1 - Reg2	-5.220	10.180	1.325	-7.873	-2.568	-3.939	58	.000
Pair 4	Aw1 - Aw2	-10.559	12.478	1.624	-13.811	-7.308	-6.500	58	.000
Pair 5	Ass1 - Ass2	-6.441	11.724	1.526	-9.496	-3.385	-4.220	58	.000
Pair 6	Ind1 - Ind2	-5.288	10.196	1.327	-7.945	-2.631	-3.984	58	.000
Pair 7	Act1 - Act2	-6.508	11.227	1.462	-9.434	-3.583	-4.453	58	.000
Pair 8	Inter1 - Inter2	-6.661	12.750	1.660	-9.984	-3.338	-4.013	58	.000
Pair 9	Emp1 - Emp2	-7.000	15.141	1.971	-10.946	-3.054	-3.551	58	.001
Pair 10	Soc1 - Soc2	-4.203	13.955	1.817	-7.840	-.567	-2.314	58	.024
Pair 11	Intrel1 - Intrel2	-3.407	13.787	1.795	-7.000	.186	-1.898	58	.063
Pair 12	Smgmt1 - Smgmt2	-5.864	10.301	1.341	-8.549	-3.180	-4.373	58	.000
Pair 13	Stol1 - Stol2	-8.424	9.782	1.274	-10.973	-5.874	-6.614	58	.000
Pair 14	Imp1 - Imp2	-2.000	12.637	1.645	-5.293	1.293	-1.216	58	.229
Pair 15	Ada1 - Ada2	-9.576	11.786	1.634	-12.648	-6.505	-6.241	58	.000
Pair 16	Real1 - Real2	-7.542	12.640	1.646	-10.836	-4.248	-4.583	58	.000
Pair 17	Flex1 - Flex2	-6.203	12.571	1.637	-9.479	-2.927	-3.790	58	.000
Pair 18	Prsol1 - Prsol2	-9.881	14.076	1.833	-13.550	-6.213	-5.392	58	.000
Pair 19	Mood1 - Mood2	-6.322	10.865	1.415	-9.153	-3.491	-4.469	58	.000
Pair 20	Opt1 - Opt2	-7.136	12.612	1.642	-10.422	-3.849	-4.346	58	.000
Pair 21	Hap1 - Hap2	-5.000	10.940	1.424	-7.851	-2.149	-3.510	58	.001

Conclusion

This research indicates a student development model incorporating emotional intelligence competencies in the curriculum could assist in student development. An important finding is that both undergraduate and graduate-level students can benefit from the integration of emotional intelligence training. In an increasingly service-oriented marketplace, interpersonal, and intrapersonal skills can significantly increase the probability of career success. Therefore, as higher educators we have a responsibility to increase both the theoretical knowledge and the emotional intelligence of students.

REFERENCES

- Akers, M., & Porter, G. 2003. Your EQ skills: Got what it takes? **Journal of Accountancy**, 195: 65-70.
- Bar-On, R. 2000. Emotional and social intelligence: Insights from the emotional quotient inventory. In R. Bar-On, & J. Parker, (Eds.), **The Handbook of emotional intelligence**. (pp 363-388). San Francisco: Jossey-Bass.
- Bay, D., & McKeage, K. 2006. Emotional intelligence in undergraduate accounting students: Preliminary assessment. **Accounting Education: An International Journal**, 15: 439-454.
- Boyatzis, R., Stubbs, E., & Taylor, S. 2002. Learning cognitive and emotional intelligence competencies through graduate management education. **Academy of Management Learning and Education**, 1: 150-162.
- Cherniss, C. 2000. Social and emotional competence in the workplace. In R. Bar-On & J. Parker, (Ed.), **The Handbook of emotional intelligence**. (pp 433-458). San Francisco: Jossey-Bass.
- Esmond-Kiger, C., Tucker, M., & Yost, C. 2006. Emotional intelligence: From the classroom to the workplace. **Management Accounting Quarterly**, 7: 35-42.
- Goleman, D. 1995. **Emotional intelligence: Why it matters more than IQ**. New York: Bantam Books.
- Goleman, D., Boyatzis, R., & McKee, A. 2002. **Primal leadership: Realizing the power of emotional intelligence**. Boston: Harvard Business School Press
- Harris Education Research Council. 1991. **An assessment of American education**. New York: Committee for Economic Development
- Hunter, J., & Hunter, R. 1984. Validity and utility of alternative predictors of job performance. **Psychological Bulletin**, 96: 72-98.
- Lam, L., & Kirby, S. 2002. Is emotional intelligence an advantage? An exploration of the impact of emotional and general intelligence on individual performance. **The Journal of Social Psychology**, 142: 133-143.
- Low, G., Lomax, A., Jackson, M., & Nelson, D. 2004. **Emotional intelligence: A new student model**. A paper presented at the National Conference of the American College Personnel Association. Philadelphia, Pennsylvania
- Mayer, J., Caruso, D., & Salovey, P. 2000. Selecting a measure of emotional intelligence: The case for ability scales. In R. Bar-On & J. Parker (Ed.), **The handbook of emotional intelligence**. (pp 320-342). San Francisco: Jossey-Bass.
- Myers, L., & Tucker, M. 2005. Increasing awareness of emotional intelligence in a business curriculum. **Business Communication Quarterly**, 68: 44-51.
- Salovey, P., & Mayer, J. 1990. Emotional intelligence. **Imagination, Cognition and Personality**, 9: 185-211.
- Shivpuri, S., & Kim B. 2004. Do employers and colleges see eye-to-eye? College student development and assessment. **NACE Journal**, 65: 37-44.
- Sternberg, R. 1996. **Successful intelligence**. New York: Simon & Schuster

Thorndike, R., & Stein S. 1937. An evaluation of the attempts to measure social intelligence. **Psychological Bulletin**, 34: 275-284.

Vandervoort, D. 2006. The importance of emotional intelligence in higher education. **Current Psychology: Developmental, Learning, Personality, Social**, 25: 4-7.

Webb, K. 2009. Why emotional intelligence should matter to management: A survey of the literature. **SAM Advanced Management Journal**, 74: 32-41.

Barbara Burgess-Wilkerson is an assistant professor of management and director of student professional development at Winthrop University. She received her Ph.D. in Higher Education Administration from the University of Pittsburgh. Her current research interests include emotional intelligence as a career development strategy, business communications, and student professional development. She has published in the *Business Communications Quarterly*.

Keith Benson is an associate professor in health care management at Winthrop University. He received his Ph.D. from Penn State University. His research interests include emotional intelligence in the classroom and the use of social media in the classroom.

Steven Frankforter is a professor of management at Winthrop University. He earned his PhD at the University of Washington. He has taught business policy, business & society, entrepreneurship, and accounting. His research interests are in stewardship theory, stakeholder management, mergers and acquisitions, emotional intelligence, and diversity management.