Global Discovery of Learner Motivations: Systemic Enhancements within Higher Education

Leveraging the Heterogeneity of Critical Thinking: Creating New Classroom Knowledge

Learning Outcomes for Students’ Teamwork Skill Development

Emotional Intelligence: A Review of the Literature

Female Participation in Sport as an Indicator of Business Success
FOCUS AND SCOPE: The Transnational Journal of Business (TJB) is a peer-reviewed interdisciplinary and international journal published by the Accreditation Council for Business School and Programs (ACBSP). The TJB publishes manuscripts that link teaching and research to enhance student learning outcomes. More specifically, the Journal is interested in interdisciplinary research that promotes teaching excellence in the various academic disciplines of business to include all theoretical and applied domains.

MISSION STATEMENT: The mission of the TJB is to provide a forum for a dialogue to advance teaching excellence through research across the disciplines in business. To this end, the TJB welcomes manuscripts from all ACBSP individual members. The goal is to facilitate a linkage between teaching and research at member institutions.

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Editor—Hamid H. Kazeroony
Minnesota State Colleges & Universities, Inver Hills
hkazero@inverhills.edu
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The Transnational Journal of Business acknowledges the contributions of the many reviewers whose efforts made the publication of this issue possible. In particular, the TJB acknowledges the invaluable assistance in finalizing reviews and preparing them for publication.
It is with great pleasure that the Accreditation Council for Business Schools and Programs (ACBSP) presents its inaugural issue of The Transnational Journal of Business. This publication, which succeeds the ACBSP Annual Edition, represents the fine work of the authors, editor, and the guidance and input of the Scholar-Practitioner Publications Committee.

ACBSP was the first accrediting body for business schools to support scholarly research by publishing a peer-reviewed journal. Its fundamental objective is to provide a venue for members to present their research and findings, engage in scholarly research and inquiry, and support and improve classroom teaching.

ACBSP promotes continuous improvement and recognizes teaching excellence in the accreditation of business education programs around the world. ACBSP acknowledges the importance of scholarly research and inquiry and believes that such activities facilitate improved teaching.

This issue is dedicated to the memory and in honor of Andy C. Saucedo, Professor of Business & Marketing, at NMSU Doña Ana Community College in Las Cruces, New Mexico. Andy had been serving as Chair of the ACBSP Board of Directors when he passed peacefully on Tuesday, February 23, 2016, after a brief illness. He leaves behind his father Andres, his brother Hector, and countless friends and colleagues who loved and respected him.

Andy was the 1999 Teaching Excellence Award recipient for ACBSP Region 6, representing associate degree schools. He served as the Sam Walton Fellow for Enactus at the college. Andy also previously served as president of the Kappa Beta Delta Board of Directors and the ACBSP Associate Degree Board of Commissioners.

The Board of Directors has announced that a scholarship will be named in Andy’s honor and presented for the first time at ACBSP Conference 2016 in Atlanta.

ACBSP was so very blessed to know Professor Saucedo and have him serve as its Board Chair. Whether you knew Andy as a close friend or knew of him from afar, we can all agree that he left us with a legacy that’s worth celebrating and remembering.
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IT IS A GREAT PLEASURE to announce the arrival of the Transnational Journal of Business. Many individuals (Anthony Negbenebor, Jeff Alderman, and the entire Scholar-Practitioner Publications Committee and Editorial Policy Board) have tirelessly and relentlessly worked to create the Transnational Journal of Business.

The Transnational Journal of Business (TJB) offers many unique opportunities for the ACBSP community. The TJB is envisioned to: (1) act as a catalyst through which colleagues can share best practices while addressing the emerging business and management challenges to empower their students to become better equipped in responding to new challenges in the workplace; (2) afford the ACBSP community a venue for scholarly writing for colleagues from a wide spectrum of the ACBSP membership; (3) provide peer-reviewing opportunities for becoming better acquainted with contemporary topics; and (4) provide a vehicle for transforming tacit knowledge into tangible writing that can be shared with the wide variety of audiences.

The TJB offers a writing space, a temporal point, where in the general sense, evidence-based learning takes place from the interactions of the teacher, the student, and the environment within which we all operate (Trank, 2014). As Kepes, Bennett, and McDaniel (2014) suggest, the TJB, “focusing on the production and dissemination of practically relevant and actionable knowledge” (p. 446) will give life to the written words.

DR. HAMID H KAZEROONY
Managing Editor

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GLOBAL DISCOVERY OF LEARNER MOTIVATIONS:
Systemic Enhancements within Higher Education

Ted Sun, Mysoon Otoum, and Bruce Stetar

ABSTRACT
This quantitative study examined data from 1,399 business students across 117 nationalities for the purpose of understanding the eight most prominent values as reported by students. These values help higher education institutions by providing a better understanding of student motivations for the purpose of higher student retention and performance. The data was collected via an online survey distributed through email from participating universities. The top three values in order of priority were (a) fairness; (b) authority; and (c) friendship. Using student data from Ghana, India, Mongolia, the United Arab Emirates, and the United States, the study also found significant differences in the top three values of these students. Relationships between the top three values and the self-construct variables of extrinsic goal orientation, intrinsic goal orientation, self-efficacy, and systemic awareness were established, with one exception: the study did not find a significant interaction between self-efficacy and the value of fairness. The value of authority had the strongest relationship with the self-construct variables. Since healthy self-constructs are a foundation to leadership at the individual level, engaging students within their core values would further their development within higher education. Universities who understand the core values of their students will be able to develop further their students beyond academic performance, and in leadership characteristics.

KEY WORDS: business education, values, self-construct, colleges, universities, professional schools, constructivism, leadership development, business students, teaching, international education

Ted Sun is the Vice Chancellor at SMC University, Vorstadt 26A, 6300 Zug, Switzerland. EMAIL: t.sun@swissmc.ch

Mysoon Otoum is a Business Faculty member at Higher Colleges of Technology, Dubai Women's College, UAE. EMAIL: dr.motoumsmc@gmail.com

Bruce Stetar oversees the Graduate Business Programs and the outcomes and assessment work in the College of Online and Continuing Education, Southern New Hampshire University. EMAIL: b.stetar@snhu.edu

Introduction
The challenge of higher education in meeting the demands of global business has been a daunting systemic issue for many nations. As globalization has driven many nations towards knowledge-based economies, the necessary technology adjustments to educational systems to parallel changes in the global economy has remained difficult (Caboni & Adisu, 2004; Cohen, 2012; Guthrie & Springer, 2004). This global business environment calls for graduates who can be systemic thinkers and leaders, while also understanding many dimensions of knowledge creation at all levels of the organization (Nonaka & Takeuchi, 1995; Sun, 2007, 2010). Because the traditional education system was initially designed to produce employees for a production environment (Jacques, 1996), behaviorist principles still dominate many aspects of education today (Ormrod, 2006).

At a local campus of a major university, a faculty development workshop involved discussions about how to motivate students to read course materials before coming to class. For the next 35 minutes, experienced faculty members discussed various behaviors they use to influence students to read course materials in advance. Every idea focused on some behavior that extrinsically motivated the student to behave according to the faculty's view of a good student.
This type of exchange reflects the behaviorist tendencies still prevalent in education today (Ormrod, 2006). Not once, did a faculty member ask about the intrinsic value or purpose of preparatory reading from the students’ perspective.

Many studies have explored student motivations (e.g., Cursi & Burkhalter, 2009; Hegarty, Brasco, & Fang Lieh, 2012; I-Ying & Wan-Yu, 2012). However, most of the studies have focused on traditional theories that categorize people into generic groups. The application of such studies have failed to identify the student behaviors’ drivers. This study sought to shift the categorization of students towards a systemic understanding of students by exploring their core values that drive their motivations. This study takes a much deeper examination of what may be needed to inspire students. From a systemic perspective, human values drive many aspects of human behavior (Clawson, 2006; Rokeach, 1973; Sun, 2010). If education is going to develop the necessary skills to operate in a global environment (Lopes, 2012), then understanding students’ core values as they relate to motivations is one of the first steps in changing the educational system.

Limited empirical evidence exists on student core values from an international perspective. Most studies in international business default to Hofstede’s (1983, 2001) work when it comes to cultural perspectives of business. In recent years, the complexities of conducting business within a globalized marketplace calls for what Kelley, MacNab, and Worthley (2009) described as a crossvergent approach to business. Such an approach means that global organizations can no longer assume that a single culture will dominate an organization. Instead, the mixture of cultures will emerge within the organization, regardless of the headquarters’ national or organizational culture. Just as successful organizations adapt their management practices in different nations (Bloom & Van Reenen, 2010), higher education institutions also must adapt their approaches to the diversity of student populations. The purpose of this study is to advance innovative ways to explore students’ core motivations from a quantitative perspective, while developing a greater understanding of the relationship between self-constructs that drive success and core motivations.

**Literature Review**

With the advancement of technology, globalization is integrating cultures like never before. The amount of products and services moving across borders is growing at a staggering rate, such as those between China and the United States (Sun, 2010). For education to keep pace with globalization, businesses need leaders who have a high sense of self-efficacy and confidence. In order to produce such graduates with these qualities, teaching practices need to incorporate core values, which are important to the student, instead of relying on extrinsic motivational values. Educational philosophies like constructivism explore deeper human dimensions, such as, values to achieve the desired self-constructs that leaders require (Hannah, Woolfolk, & Lord, 2009; Ormrod, 2006; Sun, 2011).

Unfortunately, the products of many university graduates are falling short of the necessary skills for today’s complex business environment. Jackson (2010) synthesized many specific soft skills deficiencies such as problem solving, teamwork, cultural and diversity management, meeting management, emotional intelligence, leadership skills, self-efficacy, ethics, and responsibility. Within the United States, Schmidt (2008) points to the limited amount of ethics being taught in today’s business schools and its possible influence on the credit crunch problem. Ghoshal (2005) also felt that management education is lacking in real business-world skills with many challenges to ethical conduct. In the UK, Confederation of British Industry (2008a) discovered that as many as 27% of employers are not satisfied with the employability skills of the graduates. More recently, they found over half of the employers accept the weaknesses in basic competencies like literacy (54%) and IT skills (61%). Furthermore, during the economic recovery from the 2008 financial crisis, businesses are even more concerned with the lack of sufficiently skilled workers to meet the demands of the current business environment (Confederation of British Industry, 2014b).
Skill deficiencies have created systemic challenges in educational systems. The first challenge is the behaviorist principles that dominate educational practices (Jacques, 1996; Ormrod, 2006). They force students to illustrate surface level behaviors in order to pass courses, but do not nurture the development of necessary skills or self-constructs. In order to move beyond the surface of behaviors, the study takes an in-depth exploration of human values and their relationship to self-constructs. Since self-constructs have a significant relationship to many leadership characteristics, such as ethics, this study is a starting point for creating a deeper understanding of student values and motivations in students’ educational journey and how to create leaders for the business world of tomorrow (Sun, 2011).

Challenges of Behaviorism

Moore (2011) wrote behaviorism can be traced to 1879, the birth of psychology as an independent scientific discipline. In its first 30 years, psychology spawned two predominant theories – Titchener’s American structuralism and the opposing European functionalism (Zuriff, 1979). Both theories, however, faced difficulties with reliability and agreement in the academic community; and this in turn led Watson (1913) to produce his seminal article promoting behaviorism (Zuriff, 1979) as the new basis for psychology.

Watson (1913) believed the basis of psychology should be the study of behavior, with experimental observation as its primary method of study (Moore, 2011). Sellars (1963) concurred, professing for something to exist from a psychological standpoint it must be observable in someone’s behavior. Behaviorism was one of a series of movements which grew out of a desire to solve the problems of human life through the application of dependable scientific methods (Harzem, 2004). Supporting that view, Moore (2011) stated that behaviorism is objective rather than subjective, using techniques of analysis and measurement, and analyzing behavior at a detailed and sequential level, avoiding the introspective methods previously used.

In the field of education, the constructivists saw the same flaw. Behaviorists believed there was no room for introspection or internal mental processes in education; rather it was all about the reaction to observable stimuli (Boghossian, 2006). Knowledge was publically observable; therefore, its construction did not take place inside the student (Freiberg, 1999). The constructivists, however, theorized learning involved internal introspection and the personal development of knowledge was of the student’s own making (Boghossian, 2006). The constructivists believed students develop new knowledge on a basis of previous learning (Miranda, 2009). Behaviorism was seen as teacher-centered while constructivism was seen as student centered (Miranda, 2009), hence the birth of student-centered learning theory.

Other key factors that led to the rejection of behaviorism included how it highlighted behavior-based techniques but did not provide an educational philosophy for teachers to solve problems they were facing. It also did not coincide with their personal experiences or help them understand how students actually learned or developed as individuals. Behaviorism treated students as a disconnected set of behaviors rather than a complete entity. Behaviorism theorized the most important rewards, which drove students to perform, came from external factors, like their teachers, as opposed to internal factors, like the students’ own wants, needs, and desires (Strand, Barnes-Holmes, & Barnes-Holmes, 2003). In effect, behaviorism failed to consider what the real core motivators were for students.

Human Values

Human values are typically studied by organizational psychologists in relationship with leadership (Clawson, 2006; Sun, 2006, 2010). Ancient philosophers like Socrates and Plato explored the realm of values through the process of questions to gain knowledge (Moser & Vander Nat, 1995). Rokeach (1973) was one of contemporary researchers to focus explicitly on human values. Since then, many researchers have explored values as a driver for human behaviors (Becker, 2007; Clawson, 2006; Hayibor, Agle, Sears, Sonnenfeld, & Ward, 2011; Sun, 2006, 2010). From an international busi-
ness perspective, there has been very limited work done on exploring human values as a tool for individual development (Sun, 2010). The closest is Hofstede’s (1983, 2001) work on cultural dimensions at the national level. These cultural dimensions include: power distance, uncertainty avoidance, individualism, masculinity, and long-term orientation. While these dimensions have been validated by others, like Boonghee, Donthu, and Lenartowicz (2011), a significant difference exists between the generalization of culture in five dimensions and the specificity of human values such as the 63 individual values identified and researched by Sun (2010). For example, a dimension of power distance contains many intrinsic values within a culture. According to Hofstede (1983, 2001), power distance may exist between people from different hierarchical positions, gender, and other backgrounds resulting in various degrees of communication among groups. Looking at this from a human values perspective, values such as courage, wisdom, trust, and a few others, would drive the application of communication skills. This offers a much wider perspective for further exploration, rather than applying labels to people with a certain score of high or low power distance based on their national culture (Sun, 2010). Within the educational context, exploring core values creates a contextual framework towards understanding learners in the classroom. This moves away from the traditional labeling of students with simple categories, which further develops educational curriculum and avoids challenges in education such as those discussed by Ghoshal (2005). Curriculum design would go beyond content delivery; it would also incorporate a contextual focus on the strategic development of values.

To obtain a greater understanding of human values, Sun (2010) created an instrument to explore the top values of American and Chinese business executives. The original instrument assessed the top eight identified values, as well as the congruence level between theoretical beliefs and behaviors. Adapting this instrument, this study explored the top eight values of business students. Applying a similar approach to Hofstede’s (2001) work, the study compared the difference of values at the national levels.

Hypothesis 1: University students studying business do not have specific priorities in their values.

Hypothesis 2: A statistically significant difference does not exist among the top three self-reported values among the students from different national origins.

Rokeach’s (1973) initial work stated that values are relatively stable over time. While there are ample studies that looked at changing values between different generations (e.g., Murphy, Gibson, & Greenwood, 2010; Sessa, Kabacoff, Deal, & Brown, 2007; Sun, 2011), many studies agree that values are formed early in life and remain relatively consistent (Hofstede, 2001; Ormrod, 2006; Rokeach, 1973; Sun, 2010). From a historical perspective, before globalization took place, most people did not move between borders. Within the current environment of globalization, the mixture of many cultures within multinational enterprises have enabled much more change than the environment during Rokeach’s era. Concepts like crossvergence, where values integrate between national cultures, organizational cultures, and individual experiences are now commonly accepted (Kelley, MacNab, & Worthley, 2006).

Crossvergence also takes place within educational institutions. Global universities, such as Swiss Management Center (SMC) University, have over one hundred nationalities within their student body (SMC University, 2014). The integration of values among students from different nations at various educational levels challenges educators to rethink their teaching strategies, including motivational tools to engage the diversity of learners (Ormrod, 2006; Sun, 2011).

Hypothesis 3: A statistically significant difference does not exist in the top core values self-reported by business students at different educational levels.

**Self-Constructs**

The study of self-constructs is a common topic of expo-
ration in the field of leadership and psychology (Sun, 2011). The motivations of students also is a common topic, and researchers like Goodpasture and Cripps (2010) sought to have a better understanding of what drives students to make an effort. In order to develop leaders for the global economy, one of the contextual goals in education includes the development of self-constructs. Self-constructs create a healthy set of internal structures necessary for wise decisions (Hannah, Woolfolk, & Lord, 2009; Sun, 2011). Especially with the complex demands in a leader’s role, a healthy set of dynamic self-constructs enables leaders to make more strategic choices when considering a wider group of stakeholders who may stretch across multiple continents (Kihlstrom, Beer & Klein, 2003; Sun, 2011). In order to look at this issue, this study chose four specific self-constructs.

The first self-construct is self-efficacy (Bandura & Locke, 2003; Bandura, 2012). This construct is one’s ability to learn and adapt (Ormrod, 2006). Self-efficacy beliefs also influence goal systems (Bandura & Locke, 2003). Within the constantly changing workplace, self-efficacy enables the adaptability of leaders to successfully traverse various challenges within the complex workplace (Burnette, Pollack, & Hoyt, 2010; Sun, 2011). The second self-construct is systemic awareness. Applying the theory of systems thinking, this construct explores one’s awareness of the various systems interacting in a given situation (Checkland, 1999). Rather than approaching issues from a problem-based orientation, systemic thought calls for a broader analysis of the interactivity between the various parts - like stakeholder groups - and creates a sustainable solution (Checkland, 1999; Dupoux-Couturier, 2011; Sun, 2007). The last two self-constructs are intrinsic and extrinsic goal orientation. These two often are used by researchers like Adcroft (2010), with student motivations, and by Rogers and Spitzmueller (2009) with organizational training. These two self-constructs connect common research on motivation to this current study.

**Synthesis of Human Values and Self-Constructs**

This study aimed to determine the interaction between these four self-constructs and core values. If the relationships exist, it would challenge educators to play closer attention to individual core values in the context of education.

Hypothesis 4a: A statistically significant relationship does not exist between extrinsic goal orientations and the top three self-selected core values of students.

Hypothesis 4b: A statistically significant relationship does not exist between intrinsic goal orientations and the top three self-selected core values of students.

Hypothesis 4c: A statistically significant relationship does not exist between self-efficacy and the top three self-selected core values of students.

Hypothesis 4d: A statistically significant relationship does not exist between systemic awareness and the top three self-selected core values of students.

**Research Design**

The system of human values is a complex concept from an empirical perspective due to its subjective nature. Since Rokeach’s (1973) initial work on values, others like Clawson (2006) and Sun (2006, 2010) have used a combination of quantitative and qualitative methodologies to assess human values. In order to assess core values at a global level, this study used a descriptive correlational quantitative methodology to explore the core motivations of business students, as well as four self-constructs that influence their development.

**Research Instrument**

The instrument for this study had two specific sections. The first section included measures on self-constructs adapted from Sun’s (2011) study of self-constructs and leadership behaviors. Using 21 statements, this section measured self-constructs including extrinsic goal motivation, intrinsic goal motivation, self-efficacy, and systemic awareness. The
second section of the instrument used Sun's (2010) values assessment. This was a dynamic instrument that first explored the top eight values of participants. Using a combined list of 63 values derived from the studies of Rokeach (1973), Clawson (2006), and Sun (2010), participants selected their eight top values. The instrument then dynamically adopted the remaining questions to focus on the top eight core values. Each of the core values had between three to five statements assessing relative importance. Based on the selected values, the second section of the instrument would contain 24 or more statements. For example, when participants selected authority as one of their top values, the instrument included three statements that further evaluated the value: (a) I follow the directions given by my supervisor; (b) I often challenge the decisions passed down from management; and (c) I do not question my superior's decisions. Each of the statements used a six-point Likert scale. The instrument was critically reviewed by subject matter experts to ensure validity. Cronbach alpha established reliability at 0.931 for the self-construct section and 0.750 for the values section. Cronbach alphas for all constructs were above 0.7.

Population and Sample

The study of core values globally would take many years to complete. In order to create a practical study, the study used the institutional members of the Accreditation Council for Business Schools and Programs (ACBSP) Region 8. (ACBSP is an international business accrediting body.) Leveraging the existing relationships within the accreditation organization created an accessible population. The purposeful sampling strategy provided accessible participants across three different continents including Asia, Europe and Africa. Within these continents, the Region had 96 universities and colleges (http://www.acbsp.org/). These institutions ranged from larger universities with thousands of students to smaller private universities with a few hundred students. Within these 96 universities and colleges, the President of the Region requested participation from students via the university faculty. All of the universities and colleges in the region were given equal opportunity to participate in the study and those that did participate self-selected their participation in the study. This purposeful sampling strategy yielded 28 universities and colleges, with a total of 1,455 participants.

Data Collection

The initial dialogue concerning the research, with respective faculty in the various institutions, began at an ACBSP Region 8 Conference including institutions from Europe, Africa, and Asia. With the support of the Accreditation Council for Business Schools and Programs, emails were sent to active ACBSP faculty members within the Region. The email provided a brief overview of the study and a link for participants. The email also invited snowball sampling by requesting these individuals to pass the study onto other faculty within their institutions. Once they received approval from their institution, the faculty invited participation from their students via an email message and provided them with an online link to the survey. This link led to a statement of informed consent which clearly outlined the purpose, risks, and confidentiality of the study. Once students agreed to the informed consent, a web survey recorded the data into a database for later analysis. Over a one-year period, the study gathered 1,399 valid data points from 117 nationalities that resided in 83 different nations.

Analysis of the Data

This study presented numerous ways to analyze the data, especially with the large sample size stretching across 117 nationalities. While the richness of the data offers abundant exploration, the research questions guided the data analysis. All variables were interval. Descriptive statistics tested the first hypotheses (H1a) to determine the ranking of the top eight values and Variance analysis (ANOVA) was used to compare them between national boundaries (H2a) and also to compare them between different educational levels (H3a). Correlational analysis tested the hypotheses 4a, 4b, 4c, and 4d to explore the existence of a relationship between
self-constructs and top three core values. All analyses used a 95% confidence interval. A Shapiro-Wilk test established normal distribution for all data sets.

Results

This study received a total of 1,795 entries of which 1,455 were valid. Upon further analysis, the 1,455 participants fully completed the first section of the instrument but did not complete the second. A total of 1,399 entries had completed the entire instrument enabling the analysis for this study. The descriptive statistics for the demographics revealed an average age of 29 years (see Table 1). The standard deviation was 10.5 years, which may be explained by the growing population of older adults seeking further education. The university rank was just above a third-year student. The gender spread was fairly even at 51.54% females and 48.46% males.

Table 1
Descriptive statistics for Demographics (n=1399)

<table>
<thead>
<tr>
<th>Age</th>
<th>University Rank</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>29.00</td>
<td>3.54</td>
</tr>
<tr>
<td>Std Dev</td>
<td>10.50</td>
<td>1.84</td>
</tr>
</tbody>
</table>

Note. For university rank, 1 is a first year, 2 is second year, 3 is third year, 4 is fourth year, 5 is graduate student and 6 is a doctorate/PhD student.

Results of frequency analysis for the top values showed “fairness” to be the top value amongst business students. Table 2 illustrates the frequency distribution of the top value rankings with fairness as the highest priority (17.4%).

Table 2
Frequency distribution of the #1 value

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fairness</td>
<td>244</td>
<td>17.4</td>
</tr>
<tr>
<td>Authority</td>
<td>162</td>
<td>11.6</td>
</tr>
<tr>
<td>Friendship</td>
<td>87</td>
<td>6.2</td>
</tr>
<tr>
<td>Personal Achivement / Excellence</td>
<td>71</td>
<td>5.1</td>
</tr>
<tr>
<td>Comfort</td>
<td>57</td>
<td>4.1</td>
</tr>
<tr>
<td>Integrity</td>
<td>54</td>
<td>3.9</td>
</tr>
<tr>
<td>Adventure/Challenge</td>
<td>49</td>
<td>3.5</td>
</tr>
<tr>
<td>Religion</td>
<td>48</td>
<td>3.4</td>
</tr>
</tbody>
</table>

Table 3
Frequency distribution of the #2 value

Table 3 illustrates the frequency distribution of the second highest value rankings. Although the second highest value had a wider distribution of weight on more values, fairness remained the most important value (11%).

The trend continues for the third most important value, as the spread of the distribution of values increased. This time, fairness (5.4%) was ranked as the third most important value (see Table 4).

To combine all of the values selected, the study applied a weighting scheme for all values selected, where the highest weight for the top value was eight and the lowest rank for a value was one; the combined weights provided a clear picture of the top eight core values selected by the participants (see Table 5). The value of fairness, authority, and friendship were the top three.

Table 4
Frequency distribution of the #3 value

<table>
<thead>
<tr>
<th>Value</th>
<th>Frequency</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrity</td>
<td>86</td>
<td>6.1</td>
</tr>
<tr>
<td>Authority</td>
<td>77</td>
<td>5.5</td>
</tr>
<tr>
<td>Fairness</td>
<td>75</td>
<td>5.4</td>
</tr>
<tr>
<td>Fame</td>
<td>66</td>
<td>4.7</td>
</tr>
<tr>
<td>Friendship</td>
<td>58</td>
<td>4.1</td>
</tr>
<tr>
<td>Comfort</td>
<td>50</td>
<td>3.6</td>
</tr>
<tr>
<td>Financial</td>
<td>49</td>
<td>3.5</td>
</tr>
<tr>
<td>Independence</td>
<td>49</td>
<td>3.5</td>
</tr>
<tr>
<td>Fun/Happiness</td>
<td>43</td>
<td>3.1</td>
</tr>
</tbody>
</table>
With the lower ranked values starting at Rank #5, the frequency distribution revealed very limited differences in weights between these values. As a result, although the latter values are more likely to be interchangeable, the data analysis rejects Hypothesis 1: University students studying business do not have specific priorities in their values. With less difference between the lower values, the later analysis focused primarily on the top three values.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Top Values</th>
<th>Percentage Overall (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Fairness</td>
<td>8.68</td>
</tr>
<tr>
<td>2</td>
<td>Authority</td>
<td>5.70</td>
</tr>
<tr>
<td>3</td>
<td>Friendship</td>
<td>4.13</td>
</tr>
<tr>
<td>4</td>
<td>Integrity</td>
<td>3.45</td>
</tr>
<tr>
<td>5</td>
<td>Comfort</td>
<td>2.81</td>
</tr>
<tr>
<td>6</td>
<td>Fun</td>
<td>2.69</td>
</tr>
<tr>
<td>7</td>
<td>Trust</td>
<td>2.68</td>
</tr>
<tr>
<td>8</td>
<td>Fame</td>
<td>2.37</td>
</tr>
</tbody>
</table>

Table 5
Overall values ranking

Using the sum of the highest participation nations and the United States (US), the comparison between the top three values illustrated some interesting differences between the second and third values; although the first value of fairness was mostly consistent (see Table 6). The participants from India, Mongolia, the United Arab Emirates (UAE), and the US all found fairness to be the top value, while the participants from Ghana showed authority as their top value. Authority also appeared in the second or third values for India, Mongolia, and UAE. This evidence rejects Hypothesis 2: A statistically significant difference does not exist among the top three self-reported values among the students from different national origins.

The third analysis tested the assumption that values do not change significantly over time (Rokeach, 1973). Using only the top value, the study explored the differences in the top value between the various university ranks. Two specific countries were selected based on their high number of participants: India (n= 355) and Ghana (n= 138). The two nations also represented the continents of Asia and Africa. For the Indian students (see Table 7), the variance analysis revealed an F of 2.076 which is lower than F_{critical} (2.372). At the same time, a p-value of 0.084 accepts Hypothesis 3: A statistically significant difference does not exist in the top core values self-reported by business students at different educational levels.

<table>
<thead>
<tr>
<th>Between Groups</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>947 18.74</td>
<td>300</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7
One way ANOVA: top core value and university rank from India students

The correlational analysis for the self-constructs and the top three core values showed weak to mild relationships (see Table 8); however, the only relationship that was not statistically significant was between fairness and self-efficacy (r = 0.183). Authority had the highest relationship strength to all of the self-constructs (0.397 > r > 0.440). This evidence rejects three of the four hypotheses (H4a, H4b, H4d) where there is a statistically significant relationship between extrinsic goal orientations, intrinsic goal orientation, systemic awareness and the top three core values. For H4c, only authority (r = 0.440) and friendship (r = 0.251) had a statistically significant relationship to self-efficacy.

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<table>
<thead>
<tr>
<th>Country</th>
<th>Value #1</th>
<th>Value #2</th>
<th>Value #3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ghana (n=138)</td>
<td>Authority</td>
<td>Comfort</td>
<td>Inner Harmony</td>
</tr>
<tr>
<td>India (n=355)</td>
<td>Fairness</td>
<td>Authority</td>
<td>Personal</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Achievement / Excellence</td>
</tr>
<tr>
<td>Mongolia (n=222)</td>
<td>Fairness</td>
<td>Friendship</td>
<td>Authority</td>
</tr>
<tr>
<td>UAE (n=134)</td>
<td>Fairness</td>
<td>Religion</td>
<td>Authority</td>
</tr>
<tr>
<td>US (n=64)</td>
<td>Fairness</td>
<td>Trust</td>
<td>Religion</td>
</tr>
</tbody>
</table>

Table 6
Top values Comparison by Country of Origin
Discussions and Conclusions

This study makes a significant contribution to the growing literature on students as stakeholders and student-centered learning, especially in the international educational environment. From the 117 nationalities in the study, a value of fairness was dominant as the top priority. Authority was the second most important value, with friendship the third. In the comparison between nations, fairness was the top value for all nations other than Ghana, which had authority as the top value. When it came to the values of lower priority, the mixture of values was more complex with little alignment between values. This result creates an interesting challenge for universities with a diverse student population. The differences in student values from various nationalities challenge faculty in aligning the teaching methodologies and content to those core values.

The findings of the top two values align with Jacques’ (1996) view of the traditional educational system, producing employees who are to be managed. The value of fairness reflects a struggle between the hierarchical system of education, which places students at the bottom of the hierarchy, against their desire for development and growth. The value of authority is one of the contextual outcomes of the traditional educational system that provides ample power to managers to control employees. In combination, the top two values reflect the needs of an industrial era that has long past. Depending on the nation and its development, the outcome of these top two values illustrates some of the fundamental challenges of business education today that calls for innovative thinkers and knowledge workers.

The lack of differences in value between educational levels confirms Rokeach’s (1973) view that values do not change significantly. Within a range of years from the first-year student to a fourth-year student in India, the importance of fairness showed no statistically significant differences between these university ranks. The same was found in Ghana. This presents an interesting challenge for education – with the massive shift towards globalization, the shift of core values has to transpire in order to create business leaders. With a struggle in fairness and compliance to authority, shifting students’ top values would require a conscious approach at the curriculum design level as well as changes in educational practices.

The findings of correlations showed statistically significant relationship between self-constructs and top core values, except for the value of fairness and self-efficacy ($r = 0.183$). The value of authority had the strongest relationship with the self-constructs ($0.397 < r < 0.440$). Fairness had weak relationship with extrinsic goal orientations ($r = 0.220$), intrinsic goal orientations ($r = 0.274$), and systemic awareness ($r = 0.225$). These relationships provide evidence towards the importance of core values in the development of healthy self-constructs.

One of the unexpected findings is the relationship between top values. The top third value of friendship had a

<table>
<thead>
<tr>
<th>Table 8</th>
<th>Correlations between self-constructs and top three core values</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Extrinsic Goal Orientations</td>
</tr>
<tr>
<td>Extrinsic Goal Orientations</td>
<td>1.000</td>
</tr>
<tr>
<td>Intrinsic Goal Orientations</td>
<td>0.409</td>
</tr>
<tr>
<td>Self-Efficacy</td>
<td>0.404</td>
</tr>
<tr>
<td>Systemic Awareness</td>
<td>0.546</td>
</tr>
<tr>
<td>Fairness</td>
<td>0.220</td>
</tr>
<tr>
<td>Authority</td>
<td>0.421</td>
</tr>
<tr>
<td>Friendship</td>
<td>0.233</td>
</tr>
</tbody>
</table>

Note. All coefficients are shown with $p < 0.05$.

The Ghana students had similar results where the $F$ was less than $F_{0.05}(0.974 < 2.175)$ and the $p$-value was high at 0.446, also accepting $H_3$ (see Table 9).

<table>
<thead>
<tr>
<th>Table 9</th>
<th>One way ANOVA: top core value and university rank from Ghana students</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sum of Squares</td>
</tr>
<tr>
<td>Between Groups</td>
<td>2248.70</td>
</tr>
<tr>
<td>Within Groups</td>
<td>45011.14</td>
</tr>
<tr>
<td>Total</td>
<td>47259.84</td>
</tr>
</tbody>
</table>

The Transnational Journal of Business A publication of ACBSP
negative correlation with the top second value of authority 
\( r = -0.203 \). This presents an internal conflict between core 
values amongst the students. Such lack of congruence be-
tween core values will create further challenges within the 
workplace (Williams, 1993). Since the complexity of global-
ization calls for strategic choices by leaders, congruence be-
tween one’s values becomes one of many responsibilities for 
the educational system.

**Implications for Business Education**

The value of university education is constantly under 
challenge by various stakeholders (McClung & Werner, 
2008). While many universities market their approach to be 
some form of student-centered, the processes and models of 
education remain relatively unchanged since the industrial 
revolution. If one were to truly embody educational meth-
odologies, like constructivism, faculty and administration 
would have complete knowledge of students’ core values. 
Unfortunately, this is not a reality in some universities.

At a regional conference of ACBSP with academics from 
Europe, Asia, and the Middle East, faculty from various uni-
versities stated their perception of student values to include: 
growth/learning, freedom, achievement, socialization, and 
“getting a job.” Such perceptions are far from the list of the 
findings of this study. To make a significant impact on stu-
dents, a process of understanding students’ core values can 
help mold educational content to the students so that the 
learning becomes meaningful. Such meaning will impact 
the relative ability to recall meaningful content when need-
ed (Ormrod, 2006). Similar to organizational practices of 
values, connecting the various subjects and assignments to 
core values enables the construction of new knowledge and 
authentic development of new skills (Clawson, 2006; Orm-
rod, 2006; Sun, 2006). The completion of the instrument in 
this study or similar processes to explore core values, would 
take minimal time at the start of a new course. Faculty would 
then be able to weave student values into course concepts 
and theories. This practice would reflect the student-cen-
tered approach to learning while developing congruence be-
tween the educational system and the student. For example, 
since self-efficacy had the strongest correlation \( r=0.440 \) 
with core value of authority, faculty would focus students on 
building self-efficacy within every course. Since self-efficacy 
takes time to develop, faculty would need to maintain an in-
ventory of student characteristics, which is far beyond the 
typical systems that capture grades and demographics (Ban-
dura, 2012; Bandura & Locke, 2003; Sun, 2011). This process 
enables the consistent development within the educational 
journey of the students. As students learn to become more 
efficient in learning, the improvement in learning skills 
would further motivate their learning, regardless of the con-
tent of the course.

Another common practice in education is the use of 
categorization, which is a traditional management practice 
(Jacques, 1996). When working with a diverse group of stu-
dents from various nationalities, Hofstede’s (2001) cultural 
dimensions are commonly used. While the five dimensions 
(categories) offer great insight to one’s national culture, glo-
balization has brought the simplicity of these dimensions 
into question. First, each of these dimensions contains mul-
tiple values. Second, as nations develop, certain cities and 
regions within a nation acquire more interaction with the 
international business environment. Each interaction shapes 
their cultural practices, resulting in crossvergence (Kelley, 
MacNab, & Worthley, 2006). Educational institutions would 
integrate the understanding of values as its primary tool to 
drive learning. Instead of faculty manipulating student mo-
tivation with grades, they would explore the students’ per-
spective of fairness since it was the highest ranked value. De-
pending on the course, faculty can guide students to assess 
the financial investment from students and compare to the 
return of knowledge and skills gained within a course. Indi-
vidual learning plans would then maximize return to drive 
student engagement.

Within the business educational environment, students 
are interacting with other nationalities. Assuming one’s be-
haviors based on the five cultural dimensions of origin (con-
tent) could lead to some fundamental challenges. Using a
values-based approach to understanding students, offers a much richer variety of motivational tools as well as learning strategies. This is much like creating a masterpiece – where the student is the canvas. A categorical approach would only provide five colors (if one applied Hofstede's cultural dimensions). The contextual approach to discovering values provides 63 different colors in which to weave course content. Even more important, the process of learning about the student reflects the student-centered approach, rather than simple categorization. The 63 values would provide faculty abundant motivational strategies in any part of the world. With a mastery and effective application of core values, universities would have the basis of knowledge necessary to develop students’ healthy self-constructs consciously. This research, exploring values of students, initiates the systemic development of how higher education can engage students and the potential impact to developing business leaders.

References


LEVERAGING THE HETEROGENEITY OF CRITICAL THINKING: Creating New Classroom Knowledge

John D. Rudnick, Jr., Daniel J. Cahill, and Anthony C. Schumacher

ABSTRACT

This paper examines the literature on the creation of new classroom knowledge in higher education. Among the stakeholders identified, faculty members surfaced as a key force for meeting student-centric knowledge-creation needs. Global feedback from other stakeholders, employers, reveals a problem: students graduating from college lack competencies required for workforce application of higher-order thinking. Globalization, advances in technology, competition, and accountability are among forces creating barriers that are potentially impeding knowledge development. The literature suggests that students are graduating from universities without the ability to solve complex problems—a foundational skill for business success. Critical thinking emerges as a foundation and a potential solution to mitigate this problem. The heterogeneity of critical thinking supports this foundation by offering versatility, adaptability, and flexibility into faculty member curricula and teaching methods. A new critical thinking model, “The Wheelhouse Intersect Model”, is introduced to help faculty link critical thinking, brainstorming, and strategic planning, which may help students become better prepared to meet the aforementioned business challenges upon graduation and address the knowledge gap. Recommendations for future areas of study of knowledge creation are provided on the topics of competitive strategy, online learning evaluation and assessment, and faculty development.

KEY WORDS: accountability, competition, critical thinking, knowledge, faculty members, higher-education, technology, strategic differentiation

John D, (Jack) Rudnick, Jr., Associate Professor at Thomas More College, 333 Thomas More Parkway, Crestview Hills, KY 41017.

Daniel J. Cahill, Vice President, Market Leader, Columbia Executive Center, 207 Grandview Drive Suite 100, Fort Mitchell, Kentucky 41017

Anthony C. Schumacher, Director of Accelerated Programs and Adjunct Professor at Thomas More College. 333 Thomas More Parkway, Crestview Hills, KY 41017.

Introduction

The competitive pressures facing higher education have never been greater (Dunnion & O’Donovan, 2014). The reality for universities and colleges in the 21st century is that they are not properly preparing students for the demands of the workforce. Given the increasing need for talent, institutions need responsive, adaptive, and transformative change to meet demand and remain competitive. Employers report that students graduating from colleges and universities lack the competencies required for workforce application of higher-order thinking and problem-solving skills (Scott, 2008). Reid and Anderson (2012) report that 70% of Americans do not understand the scientific process, which infers a gap in basic reasoning skills—known commonly in business settings as “good business sense” or “business savvy.”

Globalization, advances in technology, competition from other colleges and universities, and accountability to multiple stakeholders are among the forces working
against the sustainability of many higher education institu-
tions (Bahhouth & Bahhouth, 2011; Barbera, Layne, & Gun-
awardena, 2014; Dill, 1999; Emes & Innes-Cleveland, 2003;
Matheson, Wilkinson, & Gilhouly, 2012; Stukalina, 2008).
While not a panacea, educating and developing future talent
that can think critically can be a competitive advantage for
higher institutions that want to remain relevant.

The healthcare community generally refers to a
“triple-aim” when assessing an institution’s or community’s
health and the efficacy of care delivery. Three pillars —im-
proved quality, reduced cost, and improved patient experi-
ence—can be summarized as basic units of measurement to
help identify healthcare’s effectiveness (McCarthy, 2015). A
relevant (newly-introduced) parallel construct that might
also apply between the healthcare and higher education
fields is coined as “the triple aim of higher education” —
high quality, reasonable cost, and high stakeholder satisfac-
tion. The pillars of this construct can be used as basic units
of measurement to anchor, assess, and help identify the
efficiency and effectiveness of higher education outcomes.
Adopting the model, high quality, reasonable cost, and high
stakeholder satisfaction might be outcomes best measured
for higher education using standardized testing, course
grading rubrics, and end of course satisfaction surveys. The
authors introduce these three pillars and argue that these
tools and outcomes can help measure and gauge students’
effectiveness as it relates to critical thinking. In order for
students to learn effectively, they need to be engaged. They
also need engaged faculty as an active force for driving new
classroom knowledge-development. The authors believe that
adoption of critical thinking as a heterogeneous tool will
help fill the workforce readiness problem when delivered in
a highly student-centric manner. When colleges create and
offer a quality education using critical thinking as a founda-
tion for learning at a reasonable cost, the net effect is satis-
fied graduates and their future employers.

Academic critical thinking models have helped to
shape curricula and approaches to teaching. However, these
models do not adequately address the practical needs of
the modern college student and the needs of the business
community. Thus, there is a need for models of critical
thinking that can transform idea generation into concrete
and practical options for issue resolution or opportunity
improvement—fundamental skills needed in any business
environment. A new critical thinking model, “The Wheel-
house Intersect Model” (“Model”) will address the gaps in
the literature. It has been developed for its practicality and
usefulness as a concrete tool to analyze, evaluate, and cre-
ate breakthrough thinking and new ideas generated through
processes similar to brainstorming and strategic planning.
The new Model builds on the higher order thinking elements
of Bloom’s Taxonomy Model (Krathwohl, 2002). The follow-
ing will include background and information on select criti-
cal thinking definitions and forces driving the need for crit-
cical thinking in higher education. Opportunities for further
research on the topics of competitive strategy, online evalua-
tion and assessment, and faculty development are proposed.

**Literature Review**

The proposed Model stems from several areas of
study and has implications for several stakeholders including
university administrators, employers, faculty, and students.
The authors also highlight relevant research that relates to
learning methods at the university level. The first relevant
research area examined as part of the model building pro-
cess is critical thinking. The following will examine the lack
of critical thinking curricula, and how this has impacted stu-
dents and the workforce.

**Forces Affecting Higher Education**

Responsive, adaptive, and transformative change
is needed to increase students’ critical thinking and com-
plex problem-solving competencies. Organizations must be
skilled at fostering creativity as well as acquiring and trans-
ferring knowledge (Barbera, Layne, & Gunawardena, 2014).
Critical thinking is a construct that is discussed in the lit-
erature as both essential and invaluable for addressing this
requirement for change. Historians have championed the
concept of freedom of thought and speech to establish the
basis for reflective and critical thinking (The Critical Thinking Community, 2016). An examination of the fundamental basis for critical thinking through the linkage of critical thought with free speech and religious liberty (The Critical Thinking Community, 2013) appears to be re-emerging as relevant to addressing the need for change.

There are several prevailing forces that can impact a new worker coming out of school, including globalization, technology, competition, and accountability. Globalization within the business community is becoming a part of everyday work life. Once thought of as a separate business unit or new initiative, global business is business. Similarly, technology is an enabler for all aspects of an individual's work life. Certainly students understand how to communicate via technology, but they may not be trained on how it can be used to create a competitive advantage in a world market. Competition in the world market is another area that students may not be prepared based on their current curriculum. Reading about competition for talent, resources, and revenue is different than understanding how these elements fit together to create success. Finally, students get some level of exposure to accountability by learning about the notion of dashboards and scorecards. Still, this is one-dimensional learning akin to showing and asking a worker to run a machine by reading a manual without the benefit of hands-on training. Taken together, these are multi-dimensional, complex issues that highlight the demand for workers who can sort, analyze and problem solve at the same speed with which these issues arise in their work lives. These issues underscore the need for our centers of higher learning to teach students how to think.

**Definitions**

Rowles, Morgan, Burns, and Merchant (2013) argue that one cannot teach what one does not know. Integrating critical thinking history, philosophies, theories, and definitions in this paper will help frame an understanding of critical thinking as a knowledge construct. The Critical Thinking Community (2013) reports that critical thinking, characterized by application of its versatile elements, standards, and virtues, is a rich concept that has evolved over 2500 years. While there are multiple overlapping descriptions of critical thinking, the National Council for Excellence in Critical Thinking shares the commonly embraced definition, introduced in 1987, by Michael Scriven and Richard Paul: “Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and/or evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action.” (The Critical Thinking Community, 2013, para. 2).

One of the early critical thinking theorists, John Dewey, referred to critical thinking as “reflective thinking” (as cited in Hsiao, Chen, & Hu, 2013) and contributed the following description: “Active, persistent and careful consideration of any belief or supposed form of knowledge in the light of grounds that supports it and the further conclusions to which it tends.” (p.18) Scott (2008) explains Halpern’s critical thinking definition as the use of cognitive skills or strategies to increase the probability of a desirable outcome. Terry and Ervin (2012) assert that critical thinking is the cognitive engine that drives problem solving and decision-making. Rowles et al. (2013) support what most experts agree upon—that the presence of critical thinking involves the inclusion of cognitive as well as affective dispositions (attitudes). For purposes of this research, the authors of this paper define critical thinking as the application of focused reflection and reasoned thought.

**The Problem**

Federal studies report on poor technology literacy, reading, and math skills among Americans and indicate that 70% of Americans do not understand the scientific process (Reid & Anderson, 2012). The lack of critical thinking in education is significant because it also impedes the development of another “higher order thinking” component—problem solving skills (Hsiao et al., 2013). Yet, employers require the application of critical thinking and complex problem-solving as fundamental workforce skills (Bloch &
Spataro, 2014; Coi & Sankaran, 2015). The problem is that curricula design by faculty is likely not focusing on critical thinking as a student-learning outcome; nor is it likely that outcomes are being assessed and measured. A sub-problem exists in the inability to easily apply critical thinking fundamentals to practical business matters. Consequently, institutions are graduating students who are not equipped with the appropriate training or skills to enter the workforce.

To facilitate students’ transitions from school to work, functional workforce requirements for students must be identified by employers and these must be factored into student learning outcomes. Relevant key metrics for assessment must be implemented by universities and colleges. If an outcome is not measured, it is likely not going to be identified, celebrated or addressed. For example, metrics for business students might include an ability to satisfy the following: clarity and effectiveness in oral and written communication skills; awareness of emotional intelligence relative to accepted principles of leadership/management/supervision; ability to manage workplace conflict; ability to participate in consensus-building to work in groups and teams; and awareness of and ability to manage or influence the costs associated with providing benefits for employees.

**Pedagogy vs. Andragogy**

Children and adults have different learning needs and goals. Traditionally, pedagogy is associated with child and adolescent learning and is characterized as a “top-down” or authoritative teaching style (Bahhouth & Bahhouth, 2011.) Conversely, the term “andragogy”, coined by the German educator Alexander Knapp in the 1800’s and popularized by Malcolm Knowles in the 1960’s, is focused on the teaching of adults. This latter style is deemed more self-directed, self-motivated, collaborative, and co-operative (Bahhouth & Bahhouth, 2011; Diffen, 2015). Technology serves as a likely appropriate option for the current younger generations of “digital natives.”

Mandernach (2006) reports on research where faculty members felt that promotion of critical thinking was one of the primary objectives of their instruction. Faculty members need to be aware that their feedback and expertise are two critical areas that support student learning (Sorenson, 2015). Developing competencies in the area of critical thinking is a responsibility of faculty members to maintain proficiency in meeting the evolving stakeholder-driven needs of students. In short, faculty members recognize the need for critical thinking. They understand their role in the process, and they appreciate that a deficit in critical thinking skills hampers students’ ability to assimilate to their work lives.

Awareness, knowledge, and critical thinking consistency in the classroom are essential for instruction that incorporates critical thinking application for smooth student transition of classroom knowledge to practical real-world settings. (Rowles, et al., 2013). Emes and Cleveland-Emes (2013) emphasize the importance of an institution’s core-curriculum structure from which students acquire explicit knowledge. Barbera, Layne, and Gunawardena (2014) also emphasize that faculty course design is a key success determinant in knowledge advancement.

In order to understand the role of faculty members among students in developing skills, the degree of faculty readiness and familiarity for incorporating these constructs into knowledge delivery for students is important to assess. While critical thinking is seen as an educational objective, research indicates that faculty members are generally unaware of critical thinking principles (Stedman & Adams, 2014). Though faculty members may self-report critical thinking knowledge and proficiency, few faculty members actually can demonstrate this; and most faculty members cannot identify their teaching elements that develop critical thinking (Paul, 2004). In addition, universities and colleges consider using more adjunct staff to teach courses in an effort to decrease costs; the relevance of this issue increases as the supply of instructors coming from the business-world are typically not acquainted with the academic aspects and labels attached to critical thinking. As these different issues converge, it is clear that faculty need to enhance students’ critical thinking skills. Yet, the erosion of critical thinking as
a curricula component, cost savings strategy by universities, and a lack of critical thinking woven into curricula impedes students from developing the problem solving skills they may need as they enter the workforce.

**Stakeholder Background**

There are multiple stakeholders groups that have a vested interest in bridging the critical thinking curricula gap that include university administration, faculty and students. Some insight into how interested parties can influence knowledge development establishes an additional foundation for the complexities and opportunities involved with multifaceted group collaboration.

**Stakeholders and Stakeholder Engagement**

Deloitte (2008) defines stakeholders as “groups who affect and/or could be affected by an organization's activities, products or services and associated performance . . . organizations will have many stakeholders . . . with diverse and sometimes conflicting interests and concerns” (p.2) Higher education stakeholders are faced with a complex critical thinking knowledge-divide. For higher education, stakeholders include the board of directors, administrative leadership and staff, faculty members, students, employers, and the area communities served. For new-knowledge classroom cultivation, higher education stakeholders need to become engaged in the process. Stakeholder Engagement is the “process used by an organization to engage relevant stakeholders for a purpose to achieve accepted outcomes” (Deloitte, 2008, p.2). Accordingly, to engage students and assess learning styles, faculty members must be aware of the problem and understand which tools and teaching methods are available to address it.

If deficits in student performance and workforce readiness are indicators of the sickness, faculty members are the cure. Faculty members are well-positioned to influence and affect learning outcomes by applying critical thinking elements, standards, and virtues through skilled and purposeful teaching strategies.

**Faculty Member Awareness and Familiarity**

If faculty do not acknowledge and understand critical thinking methods, it is virtually impossible to enhance students’ critical thinking skills. Kemp (2011) establishes that content knowledge is short-range focused on subject matter skills where cultivation of critical thinking is long-range focused on applying knowledge, as situations arise, to life-long challenges. Faculty members are in a conundrum given their finite resources: Either teach content that encourages short-range retention or take a chance and teach higher order thinking skills that offer long-range skills development. In short, faculty members are often caught in the middle, forced to choose between lower-level or higher-level knowledge development in the classroom. Faculty face challenges while weaving critical thinking skills into the fabric of their curricula.

Faculty members need to be aware that students of all ages need the competencies and confidence to face the new and complex challenges in the working world. Stedman and Adams (2014) assert that learning styles need to be adapted to students’ preferences, and that faculty members need to appreciate the value of applying critical thinking to learning styles. Faculty members need to be aware of these differences and the attendant resources to meet students’ needs and expectations.

It is likely that faculty members may not have an exhaustive resource of tools needed to incorporate critical thinking into their courses. A host of models and tools are available for employing critical thinking to augment teaching methods. Smilkstein (1991) asserts that it is the role of teachers to help students construct schemas (i.e., a mental picture of something we have learned) for each skill or subject taught. A recent survey best illustrates the need for faculty development.

A small convenience sample survey (n=42) was conducted in the Department of Business Administration at Thomas More College, Crestview Hills, KY, targeting adjunct faculty members who teach an average of two cours-
es per year. A Survey Monkey tool was used resulting in 27 faculty member responses (64%). Of the 27 faculty member respondents, 13 (48%) self-reported proficiency or solid familiarity with critical thinking academic constructs. Conversely, 14 faculty members (52%) indicated either no knowledge or a lack of familiarity with critical thinking as a discipline. While three respondents indicated uncertainty, 23 faculty members (85%) indicated a strong desire to learn more about critical thinking. These findings, while anecdotal, suggest an opportunity for a faculty development program to increase awareness of a useful teaching tool and method.

Barbera, Layne, and Gunawardena (2014) strongly endorse the promotion of a faculty development program to help them develop effective teaching strategies for online learning.

**Students, Employers, Higher Education Institutions, and Knowledge**

Based on the observations above, faculty members’ awareness of the importance of other key stakeholders and issues in the knowledge-creation process is important. Considerations for academic course development need to prioritize employer needs while recognizing the reality of prudently expending limited resources to do so. The literature below highlights the need for how other stakeholders are instrumental in the knowledge development process.

**Students**

Student-engagement in processes that fosters active learning and self-development is likely to stimulate student interest and curiosity. Styles and learning strategies that are student-centered characterize the progressive style of knowledge creation in the future (Al-Mubaid, 2014; Bahhouth & Bahhouth, 2011; Ennes & Cleveland-Innes, 2003; Hsaio et al., 2013).

**Employers**

Bloch and Sparturo (2014) indicate that employers are calling for employees with particular skills and experiences. Critical thinking is among these skills. Hansson and Monsted (2008) support the development of partnerships and relationships between the business community and higher education institutions that can identify skills and integrate development into the workplace (Scott, 2008.) Workforce cultures that promote critical thinking need to be cultivated to foster and promote a “critical spirit”, “critical dispositions”, and “critical spillovers” (Shaw & Holmes, 2014; Stedman & Adams, 2014).

**Higher Education Institutions**

Steyn (2015) asserts that the ability of students to learn faster is a way for institutions to gain a competitive advantage in the higher education marketplace. Leaders in higher education shape a positive higher educational culture through visionary growth strategies. Charismatic and visionary leaders can initiate ideas such as research and entrepreneurship activities on campuses to avail campuses of new revenue funding streams (Monsted & Hansson, 2010). Dunnion and O’Donovan (2014) caution against authoritarian leadership styles among those at the helms of higher education institutions. A disadvantage and negative consequence of a “command and control” style of leaders is that it typically results in inferior and expensive services in the long-run. Conversely, transformational leaders characterized by high degrees integrity and values experience more efficacious styles and sustaining outcomes. Transformational leaders are preferred to employ strategies that result from a more effective participatory style (Rudnick, 2009).

**Knowledge**

Knowledge is important because it is what offers universities and colleges their number-one distinctive strategic competitive advantage (Emes & Cleveland-Innes, 2013). Unfortunately, the literature reveals many examples of deficits in modern teaching methods and resources. Faculty have become subject matter experts in content areas; however, the content may not provide the life-long skills that students need and employers demand. There are a host of methods and tools for consideration for faculty to consider embracing, but these methods may not meet the practical
needs of faculty for incorporation into their teaching plans. Content-matter and knowledge needs to be packaged and conveyed in a practical and manner useful for prospective employment. Higher-order thinking skills also need to be considered, planned, and incorporated in order to bring context and relevance to the classroom.

Critical thinking is also the basis for other key skills such as communication basics. Strategic written and oral communication skills are essential for higher education graduates at all levels. Clifton (2012), reports that critical thinking is at the heart of academic writing. Development of effective written and oral communication teaching strategies offers one opportunity for differentiation in the marketplace. Universities and colleges are the creative spaces where people can find themselves through writing. Badley (2009) discusses the practices of refined writing, and contributions in the form of deconstructing and reconstructing to form new material for greater networking and relationship building.

Partnerships, connections, and networking have a similar resonance in the context of parallels between business activities and entrepreneurship growth. Research and knowledge need to be part of the outcome from entrepreneurial activities. For select oral communication development, Scott (2008) emphasizes the importance of debates as an effective tool and process for cultivating student knowledge. General science courses as well as technology courses are identified as great course types for students to learn critical thinking skills.

Technology: Virtual Resources

As in most modern issues, technology has a role to play as universities, students, and faculty partner to create a better outcome using critical thinking principles. Advanced internet-based learning, through innovations in technology, has become an integral part of the higher education academic environment. (Bahhouth & Bahhouth, 2011). Verpoorten, Westera, and Sprecht (2011) share that today’s electronic learning environment offers new opportunities for reflective thinking. Discussion concerning the uses and potential for technology application in higher education is provided below.

Online Learning

While technology has revolutionized approaches to higher education learning (Zheng, Stucky, McAlack, Menchana, & Stoddart, 2005), this resource could be considered both a blessing and a curse, from the perspective of faculty. Reliance on retrieving instantaneous information from the internet can be considered a crutch that does not help people to reflect or cultivate critical thinking skills. Aborisade (2009) points out that technology redefines the classroom and narrows the digital-divide among socioeconomic groups and has the ability to ameliorate many of the struggles facing higher education.

Technology can contribute to creativity by providing innovative space, forums, and opportunities that are flexible and convenient for engaging in knowledge creation opportunities. A disruptive feature of technology is that it can be a force that redirects learning and knowledge creation away from the traditional classroom (Arborisade, 2009). For adults, technology can help improve overall stakeholder satisfaction by making the learning process more accessible and realistic. Technology (i.e., online learning) as used by adult students, who have busy lives with family and work, has markedly increased access for expanded learning opportunities among this growing student population.

Advances in technology have improved processes and methods for engaging in communication (written and oral) strategies to improve efficiency and effectiveness in operations with multiple resources and tools. However, with changes that emphasize more technology, there is sometimes a concomitant potential shortcoming. One could argue that students do not write well because they do not think well. Technology impacts writing skills in the sense that terse communication through email and texts is evolving into an accepted workplace communication style and norm. This communication approach does not help students maintain a level of practice and rhythm for smooth flowing
cohesive discourse that is academically robust, grammatically accurate, and properly constructed. Critical thinking skills development can contribute to addressing this shortcoming among students and potential employees.

Bahhouth and Bahhouth (2011) report more positive findings concerning online learning outcomes that indicate an equal learning effectiveness involving online (e-learning) and ground/face-to-face methods. From an employer perspective one can generalize these findings to both classroom learning opportunities and employer-based training in the field. While this area of study is yet unexplored, one might argue that an intangible benefit of online learning deals with different learning styles. Some students admit to self-consciousness and, therefore, hold back on contributing to class discussions. Online learning addresses this self-consciousness and allows students to take more of a risk and express themselves, thus avoiding potential criticism in face-to-face settings.

Additional information is needed between studies and variables relative to the training level of online learning, its benefits, pitfalls, and requirements for future research (Bahhouth & Bahhouth, 2011). Mundernach (2006) supports the use of online resources to supplement teaching strategies. For efficiency of resource use and time, online tools can be used to convey lower-level content material. Higher order thinking and teaching can occur in the classroom to supplement activities for increased depth of knowledge coverage and creation, and critical analysis of course material can be considered.

Tools and Resources

Online learning is an example of a “disruptive technology” that has dramatically altered the creation of knowledge. Al-Mubiad (2014) asserts that online learning should be revolutionizing critical thinking; however, critical thinking is not highly promoted in online learning. Many faculty members and higher education administrative staff do not value online learning. Some faculty members feel that it is an inferior form of knowledge creation. Sorensen (2005) asserts that institutional sustainability is one distinct advantage of online learning. Williams and Lahrmann (2011) support online discussion as an effective means of encouraging instruction and critical thinking. Online discussion boards provide supportive student scaffolding for knowledge creation and foster collaboration vs. competition (Barbera, Layne, & Gunawardena, 2014; Hsiao, Chen, & Hu, 2013). Webquests (Zheng et al., 2005) are among other important virtual learning tools that include wikis, aggregated data bases (e.g., EbscoHost and ProQuest), websites, podcasts, and blogs. (Aborisade, 2009; Thormann, Gable, Fidalgo, & Blakeslee, 2013).

Solution

Bloch and Spataro (2014) report on positive experiences with the use of Socratic questioning methods through the use of case studies. Thormann et al. (2013), and Bahhouth and Bahhouth (2011), report that “student moderators” can generate freer discussion and analysis of ideas. Williams and Lahman (2011) share findings on the positive effects of using student “starters” and “wrappers” to ease and promote online discussions. (Starters and wrappers refer to sample beginning and ending stimuli.) Reflection triggers are basic prompts, identified by Verpoorten, Westera, and Specht (2011), which serve as the foundation for initiating and refining improved discussion processes. Kalelioglu and Gulbahar (2014) identify opportunities to incorporate multiple methods for assessment in online learning and note the complexity of the assessment process.

Gap Synopsis

The gap in critical thinking awareness and teaching competencies among faculty members is clear. This assertion is supported through a comprehensive literature search, a brief field survey, and suggested opportunities for further improvement by multiple critical thinking subject matter experts. For those in the field of leadership and business, there is recognition of a disconnect between how systematic business principles and how academic institutions approach resolution to this problem of “a gap.” Explicit, concrete options to ameliorate this gap can be achieved by considering the following:
The shift away from critical thinking has left faculty members and students within a conundrum: The market demand for critical thinking from employers is increased. In economic terms, the “supply” of producing and delivering curricula that focus on critical thinking skills in universities and colleges has failed to keep pace with “demand.” The result is that faculty experience dissonance (i.e. content vs. critical thinking) while students emerge without necessary preparedness.

Administrators at universities and colleges have failed to articulate clear expectations for faculty who are not promoting critical thinking skills.

Incorporation of critical thinking in student learning outcomes by faculty and measurement of those outcomes by administration is likely not occurring.

Several essential factors (e.g., faculty awareness, knowledge, and training as well as acquiring advanced technology) could be propelling critical thinking skills forward in students, but a lack of priority in strategic planning has kept critical thinking skills tamped down.

Even if all of the above were to be resolved, the current critical thinking models executed through all of these channels may not be able to support the complexity needed to flourish in the current business environment.

Employers demand “out of the box” thinking, which drives the need for an “out of the box” model to promote critical thinking.

Faculty members are on the “front line” and are likely the primary drivers of curriculum and learning. The methods they use (e.g., on-line learning, technology) are relatively new tools for learning, but critical thinking remains an important basis for education. These are brought together in this new model that the authors introduce to help bridge learning, new technology, faculty and employers. In order to engage students and assess learning styles, faculty awareness of the need to have multiple teaching methods and tools available is important. The above gaps reveal the need for a model that can enable critical thinking as a foundational learning tool, offer faculty options when building curriculum with limited resources and incorporate the reality of technology as part of its delivery: The Wheelhouse Intersect Model.

The purpose of The Wheelhouse Intersect Model (Model) is to offer a framework for generating new ideas using basic critical thinking principles. [A wheelhouse originates with a nautical linkage as an enclosed structure on the deck of a ship from which it can be navigated (merriam-webster.com, 2015). It can be generally seen as the part of a batter’s strike zone most likely to produce a home run; or a place or situation in which one is advantageously at ease (oxforddictionary.com, 2016). A wheelhouse is also analogous to the “sweet-spot” of a tennis racquet where the most effective force of a connection can be expected (merriam-webster.com, 2015).]

**Idea Integration**

The Model itself combines the following elements:
construct—e.g., critical thinking/strategic planning; domain—e.g., academic discipline or activity/workplace issue; and context—face-to-face/virtual setting with higher order thinking facets from the education classic, originally established for developing educational objectives, by Bloom’s Taxonomy. Parallel constructs and components that helped to form this model include cross-disciplinarity, select elements of current critical thinking methods and tools, as well as elements from the business field combine to help form this model.

The intersection of the boundaries from these facets represents a pictorial image of the space where creative thinking and idea generation has the potential to occur. Hansson and Monsted (2010), report that new knowledge is created on the boundaries of disciplines. Emes and Cleveland-Innes (2003) define interdisciplinarity as the purposeful integration and synthesis of knowledge, skills, and methodologies from different fields of study and perspectives (p. 59). The opportunity for considering different fields of study coming together for consideration is an underpinning principle of the Model. The space formed, where multiple new concepts or variables from multi-disciplinary dimensions intersect with common elements or parallel academic constructs, creates new opportunities and information for the connection of ideas. This can result in knowledge through this semi-structured brainstorming process consisting of thoughts and ideas. The process of “driving the wheel” and navigating information to create new knowledge is a value of this Model and contribution to the critical thinking community.

One practical application of the Model can be explained in conjunction with “change theory.” Kurt Lewin’s unfreeze, change and freeze/refreeze process (change-management-coach.com, 2015) outlines an efficient approach that combines an algorithmic flow, applying process improvement to identify the different use of existing resources to further improve or change a process to meet a need. Incorporation of this Model provides an opportunity to achieve improvement by reassembling and without increasing cost or net resources. This use of existing resources could be one outcome. Another outcome of applying this Model is the innovation established out of a strategic need to differentiate, innovate, or fulfill a new need. The need could include problem resolution, process improvement, a strategic planning opportunity, or part of an entrepreneurial thought process.

Application

The method for applying the new Model follows:

- Identify the concept intersect components—i.e., construct, domain, and context. Consider and identify the successful components and/or processes of each and why these are successful.

- Conduct a structured brainstorming participatory process where ideas are exchanged—perhaps one at a time in a group—initially; then in turn until ideas are exhausted.

- Comment and piggyback off ideas; identify ideas and prioritize.

- Generate possible options/solutions to satisfy an unmet need.

Other approaches/considerations follow:

- Begin with the end results in mind. Establish opportunities or desired outcomes and construct a model that satisfies the desired outcome and accommodates refinements. Conduct a Strengths, Weaknesses, Opportunities, and Threats (S.W.O.T.) analysis of each existing resource. Consider the analysis to identify, for example, opportunities.

- Consider where the concept is in The Product Life Cycle—i.e., introduction, growth, maturity, or decline phases of “the intersect” components and space.

- Assess the “5 Ms” of manufacturing (5me.com, 2015) for select needs: Manpower, Materials, Machines, Methods, and Metrics— to identify necessary resources/ideas to meet the issue/idea/targeted opportunities.
Discussion

The triple-aim of higher education—high quality, reasonable cost, and stakeholder satisfaction is considered in relation to new knowledge development. Critical thinking emerges, from the evolutionary process of cognitive reflective thought, as an underpinning theme involving important stakeholders. An analysis, evaluation, and synthesis of the literature reinforces the pivotal role played by faculty members through application of critical thinking strategies. In addition to students, others with vested interests in knowledge creation include higher education institution boards, higher education administrative staff, employers, and the communities served. Faculty member awareness of critical thinking is a dire need in the knowledge-creation process.

Advances in technology have redefined the traditional classroom through virtual communication and the “disruptive innovation” of online learning platforms. A new model, “The Wheelhouse Intersect Model”, provides a method for further developing idea generation and brainstorming that could help narrow the knowledge-divide that exists in higher education today.

Knowledge is the most valuable asset that higher education institutions can boast. Cultivation and refinement of knowledge creation processes are indicated. The host of variables influencing knowledge creation focuses on learning processes and considerations for faculty members who navigate and drive approaches to student engagement suggest multiple areas for future exploration and study. The areas that seem fertile for future research include the following: evaluation and assessment of critical thinking using online learning; the effects of critical thinking on competitive advantage and strategic differentiation; and a faculty development program to heighten an awareness of critical thinking tools, as well as movement toward more active learning styles.

Recommended Areas for Future Study

Select opportunities for future research and recommendations for future study (with select variables addressing the knowledge gap pressures categorized in parentheses) follow: Apply benchmarking and critical thinking processes to facilitate cross-discipline course re-design for efficient fulfillment of curriculum core requirements (globalization/competition); consider if critical thinking can mitigate faculty resistance to technology and online learning for course delivery (technology/competition); establish effective initial and ongoing training and development programs for faculty members (accountability); develop expectations for critical thinking including rubrics; and evaluation and assessment strategies for face-to-face and online learning venues (accountability); benchmark and consider how to cultivate technology development on higher education campuses through incubators and accelerators in partnership with businesses (technology, competition, globalization); apply technology to further develop learning communities for reducing the community chasm between residence life students and commuters through technology (competition, accountability, technology, globalization); and explore feasibility of and initiate campus research (Hansson and Monsted, 2008) and eco-entrepreneurship (ASHE, 2009) relative to the blend of academic and entrepreneurial revenue, as well as differentiation principles associated with entrepreneurship (e.g., idea ”incubator” or “accelerator” on campus - competition, technology, globalization).

These considerations for future research establish the reality of a fluid and dynamic nature of higher education. Stakeholders have been and will need to continue as vanguards for knowledge creation and incorporate new research and developments as it has since the inception of educational practice. The desired outcome of this research has been to acknowledge the gap in knowledge creation and to offer concrete solutions and suggestions for consideration. The Wheelhouse Intersect Model along with the suggestions above, contribute to a growing body of knowledge and research on this vital topic.
References


*The Graduate Writing Institute, 19*(1) 99-119.


*Journal of Online Educators Online, 12*(1) 140-159.


LEARNING OUTCOMES FOR STUDENTS’ TEAMWORK SKILLS DEVELOPMENT

Behnam Nakhai

A B S T R A C T

Increased emphasis on collaborative and active learning has led many business schools and programs to engage students in team projects as an important part of their curricular enhancements. However, learning goals for student teams tend to mostly emphasize the team’s outcome, with little focus on developing skills for effective team processes. Identifying effective and measurable learning goals is the first and most important step in the assurance of learning process. Upon determination of teamwork skills valued in the workplace based on a literature review, this article proposes learning goals for developing students’ teamwork skills for application in higher education.

KEY WORDS: Student teams, teamwork, team skills, management education, assurance of learning, learning outcomes

Behnam Nakhai, Ph.D. Professor of Management, Department of Management & Marketing, Millersville University of Pennsylvania, Millersville, PA 17551

Introduction

Teams of all types have become a vital element of organizational performance and change due to dispersed knowledge and increasingly complex tasks. Teams have been lauded for improving the quality of decision making (Kerr & Tindale, 2004), for fostering innovation and creativity (Larson & LaFasto, 1989), and for enhancing organizational learning (Edmonson, Dillon & Roloff, 2008), among many other benefits. It is believed that team structures will be increasingly adopted by the organizations of the future (Katzenbach & Smith, 1993; Guzzo, 1995; Cohen & Bailey, 1997).

With increased organizational demand for more collaboration and coordination, the use of teams in the workplace has increased and has created the need for managers who possess effective teamwork skills. Colleges and universities are responding to these demands by providing opportunities for their students to work in team projects and engage in collaborative learning. For example, a Google (2016) search on ‘team projects in college’ resulted in over 285,000,000 hits. In fact, a recent survey conducted by the Higher Education Research Institute (2014), reported that 86% of freshman in the U.S. worked with their peers on a course-based group project.

Researchers on teams have long stressed the distinction between effective team ‘performance’ and effective team ‘process’ (Griffin & Mathieu, 1997; Cannon-Bowers & Salas, 1998; Stewart, Manz, & Sims, Jr., 1999; Marks, Mathieu, & Zaccaro, 2001). This distinction is significant as it shifts the focus from team outcomes to the processes underlying effective teams. If working in teams has many advantages, it is also widely documented that teams can lead to many inefficiencies and even disasters. For example, Lencioni (2005) focuses on the five common dysfunctions of teams (absence of trust, fear of conflict, lack of commitment, avoidance of accountability, and inattention to results) and on the tactics to overcome them. On the other hand, Hackman (2002) focuses on the continued monitoring and support of a team,
including team and individual coaching, facilitating, leadership development, and the nurturing of ties between the team and its external networks, in order to ensure its success. In this context, the pivotal role of effective teamwork skills as a key leverage to improving team processes and thus team effectiveness in the workplace cannot be overstated (Guzzo & Dickson, 1996).

This paper addresses the educational implications of this focus on team processes, that is, on preparing students to become effective team members. More specifically, to focus on what teamwork skills students must develop to engage effectively in the team process. Since teams are important building blocks for work in organizations, preparing students to master the teamwork skills necessary to be effective team members is a key goal for business education. It is thus not surprising that both Accreditation Council for Business Schools and Programs (ACBSP, 2010) and AACSB International (2013), the leading accrediting agencies for business programs, emphasize teamwork and collaborative learning. In addition to the expectation that programs develop clear collaborative learning goals, ACBSP insists on the importance of assessing the level of attainment of the adopted goals:

[The] learning outcomes of the education process are of paramount importance. Student learning outcomes cover a wide range of skills, knowledge, and attitudes that can be influenced by the educational experience. Therefore, when implementing a student learning outcomes assessment program, careful consideration must be given to the learning outcomes that are most important to the missions of the institution and business programs and the level of the degree awarded. (ACBSP, 2010, p. 25)

Although there is no mandated uniform set of goals required of all institutions as long as each school defines its program’s learning goals consistent with its missions and objectives, the new standards of both accreditation bodies include a number of requirements that relate to developing students’ team skills. For example, ACBSP emphasizes that baccalaureate and graduate degree programs should include active “cooperative or collaborative learning in which students work interactively in teams that promote interdependence and individual accountability to accomplish a common goal.” (ACBSP, 2010, p. 61)

Business schools and programs around the world have responded to industry and accreditation requirements by defining teamwork, learning goals, and adding multiple group projects and a variety of pedagogical strategies to cover management topics on teams. The meaning of skills needed to work effectively in teams has varied considerably. Generally, it encompasses knowledge, skills, and abilities (Stevens & Campion, 1994) and it often includes behaviors (e.g., participation at meetings, being prepared, completing work on time, taking initiative), and attitudes (e.g., being respectful, being helpful and flexible). However, team goals are generally defined in broad terms or are limited in scope (Dickson, 1997; Diamond, 1988). For example, consider the following undergraduate program learning goals:

…understand your own sense of purpose and identity and are adept at leading and functioning effectively in teams. (Babson College, 2015)

Collaborate productively with others, functioning effectively as both members and leaders of teams.

- Facilitate team meetings and collaborate effectively in both face-to-face and virtual interactions.

- Identify and employ best team practices.

- Assess and offer feedback on one’s own effectiveness as well as one’s team members’ effectiveness with
respect to productivity and relationship-building in both oral and written formats.

- Articulate and analyze the value of inclusivity in a variety of business settings. (Indiana University Bloomington, 2015)

Identifying meaningful and measurable learning goals is the first and most important step in the assessment process (Baker & Salas, 1992; Banta, Lund, Black, & Oblinger, 1996; Palomba & Banta, 2001; Kemery & Stickney, 2014, Loughry, Ohland, & Woehr, 2014). Whether the assessment is geared towards evaluation of students' performance or providing midpoint feedback to students for their development, or it is for program outcome assessment purpose, instructors and curriculum coordinators must formulate clear learning goals for the learning process. Recognizing that different desired learning outcomes may exist, three sets of learning goals to address the needs of a variety of training and educational focuses are presented. These goals are derived from an investigation of various skills needed for effective teamwork identified in the team literature. The remainder of the paper is organized as follows: in the first section, the purposes of collaborative learning and types of learning goals and their roles in the outcome of the educational process are discussed. Next, the skills for effective teamwork that are valued in the workplace are identified based on a review of influential studies on the subject. The article then presents three formulations of learning goals for different applications in higher education. Finally, a brief discussion of the implications and suggestions for instructors and program coordinators along with areas for future research conclude the article.

**Learning Goals and Assurance of Learning**

The purpose of this article is to identify the learning goals for students’ teamwork skill development. Formulating reliable and measurable learning goals is critical for developing teamwork skills needed to improve team processes. The underlying logic is that by focusing on learning goals, instructors and program coordinators will be able to determine ways to improve the processes that drive effective teams in the workplace. Setting goals is a key motivational process for individuals (Locke & Latham, 1984; 1990). In the areas of training and education, effective goal setting facilitates the transfer of learning to the workplace (Latham & Sejits, 1997). Research has indicated that the types of goals that individuals pursue are robust predictors of behavior and performance in achievement contexts (Dweck, 1986; Bunderson & Sutcliffe, 2003). More specifically, emphasis on the development of skills, knowledge and competence (i.e., a learning goal orientation) leads to more task-focused, learning-oriented behaviors, whereas a focus on demonstrating competence and avoiding failure (i.e., a performance goal orientation) leads to more ego-oriented, instrumental and defensive behaviors (Button, Mathieu, & Zajac, 1996; VandeWalle, Brown, Cron, & Slocum, 1999; Kozlowski, Gully, Brown, Salas, Smith, & Nason, 2001). Also, good performance requires learning the necessary skills; having learning goals would serve better than performance goals because they increase student’s self-efficacy, which results in higher motivation (Bandura, 1997; Sejits & Latham, 2001; Bell & Kozlowski, 2002).

The research findings discussed above have important implications for educators. In the case of collaborative learning assignments that emphasize teamwork skills, learning goals have developmental purposes for students and focus on ‘team processes’ (i.e., what process elements account for a team’s high productivity). Whereas, collaborative learning assignments that emphasize performance goals typically have evaluative purposes for students and are focused on ‘team outcomes’ (i.e., team productivity). A recent empirical study found that simply by having students in team projects is not sufficient for the “development of their leadership” skills even when they are motivated to act interdependently in order to succeed in the class group assignment (Rosch, 2015, p. 113). Learning goals help students to acquire new skills and improve their knowledge by learning from the mistakes they might make in the process. However, with performance goals, students tend to avoid negative evaluations in order to maximize their positive scores and attain the highest grade.
for the assignment. As such, students have the tendency to avoid the risk of receiving a negative evaluation for a more challenging assignment, and thus miss important learning opportunities along the way (Miller, Behrens, Greene, & Newman, 1993).

Some research studies (Meece, 1994; Seifert, 1996) indicate that learning goals and performance goals are relatively complementary and that students are able to have multiple goals concurrently, which leads to more flexibility in achieving higher efficacy in various contexts and learning situations. Valle, Cabanach, Nunez, Gonzalez-Pienda, Rodriguez, and Pineiro (2003) subdivide performance goals into two categories of social reinforcement goals and performance goals. For these authors, social reinforcement goals are those that reflect students’ tendency to learn in order to obtain approvals and avoid parents’ and professors’ rejection. Performance goals refer to the students’ tendency to achieve good academic grades and advance in their studies. Using cluster analysis across three groups of students with different goals (learning goals, performance goals, and social reinforcement goals), Valle et al. (2003) found that the students with predominance of multiple goals were more successful. In sum, a focus solely on performance goals is less likely to result in process improvements within teams, but more likely to result in learning opportunities being foregone. Students need learning goals in order to develop as effective team members and learn new skills necessary for teamwork.

Learning goals are also an important element of the outcome assessment process. Assessing teamwork is complex and multifaceted due to mainly having multiple purposes and measurements (Kemery & Stickney, 2014). In higher education, there are three distinct but related purposes for assessment: evaluative, developmental, and outcome assessments. While evaluative and developmental approaches are used to provide feedback to the individual student about his or her performance, the primary goal of outcome assessment is to determine how well a program or a pedagogical approach is meeting, in the aggregate, the desired learning goals. The main difference between evaluative and developmental assessments is that the goal of the former is to assign a fair grade while the goal of the latter is to provide specific feedback for improvement (Druskat & Wolff, 1999; Farh, Cannella, & Bedeian, 1991; Fedor, Bettenhausen, & Davis, 1999). While evaluative assessments focus on the knowledge and contributions of the individual to the team, developmental assessments focus on the skills and behaviors learned by the team members. Teamwork assessment should be based on multiple measures designed to evaluate different knowledge, skills, and abilities administered by different individuals (i.e., self, peer, instructor, and program director).

In the workplace, when assessing characteristics of a team (e.g., composition) or a team’s processes (e.g., communication), the perspective is to look at the team as a whole and the purpose of the assessment is often to decide whether the team is working as effectively as it should or to determine whether additional resources and support are needed. The purpose of assessing individuals is typically to determine the training needs of individual team members. In an academic environment, the focus of developmental assessments should be on the individual, and thus we will examine the skills and behaviors that individual students need to be effective team members. Table 1 summarizes the descriptions and purposes of each type of team assessment and provides examples of common assessment items.

There is an increasing recognition of the need for making methods of assessment clear to students at the outset. Students’ learning is enhanced by their understanding of the assessment criteria and methods employed (Rust, Price, & O’Donovan, 2003). Given this paper’s interest in the developmental aspect of teamwork assessment and in individual students’ readiness to be effective team members, the next sections focus on students’ teamwork skills and the learning goals necessary to facilitate the learning of these skills.
What teamwork skill sets should the student develop in order to respond to the challenges of working effectively in teams? Determining the skill attributes for effective performance in teams in a classroom environment poses unique challenges (Feichtner & Davis, 1985; Dickson, 1997; Cox & Bobrowski, 2000; Loughry, Ohland, & Woehr, 2014). Attending meetings, being prepared, doing a fair share of the work, and completing assignments on time are examples of learning goals frequently found across many schools. These are not true skills; at best, they represent instrumental goals that may promote a fair distribution of work, satisfied team members, and a satisfactory outcome. These characteristics are without doubt important and should not be overlooked by students or instructors. They are often manifestations of a sense of accountability, hard work, and respect for others that is critical to teamwork. However, they are not skills and the instructor should aim higher. A useful framework for understanding teamwork skills is to distinguish between (a) task-specific versus task-generic competencies, and

<table>
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<tr>
<th>Focus of Evaluation</th>
<th>Description</th>
<th>Purpose</th>
<th>Examples of Assessment Items</th>
</tr>
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<tbody>
<tr>
<td><strong>Student</strong></td>
<td>Contribution</td>
<td>Contribution to the task and to the team</td>
<td><strong>Evaluative:</strong> to evaluate individual performance, to assign student grades</td>
</tr>
<tr>
<td></td>
<td>Skills</td>
<td>Judgments about demonstrated skills, and potential for development</td>
<td><strong>Developmental:</strong> to provide feedback to students or assign grades</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Assessment:</strong> to assess the effectiveness of the curriculum design and delivery</td>
<td></td>
</tr>
<tr>
<td><strong>Team</strong></td>
<td>Outcome</td>
<td>Quality and timeliness of the team assignment</td>
<td><strong>Evaluative:</strong> to assign a grade to the team output</td>
</tr>
<tr>
<td></td>
<td>Processes</td>
<td>Effectiveness of team processes (e.g., communication, trust, interpersonal relations, conflict resolution, leadership, etc.)</td>
<td><strong>Developmental:</strong> to provide feedback to the team or individual students for improvement and self-awareness</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>External support provided to the team (e.g., resources, training, networking, intra-team communication)</td>
<td><strong>Assessment:</strong> to assess the effectiveness of instruction and the support services, the appropriateness of interventions, and the efficacy of intra-team collaboration and external networks</td>
</tr>
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Table 1. Types of Students’ Team Performance Evaluation

**Teamwork Skills Valued in the Workplace**

What teamwork skill sets should the student develop in order to respond to the challenges of working effectively in teams? Determining the skill attributes for effective performance in teams in a classroom environment poses unique challenges (Feichtner & Davis, 1985; Dickson, 1997; Cox & Bobrowski, 2000; Loughry, Ohland, & Woehr, 2014). Attending meetings, being prepared, doing a fair share of the work, and completing assignments on time are examples of learning goals frequently found across many schools. These are not true skills; at best, they represent instrumental goals that may promote a fair distribution of work, satisfied team members, and a satisfactory outcome. These characteristics are without doubt important and should not be overlooked by students or instructors. They are often manifestations of a sense of accountability, hard work, and respect for others that is critical to teamwork. However, they are not skills and the instructor should aim higher. A useful framework for understanding teamwork skills is to distinguish between (a) task-specific versus task-generic competencies, and
(b) team-specific versus team-generic competencies (Cannon-Bowers, Tannenbaum, Salas, & Volpe, 1995). For Cannon-Bowers and colleagues, transportable competencies are those that are both team-generic and task-generic, that is, skills that can be applied in a variety of contexts and tasks. These competencies are not more critical or less critical to the success of the team than team-specific or task-specific competencies; they are, however, more general, “transferrable”, and “teachable” (Ibid., p. 340), and thus are considered in this study.

Among the numerous studies on the teamwork skills, several studies are often cited and are highly recognized in the literature: these include Benne and Sheats (1948), Hackman and Walton (1986), Larson and LaFasto (1989), Stevens and Campion (1994), Cannon-Bowers et al. (1995), and Thompson (2008). Benne and Sheats (1948) rejected the notion that the team leader is uniquely responsible for the quality and amount of production of the team and proposed a concept of team leader as multilateral shared responsibility. According to this view, competencies are related to group roles that team members are called to play and the team’s performance depends on the awareness of what needs to be done and the ability of its members to deliver it.

For Benne and Sheats (1948) team skills consist of task management skills (initiating, information seeking, opinion seeking, elaborating, energizing, coordinating, orienting, detailing, recording, and challenging) and interpersonal skills (encouraging, harmonizing, compromising, gate keeping, reflecting, following, standard setting). Hackman and Walton (1986) differentiate between diagnostic skills (i.e., intellectual tools and expertise to analyze the work environment and team dynamics) and execution skills for effective team leadership. Execution skills pertain to the hands-on task of leading team members, getting the best out of the team, and overcoming obstacles to implementing team actions. These skills comprise envisioning, inventive, negotiation, decision-making, teaching, interpersonal, and implementation skills. For Larson and LaFasto (1989), teamwork skills are individual behaviors and attitudes that are generally observed in members of successful teams. Highly effective team members have a realistic understanding of their roles and accountabilities, possess objective and fact-based judgments, are collaborative, make the team goal a higher priority than any personal objective, are willing to devote whatever effort necessary to achieve team success and share information, provide help to other team members, possess high standards of excellence, are supportive of team decisions, confront important issues with courage, play leadership in ways which contribute to the team’s success, and respond constructively to feedback from others.

Stevens and Campion (1994) introduced the teamwork knowledge, skills, and ability (KSA) test for selecting team members. They proposed 14 teamwork KSAs organized in two main categories and five subcategories: Interpersonal, which includes conflict resolution, collaborative problem solving, and communication KSAs; and Self-management, which includes goal setting and performance management, and planning and task coordination KSAs. Interpersonal KSAs are focused on the skills needed to foster healthy relations among team members, respect for others, and acceptance of different points of views. Self-management KSAs deal with the abilities to perform essential management functions, such as goal setting and planning, organizing and coordinating group tasks, and ensure the proper balancing of the workload among the team members. Cannon-Bowers et al. (1995) identified seven teamwork competencies necessary for effective teamwork: adaptability, shared situational awareness, performance monitoring and feedback, leadership/team management, interpersonal relations, coordination, and communication. Finally, Thompson (2008) presents a comprehensive set of team leadership skills, which an actual corporation uses in its 360-degree evaluation process. Essential team leadership skills are providing vision; showing entrepreneurship, influencing and convincing; achieving results; focusing on the customer; enhancing cooperation; empowering; managing change; and developing talents.

**Proposed Learning Goals**

How can we translate the teamwork skills valued in the
workplace into learning goals that can be used in higher education? One should focus on individual-centered teamwork skills, what Cannon-Bowers et al. (1995) call transportable skills, and the learning goals should be formulated in such a way as to provide meaningful feedback for students to enable their development of individual teamwork skills. As previously discussed, learning goals should not be confused with performance goals; while complementary, performance goals are for grading and often respond to the instructor’s need to assign individual grades for a team assignment. On the other hand, learning goals should reflect the ability of a student to perform effectively in teams in a variety of contexts, especially after they leave the classroom. Learning goals assume that students make mistakes and that these mistakes are often the foundation of further learning and skill development (Dweck, 1986; Elliott & Dweck, 1988).

Recognizing that different objectives may be desired in different academic programs and learning contexts (Loughry, Ohland, & Woehr, 2014, Goltz, Hietapelto, Reinsch, & Tyrell, 2008.), the following are three possible formulations of team learning goals based on the teamwork skill sets discussed above. The proposed first formulation may be appropriate for a full-term course on teams and it includes ten learning goals, one for each skill set. The second suggestion could be used in a specialized experiential course that focuses on developing hands-on teamwork skills. These experiences are often found in intensive training workshops for executive or project teams, which may include integrative group experiences such as mountain climbing, scavenger hunts, or disaster management games. Finally, the third proposed formulation integrates the ten skills into five combined skill sets making it more suitable for program-level assessment.

**Learning goals for a full course on teams**

- Communication skills - Each student should be able to express oneself and articulate views of the group and sub-groups, and to understand and effectively use communication networks.

- Facilitating and information sharing skills - Each student should be able to promote and clarify communication among team members, to elicit unique and different types of information, and to manage information sharing processes effectively.

- Work planning and organization skills – Each student should be able to plan and organize group tasks, to prioritize activities, and to identify resources needed.

- Task coordination skills - Each student should be able to direct activities of members, to shift resources and expedite processes when needed, to take care of operational details, and to recognize changes in the environment and to adjust plans.

- Collaborative problem solving and group decision-making skills - Each student should be able to question the group assumptions and decision-making methods, to maintain independent and fact-based judgments, to arrive at a multi-faceted understanding of the situation, to foster creativity, and to manage group decision-making processes effectively.

- Conflict resolution skills - Each student should be able to persuade others, to recognize and reconcile differences of opinion, to use strategies to resolve disputes and overcome impasses, to negotiate to secure or reallocate resources.

- Interpersonal skills - Each student should be able to show empathy toward the feelings or conditions of others, to recognize the importance of and engage in ritual social behaviors, to promote solidarity and trust among team members, to treat others with respect, and to recognize when an intervention may be necessary.

- Coaching and collaborative skills - Each student should be able to work with others, to help and instruct others, to support and motivate others, and to adjust behaviors for the success of the team.

- Leadership skills - Each student should be able to pro-
vide a compelling vision of a desired end state; to set a direction for the team; to carry-out important initiatives for the group; and to energize and inspire others.

☐ Performance monitoring skills - Each student should be able to maintain focus on task, to clarify objectives and standards of performance, to monitor team and individual performance, to provide constructive feedback, and to devise necessary corrective actions.

**Learning goals for a specialized/experiential course on teams**

☐ Facilitating skills - Each student should be able to run a team meeting and lead a team discussion; clarify positions, assumptions, and feelings; to elicit unique types of information; and to encourage the participation of all team members.

☐ Task coordination skills - Each student should be able to take care of operational details, to make lists and follow plans through completion, to recognize changes in the environment, and to adjust plans.

☐ Conflict resolution skills – Each student should be able to avoid or mediate conflicts, to recognize differences of opinion and use appropriate strategies to resolve disputes, and to promote harmony and achieve consensus.

☐ Coaching and collaborative skills - Each student should be able to work with others, to help others, to motivate and instruct others, and to adjust behaviors for the success of the team.

☐ Leadership and performance monitoring skills - Each student should be able to set challenging goals for team accomplishment, to monitor performance and provide constructive feedback to team members, to clarify standards, and take corrective actions.

**Learning goals for program outcome assessment**

☐ Communication and facilitation skills - Each student should be able to express oneself, to articulate the views of the group and sub-groups, and to elicit information from all members.

☐ Planning, organization, and coordination skills - Each student should be able to plan, organize, and assign group tasks; to prioritize and coordinate activities; and to manage operational details.

☐ Problem solving and conflict resolution skills - Each student should be able to use group decision-making effectively, to help to overcome impasses, and to resolve conflicts and to negotiate resources.

☐ Interpersonal, coaching, and collaborative skills - Each student should be able to work with others, to show empathy and treat group members with respect, and to promote solidarity and trust among team members.

☐ Leadership and performance monitoring skills - Each student should be able to foster a unified vision and direction for the team, to clarify objectives and standards of performance, to energize and inspire members towards high performance, and to monitor team and individual performance.

**Discussion and Conclusion**

Our knowledge of developing and assessing teamwork skills is still evolving. Recognizing the flattening of the organizational structures and the wisdom of teams, some of the most influential authors in the field of management have long heralded teams as the new system of management (Drucker, 1988; Senge, 1990; Katzenbach & Smith, 1993, 2001) or as the very essence of leadership (Drucker, 1999; Collins, 2001). More recently, Wageman, Nunes, Burruss and Hackman (2008) referred to this evolving trend in management as the “fall of the single heroic CEO and the rise of the leadership team.” (p.1) It is, thus, not surprising that organizations and employers are increasingly seeking college graduates who are well prepared in teamwork knowledge, skills, and abilities. Colleges and universities have been responding to these demands by providing opportunities for their students to work in team projects and engage in collaborative learn-
ing. In addition to the expectation that business schools and programs develop clear collaborative learning goals, AACSB and ACBSP—like any other accrediting agency—insists on the assessment of the level of attainment of the adopted goals and objectives. These have led to many initiatives in collaborative learning (e.g., Hobson & Kesic, 2002; Hansen, 2006; Halfhill & Nielsen, 2007).

As it is emphasized by ACBSP and AACSB standards, learning outcomes of the education process are of “paramount importance” (ACBSP, 2010, p. 25). Research has shown that simply assigning our students team projects does not necessarily result in their team skills development (Rosch, 2015; Lancellotti & Boyd, 2008). Business schools must have processes in place for “determining for each degree program learning goals that are relevant and appropriate, as well as for designing and delivering curricula to maximize the potential for achieving the expected outcomes.” (AACSB, 2013, p. 29) Identifying appropriate learning goals is a critical step in defining learning expectations and making sure student learning takes place. An important area in which business schools need to develop and use learning goals is the development of students’ teamwork skills, as these have become an important requirement in the modern workplace. Therefore, instructors in business schools need to engage in systematic efforts to ensure the development of these skills for their students. This paper proposes a framework to understand the skills that students need to become effective team members in school and in the workplace, as well as learning goals that facilitate the development of these skills.

Student groups are utilized in many contexts and for variety of purposes in higher education. For example, a course such as organizational behavior may be the primary locus to teach teamwork skills in a business program. On the other hand, a course in managerial accounting may use groups without assigning special responsibilities for improving collaborative learning. And, the responsibilities of a business policy or strategic management course, for example, may lie somewhere in between the two previous examples. Certainly, it would be simplistic to expect that the team learning goals are the same for every course that uses teams, or that learning goals have to focus primarily on teamwork skills. In many instances, the instructor is merely attempting to evaluate the individual contributions of each team member to the final outcome. In these cases, Baker (2008), Carr, Herman, Keldsen, Miller, and Wakefield (2005), Friedman, Cox, and Maher (2008), Halfhill and Nielsen (2007) and Loughry, Ohland, and Woehr (2014) suggest the use of a simple, holistic approach which differentiates the students’ contributions to the team’s outcome (e.g., performed the assigned tasks and was well prepared, contributed valuable ideas, showed initiative and innovation, did valuable research and analysis, completed assignments on time, and performed work of high quality) from those to the team processes (e.g., attended meetings, was flexible in accommodating group needs, listened and was supportive of others’ contributions, was respectful of others, contributed to a healthy group atmosphere, managed conflict effectively, encouraged others to participate, and demonstrated leadership skills). What is important is to realize that behaviors such as “attended group meetings”, “completed assigned parts on time”, or “was respectful” are not teamwork skills in the sense of a student’s developed abilities to work effectively and intervene successfully in team processes.

Learning goals are an essential element of any type of assessment. Whether assessing the individual student’s performance for grading or providing feedback to the student for future development, or assessing outcomes to assure the learning process is meeting its intended goals, it is crucial that at the outset we identify solid and specific learning goals consistent across the curriculum. Learning goals have a positive impact on ensuring learning of teamwork skills, in part through increasing self-efficacy beliefs about working in teams. In the context of teaching a team course, instructors could supplement the use of teamwork learning goals for team assignments with in-class role-play activities, where students could build their self-efficacy by practicing and developing teamwork behaviors and skills that are targeted in the course. Further, in courses where teamwork learning goals are positioned, it is important that students have access
to a variety of materials on teams prior to the start of their team projects. It is also suggested that information regarding goals and expectations, behavior guidelines, and evaluation rubrics be provided to all students.

The primary objective of this research was to identify key learning goals for developing students’ teamwork skills. Upon exploring the skill sets based on a literature review of teamwork skills valued in the workplace, three formulations of learning goals for application in higher education were presented. This study does not present the assessment instruments for measuring the outcome of student’s learning. It is important that before implementation, instructors and assessment coordinators or program directors develop appropriate instruments for assessment data collection, assurance of learning, and continuous improvement purposes.

Web-based assessment instruments allow flexibility, mobility, compatibility, and easy aggregation of the information collected. Future research is needed for evaluating the effectiveness of the proposed learning goals by collecting direct assessment information using different instruments designed for evaluations by peers and instructors.

References


EMOTIONAL INTELLIGENCE: 
A Review of the Literature

Justin Matus

Abstract

This paper reviews the literature and traces the origins of the Emotional Intelligence (EI) construct, its definition, measurement and its relationship to leadership and job performance, and other related variables. A discussion of various EI instruments, their relative strengths and weaknesses, psychometric properties and utility are presented. Several studies of EI and their relationship to leadership and job performance are examined. The author concludes by suggesting the EI construct be abandoned and that charisma and maturity are more accurate descriptions of the putative EI construct.

Keywords: alexithymia, cognitive, emotion, intelligence, leadership, perception performance,

Justin Matus is Associate Dean/Associate Professor at Sidhu School of Business & Leadership Wilkes University Wilkes-Barre, PA 18766, USA.

Introduction

The purpose of this article is to review the literature and examine the construct known as Emotional Intelligence (EI). The concept of EI has been in the literature for quite some time, although pinpointing its precise origin is somewhat difficult (Mayer, J. D., Salovey, P. & Caruso, D. R., 2004). Locke (2005) suggests that EI was first introduced by Salovey and Mayer in 1990, although others suggest that similarly labeled constructs precede these researchers (Mayer, Salovey, & Caruso 2004, p. 198). Salovey and Mayer (1990) state, “We define emotional intelligence as the subset of social intelligence…” (p. 189). Interestingly, Cronbach (1960, cited in Salovey and Mayer) concluded that, “fifty years of intermittent investigation …social intelligence remains undefined and unmeasured” (p.188). Most would agree that EI entered the popular mainstream culture as a result of Daniel Goleman’s book entitled Emotional Intelligence, first published in 1995 followed by his article What Makes A Leader? first published in 1998. If one assumes that Salovey and Mayer’s 1990 article is indeed the seminal work that started Goleman’s dialogue of EI as the sine qua non of leadership, it quickly becomes apparent that for about the next twenty-five plus years, scholars struggled with both the definition of the EI construct and its measurement. This article will examine the definition of EI, the measurement of EI, the effect of EI on various dependent variables, and finally a discussion of the literature and conclusions.

Review of the Literature

Salovey and Mayer (1990) state, “We define emotional intelligence as the subset of social intelligence that involves the ability to monitor one’s own and others’ feelings and emotions, to discriminate among them and to use this information to guide one’s thinking and actions” (p. 189). Their original conceptual model is depicted in Figure 1. From this model, they posit that there are, “conceptually related mental processes involving emotional information. The mental processes include: a) appraising and expressing emotions in the self and others, b) regulating emotion in the self and others, and c) using emotions in adaptive ways” (p. 190). It is especially important to take note of the phrase, using emotions in adaptive ways, since this becomes the
platform upon which many, including Goleman, have constructed an argument that EI is a fundamental and necessary ingredient of leadership.

Salovey and Mayer (1990) go on to suggest that appraising emotions in others requires an ability to observe and translate both verbal and nonverbal expressions of emotions. This skill, it is suggested, then becomes part of one’s EI. Concurrently, the ability to express one’s emotions and be self-aware of those expressions, both verbal and non-verbal, becomes a second skill, and again part of one’s EI.

The second component of EI, regulating emotion (in self) and the skills for regulating it, they suggest, is drawn from research on moods. They state, “Moods, although less intense and generally longer lasting than emotions, should be just as effectively regulated and managed by individuals with emotionally intelligent skills” (p. 196). Salovey and Mayer (1990) describe the meta-experiences of mood as essentially that inventory of all the various types of moods, feelings and emotions one has typically experienced: happy, sad, angry, confused, anxious, etc. This inventory becomes the framework for which each individual builds a theory about how his or her own moods and concomitant behaviors work. As an example, they offer, “…if one experiences a pleasant, acceptable mood when dancing, then the cause of the mood (dancing) could be sought after in the future so as to bring about the mood again. In this way, it would serve as a foundation upon which rules could be constructed that would themselves direct behavior to bring about moods” (p. 196).

Regulating emotions in others, or more simply put, managing impressions, is also a learned skill. For example, a job candidate arriving on time. Goffman (1959) wrote extensively on impression management:

When an individual enters the presence of others, they commonly seek to acquire information about him or to bring into play information about him already possessed. They will be interested in his general socio-economic status, his conception of self, his attitude toward them, his competence, his trustworthiness, etc. Although some of this information seems to be sought almost as an end in itself, there are usually quite practical reasons for acquiring it. Information about the individual helps to define the situation, enabling others to know in advance what he will expect of them and what they may expect of him. Informed in these ways, the others will know how best to act in order to call forth a desired response from him (pp. 135,136).

Goffman seems to be suggesting that a job candidate might just be arriving on time not as an end in itself, but as the means to an end, e.g., getting the job. Moreover, the hiring manager, observing the punctuality of the job candidate is using that information to infer future behaviors relating not only to punctuality, but to job performance at a minimum, if not any other number of inferred positive traits.

The third component, using emotions in adaptive ways, is the suggestion that certain moods give rise to certain types of productivity. For example, if one is happy they might be more creative, whereas if they are angry they may enjoy physical labor as a way to work off their anger. Salovey and Mayer (1990) conclude, "When people
approach life tasks with emotional intelligence, they should be at an advantage for solving problems adaptively” (p. 200). This concluding remark by Salovey and Mayer lays down the foundation of the suggestion that if one has EI, he/she will perform at a higher level and launched the next twenty-five plus years’ struggle of defining and measuring EI. Indeed, these same authors revisited their original 1990 model, expanding their work (Mayer and Salovey, 1995) and further revising it to the now so-called Four Branch Model wherein (1) perceiving emotion is at the bottom of the model, (2) followed by facilitating thought with emotion; (3) understanding emotion; and (4) finally managing emotion (Salovey, et al. 1995, p.235).

One of the first teams to take on the challenge of measuring at least a dimension of EI, was Salovey, et al., (1995). This team developed an instrument known as the Trait Meta-Mood Scale (TMMS). They write, “The measure is called the Trait Meta-Mood Scale (TMMS) because it was designed to assess relatively stable individual differences in people’s tendency to attend to their moods and emotions, discriminate clearly among them, and regulate them” (pp. 127, 128). Their 48- item self-report, scale (later refined to 30 items) and subsequent factor analysis revealed three factors labeled as (a) attention to feelings, (b) clarity of feelings, and (c) mood repair. The authors argue for the instrument’s reliability and “sufficiently differentiated from related constructs such as neuroticism and repression. Moreover, the clarity scale in particular demonstrated validity in predicting the unpleasant quality of ruminations after a stressful experience” (p. 147). The authors conclude, “we believe that the TMMS is a reasonable operationalization of aspects of emotional intelligence” (p. 147). However, they further stipulate that “future research needs to be focused on the discriminant validity of the TMMS vis-a-vis the constructs noted…” (p. 147).

The team of Schutte, et al. (1998) attempted to construct a measure of EI, also based on Salovey and Mayer’s original model of EI. This instrument was developed from an initial 62-item self-report scale, subsequently reduced to 33 items using factor analysis, resulting in a one factor solution. This solution, the authors suggested, is “a homogenous construct of emotional intelligence” (p. 175). They cautioned, however, that while the instrument held “promise as a reliable valid measure of EI…the emotional intelligence scale, like most self-report measures, seems susceptible to faking good. Thus, the emotional intelligence scale should probably not be used as a method for selecting individuals for jobs or other highly desired opportunities” (176). The authors further presented that the 33-item scale did correlate with theoretically related constructs, including alexithymia1, attention to feelings, clarity of feelings, mood repair, optimism, and impulse control (p. 167). The authors also posited that the instrument had predictive validity since the EI scores of 31 college freshmen predicted final grade point averages with an r(63) = .032, and p value of <0.01 (pp. 173,174). They also argued discriminant validity of the instrument citing their own study of 42 college freshmen and corresponding SAT scores. They found no relationship between EI scores and SAT scores, r(41) = -.06. In a second study of 23 college students, they again suggested discriminant validity of their EI instrument based on an analysis of a NEO personality Inventory (Costa and McCrae, cited in Schutte, et al. 1998), more commonly referred to as the big five personality dimensions. In this study they found that higher EI scores were significantly associated with greater openness to experience, r(22)=0.54, p value ,0.009. The remaining personality dimensions were reported as: neuroticism, - 0.28; extraversion, 0.28; agreeableness, 0.26; and conscientiousness, 0.21. (p.175).

The reader should note at this point that the two previous discussions of EI instruments (TMMS and Schutte, et al. 33-item scale) were both of the self-report type, with some weaknesses noted in both. Self-report measures of EI have received critical scrutiny by several researchers. Ciarrochi, Chan and Caputi (2000) state the problem as follows:

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1 For a full discussion of alexithymia see also P.E. Sifneos (1972); Parker, Taylor & Bagby (2001).
In a recent set of studies, Davies et al. (1998) uncovered a number of problems with the different self-report EI measures. First, Goleman’s (1995) EQ test and two self-report measures of the Alexithymia Scale have poor reliabilities (cf. Bagby et al., 1994). Second, the more reliable self-report measures have salient loadings on the well-established personality factors of Neuroticism, Extraversion, Psychoticism, Agreeableness and Openness. Third, although there is a factor-analytic evidence supporting discriminant validity of two emotional intelligence factors (emotional awareness and clarity), these factors no longer emerge when unreliable measures are dropped from factor analysis (p. 541).

Ciarrochi, Chan and Caputi (2000) addressed this in their study by using the Multifactor Intelligence Emotional Intelligence Scale (MEIS) developed by Mayer, Caruso and Salovey (1999). The authors describe this instrument, “as an objective measure of EI….the test is objective in the sense that there are better and worse answers, as determined by consensus” (p. 541). In their study, they assessed the reliability and validity of the MEIS by assessing the factor structure and reliability of 11 of the 12 subscales. Their findings confirmed that, “The EI factors were reliable, all the subscales loaded on a single emotional ‘g’ factor, EI related in expected ways to a number of criterion variables and to mood-based processes even after controlling for IQ and well-established personality variables. Taken together, these results make a case for the distinctiveness and usefulness of EI” (p. 556). It is worth noting that their study also confirmed previous research (Mayer & Geher, 1996) which suggests women score higher on EI than men. The issue of gender differences will be addressed further along in this paper.

The team of Law, Wong and Song (2004) also addressed the challenges of the EI construct and its measurement. In their study, they attempted to validate yet another EI instrument, the Wong and Law EI Scale (WLEIS) (Wong & Law, 2002, cited in Law, Wong & Song, 2004). Using confirmatory factor analyses (CFA) and multitrait-multimethod (MTMM) analyses, they found that EI (as measured by the WLEIS) is “related to but distinct from the big five personality dimensions” (p. 494). Much of the controversy around the EI construct is the question of whether EI is an ability or a personality trait. These authors suggest that if EI is in fact a skill, then self-report measures should not be used, despite the fact their study used the WLEIS, a self-report instrument.

The 2001 study of Morand attempts to measure at least one dimension of EI, specifically the ability to, “recognize emotional expressions displayed by others” (p. 21). In this study, respondents are presented with photographs of faces expressing any of the six so-called universal emotions: anger, happiness, surprise, fear, disgust, and sadness (p. 27). Morand hypothesized that women would outperform men. The study results indicated that women did in fact outperform men on the facial recognition task, specifically the author found a statistically significant difference at the p value <0.05 level with women scoring an average of 14.17 versus men, 12.48 (p. 29). Morand posited that, “proficiencies of a human relations leadership style may be bifurcated. That is, a critical distinction may exist between expressing emotion versus perceiving it in others…There exists a viable argument that these dimensions are quite independent of one another, indeed it is possible that being adept in one area may be inversely related to skill in the other” (p. 30).

In other words, one might be a poker player who may be good at reading the other players at the table and know who is bluffing, yet himself has a behavior that unintentionally informs others at the table, i.e., a tell. The author concludes, “the results indicate one facet of emotional intelligence, here operationalized as the accurate discernment of others’ emotional states, can be reliably measured at a non-verbal level in a laboratory setting” (p. 30).

With the several aforementioned studies in mind, the following studies attempt to validate or compare and
contrast many of the EI instruments. One study in particular by Conte (2005) examines several of the better known EI instruments. In this research, Conte reviewed the (1) Emotional Competence Inventory, (2) Emotional Quotient Inventory, (3) Multifactor Emotional Intelligence Scale, and (4) Mayer-Salovey Caruso Emotional Intelligence Test V.2. Conte held that there was no evidence of predictive and discriminant validity for the Emotional Competence Inventory. Similarly, Conte's analysis of the Emotional Quotient Inventory suggested that while there was, “adequate reliability and some validity evidence, it is lacking in discriminant validity evidence, and few studies have examined whether it provides incremental predictive validity above the contribution of established predictors such as cognitive ability and big five personality dimensions” (p. 435). Lastly, Conte took the Multifactor Emotional Intelligence Scale and the Mayer-Salovey Caruso Emotional Intelligence Test V.2, discussing them in tandem, since the latter was born of the former. In the final analysis, Conte offered little support for either of these instruments (p. 436). Conte concludes his analysis that, “because few EI researchers are willing to be specific about what they want to measure, it is difficult to examine content validity. Similarly, construct validity in the form of convergent and discriminant validity is lacking” (p. 437). He continues, “in sum, serious concerns remain for all of the EI measures, ranging from scoring concerns for ability-based EI measures to discriminant validity concerns for self-report measures” (p. 438).

A second work to review, by the team of Davies, Stankov and Roberts (1998), is noteworthy for the depth and breadth of their investigation into the EI construct. Over the course of three studies, they investigated “the psychometric status of emotional intelligence and determine whether it serves as a unique type of human ability” (p. 989). Among their several findings, the authors concluded that self-report measures of EI are “problematic for one of the following two reasons. First, some of the self-report measures have poor reliability….Second, all self-report measures having satisfactory reliability tend to load on well-known personality factors” (p. 1012). The authors further suggest that, “determining what is the correct response to an emotional intelligence test item presents practical and theoretical difficulties” (p. 1012). They conclude their findings by stating, “the three studies reported here converge on a conclusion that, as presently postulated, little remains of emotional intelligence that is unique and psychometrically sound” (p. 1013).

Finally, a third article, by the well-known researcher Edwin Locke, offers his review of the EI construct in his paper, Why Emotional Intelligence is an invalid concept (2005). The essence of his objections is rather straightforward. He suggests that emotions are an “automatic process based on subconsciously held knowledge and values” whereas “reason is the means of gaining and validating one's knowledge.” The point of this distinction he writes is that, “One cannot therefore reason with emotion, one can only reason about it” (p. 427). Locke saves his strongest words for the linkage of EI to leadership, especially by Goleman (discussed earlier in this article). Locke writes:

In addition to making the concept of EI-leadership preposterously all-encompassing, Goleman et al. seriously misconstrue what organizational leadership involves. They claim that ‘The fundamental task of leaders is to create good feelings in those they lead.’ This is simply not true. The function of organizations is to attain goals; in the case of private organizations the goal is long term profitability. Organizations, other than psychotherapy clinics, are not in the ‘feel-good’ business. Employee morale is important, but as a means to an end not as an end in itself divorced from effectiveness (p. 428).

The team of Brackett and Salovey (2006) attempted to rescue the EI construct with their validation study of the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) in 2006. They concluded that “EI, defined and operationalized as a mental ability with the MSCEIT, can be reliably measured and predict important psychological and behavioral outcomes (e.g., depression and peer reports of
relationships satisfaction)” (p. 40). These same researchers, however, pointed out that “mixed and perhaps unexpected findings with MSCEIT in organizational settings. Managing emotions scores on the MSCEIT were significantly lower for the highest ranked and highest paid among 59 senior executives in a large international production and service organization” (Collins, 2001 cited in Brackett & Salovey, 2006). These findings seem to question the proponents of EI when one ponders their preference for a higher EI score or a higher salary.

In 2008 the seasoned research team of Mayer, Salovey and Caruso once again tackled the question of EI in a paper entitled, Emotional Intelligence New Ability or Eclectic Traits. They begin their paper affirmatively stating, “Our principal claim is that a valid EI concept can be distinguished from other approaches” (p. 503). By the authors’ own admission and their five concluding recommendations, one may wonder what remains of the EI construct. Their 5 recommendations include:

(1) ...urge researchers and practitioners alike to refer to the scientific literature on emotions, intelligence, and emotional intelligence;

(2) ...emotional intelligence be limited to abilities at the intersection of emotions and intelligence;

(3) ...an EI refocus on research relevant to the ability conception of EI;

(4) ....widely studied personality traits...should be called what they are, rather than being mixed together in haphazard-seeming assortments and named emotional intelligence; and

(5) ....applications of EI must be conducted with much greater attention to the research literature, be grounded in good theory, and reject outlandish claims. (513,514)

Like so many other EI researchers, Mayer, Salovey and Caruso seem to struggle with the belief that EI exists, yet their belief appears conflicted by their own data. Their article seems to be predicated on flawed models, suspect measures and tenuous relationships between any numbers of variables. At this point, any reasonable reader or researcher would ask “why does the concept persist?” Yet, persist it does, and there have in fact been quite a few studies using a variety of these EI measures, replete with all the aforementioned weaknesses and limitations, all in an attempt to measure the impact of EI on any number of variables, such as performance. Below is a review of some of these studies.

Sy, Tram and O’Hara (2006) examined the relationship of EI to job satisfaction and performance. In this study of food service employees the authors found that employees with a higher EI score had a higher job satisfaction, with a reported R square of .06, p <.0001. EI was also positively correlated with job performance with a reported R square of .03, p <.001. These finding were however limited, as the authors point out, by the fact that the EI measure used was a self-report instrument and the performance measure was a subjective one, specifically performance was measured by managers. An objective measure of performance such as work output or revenue would strengthen these findings.

Marquez, Martin and Brackett (2006) examined the relationship of EI to social competence and academic achievement. Their study examined 77 high school students, using the MSCEIT instrument to measure student’s EI, the big five questionnaire (BFQ), the Factorial General Intelligence test, the Social-Cognitive Attitudes and Strategies test and finally, student’s final grades from science and humanities classes as a measure of academic achievement. This study is noteworthy for its ambition, and interesting to note that the BFQ measure was used as a control variable in their final analyses. This is commendable given the many concerns discussed earlier in this paper regarding the big five personality traits and correlation with various EI instruments. Nevertheless, the authors make their case for the MSCEIT’s discriminant validity since in their study they did not find significant correlation with neuroticism, extraversion and conscientiousness. Furthermore, the authors found that EI was significantly related to nine of the social
competencies measures and final grades (i.e., academic achievement). They also found associations between EI and self-confidence, prosocial behavior and academic grades while controlling for general intelligence.

Bastian, Burns and Nettlebeck (2005) examined EI, life skills, personality and cognitive skills. In their study of 246 first-year psychology students, they administered the Trait Meta Mood Scale (TMMS), the Assessing Emotions Scale (AES) and the MSCEIT. Additionally students completed Raven’s Advanced Progressive Matrices, an abstract reasoning measure, the Phonetic Word Association Test, Revised NEO Personality Inventory, the Satisfaction with Life Scale, the Anxious Thoughts Inventory, The Problem Solving Inventory, the COPE and finally the Tertiary Entrance Rank. Once again a very ambitious methodology is deployed, including a three-pronged approach to quite literally triangulate the EI construct. The ambitious attempt at measuring EI may be conflated, however, by the three different methodologies when they get to their statistical analysis. Specifically, the approach resulted in dimensionality of the TMMS and MSCEIT, requiring the study’s authors to cobble together a model using elements of the knowledge and management subscales from the MSCEIT and the TMMS subscales2. The authors concluded that EI, measured as such, predicted life skills; however, it did not predict personality or cognition. The reader should take special note of this study as an example of the difficulties in executing a study of EI, no matter how well intentioned the researchers.

The study by Brackett, Mayer and Warner (2004) examined EI and everyday behavior. Everyday behavior was measured using the Life Space scales which “assessed an array of self-care behaviors, leisure pursuits, academic activities and interpersonal relations” (p. 1387). EI was measured using MSCEIT. Subjects (n=330 college students) were also measured for their Big Five personality traits using the International Personality Item Pool. Among the study’s findings were that “In contrast to our expectations, EI was not related to many positive aspects of the Life Space….most of the correlations suggested an interaction between gender and EI as predictors of life space criteria” (p.1394). The authors concluded that “more research is needed to understand how EI is expressed in people’s lives” (1400).

Kerr, Gavin, Heaton and Boyle (2006) examined EI and leadership effectiveness. This study used the MSCEIT to measure the EI of supervisors (n = 38) and a second measure, given to the supervisor’s subordinates (n = 1258), to measure leadership effectiveness. The MSCEIT produces a total EI score as well as factor-level area scores for experiential EI and reasoning EI as well as factor-level branch scores for perceiving emotions, using emotions, understanding emotions and managing emotions. The authors noted that, “surprisingly both the understanding and managing emotions branch scores and their corresponding EI domain, did not display a significant relationship with supervisor ratings” (p. 272). They conclude that, “the ability to understand emotions and the ability to act effectually on this understanding may only be marginally related” (p. 275).

Barbuto, Gotfredson and Searle (2014) examined EI as an antecedent of servant leadership. In this study of civic leaders (n = 75) and followers (n= 401), a 30-item, self-report EI instrument was used which was developed by Carson et al. (2000 cited in Barbuto, Gotfredson and Searle 2014). Servant leadership was measured using the Servant Leadership Questionnaire. The authors’ findings suggested that EI was, “a good predictor of a servant leader’s servant-leader ideology but may not be a good predictor of servant-leader behaviors as rated by the leader’s followers” (p. 315).

Wong and Law (2002) examined the EI of leaders and the job performance of their subordinates. In this series of three separate and progressive studies, the authors first developed their own EI instrument. Wong and Law argued for their EI instrument’s reliability and validity based on their confirmatory factor analysis. They subsequently used their EI instrument in the two other successive studies, each looking at supervisor-subordinate relationships and its effect...
on job performance. They concluded that “no relationship between the EI of leaders and the job performance of their followers has been found” (p. 269).

The final two EI articles are framed in tandem, for they both use a meta-analysis approach and in fact build upon one another. The first by Joseph and Newman (2010) suggested that EI should follow a cascading model, where-in there is a set of sequential behaviors which ultimately impact job performance. The authors also excluded from their model, emotion facilitation because they feel, “…empirical research has shown a lack of empirical validity for the emotion facilitation facet” (p. 55). Their model suggests that emotion perception takes place first, followed by emotion understanding, followed by emotion regulation, and concluding with job performance. Because of their meta-analytic approach, the authors were able to examine the three different approaches to measuring EI, including (1) self-report mixed EI, (2) self-report ability EI and (3) performance-based EI. In their study they reported that, “although we report correlations of overall EI with personality, cognitive ability and job performance in Table 2 (omitted here), we warn that the concept of overall EI (averaged across the three construct-method pairings) is of limited conceptual value due to inconsistent and low correlations among some types of EI measures” (p. 65). In terms of their cascading model, they conclude that “much of the relationship between emotion perception and emotion regulation is mediated by emotion understanding” (p. 65). They continue their summary discussion, “Our further decision to omit self-reported mixed EI from the theoretical model is based on the fact that mixed EI is a muddled construct – an ill-defined composite of ability, personality, affect and possibly other poorly specified content” (Murphy, 2006 cited in Joseph and Newman). The authors concluded, “at worst, measures of ability models of EI show only a modicum of incremental validity over cognitive ability and personality traits, again providing evidence against Goleman’s (1998) expansive claims” (p. 69).

As a follow up, or perhaps as a response to the aforementioned meta-analysis, the team of O’Boyle, Humphrey, Pollack, Hawyer and Story (2011) conducted another impressive meta-analysis of the EI construct. While acknowledging the 2010 work of Joseph and Newman, this team set out to improve upon their work through several efforts including more than double the number of studies included in the current meta-analysis, testing for publication bias and using a recently developed statistical procedure, dominance analysis, which attempts to improve on other methods by providing more precision than beta weights in explaining the relative amount of total variance explained by all of a model’s factors.

Similarly to Joseph and Newman, the current team of O’Boyle, et. al. distinguished the various approaches to measuring EI describing them as three streams. Once again, the distinctions in how EI is measured are no small thing. “Ashkanasy and Daus (2005) argued that there are important theoretical and methodological reasons to distinguish among the three streams” (cited in O’Boyle, et. al., p. 792). The three streams are described as follows, “(1) A four-branch abilities test based on the model of EI defined in Mayer and Salovey (1997); (2) self-report instruments based on the Mayer-Salovey model; and (3) commercially available tests that go beyond the Mayer-Salovey definition” (cited in O’Boyle, et. al., p. 792). Among the reasons for concern are again, overlap across all three approaches with personality traits, i.e. the big five or Five Factor Model (FFM).

O’Boyle, et. al. tackled these concerns head on by positing that, “Although there is considerable debate among the advocates of the three different streams of EI research, there is good reason to believe that all three types of measures predict job performance” (p. 793). From this premise that all three streams will predict job performance, using the meta-analytic approach and dominance analysis the authors concluded that, “Overall, the present data did not offer support for claims that EI is the single most important predictor on job performance” (p. 804). They did, however, further conclude that all three streams of EI provided “additional explanatory power above and beyond the FFM and cognitive ability” (p. 803). Specifically, they found the stream 1
approaches explained 6.4 percent of the total explained variance with an $R^2 = 0.03$. Additionally, stream 2 approaches explained 13.6 percent of the total explained variance with an $R^2 = 0.065$. Finally, stream 3 approaches explained 13.2 percent of the total explained variance also with an $R^2 = 0.065$. These findings are discussed further below.

**Discussion**

The foregoing has traced an approximate 25-plus-year journey in the literature of the many varied and multifaceted attempts at defining, measuring and ultimately evaluating the utility of the EI construct. The results of these studies appear mixed. The just discussed meta-analyses above are illustrative of what seem to be many of the problems with the EI narrative. Both of these meta-analyses are built upon a seemingly shaky platform drawn from the literature, which is filled with qualifying statements, limitations and the usual requisite calls for further research (Cote, S. & Miners, C., 2006; Brackett, M. A. & Mayer, J. D., 2003; Murphy, K., 2009). Yet the researcher teams in both of these examples forge ahead, plugging into their model data gleaned from a virtual hodge-podge of populations and methodologies with no regard for the underlying weaknesses in the original studies.

Moreover, efforts such as the O'Boyle, et. al. teams, while heroic in their scale would seem to fall short of an aha moment. The suggestion that all Three Streams, regardless of the approach to measuring EI, all predict performance is rather misleading. The reader should look at the O'Boyle et. al. team's results. An $R^2 = 0.03$ is typically not considered a profound linkage, especially in the context of the much larger model of explaining performance. While one must first appreciate O'Boyle et. al.'s findings of a total $R^2$ for the Streams 1, 2, and 3 are .427; .474; .491, respectively, it also means that over fifty percent of the variance for performance remains unexplained in the current models. It is very possible, and very likely that further unmasking of other determinants of performance, for example, effort, clarity of goals, feedback, etc., would diminish even further any putative effects of EI. This further begs the question, at that level of significance, given all the other things a manager or leader would wish to work on, is EI really worth the effort?

The careful reader should recognize that there has been a constant changing and shifting of the EI definition and its measurement, and in many ways, the various schools of thought undermine each other, yet simultaneously reveal a universal truth: EI has not been defined, has not been measured, and has not shown a significant and meaningful casual effect on performance. It seems that even when a particular aspect of a given EI measure survives rigorous psychometric evaluation, its relationship to a meaningful variable, say for example, job performance, yields very little. On the other hand, the EI approaches that do “show promise,” the many so-called mixed models of EI, while often times showing some power at predicting job performance, quickly fall apart when scrutinized for psychometric validity.

If there is a consistent thread throughout the literature, it is a bias in the direction that there must be something there and that when that something is not detected, it’s always a case of needing more research or better measures or different populations. Rarely is it held out that things like performance are a function of effort, cognitive ability and personality, all of which are indeed quite measurable and known to predict performance.

There seems to be a few major points in the literature which do not appear to be in dispute. The very narrow skill of perceiving what a given emotion being expressed is generally better performed by women than men as pointed out above. There is strong evidence that emotion perception is rooted in one's neurobiology, meaning it is not a learned skill or behavior (Phillips, Drevets, Rauch & Lane, 2003). Similar to one who is colorblind, a person may or may not have a particular ability to see or not see certain things, including various emotions being expressed. It is a biological characteristic and one's natural ability varies. There is also a hierarchy in one's ability to perceive various emotions in others. Humans are hardwired to more accurately perceive anger in someone, than say sadness or happiness, the result of our Darwinian survival skills. Someone charging at us,
possibly wanting to harm us, is much more important information than someone with a smile on their face who wants to tell us a joke.

Finally, it is important to note the following unanswered questions (Mayer, et. al., 2001). Does EI and its purported casual effects transcend race? Does EI transcend cultural settings and cultural background? Does EI transcend organizational settings? Why do EI scores decrease as performance scores increase? What role do neurobiological factors have in emotion perception across age, gender, race and family history? These and many other unanswered questions demand that researchers, leadership and management educators, and practicing managers bridle their own enthusiasm over the seductive power and unmet promises made by the likes of Daniel Goleman.

Conclusions

There is a long and very illustrious line of academics with very well thought out arguments in favor of the EI construct. There are also quite a few notable academics who strongly suggest that there are several issues and concerns with EI, especially as it has been operationalized in the applied world of management and leadership. Nevertheless, the term Emotional Intelligence should not be used. Words have meaning. It is very clever, yet also very misleading, to couple a word like intelligence alongside the word emotion as a type of bait. People should not be induced into thinking EI is something they should want and that if indeed they don't have it, they are suffering some type of defect. The proponents of EI seem to have a psyche about them which blocks out any contradicting evidence. They should be cautioned. Imagine an employer who unwittingly screens out men or minorities because they are using an EI instrument as part of their selection process. If the goal is to teach good manners, teach good manners because it's the right thing to do, not because it will increase your performance or the performance of your subordinates. Mayer and Cobb (2000) reminded us, educational policy related to emotional intelligence is of considerable interest. The policies are well meaning and often executed through promising curricula devoted to socio-emotional learning. An examination of the emotional intelligence concepts in educational policy indicate some weaknesses in how that policy was formulated, however, and some serious lapses in how it is tied to science. Most centrally, the polices are based on popularizations of a very young science that is, at present, still developing support for its central hypothesis that emotional intelligence exists (p. 180,181).

All roads lead to Rome and many roads can lead to one performing at a high level and being an effective leader. Everyone is a unique individual capable of extraordinary things, and who we are and how we accomplish those things will always naturally vary. It is myopic to suggest everyone should fit into a very narrow model as to how to behave and respond to the behavior of others. Moreover, there is absolutely no proof that EI is a necessary pre-requisite to being an effective leader; the suggestion that it is, is patently false. Leading people is not about making them feel good. Leading people is about getting them to perform.

Think about emotions. The terms, ‘tears of joy’ or ‘nervous laughter’ are both oxymorons, yet we immediately see that underneath these expressions is the real possibility that one’s reaction to an event will be very different than another person’s. Conversely, is one’s ability to recognize that tears truly mean sadness anything more than an innate physical ability that is limited in its capacity for improvement? And indeed, do tears always mean sadness? Are tears the singular correct response to a given situation? And is empathy the truly correct response to those tears? Can someone be taught to be a better liar? Can someone learn how to tell who is lying and who is telling the truth? If the goal is to improve performance of one’s self or in one’s subordinates, they should be taught the skills needed for that job. If the goal is to improve performance, the focus should be on ef-
fort. How one feels about doing something over the long run may make them feel better or worse about doing the task, but skill is skill and effort is effort. Telling someone it’s ok if they feel bad about being late for work will not solve the problem of tardiness.

If the challenge is to describe the indescribable phenomena of what makes some great leaders great, there is already a word for that: charisma. If the challenge is to describe what it means to respond appropriately to someone else’s emotions, there is a word for that: maturity. However, no amount of maturity and no amount of charisma will replace skill, effort and intelligence in the ability to perform, lead and inspire others to perform.

References


FEMALE PARTICIPATION IN SPORT AS AN INDICATOR OF ECONOMIC SUCCESS
A Review of the Literature

Wanda Rutledge, John Donnellan, and Melanie McDonald

ABSTRACT

According to the United Nations Population Fund (2011), a higher number of women in the workforce correlate with higher gross domestic product (GDP) growth. In the next five years, the global incomes of women are expected to grow from US $13 trillion to US $18 trillion. That increase of US $5 trillion is almost twice the growth in GDP expected from China and India combined (EY, 2013b). Today, women have little access to seats in business boardrooms, even in developed markets. In many rapid-growth markets, women experience severe legal, cultural, and social restrictions against joining the labor force, along with the reality of having few or no rights to own property and limited access to education (EY, 2013b). Sport can be a powerful vehicle for change. The full participation of women in team activities such as sports nurtures the advanced leadership skills that the complex world economy so urgently needs (EY, 2013b). The United Nations Population Fund Report on Women, Gender Equality, and Sport (2007) determined that “the participation of women and girls in sport challenges gender stereotypes and discrimination, and can therefore be a vehicle to promote gender equality and the empowerment of women and girls” (p. 3). Through the analysis of literature, this paper will explore how the impact of sports participation by women can have on development, entrepreneurship, and social change in Nigeria and Zambia, two countries in Sub-Saharan Africa (SSA), considered by The Prosperity Index in Africa (2011), the second fastest growing region of the world after Asia.

KEY WORDS: women in the workforce, global female entrepreneurship, women and sport, sport leadership, women in Africa

Wanda Rutledge is Chair of the Management Department in the School of Business at New Jersey City University (NJCU), NJ, USA. Email: wrutledge@njcu.edu

John Donnellan is an Assistant Professor of Global Business at the New Jersey City University School of Business, NJ, USA. Email: jdonnellan@njcu.edu

Melanie McDonald is an Associate Professor in Management and the Faculty Liaison to the Dean’s Office for the New Jersey City University School of Business. Email: mmcdonald@njcu.edu

Introduction

In 2010, Aguirre and Sabbagh determined that nearly one billion women around the world could enter the global economy during the coming decade, equal to and just as significant as that of the billion-plus populations of India and China, leading them to dub this group of women the “Third Billion.” The Boston Consulting Group (2013) predicts that by the year 2028, women will control close to 75% of discretionary spending worldwide. “(para. 2)” 

There is compelling evidence that women can be powerful drivers of economic growth. Aguirre and Sabbagh’s (2010) estimates indicated that greater involvement from
women participating in the workforce, providing leadership roles in business, and promoting entrepreneurship has an impact far beyond the direct gross domestic product ratings. For example, Revenga and Shetty (2012) reported that women are more likely than men to invest a large proportion of their household income in the education of their children. As those children grow up, their improved status becomes a positive social and economic factor in their society. While there is enormous potential, there is a wide gap between that potential and the current reality. Aguirre and Sabbagh (2010) contended that closing that gap and propelling women forward can bring powerful positive change to the global economy. It is clear that addressing gender equality, closing the income gap, and in general, engaging some 50% of the world's population in greater participation in the global economy must take a multi-faceted approach.

This paper seeks to shed some light on the role that women's participation in sports can have in producing a positive impact on development, entrepreneurship, and social change in Nigeria and Zambia. In particular, women in sport leadership can shape attitudes towards women's capabilities as leaders and decision-makers, especially in traditional male domains (United Nations, 2007).

Sport has been a long-established male domain and the participation of women and girls in sport challenges a multitude of gender stereotypes, not only those that relate to physical ability but also those regarding women's roles in local communities and society at large. However, by directly challenging and dispelling misconceptions about women's capabilities, integrated sport programs are seen to help reduce discrimination and broaden the role prescribed to women (United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003).

Women around the world face significant discrimination and barriers to success in business, sport, and society at large. Nowhere have those inequities been quite so stark as Sub-Saharan Africa (SSA). Stringent social, cultural, and legal barriers have excluded more than half of the region's population in decision-making and full-participation in sports and in the economy. There is some reason to hope that many more leaders in government, business, non-government organizations (NGOs), and sports are coming around to agreement with Nelson Mandela who was frequently quoted as saying:

Sport has the power to change the world. It has the power to inspire. It has the power to unite people in a way that little else does. It speaks to youth in a language they understand [and creates] hope where once there was only despair. (Longman, 2013, para. 3)

Kelley, Brush, Greene, Litovsky, and Global Entrepreneurship Research Association (2013) found that the highest regional female Total Entrepreneurial Activity (TEA) levels can be seen in Sub-Saharan Africa, where 27% of the female population is engaged in entrepreneurship (40% in Zambia) and that on average, SSA and Developing Asia exhibit the greatest gender parity. Zambia and Nigeria are two SSA nations where women showed much greater confidence in their entrepreneurship capabilities. Kelley et al. (2013) found that four out of five women in Zambia and Nigeria say they have the skills necessary to start their own business. Figure 1 reflects the macro percentage view of regional TEA.

Perceptions of opportunity and capability are strongly linked to entrepreneurial activity, said VanderBrug (2013) in the Harvard Business Review's report on The Global Rise of Female Entrepreneurs. While it does not negate the influence of access to capital and property ownership, a sense of agency, self-empowerment and personal freedom constitute essential building blocks for starting a business. That perception of capability or confidence in their ability to succeed is one of the chief outcomes of women's participation in sports. An EY (2014) study of more than 800 female chief executives from more than 400 companies in 15 countries says the most important contributors to their current career success are persistence, ambition and drive, and con-
The report proposed the idea that if China and India each represent roughly one billion emerging participants in the global marketplace, the third billion represents women who are entering the mainstream economy for the first time. This notion grew out of their analysis of International Labor Organization data on women in the global workforce (Aguirre & Sabbagh, 2010).

According to EY (2013b), women own approximately one third of all businesses in the world, and nearly half of those businesses are in developing markets. Furthermore, the Boston Consulting Group (2013) predicted that by the year 2028, women will control close to 75% of discretionary spending worldwide.

A higher number of women in the workforce correlate with higher gross domestic product (GDP) growth,
according to the United Nations Population Fund (2011). In the next five years, the global incomes of women will grow from US $13 trillion to US $18 trillion. That incremental US $5 trillion is almost twice the growth in GDP expected from China and India combined (EY, 2013b).

While the economic potential is clear, Aguirre and Sabbagh (2010) further determined that approximately 860 million women worldwide are “not prepared” (lacking sufficient secondary education) and/or “not enabled” (lacking support from families and communities) to take part in the world economy. Most of these women are between the ages of 20 and 65, and nearly 95% live in emerging economies; the rest live in North America, Western Europe and Japan.

Entrepreneurship

One key factor in harnessing the potential of women worldwide is entrepreneurship. VanderBrug (2013) acknowledged that while increasingly a recognized force, women’s entrepreneurship still lags men’s in all but seven countries in the world. If women’s labor participation were closer to male participation, it would contribute US $1 trillion to GDP in emerging economies. Women-led businesses are key to this opportunity (VanderBrug, 2013).

Women face significant obstacles to starting their own businesses, not the least of which is their lack of confidence and fear of failure. Perceptions of opportunity and capability strongly link to entrepreneurial activity (Kelley et al., 2013). This means that if you think you will succeed and will be supported, you are more likely to try. In the US and developed Europe, women are 18% less likely to perceive they have the capability to start a business. While the difference is less for developing economies, in every economy women report being generally more afraid of failure than their male counterparts (Kelley et al., 2013).

In 2012, GEM, in the 14th study of its kind, surveyed 198,000 people in 69 countries. The GEM Women’s Report (2013) looked at 67 of those economies. In all but seven of the countries surveyed, women represent a minority of the nation’s entrepreneurs. The seven economies noted in the report where there are as many or more women as men entrepreneurs are Panama, Thailand, Ghana, Ecuador, Nigeria, Mexico and Uganda (Kelley et al., 2013).

In other findings, while more than 126 million female entrepreneurs were either starting or running new businesses in 2012 in the 67 countries measured, they are less confident about their abilities than men. In every economy studied, women reported lower perceptions of their entrepreneurial capabilities than men (Kelley et al., 2013). Women in developed regions of Asia show the lowest levels of confidence in their abilities. Only 5% of women surveyed in Japan say they have the skills necessary to start their own business.

If women have lower perceptions of their capabilities, then it is important to showcase the enormous opportunity for an enabling environment which would boost entrepreneurial activity rates. VanderBrug (2013) reported that “foundational to this environment are access to healthcare, education, land rights and affordable childcare. Just as critical are role models and mentors.” (para. 9) Another way for women to boost self-confidence has been directly linked to their participation in sports (United Nations, n.d.).

Women in Corporations

It is not just entrepreneurship where women prove their economic worth to the business world. Studies have repeatedly indicated that corporations with a higher proportion of women in top management show more successful growth in terms of a range of goals including operating results, employee satisfaction, public image, and stock price (Carter & Wagner, 2011; Credit Suisse Research Institute, 2012).

Although the number of female CEOs of Fortune 500 companies has doubled in the last decade, in 2012 it was still only 4% of the total. When the world’s industrialized economies are viewed as a group, just 11.1% of board directors are women, and in rapid-growth markets, that number falls to 7.2%, according to Governance Metrics International (GMI) (Hodgson, 2012).
The missed opportunity is all the more striking in light of the difference that empowered women, and the diverse viewpoints they bring, can make to the world. Closing the gender gap enables both public- and private-sector organizations to fuel measurable economic growth.

Research shows that women in leadership positions can enhance organizational performance in measurable, quantifiable ways. Consider these key benchmarks:

Organizational excellence: A study of 101 large corporations showed that companies with three or more women in senior management functions scored higher than companies with no women at the top on nine criteria of organizational excellence, including key factors such as leadership, accountability and innovation (Desvaux & Devillard, 2008).

Profitability: A study of eight Fortune 100 companies showed that diverse corporate boards correlated with higher profitability. The average return on equity for companies with a highly diverse board was 25%, compared to only 9% for companies with a uniform board (Chicago United, 2013). In another study, the 25 Fortune 500 firms with the best record of promoting women to high positions were between 18% and 69% more profitable than the median Fortune 500 firms in their industries (Adler, 2009).

Financial indicators: Among Fortune 500 companies, firms with the highest representation of women board directors outperformed those with the least, as measured by return on equity, return on sales and return on invested capital (53%, 42% and 66%, respectively) (Carter & Wagner, 2011).

Firm quality: Data on the top 1,500 US firms from 1992 to 2006 shows a strong correlation between firm quality as measured by Tobin’s Q (the market value of a company divided by the replacement value of its assets) and female participation in senior management (Dezso & Ross, 2008).

Innovation: A comprehensive study of 1,000 international teams found that innovation correlated positively with an equal gender ratio within work teams and correlated negatively with an unequal ratio (Gratton, Kelan, Voigt, Walker, & Wolfram, 2007).

Beyond the Boardroom

The economic advancement of women does not just empower them but also leads to greater overall prosperity. The idea has been a consistent theme in the literature of women’s issues, but it is typically argued with anecdotal rather than quantitative results. As Caroline Anstey, managing director of the World Bank, put it, “Gender equality is good in and of itself, and it is smart economics. But the first one of these alone never seems to convince anyone,” (Anstey, 2011, para. 36).

The findings of the research by Booz and Company (2010) related to their Third Billion Index strongly suggests that economically empowering women is the key to greater societal gains. Such a relationship indicates that positive steps taken by governments, non-government organizations, businesses, and other agents…intended to economically empower women not only contribute to the immediate goals of mobilizing the female workforce, but also lead to broader gains for all citizens, such as economic prosperity and improvements in health, early childhood development, security, and freedom. (Aguirre, Hoteit, Rupp, & Sabbagh, 2012, p. 15)

Revenga and Shetty (2012) recognized that closing the gap in well-being between males and females is as much a part of development as is reducing income poverty. Greater gender equality also enhances economic efficiency and improves other development outcomes.

Aguirre and Sabbagh (2010) defined broader indications of well-being, such as per capita GDP, literacy rates, access to education, and infant mortality. They indicate, however, that improving the economic lot of women in a country can generate benefits that transcend traditional gen-
nder boundaries and improve society at large. Revenga and Shetty (2012) agree and provided policy implications. They suggested that to bring about gender equality, policymakers need to focus their actions on five clear priorities: reducing the excess mortality of girls and women; eliminating remaining gender disadvantages in education; increasing women's access to economic opportunity and thus earnings and productivity; giving women an equal voice in households and societies; and limiting the transmission of gender inequality across generations (Revenga & Shetty, 2012).

These five priorities intersect with some of the eight Millennium Development Goals (MDGs) set forth by the 2003 United Nations Inter-Agency Task Force on Sport for Development and Peace that provided a report on sport as a tool for development and peace. The Agency noted that MDGs were: to eradicate extreme poverty and hunger; achieve universal primary education; promote gender equality and empower women; reduce child mortality and improve maternal health; combat HIV/AIDS, malaria, and other diseases; ensure environmental sustainability; and develop a global partnership for development. The report found that all areas of development can be influenced by sport, and women have been found to play an integral role in the achievement of every MDG (United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003).

The Role of Sport

Sport has been one of the most important socio-cultural learning experiences for boys and men for many years. Gerdy (2000) identified one of the primary reasons for the development of organized sport, particularly in schools, as the need expressed by business and industry leaders to socialize young men into productive workers for the growing industrial economic system at the beginning of the 20th century. Early US industrialists such as J.P. Morgan, J.D. Rockefeller, and Andrew Carnegie helped finance many public school athletic teams because they believed participation in sports would ultimately produce workers that were loyal, competitive, who responded to authority, and could work as part of a team (Miracle & Rees, 1998).

The connection between business and sports is reflected in a report by Fortune (Casey, 2014), that says 95% of Fortune 500 executives participated in high school athletics. Kniffin, Wansink, and Shimizu (2014) found that former student-athletes displayed significantly higher levels of leadership, self-confidence, and self-respect than those who were active outside of sports.

It cannot be surprising that the benefits men derive from participating in sports also accrue to women. EY (2013a) found that there is a direct correlation between women's participation in sport and their leadership capabilities. Some of the world's most senior women leaders participated in sports. International Monetary Fund head, Christine Lagarde, is a former member of France's synchronized swimming team. Condoleezza Rice, former US Secretary of State, was a competitive figure skater. Another former US Secretary of State, Hillary Clinton, played basketball, soccer, and softball. Brazilian President, Dilma Rousseff, played volleyball. PepsiCo CEO, Indra Nooyi, played cricket in India and baseball in the United States. DuPont CEO Ellen Kullman played lacrosse, softball, and college basketball. The co-founder of Marvell Technology Group, Weili Dai, played semi-professional basketball in China.

Sport is where boys have traditionally learned about teamwork, goal-setting, the pursuit of excellence in performance and other achievement-oriented behaviors - critical skills necessary for success in the workplace. The Women's Sports Foundation (WSF, N.d) asserts, “In an economic environment where the quality of our children's lives will be dependent on two-income families, our daughters cannot be less prepared for the highly competitive workplace than our sons,” (pp. 1-2).

The evidence for women athletes taking on leadership in the business world is compelling. A 2002 survey by Mass-Mutual Financial Group and Oppenheimer Funds, “From the Locker Room to the Boardroom: A Survey on Sports in the Lives of Women Business Executives,” revealed 80% of the women executives surveyed played sports growing up. The survey of more than 400 senior women executives found that:
86% say sports helped them to be more disciplined.

- 69% note sports assisted in the development of their leadership skills.
- 68% say sports helped them deal with failure.
- 59% believe sports gave them a competitive edge. (MassMutual, 2002)

A separate survey by Ernst and Young (2013a) of more than 800 women executives, found that a far greater proportion of women who occupy roles as CEO, CFO, COO, etc. (referred to as C-level positions) rather than lower-level managers had participated in sports at a higher level, especially at university or as a working adult. Nearly 67% of women now in C-level positions have participated in sports as working adults, compared with 55% of other female managers. The survey conducted in 2013, had more than 400 female executives throughout the world respond, with the top five countries consisting of Brazil, Canada, China, the United Kingdom, and the United States.

The majority of women executives say that a sport background can help accelerate a woman's leadership and career potential, and has a positive influence on hiring decisions. Furthermore, they believe the ability to motivate others is one positive outcome of playing sports, while the commitment to complete projects is another. Discipline as honed by sports also translates into positive corporate qualities, such as determination and work ethic. Women chief executives note that the most important contributors to their current career success are persistence, ambition and drive, and confidence, much of which they learned from their participation in sports (EY, 2014).

The respondents included 821 senior managers and executives (40% female, 60% male) who work at companies with annual revenues in excess of US $250 million. Together they represented 15 different countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Russia, South Africa, United Kingdom, and United States) and a wide range of industries including but not limited to agriculture, automotive, entertainment, media and publishing, government/public sector, financial services, and technology (Glass, 2013).

Additional research findings include:

- Ninety percent of women agree that teams are the best way to address increasingly complex business problems, while 82% agree that improving their organization’s ability to develop and manage teams will be essential for future competitiveness.

- When comparing C-level female respondents to other female managers, a far higher proportion had participated in sports at a higher level, especially at university or as a working adult. For example, nearly seven in ten (67%) women now occupying a C-level position had participated in sports as a working adult, compared with 55% of other female managers, while 55% of the C-suite women had played sports at a university level, compared with 39% of other female managers.

- More than three-quarters, or 76%, of women agree that adopting behaviors and techniques from sport in the corporate environment can be an effective way of improving the performance of teams (Glass, 2013).

![Figure 2. Female C-level Sports Involvement](image-url)
A United Nations 2007 report on Women, Gender Equity and Sports notes:

Over the past decade, there has been a growing understanding that access to and participation in sport and physical education is not only a right in itself, but can also be used to promote a number of important development goals through facilitating democratic principles, promoting leadership development, and encouraging tolerance and respect, as well as providing access to opportunities and social networks. All areas of development can be influenced by sport, including health, education, employment, social inclusion, political development and peace and security. (United Nations, 2007, p. 4)

World Focus on Women and Sport

In many parts of the world, women do not have equal access to sports. Yet there is clear evidence that participation on the playing field correlates with sizeable gains. The Women's Sports Foundation (n.d.) has long-term research that shows, for example, women and girls who participate in sports are less likely to take drugs, be overweight, suffer from depression and diabetes, engage in abusive relationships or have unwanted pregnancies. They are more likely to graduate from high school, earn postgraduate degrees and earn more money.

In 2003, the Secretary-General convened the United Nations Inter-Agency Task Force on Sport for Development and Peace that subsequently provided a report on Sport as a Tool for Development and Peace: Towards Achieving the United Nations Millennium Development Goals (MDG). The report found that all areas of development can be influenced by sport, including health, education, employment, social inclusion, political development and peace and security. Throughout the world, leaders in all arenas have also recognized the power of sport as a catalyst for social and economic development. Women have been found to play an integral role in the achievement of every MDG (United Nations Inter-Agency Task Force on Sport for Development and Peace, 2003).

Sport and physical activity were first specifically recognized as a human right in the International Charter of Physical Education and Sport, adopted in 1978 by the United Nations Educational, Scientific and Cultural Organization (UNESCO). The Charter states:

One of the essential conditions for the effective exercise of human rights is that everyone should be free to develop and preserve his or her physical, intellectual, and moral powers, and that access to physical education and sport should consequently be assured and guaranteed for all human beings. (UNESCO, 1978, p. 1)

Since then, governments, the United Nations system, numerous agencies and NGOs, as well as civil society have supported the notion of sport and physical education as a human right. Many have worked on a variety of initiatives, policies, and programs to encourage women to practice regular sport and recreational activities. There is much agreement that such efforts have a positive impact on women's health, well-being and fitness throughout the whole life cycle, and seek to ensure that women enjoy equal opportunities to practice sport, use sport facilities and take part in competitions.

The International Olympic Committee (IOC) is one such group that plays a central leadership role in the world of sport, and its policies set standards in international, regional and national sporting events and procedures. The IOC and its National Olympic Committees (NOCs) established
the Women and Sport Commission, to annually monitor the participation of women in the Olympics as well as their representation in decision-making. The Commission defines priority actions to increase the involvement of women. They initially set a goal of 20% women in decision-making roles by 2005 (Institute of Sport & Leisure Policy for the International Olympic Committee, 2004; International Olympic Committee, 2005; United Nations, n.d.).

Sixty-two percent of NOCs had achieved these targets by 2005. There were nine women NOC Presidents: five in Africa, three in Europe and one in the Americas; and there were 14 women Secretaries General: four in Europe, four in the Americas, three in Africa, two in Asia and one in Oceania. According to the IOC’s official website, Africa is leading the way for women’s leadership, and in 2005, the National Olympic Committee of Zambia became the second in the world to elect women as both President (Miriam C. Moyo) and Secretary General (Hazel M. Kennedy) (Institute of Sport & Leisure Policy for the International Olympic Committee, 2004; International Olympic Committee, 2005; United Nations, n.d.). It is the leadership shown by Africa in the promotion of women to leadership roles in sport governing bodies which provides some hope that this vision can be duplicated in other aspects of women’s lives.

Women of Africa (Nigeria and Zambia)

According to The Prosperity Index of Africa (2011), the entrepreneurial landscape in Africa is multi-faceted. It includes informal and formal sectors, traditional and modern, as well as local and foreign-owned enterprises, all of which are geographically dispersed across rural and urban areas. It ranges from small enterprises (providing employment for a single individual) to large corporations (employing hundreds). Small and Medium-sized Enterprises (SMEs), however, are the dominant form of entrepreneurial activity in sub-Saharan Africa (SSA). SMEs constitute around 90% of SSA business operations and create over 50% of employment and GDP (Roxburgh, Dörr, Leke, Tazi-Riffi, van Wamelen, Lund, Chironga, Alatovik, Atkins, Terfous, & Zeino-Mahmalat, 2010).

In the recent decades, most SSA countries have seen economic growth rates surpassing those of Western Europe, the United States and even some Asian countries. SSA is now the second fastest growing region of the world after Asia. The informal economy represents more than 70% of economic activity in most SSA countries and women are responsible for the largest percentage of players in that informal economy, some 70% according to Roxburgh et al. (2010). Kermeliotis and Veselinovic (2014) noted that “sub-Saharan Africa is the region with by far the highest number of people involved in early-stage entrepreneurial activity, with Zambia and Nigeria leading the world rankings” (para.5). They further state that African women from Nigeria, Zambia, and Ghana are leading the world in the number of women starting businesses, with almost equal levels of male and female entrepreneurs (Kermeliotis & Veselinovic, 2014).

McCarthy (2014) found one in seven adults worldwide (14%) who are not already business owners said they plan to start their own business in the next year. Entrepreneurial intent was highest in SSA. Entrepreneurial intentions tended to be highest in regions where many new businesses are born out of necessity rather than opportunity. SSA and the Middle East and North Africa region, where 23% planned to start a business, had the lowest Payroll to Population (P2P) employment rates in the world in 2013.

Also significant in this review is the United Nations Population Fund (Das Gupta, Engelman, Levy, Luchsinger, Merrick, Rosen, & Castle, 2014) reports that demographic transition occurs when a population shifts from high fertility rates and high mortality rates to low fertility rates and low mortality rates. They report there has historically been a window of rapid economic growth in countries experiencing the demographic transition, a benefit called the “demographic dividend.” This accelerated growth occurs when a country’s working age population grows larger than the non-working age population, creating a more productive economy where a state faces fewer costs associated with non-workers, like children and the elderly.
The United Nations Population Fund (Das Gupta, et al., 2014) identified a way forward, saying the successful implementation of policies that empower women and girls and promote gender equity in social and economic environments are vital to securing the demographic dividend. Nigerian and Zambian students have “unanimously called for the empowerment of women as one of the ways of ending modern day slavery where girls are the target” (United Nation Information Centres, 2015, para. 1). Nigeria and Zambia are two nations poised to take advantage of the demographic dividend, provided their women receive the support needed.

According to Forbes (2013), Nigeria and Zambia account for 20% of the 20 Young Power Women in Africa (Figure 3). This provides further positive correlation that these two regions are poised to grow as a result of young power women through entrepreneurial endeavors and continued C-level boardroom control. The reality is “women make up just over 50% of Africa’s growing population and their under-representation in social, political and economic spheres must be addressed if Africa is to leverage fully its promise and potential (EY, 2011, p. 7).

On the other extreme, Nigeria has three placements on the Forbes list of the 20 Young Power Women in Africa 2013; Tara Fela-Durotoye, Founder, House Of Tara; Ola Orekunrin, Medical Doctor and Founder, The Flying Doctors; and Folake Folarin-Coker, Fashion Designer. It is also a nation whose women have made inroads into athletics and into such traditional male sports as soccer, combat sports (such as judo) and weight lifting. At the Atlanta Olympics in 1996, Nigeria’s female athletes won one gold, one silver, and two bronze medals. The first individual gold medal won by Nigeria after 38 years of Olympic participation was by the female long jumper, Chioma Ajunwa. In an analysis of gold medals won by Nigerians in all the African Games since inception, Nigerian men have won 28 gold medals; their female counterparts have won 57 medals (Audu, 1999).

The International Platform on Sport and Development (2013) report on The Role of Sport in Addressing Gender Issues, notes evidence from post-apartheid South Africa shows that young women from different backgrounds could use football as a platform to engage with one another, mentor each other, as well as develop friendships and strengthen relationships. Similar findings from Nigeria suggest that sport

Women, Sport, and Business Development in Nigeria and Zambia

Nigeria is a nation of contrasts. It is home to the notorious Boko Haram, a militant Islamist group known for its many human rights abuses, including the abduction of more than 5,000 women and girls over the past five years. A poor nation within the SSA, Nigeria experiences high fertility rates, and a lack of education (some 36% of adolescent girls not in secondary school, compared to 7.39 in Latin America and the Caribbean). The United Nations Population Fund (Das Gupta, et al., 2014) has identified Nigeria is a country that could reap significant benefits from the demographic dividend with the proper investments in human capital. They say the successful implementation of policies that empower women and girls and promote gender equity in social and economic environments are vital to securing the demographic dividend.

Figure 3. Power Women in Africa

Figure 3. Reflects the percentage of Africa’s most powerful women. Adapted from Forbes by M. Nsehe (2013, December 4). Retrieved from http://www.forbes.com/sites/mfonobongnsehe/2013/12/04/the-20-young-power-women-in-africa-2013/
plays a crucial role in enhancing social cohesion and encouraging social interaction among young women and girls.

Zambia, although smaller than Nigeria in SSA, is similar with regard to the challenges their women face with regards to full participation in sports and business opportunities. In 2005, the National Olympic Committee of Zambia became the second in the world to elect women as both President (Miriam C. Moyo) and Secretary General (Hazel M. Kennedy), according to the official website of the IOC. Zambia placed one woman on the Forbes list of the 20 Young Power Women In Africa 2013 (Monica Musonda, Chief Executive Officer and Founder of Java Foods) (International Olympic Committee, 2005).

Whether because of, or in spite of, the challenges women in Nigeria and Zambia face, they have shown remarkable resilience and confidence in their ability to start a business. Some 44% of the population in Zambia and 41% in Nigeria intended to start their own business (McCarthy, 2014). Additionally, unlike much of the rest of the world, women in SSA showed much greater confidence in their entrepreneurship capabilities. Kelley et al. (2013) found that four out of five women in Zambia, Malawi, Ghana, Uganda and Nigeria say they have the skills necessary to start their own business. Part of the higher levels of confidence in SSA is because almost 60% of women report that they know other women entrepreneurs (Kelley et al., 2013). The entrepreneurship confidence levels in SSA are also related to the types of businesses being started, often small, necessity-driven, and consumer-oriented with few or no employees.

In terms of entrepreneurship, the International Labour Organization released a seminal report in 2003 on Zambian women entrepreneurs. Their demographic profile shows many of the women had similar characteristics in terms of age (45% were between 41-50 years old); education level completed (46.2% had completed college or university vs. only 20% at the national level); marital status (71% were married - 96% of them in a monogamous type in a nation where 10% live in polygamous marriage); number of children (72% have between 1-4 children vs. the 6.1 national average fertility rate), and work experience (89% had been employed in the formal sector, a small or medium enterprise or self). These women entrepreneurs emphasized the need to develop certain qualities that they felt necessary for success as an entrepreneur, such as self-confidence, assertiveness, discipline, hard work, determination, perseverance, courage, being proactive and readiness to fight (International Labour Organization Office, Lusaka, and Gender in Development Division, Cabinet Office, 2003).

These qualities are significantly enhanced through participation in sports. Research among young women in South Africa indicated that athletes from one sample were more likely to have fewer children than non-athlete females from the same region (International Platform on Sport and Development, 2013).

When girls participate in sports they are more likely to attend school and participate in society. When women and girls can walk on the playing field, they are more likely to step into the classroom, the boardroom, and step out as leaders in society.

Sport is one of the best tools for social change because it is a large part of cultures around the world and reaches into every socioeconomic class of society. If laws are put in place, the benefits will be beyond measure. Sport helps develop self-esteem and confidence, improves physical and mental well-being, serves as a medium of communication, and empowers women to improve themselves and their communities. Nawal El Moutawakel, the first Olympic gold medalist from Morocco (1984 Olympics - hurdles). (EY, 2013b, p. 3)

Studies in the United States, for example, have also pointed to a positive relationship between girls’ participation in sport, positive attitudes towards education and higher academic achievements, girls being more likely to finish high school and college (Barber, Eccles, & Stone, 2001; Bailey,
Wellard, & Dismore, 2004). Using the concept of self-esteem, girls and women who participate in sport and physical activity in both developed and developing countries demonstrate higher self-esteem as well as improved self-perception, self-worth, and self-efficacy (Oglesby, 2007). Evidence is especially strong from developing countries like Zambia and Nigeria, which indicates that involvement in organized sports activities helped to enhance girls’ sense of agency, self-empowerment and personal freedom (International Platform on Sport and Development, 2013).

**Future Research Considerations**

This analysis of literature provided evidence of a positive relationship between sports and increased self-esteem and self-confidence in women and girls. Furthermore, a clear relationship was outlined between women and advancements in entrepreneurship and C-level involvement due to their sports training.

Some limitations are inherent in this study and are topics for future research. One is the lack of empirical data to illustrate entrepreneurial and C-level involvement at the regional level. A second expands on the prior in that there is limited data to support country level involvement in Africa with the exception of Nigeria and Zambia. This study would be enhanced by surveying a sample of female entrepreneurs in Nigeria and Zambia who have started businesses in the past 10 years. Such a survey could determine their level of participation in sport and inform the affect, if any, greater access to sport has made on their lives.

**Conclusion**

Sport plays a vital role in laying the foundation for developing women’s capabilities. A United Nations report points out:

The participation of women and girls in sport challenges gender stereotypes and discrimination, and can therefore be a vehicle to promote gender equality and the empowerment of women and girls. In particular, women in sport leadership can shape attitudes towards women’s capabilities as leaders and decision-makers, especially in traditional male domains. (United Nations, 2007, p. 3)

Sport can be an important tool for social empowerment through the skills and values learned, such as teamwork, negotiation, leadership, communication and respect for others. The social benefits of participation in sport are thought to be especially important for girls, given that many girls, particularly in adolescence, have fewer opportunities than boys for social interaction outside the home and beyond family structures (Oglesby, the International Working Group on Women and Sport, & Women Sport International, 2007; WSF, n.d.).

The existing Western, arguably global, business model is a male model of organizational structure and human relationships. Men learn the rules of human organizations and interactions from sports in which they compete as boys. Sport is one of the most important socio-cultural learning environments in our society and, until quite recently, has been reserved for boys and men. Today women who do not know the written and unwritten rules of sport are at a disadvantage in understanding business models of organization based on sport. It is critical that women and girls learn the same rules as men and boys (WSF, n.d.).

The great potential of women has yet to be realized. In both developed and emerging economies, women are vastly underrepresented in leadership roles and in many aspects of business, social and political life. Sport can be an energizing factor in society, yet in many countries women and girls do not have access to sporting activities and do not play a significant part in sports’ ruling bodies, according to the 2005 Parliamentary Assembly, Council of Europe Report, Discrimination against women and girls in sport (Committee of Ministers, 2005).

For women, having opportunities and choices early in life is particularly vital. Ensuring that girls are educated to the same level as boys in developing countries means that the world’s economy could be improved by U.S. $92B a year (Ernest & Young, 2013b). The benefit lasts for generations.
Children of educated mothers, especially daughters, are more likely to be enrolled in school and to have higher levels of educational attainment.

Women and girls who participate in sports, acquire new interpersonal networks, develop a sense of identity and access new opportunities, allowing them to become more engaged in school and community life, to enjoy freedom of expression and movement, and increase their self-esteem and self-confidence. These are the foundational components that can lead to a seat in the boardroom or to becoming a successful entrepreneur. For SSA, particularly Nigeria and Zambia, encouraging greater participation by women in sports can have a significant economic dividend.

References


ABOUT THE EDITOR

DR. HAMID H KAZEROONY, Managing Editor of the Transnational Journal of Business, joined ACBSP as Editor in August 2014. He is based in Minneapolis, Minnesota. Dr. Kazeroony has served as the ACBSP Co-champion for Inver Hills Community College and as evaluator and mentor for ACBSP. He is the chair of the Membership Committee and the Executive Committee Member for Diversity and Inclusions at the Academy of Management; co-chair for Gender & Diversity Track at the European Academy of Management; and his last co-edited book titled Sustainable Management Development in Africa: Building Capabilities to Serve African Organizations expands African indigenous scholars’ work, and was published by Routledge. He has a Doctorate in Management and MBA Degree in Global Management from University of Phoenix, Arizona; a Master Degree in Political Science from California State University, Fullerton; and a Baccalaureate Degree in Political Science from California State University Polytechnic, Pomona. His recent books include: The Strategic Management of Higher Education Serving Students as Customers for Institutional Growth, The Routledge Companion to International Management Education, and Capitalism and the Social Relationships: An Organizational Perspective.

Dr. Kazeroony’s academic career began in 1992, working as an adjunct math instructor at Cochise County Community College in Douglas, Arizona, donating his income to students’ scholarship on behalf of his Kiwanis Club, for which he served as president. Dr. Kazeroony has taught and worked at various for –profit, non-profit, and public institutions, teaching at 2-year, 4-year, 6-year, and doctoral programs in the US, South Africa, and China. Dr. Kazeroony currently serves as Business Professor at Inver Hills Community College, Inver Grove Heights, Minnesota and is a contributing faculty at Walden University for the Management PhD program.

Dr. Kazeroony’s professional career, before moving to academia full time in 2007, included 22 years of experience in retail turn-around management, the financial industry, retail consulting, and for-profit educational administration.
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