# Marshall University Marshall Digital Scholar

Theses, Dissertations and Capstones

1-1-2012

## Emotional Intelligence and Team Cohesiveness

Myra M. Beam myramarie37@yahoo.com

Follow this and additional works at: http://mds.marshall.edu/etd

Part of the <u>Developmental Psychology Commons</u>, <u>Industrial and Organizational Psychology Commons</u>, <u>School Psychology Commons</u>, and the <u>Social Psychology Commons</u>

## Recommended Citation

Beam, Myra M., "Emotional Intelligence and Team Cohesiveness" (2012). Theses, Dissertations and Capstones. Paper 303.

This Thesis is brought to you for free and open access by Marshall Digital Scholar. It has been accepted for inclusion in Theses, Dissertations and Capstones by an authorized administrator of Marshall Digital Scholar. For more information, please contact zhangj@marshall.edu.

## EMOTIONAL INTELLIGENCE AND TEAM COHESIVENESS

A thesis submitted to the Graduate College of Marshall University

In partial fulfillment of the requirements for the degree of Education Specialist

School Psychology

by

Myra M. Beam

Approved by

Stephen O'Keefe, Ph.D., Committee Chairperson Fred Jay Krieg, Ph.D. Sandra S. Stroebel, Ph.D.

Marshall University

July 2012

## **Table of Contents**

Table of Contents	ii
Abstract	iv
Chapter I: Review of Literature	
Exploring Emotions	1
Theories of Emotional Intelligence	4
Gender and Emotional Intelligence	7
Emotional Intelligence and its Role in Teamwork	8
Other Factors That Influence Teams	13
The "Input" Phase	13
The Team Process	16
The "Output" Phase	18
Tying it All Together	18
Purpose of the Study	19
Chapter II: Method	
Participants	21
Program Description	21
Instruments	21
Bar-On Emotional Quotient Inventory (EQ-i)	22
Team Ratings	23
Chapter III: Results	25
Chapter IV: Discussion	26
Limitations	27
Appendixes	29
Appendix A: Letter from Institutional Research Board	29

References	30
Curriculum Vitae	35

#### **ABSTRACT**

Emotional Intelligence is generally defined as encompassing the awareness and understanding of emotions. Emotional Intelligence also incorporates the application of this understanding to decision making, regulation, and self-management. Many theorists have shown that Emotional Intelligence has a significant positive impact on various aspects of teamwork. Today, more companies and organizations use teamwork to solve problems and complete tasks, so exploring elements that enhance teamwork would be beneficial.

This study was designed to support the notion that Emotional Intelligence is an integral part of teamwork. It was hypothesized that Emotional Intelligence has an impact on teamwork by making the team more cohesive. A Spearman's rho score was calculated between the individual's Total Emotional Quotient (EQ) score and his/her team rating. The analysis showed that there was a moderate positive correlation (r=.415) between an individual's Total EQ score and his/her team cohesion rating. This result indicates that as a person's Total EQ score increases, so does his/her team's cohesion rating.

## Chapter I

#### **Literature Review**

## **Exploring Emotions**

Numerous emotions can be experienced, such as anger, joy, fear, happiness, and many more. Emotions have been studied for centuries, but recently theorists and researchers have gained more interest in exploring emotions and the effects they have upon people and situations (Lewis, Haviland-Jones, & Barrett, 2008). Various theories about emotions share common ground in the disembodiment and conceptualization hypotheses (Spackman & Miller, 2008). The disembodiment hypothesis states that emotions are distinct from the body's physiological effects. These bodily effects follow and are caused by a particular emotion. The somatic states that are caused by emotions are necessary and are derived from the cognitive aspects of an emotion. A second theory is the <u>conceptualization hypothesis</u>, which embodies the cognitive aspects of emotions. This theory suggests that emotions can be explained in terms of cognition and that cognition is the central facet of emotions. Emotions are mental processes and representations that influence and are influenced by thoughts, attitudes, perceptions, beliefs, appraisals, or criticisms. Therefore, mental representations and interpretations are central to emotions (Spackman & Miller, 2008).

Emotions can also present themselves as influential driving forces for the individual. Emotions can affect a person's decisions, thoughts, actions, moods, and even his or her physiological state. "For most healthy individuals, we assume that emotions

convey knowledge about a person's relationship with the world" (Salovey & Sluyter, 1997, p. 9). Emotions present themselves as experiences within one's mind due to unique situational interpretations. Other theorists also recognize an oral aspect of emotions. An oral aspect of an emotion can be seen when a person connects with emotion and expresses it with speech in a meaningful manner. Emotions "include a distinctive cognitive component, a specified social context, a behavioral tendency, and recognition of physical arousal" (Lewis et al., 2008, p.5).

An emotion is also an individual experience. It is a personal experience in the sense that Student A cannot feel "happy" in the precise way that Student B does.

Accompanying this individualized experience is the feature that emotions are influenced by a person's interpretation of his or her present situation. The way in which a person interprets a situation he or she is presently experiencing will ultimately affect his or her emotions about the situation. Emotions can also have a positive, negative, or possibly neutral feature that accompanies them. We seek experiences that give positive emotions and avoid those that are accompanied by negative emotions (Magill, 1993).

There is also a physiological response to emotions, a response, which causes a person's body to react in a way that is congruent to the emotional feeling. In most instances, when people become nervous or anxious, their sweat glands will be activated and their heart rate will increase. Conversely, if they are happy they may smile. These physiological states are either a reflexive or a learned response. In addition, emotions can vary in intensity from the way they are experienced to the way they are expressed; for example, fear can intensify into terror. Similarly, anger can escalate into rage (Lewis et al., 2008; Magill, 1993).

"Psychologist Robert Plutchik contends that there are eight innate, primary emotions: joy, anticipation, anger, disgust, sadness, surprise, fear, and acceptance" (Magill, 1993, p.894). Each of these emotions can be combined to produce what are called secondary emotions. In addition, each combination has a varying intensity level that leads into further levels. This blend leaves the number of emotions running into the hundreds (Magill, 1993). Alternatively, in considering of all of the emotions we can experience, one must take into account that an emotional experience can be culturally shared, "universal," or unique to one culture. For example, *amae* is a unique emotion within the Japanese culture that best describes an urge or desire for something, more particularly the desire for love or compassion (Rorty, 1980).

When a person is currently experiencing an emotion, it is referred to as an emotional state. These emotional states manifest themselves in a physiological form called emotional expressions. If a particular emotion is experienced and presented more often than any other emotion, that particular emotion is referred to as that person's trait emotion. Additionally, emotional intensity refers to the strength of a particular emotion (Lewis et al., 2008).

Emotions have functions. They are not only purposeful but also enlightening and informative. They greatly affect decisions, behaviors, and communications with others. As emotions involve us so immensely, it is vital that they be understood and used effectively (Rorty, 1980; Ulutas & Ömeroğlu, 2007). An understanding of emotions and the ability to use them to understand and direct decisions, behaviors, and communication is the basis of theories of Emotional Intelligence.

## **Theories of Emotional Intelligence**

Howard Gardner is known for his theory of multiple intelligences in which he proposed that people possess intrapersonal and interpersonal intelligence among other types of intelligences. Gardner described intrapersonal intelligence as the ability to access and understand feelings and emotions and use this knowledge to guide and understand behavior (Gardner, 1998). He described interpersonal intelligence as the ability to read and understand other people's moods, temperament, and motives. Using this knowledge to guide communication and decisions is also part of interpersonal intelligence (Hetherington & Parke, 2003).

Only in the past decade or so has the study of Emotional Intelligence begun to emerge. Since then, several theorists have studied Emotional Intelligence and developed their own definition and construct for measuring this ability. For the most part, these theories can be placed into two different models. One is the ability model, which includes Mayer and Salovey's theory on Emotional Intelligence. The other model is referred to as a mixed model because it includes other constructs that are believed to influence one's Emotional Quotient (EQ). Daniel Goleman and Reuven Bar-On are theorists who can be placed into this mold. With these differing perspectives, all three major theories overlap in important ways (Downey, Mountstephen, Lloyd, Hansen, & Stough, 2008).

Mayer and Salovey first formally defined Emotional Intelligence when they theorized about a person's management of emotions. They expanded on Gardner's theory of intrapersonal and interpersonal intelligence theory by hypothesizing that there

were five subdomains included in Emotional Intelligence (Joseph & Newman, 2010; Mayer, Salovey, & Caruso, 2004; Polat & Ulusoy-Oztan, 2009). "Emotional Intelligence involves the ability to perceive accurately, appraise, and express emotion; the ability to access and/or generate feelings when they facilitate thought; the ability to understand emotion and emotional knowledge; and the ability to regulate emotions to promote emotional and intellectual growth" (Salovey & Sluyter, 1997, p.10). This model is referred to as the ability model because there are psychological processes that are involved in acquiring Emotional Intelligence and one's abilities move upward to the highest level with development, experience, and enrichment (Downey et al., 2008).

The Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) is based upon their particular theory of Emotional Intelligence and uses multiple facets to assess one's ability to perceive emotions and to understand and manage those emotions. The MSCEIT does not use a self-report but, instead, asks respondents to react to situations that involve emotions and then measures how that person reacts to that situation. In addition, it measures the extent to which people solve emotional problems and how they do so, their understanding of different emotions, and how they include emotions in problem solving (Mayer et al. 2004).

Goleman's theory emerged a few years after Mayer and Salovey. Credit is given to Goleman for making the notion of Emotional Intelligence popular. He presents another definition of Emotional Intelligence that can be categorized as a mixed model of Emotional Intelligence. He states that Emotional Intelligence is an ability that one acquires. His theory includes "zeal" and "persistence" and can be associated with personality theories (Murphy & Janeke, 2009). Goleman theorized that Emotional

Intelligence consisted of varying dimensions. These dimensions can be divided into two subgroups: interpersonal relationship management and self-management. Each of these subgroups is comprised of self-management, awareness of self, zeal, empathy, persistence, social skills, and finally, social awareness (Hamarta, Deniz, & Saltali, 2009; Shelton, 2000). Goleman included "abilities such as being able to motivate and persist in the face of frustrations; to control impulse and delay gratification; to regulate one's moods and keep distress from swamping the ability to think; to emphasize and to hope" in his definition of Emotional Intelligence (Feyerherm & Rice, 2002, p. 344). Goleman puts a strong emphasis on Emotional Intelligence and success in life, relationships, and work, and academic-related activities (Shelton, 2000). He also "states that the ability to manage troublesome emotions is highly significant of emotional health, and he adds that extreme and everlasting emotions destroy Emotional Intelligence" (Polat & Ulusoy-Oztan, 2009, p.3).

Reuven Bar-On presents another model of Emotional Intelligence that can also be classified under a mixed model. His model incorporates a social competency aspect as well as the ability to manage stress. Bar-On defines his Emotional and Social Intelligence model as "a cross-section of inter-related emotional and social competencies that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands and pressures" (Bar-On, 2004, p.77). His model encompasses five key components: 1) interpersonal, which involves self-regard and self-awareness, 2) intrapersonal, which includes social responsibility and empathy, 3) adaptability, which encompasses one's problems solving abilities, 4) stress management, and 5) general mood-- defined by a level of optimism and pessimism

(Murphy, 2009). Bar-On states that each of the previous constructs affect intelligent behavior. Also, in this model, the idea of self-motivation can be viewed as a catalyst for emotionally and socially competent behavior (Bar-On, 2004; Murphy, 2009).

Bar-On constructed an Emotional Intelligence measure called the Emotional Quotient Inventory (EQ-i). To date, this is the most comprehensively normed assessment and has proven to be valid and reliable. This assessment is a self-report, presented in the form of a Likert-type scale. The participant's scores provide a total Emotional Quotient (EQ) score as well as five composite scale scores. These composite scales include intrapersonal, interpersonal, stress management, adaptability, and general mood. This assessment also produces validity scores that include an inconsistency index, omission rate, positive impression, and a negative impression score (Bar-On, 2004).

Between Mayer and Salovey, Goleman, and Bar-On's theories, there are significant similarities between them that all combine to form a general outline of Emotional Intelligence. Each theorist believes that Emotional Intelligence involves the awareness and understanding of one's emotions as well as the emotions of others.

Another commonality between their theories is the need for emotional regulation and self-management. Emotional Intelligence affects one's relationships with others, work performance, and overall success, so the use of emotional information is another part that comprises Emotional Intelligence.

### **Gender and Emotional Intelligence**

For the most part, Emotional Intelligence and its relation to gender has not been extensively studied. Generally, men and women have very different styles when it comes

to understanding, handling, and expressing their emotions and each has its own strengths and weaknesses. The upbringing of men and women is one aspect that is influential in the development and difference of Emotional Intelligence in men and women. Research has shown that the mothers of young girls are more prone to talk to their daughters, as opposed to their sons, about emotions (Brackett et al., 2006). One could also observe that societal roles require men to express their emotions differently from women.

Men and women have significant differences in their emotional intelligence scores on the MSCEIT (Brackett et al., 2006). They also showed "females had higher mean scores than males with respect to acknowledging and reflecting on emotions" (Brackett et al., p.57). In addition, women were more apt to regulate the emotions of others, as well as their own emotions, when compared to males (Mandell & Pherwani, 2003).

These studies show that there is a difference between the Emotional Intelligence of men and women. However telling this is, there is still a point of debate as more research needs to be completed in the specific domains of Emotional Intelligence. Now it is safe to say that, for the most part, women have a more "developed" Emotional Intelligence level than men do (Pettit, Jacobs, Page, & Porras, 2009; Mandell & Pherwani, 2003).

#### **Emotional Intelligence and its Role in Teamwork**

Many organizations today have moved toward a more collaborative way of working using teamwork. To date, a team approach is proving to be the most effective way to share ideas and create the most efficient and reliable results. Teams can utilize

solutions that are more creative and increase productivity because they use the power of several people instead of relying on one (Gratton & Erikson, 2007).

Teams are most effective when all members participate and collaborate with one another, assuming that the members have already developed a team identity, mutual trust, and a feeling of efficacy (Druskat and Wolff, 2001). One model of team effectiveness includes a claim that Emotional Intelligence is necessary for a team to build an identity, mutual trust, and feelings of efficacy, thereby becoming a successful collaborative team. Druskat and Wolff (2001), state that Emotional Intelligence is not the only factor that makes an effective team, but is more of a foundation upon which to build a team. They divide Emotional Intelligence within a team into three divisions:

- "Members being aware of their own emotions, as well as the other members emotions, and understanding how that affects the team process,
- Members being aware of the emotions and moods that the team experiences as a group,
- 3. Members being aware and understanding the emotions of those individuals that are not in the team" (Feyerherm & Rice, 2002, p. 345).

In addition to these levels of Emotional Intelligence within the team, Druskat and Wolff (2001) state that Emotionally Intelligent teams build norms based upon the understanding and awareness of emotions. Emotionally intelligent norms are created so that members can recognize emotions, bring them to the surface, and "understand how they affect the team's work" (Druskat & Wolff, 2001, p.83). These norms also build the foundation for the way that team members act in a group "behaving in ways that build

relationships both inside and outside of the team and that strengthen the team's ability to face challenges" (Druskat & Wolff, 2001, p.83). These emotionally intelligent norms form the base of trust between team members, the development of group identity, collaboration between members, and group efficiency.

Emotionally intelligent teams are more apt to participate in a collaborative culture because they are able to understand their own emotions as well as the emotions of the other team members, which in turn enables them to regulate their emotions and actions. Emotional Intelligence, with regard to management of others emotions and management of one's own emotions, was significantly positively correlated with team trust, which in turn facilitated a collaborative team (Barczak, Lassk, & Mulki, 2010).

Teams with higher collective Emotional Intelligence have been shown to outperform those with less collective Emotional Intelligence (Feyerhem & Rice, 2002). Feyerhem and Rice (2002) used a short version of the Multifactor Emotional Intelligence Scale (MEIS) to measure Emotional Intelligence. The researchers used average scores for teams on overall Emotional Intelligence and also within the four constructs: 1) understanding emotions, 2) identifying emotions, 3) managing emotions within oneself, 4) and managing the emotions of others. This way the team Emotional Intelligence could be correlated with team performance, which was measured by supervision rankings and surveys completed by members of the team. The survey was based upon "key components of team performance: customer service, accuracy of work, productivity, team leader performance, and commitment to continuous improvement" (Feyerhem & Rice, 2002, p.353). Outcomes of this study showed that the construct of managing others emotions had a significant positive correlation with overall team performance. Results of

their study also indicated that a team's average score on the construct of managing one's emotions also was significantly positively correlated with overall team performance as well as accuracy.

Similarly, Frye, Bennett, and Caldwell (2006) conducted a study to determine if Emotional Intelligence had a significant impact on team Maintenance Function and Team Task Orientation. An eight-item instrument that was designed by the authors measured team Maintenance Function and Team Task Orientation. They defined Team Task with descriptive behaviors such as "sets goals effectively, continually improves, efficient problem solving and sets high quality standards" (Frye et al., 2006, p.53). The authors defined Team Maintenance Function as "team resolved conflict among members; members were friendly and cooperative, and members helped members beyond what was required (Frye et al., 2006, p.54)." The Bar-On Emotional Quotient Inventory (EQ-i) measured the Emotional Intelligence construct. Results of this study yielded a positive correlation that was not significant with "total team averaged EI" and "Team Task Orientation and Team Maintenance Function" (Frye et al., 2006, pp.53-54). The researchers also looked at aggregated data from the team's scores on the composites interpersonal EI and general mood EI. Interpersonal EI measures one's perceptions of interpersonal relationships, social responsibility, and empathy. General mood EI measures one's perception of his or her happiness and level of optimism. The aggregated scores for the team's interpersonal EI and general mood EI were positively correlated with Team Maintenance Function and Team Task Orientation in which this positive correlation was significant.

Emotional Intelligence further affects team performance by its impact on relationships in the work area. Emotional Intelligence, with particular consideration of the construct of emotional control, was positively correlated with one's ability to work with team members (Stough & DeGuara, 2003).

Additionally, teams with higher Emotional Intelligence levels were more likely to use collaboration and conflict resolution (Jordan &Troth, 2002). Teams that displayed a higher Emotional Intelligence level simultaneously did well with team problem solving as opposed to those teams whose Emotional Intelligence levels were lower.

Through all of these studies, it is shown that Emotional Intelligence has an impact on teamwork. Emotional Intelligence within a team allows members to be in control of their emotions and aware of team member's emotions, which enables a trusting relationship to emerge. Emotional Intelligence also allows teams to communicate well and make decisions that are best for all members. Although Emotional Intelligence alone does not guarantee a team's effective performance, it does enrich the team process. An emotionally competent team can control their own emotions, understand the emotions of their teammates, understand the emotions of the group as a whole, and ultimately use this information to help guide them through the group process. Having high levels of Emotional Intelligence facilitates various aspects of the team process including effective problem solving, high quality production and performance, trust, commitment, interpersonal relationships, and collaboration.

The previous studies show how Emotional Intelligence affects various aspects of teamwork. They also show that Emotional Intelligence plays an indirect role in

teamwork by influencing other elements that are involved in a team. The next section describes several other important characteristics involved in teams and teamwork.

#### **Other Factors that Influence Teamwork**

When looking at teams, one can see an ongoing process taking place. The first part in this process includes the "input" of the team. This input involves the members and encompasses their ability levels, previous knowledge, personality traits, attitudes, communication skills, team structure and size, and willingness to work. The "process" is the next aspect. Factors involved here include collaboration, communication, conflict resolution, goal setting, and the work involved in reaching the goal. The last factor is the "output," which is measured by the quality of the results that the team has produced and the time the results were produced. When analyzing issues surrounding team development, one should look at the input process as well as the process phase. However, when determining the effectiveness of the team, one should look at the output of the team (Feyerherm & Rice, 2002; Mickan & Rodger, 2000).

## The "Input" Phase

The "input" in teamwork are factors or characteristics that are present as the team is being formed that will ultimately help the team function and be effective. Many factors can be involved at this stage including personalities, previous knowledge of the members, team size, and support (Mealiea & Baltazar, 2005). Having executive support is an essential part of the team process (Gratton & Erikson, 2007). The executive team serves as a model for collaboration and effective outcomes. By its model, the team can

teach other teams to communicate efficiently, build relationships with one another, use creative styles to resolve conflicts, and use strategies to improve efficacy.

When looking at the characteristics of individual team members, one's attitude and previous knowledge can have a huge impact on how the team works and affect the team culture. Attitudes can either make or ruin the experience of members as the team works toward reaching its goal. It is also a prominent piece in developing trust between members and commitment to the team's cause. Previous knowledge can also be very valuable, which is one of the advantages of having a team. Each member brings knowledge to the group and each member may even have specializations that contribute to the outreach of the team (Mealiea & Baltazar, 2005; Mickan & Rodger, 2000).

Other factors, which affect the input process, are team size, procedures, and membership. An illustration of how influential these factors might be is to look at a team within a school: one, which meets on a regular basis whose members know each other fairly well, as opposed to a team with members stationed across the globe, who meet virtually. One is smaller and meets face-to-face, which enables more personalization and interaction. The other is larger and less impersonal. Team membership is also an important input. It is desirable to have a heterogeneous team as this type of team brings creativity and innovation to the problem-solving process (Ditman, Hawkes, Deokar, & Sarnikar, 2010).

The next few constructs that are discussed in the following paragraphs can be seen as influential factors in both the "input" and the "process" aspects of teamwork. For example, setting goals and objectives is something that helps to define the input process

by giving purpose to the team and guidelines throughout the process. Teams should develop goals and objectives collaboratively. The goals should be defined as shared team goals that motivate team members and allow members room for achievement and responsibility. These goals should be clearly defined as each member should know exactly what is expected of him or her in achieving this goal. In turn, each member should have sharply defined roles in working toward the team's goals. Each member should understand these roles to create a more cohesive outlook. Having these delineated goals leaves less room for miscommunication and overwork from members (Mickan & Rodger, 2010; Mealiea & Baltazar, 2005).

The team leader can also be viewed as both an important "input" and "process" feature. The team leader acts as a guide though the process by maintaining a clear focus on the team's goal and evaluating the development so that appropriate adjustments can be made. The leader helps to facilitate productivity by helping to assist the team through the developmental stages that it will inevitably encounter. The leader should be one who is focused on both the task of the team as well as the relationship of the team (Mickan & Rodger, 2000). Using the task-orientation style at the beginning stages to help facilitate the team to be on-task and develop goals and then switching to a relationship-orientation as the team becomes more comfortable about the team process, is the best leadership style to employ (Gratton & Erikson, 2007). This way emphasis is given to both the development of goals, commitments, and responsibilities, as well as team relationships, communication, and conflict resolution styles.

Finally, team trust, commitment, and flexibility are also important in the "input" that can be carried over into the "process" portion of the team's work. These factors are

essential to building an effective team and influenced by many of the factors that make an effective team. Commitment is seen more on an individual level but can be predisposed by the team leader, team goals, and the size and make-up of the team. Trust should be cultivated early on and needs to be maintained throughout the process. Trust is fostered through open communication, appreciation of differences and expertise, and having respect for one another. Flexibility covers a range of essential behaviors seen in effective teams. Flexibility includes the ability of members to be able to make accommodations when something unexpected happens, have an open approach, and keep the capability to understand how each factor in the team process affects another factor (Maeliea & Baltazar, 2005; Mickan and Rodger, 2000; Gratton & Erikson, 2007).

#### The Team Process

The term "process" helps to define how the team works to achieve its goals.

Similar to the "input" phase, essential team characteristics can be defined and utilized to create an effective team that produces significantly positive results. Some of these characteristics include relationship building, communication, collaboration and cooperation, decision making and conflict resolution, data analysis, and performance feedback.

Teams that get along better work better together. Teams that spend time building their relationships are more inclined to trust one another, be supportive, and work collaboratively. Teams where at least 20% to 40% of the members knew each other prior to the teamwork developed a more collaborative teaming style (Gratton & Erikson,

2007). In those cases where members did not know each other beforehand, it was useful to spend time cultivating relationships between members.

One of the most important aspects in the "process" of the group is communication. Communication should be open, honest, and frequent, which includes things such as sharing information, giving feedback or support, and sharing feelings. Active listening is another component of communication that should be developed so that members can communicate effectively (Mealiea & Baltazar, 2005). Effective communication leads to conflict resolution. Dyer (1995), states that an effective team brings differences to the surface that are dealt with in an appropriate manner by using adequate communication skills. Teams need to have strategies to manage conflict productively, such as mediation styles (Mickan & Rodger, 2000).

Collaboration is an essential part of the team "process." When team members share ideas, openly discuss dilemmas, and welcome change, they are actively collaborating. Collaboration incorporates "total involvement of team members because of the mutual respect, care, and support of each other" (Barczak et al., 2010, p. 334). The use of collaboration in teams allows members to work effectively and smoothly because they are allowing the process to be completed as a sum of parts instead of individually (Gratton & Erikson, 2007).

Finally, data collection is an indispensable part of the process in teams. Gathering data about a team's project allows for progress monitoring and evaluation. A team cannot determine if it is succeeding with its tasks without looking at the progress and outcome data.

## The "Output" Phase

The "output" phase can be defined as the product of what the team has strived to complete. Three criteria should be used to evaluate team efficacy. The team should evaluate its effectiveness based upon the outcomes of its work. Team standards should "exceed the standards of the people who receive and/or review the output" (Feyerherm & Rice, 2002, p. 346). Second, the team should evaluate how well members worked as a group. Last, the team should evaluate how the group process went. It should have been constructive and enable positive growth for the members of the team (Feyerherm & Rice, 2002).

The team process is intricate as it involves various aspects that shape the team, facilitate productivity, and help to produce effective results. A team will benefit the most from understanding and utilizing these aspects, as well as finding others strategies that work well within their group. The team process will not work in a strictly universal fashion as each team is unique.

#### Tying it all Together

An emotion is probably not the first impression that comes to mind when talking about intelligent behavior, but it is an influential part of daily life, that, when not managed correctly or given an opportunity to advance, can be detrimental to many cognitive and daily activities. Emotions help to give us knowledge about one's relationship with the world and influence one's interpretations and behaviors. Emotional Intelligence can be broadly described as an awareness of one's emotions and the emotions of others, an ability to regulate emotions, and the ability to use emotional

information to guide decision making and activities. Four theorists are prominent in the study and development of the theories of Emotional Intelligence: Salovey and Mayer, Goleman, and Bar-On.

Today, utilizing the power of teamwork is a popular and proficient way to produce the best outcomes to a goal. There are several crucial aspects and processes that are involved in the development of a team, teamwork, and the outcomes that a team produces. Some of these aspects include size and structure, attitude, communication, previous knowledge, clear and understood goals and objectives, the team leader, trust, commitment, and collaboration. Data collection and evaluation are vital and can be seen as a regulator and monitor of progress. Another factor is Emotional Intelligence.

Emotional Intelligence can be seen as a building block of teamwork. Not only does

Emotional Intelligence affect the group as a whole and the outcomes produced, it also influences the outcomes of each of the previously mentioned aspects of a team. For this reason, it is of equal importance to understand and utilize emotional knowledge so that the team process is enhanced and functions in an efficient manner.

#### **Purpose of Study**

Emotional Intelligence is an important aspect to incorporate when assessing teams and teamwork, because it has been seen to impact individual performance, group performance, and various other aspects that are involved in the teamwork process. If more studies are conducted and results show that the level of Emotional Intelligence does, in fact, positively impact teamwork, then further studies can be conducted to see if Emotional Intelligence levels can be raised to promote better teams.

For the purposes of this study, Emotional Intelligence will be compared to team "cohesion." Cohesion will encompass and merge the team's interpersonal skills, conflict resolution skills, collaboration, commitment to the team process, communication skills, shared leadership, and their facilitation of change. The term "cohesion" was chosen because a team integrates various elements to enhance its process and performance. Cohesion represents the assimilation of these parts to form a good team.

This study was designed to see if Emotional Intelligence is related to team cohesion. The following question was explored: Does a person's Emotional Intelligence level correlate with team cohesion ratings? The relationship was tested using Spearman's Rho analysis. The two variables were the individual team member's Total EQ score, and the team cohesion rating.

#### **CHAPTER II**

#### Method

## **Participants**

The sample for this study included 23 graduate students of Marshall University

Graduate College (MUGC) who participated in the 2011 Practicum III Summer

Enrichment Program. Their ages ranged from 24 to 46 years. There were twenty female participants and three male participants.

## **Program Description**

The Practicum III Summer Enrichment Program offered at Marshall University was designed to provide six weeks of additional support to students in grades K-12. This program also provided hands-on, practical, and supervised experience to graduate students. Graduate students involved in this program included School Psychology students, School Counseling students, Special Education students, and Literacy students. The graduate students were divided into 7 teams and comprised a mix of all disciplines. Throughout the day, the children were submerged in academics, including an hour of uninterrupted reading and additional stations that encompassed various concepts such as math, writing, social studies, history, and many other concepts. Emotional competency and behavioral guidance were also provided though character education, individual counseling, and group counseling (Krieg, Meikamp, O'Keefe, & Stroebel, 2006).

#### **Instruments**

In this study, two separate methods were used to assess different constructs for comparison. The first instrument, the Bar-On Emotional Quotient Inventory (EQ-i), was

used to measure an individual's emotional quotient, or Emotional Intelligence level. The second method was a team rating that was derived from a panel of supervisors.

### The Bar-On Emotional Quotient Inventory (EQ-i)

The Bar-On Emotional Quotient Inventory (EQ-i) was used to assess the Emotional Quotient of individuals that participated in the study. This instrument is based on Revun Bar-On's theory of Emotional Intelligence and is specifically designed to determine an individual's Emotional Intelligence level. The EQ-i is designed to assess individuals aged 17 years or older. In North America, the reading level was assessed in English and was determined to be at the sixth grade level. The estimated time of completion was 40 minutes (Bar-On, 2004; Mandell and Pherwani, 2003; Multi-Health Systems, 2011).

Responses were entered by the participant onto the publisher's Multi-Health Systems (MHS) website and a report was produced. The self-assessment consisted of 133 questions that were presented in the form of a Likert-type scale. The participants answered each question with a response that ranged from (1) "very seldom or not true of me" to a (5) "very often true of me or true of me." The answers to these questions produced a Total Emotional Quotient (EQ) score as well as 5 Composite Scales Scores and 15 Subscale scores. In addition to these scores, validity scores were provided, which consisted of an inconsistency index, negative impression index, positive impression index, and an omission rate index.

Scores and reports were generated though the publisher's website. Raw scores were converted into standard scores, which have a mean of 100 and a standard deviation

of 15. "Average to Above Average scores on the EQ-i suggest that the respondent is effective in emotional and social functioning (meaning he or she is most likely emotionally and socially intelligent). The higher the scores, the more positive the prediction for effective functioning in meeting environmental demands and pressures" (Bar-On, 2004, pp.118-119). The opposite can be seen in participants who display lower scores (Bar-On, 2004; Mandell and Pherwani, 2003; Multi-Health Systems, 2011).

To date, the EQ-i is the most popular and widely used instrument in measuring Emotional Intelligence. It has been peer reviewed and has been utilized in several studies. The EQ-i was standardized in North America in 1996 using 3,831 participations ages 16-100. Of the participants, 49% were male and 51% were female. The make-up included 79% Whites, 8% Asian-Americans, 7% African-Americans, 3% Hispanic, and 1% Native Americans. Reliability was proven through test-retest and internal consistency. The test-retest reliability was .85 after 1 month, .75 after 4 months, and .72 after 6 months. Validity was compared and correlated with varying personality measures, attribution styles, remedial interventions for Emotional Intelligence, theoretically expected scores, successful and unsuccessful groups, coping styles, and job satisfaction and performance (Bar-On, 2004, Mandell and Pherwani, 2003).

## **Team Ratings**

The seven teams were rated by supervising professors at the Marshall University
Graduate College (MU) summer Enrichment Program of 2011. Supervisors
independently rated each team based upon shared criteria. This criterion was taken from
Krieg (2011) and outlined what constitutes a cohesive team. Based upon these standards,
cohesive teams work through four processes: forming, storming, norming, and

performing, to reach their full potential. Teams accomplish full potential if they reach the performance stage and have maintained continuous attainment of team goals. Cohesive teams also display adequate skills in the following areas: interpersonal skills, communicational skills, commitment to the team process, shared leadership, listening skills, and collaboration skills. In addition, cohesive teams manage conflict by actively confronting the situation, facilitate change, remain cohesive, and sustain commitment to the team process (Krieg, 2011).

The supervisors unanimously agreed upon the team rankings for the "top cohesive groups" and the "bottom cohesive groups." The supervisors compromised and agreed on the teams that would be placed in the "middle cohesive groups." There was an undisputed decision about which teams to place in the top performing and bottom performing groups, which helped to maintain reliability of the team ratings.

## **CHAPTER III**

## **Results**

A Spearman's Rho was conducted to analyze the data, which would determine if there was a significant correlation between an individual's Total EQ score and his/her team cohesiveness rating. The results of the Spearman's Rho indicated a moderate positive correlation (r=.415, p<.05). These findings support the hypothesis that Emotional Intelligence is related to cohesion.

#### CHAPTER IV

#### **Discussion**

This study was designed to explore the effects of Emotional Intelligence on team cohesion. It was hypothesized that Emotional Intelligence was related to teamwork because it enabled teams to be more cohesive. The participants in this study included 23 graduate students who were involved in the Marshall University Summer Enrichment Program in 2011. Each participant was involved in a team that provided academic and social-emotional education to a group of children. The 23 graduate students completed the Bar-On Emotional Quotient Inventory (EQ-i) to assess his/her Emotional Intelligence level. At the end of the program, each team was assessed on its cohesiveness by a panel of supervisors. The term "cohesion" was used because it is seen as an all-encompassing term for the team process. Cohesion represents interpersonal skills, communication skills, conflict resolution skills, commitment to the team process, shared leadership, the team's ability to facilitate change, and collaboration.

A Spearman's Rho was used to explore the data. In the Spearman's rho, each individual's Total EQ score was compared to team rating. Results of this analysis showed that there was a moderately positive correlation (r=.415) between the individuals Total EQ score and their team's rating. This finding was significant (p=0.05) and supported the hypothesis that Emotional Intelligence was related to team ratings by making teams more cohesive. These findings help to support the notion that Emotional Intelligence plays an integral role in teamwork. These findings are similar to the conclusions of Barczak, Lassk, and Mulki (2010), Frye, Bennett, and Caldwell (2006),

Jordan and Troth (2002), Stough and DeGuara (2003), and Frye et al. (2006) by supporting the idea that Emotional Intelligence levels do impact some part of the processes involved in teamwork.

Some restrictions can be found within the literature review that should be noted. The studies that supported the hypothesis that Emotional Intelligence can affect team performance used instruments that were based upon varying theories of Emotional Intelligence. A few studies included in the literature review use the Bar-On Emotional Quotient Inventory (EQ-i), whereas others use instruments such as the Multifactor Emotional Intelligence Scale. Although the theories that encompass Emotional Intelligence do have similarities, the theories place emphasis on different aspects of Emotional Intelligence and use very different measures to assess Emotional Intelligence.

Another setback in the literature review is that each researcher was not studying the same construct. Each defines his or her dependent variable in a different way such as performance outcomes, team trust, collaboration, conflict resolution, and the ability to get along with team members. Additionally, each study measures the independent variable differently. Independent variables of the studies include individual emotional quotient scores, team average emotional quotient scores, and some researchers aggregate their data. These varying measures, definitions, and outcomes leaves the literature inconsistent with one another and, therefore, less likely to provide a solid foundation point.

### Limitations

A key constraint in this study was the small sample size, which limited the research that could have been performed on the group's Total Emotional Intelligence

score and the group's rating. Instead of being able to look at aggregated data to represent group Emotional Quotient (EQ), individual data had to be assessed and compared to the group rating. Each group could not be compared to its rating due to the limited number of participants per group.

Despite this limitation, the results of this study in conjunction with previous research, support the idea that Emotional Intelligence is an important aspect within the team process. Emotional Intelligence is a fundamental aspect for individuals and teams. Future research should be conducted to further explore this idea. Supplementary analysis of the data could also be performed to determine if there are subcomponents of Emotional Intelligence that are more influential than others. Finally, teams should use these results as an indicator that Emotional Intelligence enhances cohesive outcomes and further investigate how to raise the Emotional Intelligence level of a team to promote cohesion.



Office of Research Integrity

June 29, 2012

Stephen O'Keefe, Ph.D.
Professor
School Psychology Department
Marshall University Graduate College

Dear Dr. O'Keefe:

This letter is in response to the submitted abstract for your program evaluation for the GOESPD Summer Enrichment Program. After assessing the abstract it has been deemed not to be human subject research and therefore exempt from oversight of the Marshall University Institutional Review Board (IRB). The Code of Federal Regulations (45CFR46) has set forth the criteria utilized in making this determination. Since the information in this project is a program evaluation of deidentified archival data it is not human subject research and therefore not subject to Common Rule oversight. If there are any changes to the abstract you provided then you will need to resubmit that information for review and determination.

I appreciate your willingness to submit the abstract for determination. Please feel free to contact the Office of Research Integrity if you have any questions regarding future protocols that may require IRB review.

Sincerely,

Bruce F. Day, Th.D., CIP

Director

Office of Research Integrity

#### References

- Barczak, G., Lassk, F., & Mulki, J. (2010). Antecedents of team creativity: An examination of team emotional intelligence, team trust and collaborative culture. *Creativity and Innovation Management*, 19(4), 332-345.
- Bar-On, R. (2004). The Bar-On Emotional Quotient Inventory (EQ-i): Rationale, description and summary of psychometric properties. In G. Geher, G. Geher (Eds.) *Measuring emotional intelligence: Common ground and controversy* (pp. 115-145). Hauppauge, NY US: Nova Science Publishers.
- Brackett, M. A., Rivers, S. E., Shiffman, S., Lerner, N., & Salovey, P. (2006). Relating emotional abilities to social functioning: A comparison of self-report and performance measures of emotional intelligence. *Journal Of Personality And Social Psychology*, 91(4), 780-795. doi:10.1037/0022-3514.91.4.780
- Ditman, D.R., Hawkes, M., Deokar, A.V., & Sarnikar, S. (2010). Improving virtual team collaboration outcomes through collaboration process structuring. *The Quarterly Review of Distance Education*, 11(4), 195-209.
- Downey, L., Mountstephen, J., Lloyd, J., Hansen, K., & Stough, C. (2008). Emotional intelligence and scholastic achievement in Australian adolescents. *Australian Journal of Psychology*, 60(1), 10-17.
- Druskat, V.U., & Wolff, S.B. (2001). Building the emotional intelligence of groups. *Harvard Business Review*, 81-90.

- Dyer, W. (1995). *Team building: Current issues and alternatives* (3<sup>rd</sup> edition). New York: Addison Wesley.
- Feyerherm, A. E., & Rice, C. L. (2002). Emotional intelligence and team performance: The good, the bad, and the ugly. *International Journal of Organizational Analysis* (1993 2002), 10(4), 343.
- Frye, C.M., Bennett, R., & Caldwell, S. (2006). Team emotional intelligence and team interpersonal process effectiveness. *American Journal of Business*, 21(1), 49-56.
- Gardner, H. (1998). A Multiplicity of Intelligences. Scientific American Presents, 18.
- Gratton, L., & Erickson, T.J. (2007). Eight ways to build collaborative teams. *Harvard Business Review*, 1-13.
- Hamarta, E., Deniz, M., & Saltali, N. (2009). Attachment Styles as a Predictor of
   Emotional Intelligence. *Educational Sciences: Theory and Practice*, 9(1), 213-229.
- Hetherington, E.M., & Parke, R.D. (2003). *Child Psychology: A Contemporary Viewpoint*. Fifth Ed. New York, New York: McGraw-Hill.
- Jordan, J. and Troth, A.C. (2002). Emotional intelligence and conflict resolutions: Implications for human resource development. *Advances in Developing Human Resources*, 28(2), 195.
- Joseph, D., & Newman, D. (2010). Emotional intelligence: An integrative meta-analysis and cascading model. *Journal of Applied Psychology*, *95*(1), 54-78.

- Krieg, F.J. (2011). *Team Building* [PowerPoint slides].
- Krieg, F.J., Meikamp, J., O'Keefe, & S., Stroebel, S.S. (2006). Field-based experience in light of changing demographics. Trainers Forum, 25, 15-17.
- Lewis, M., Haviland-Jones, J. M., & Barrett, L. F. (Eds.). (2008). *Handbook of Emotions* (3rd ed.). New York: The Guilford Press.
- Magill, F. M. (Ed.). (1993). Emotion: Definition and assessment. In *Survey of Social Science: Psychology Series* (Vol. 2, pp. 881-927). Pasadena, CA: Salem Press.
- Mandell, B., & Pherwani, S. (2003). Relationship between emotional intelligence and transformation leadership style: A gender comparison. *Journal of Business & Psychology*, 17(3), 387-404.
- Mayer, Salovey, & Caruso. (2004). Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry* 15(3), 197-215.
- Mealiea, L., & Baltazar, R. (2005). A strategic guide for building effective teams. Public Personnel Management 34(2), 141-160.
- Mickan, S., & Rodger, S. (2000). Characteristics of effective teams: A literature review. Australian Health Review, 23(3), 201-208.
- Multi-Health Systems. (2011). *Emotional Quotient Inventory*. Retrieved on August 1, 2011 from <a href="http://www.mhs.com/product.aspx?gr=cli&prod=eqi&id=overview">http://www.mhs.com/product.aspx?gr=cli&prod=eqi&id=overview</a>.

Murphy, L. (2009). Developing emotional intelligence as means to increase team performance. World Review of Entrepreneurship, Management and Sustainable Development, 5(2), 193-205.

Murphy, A., & Janeke, H. (2009). The relationship between thinking styles and emotional intelligence: An exploratory study. *South African Journal of Psychology*, 39(3), 357-375.

Pettit, M. L., Jacobs, S. C., Page, K. S., & Porras, C. V. (2009). An Assessment of Perceived Emotional Intelligence and Health Behaviors among College Students. *Health Educator*, 41(2), 54-63.

Polat, S., & Ulusoy-Oztan, Y. (2009, September). Relationship between emotional intelligence of primary school 4th and 5th grade students and their teachers. Paper submitted at the conference on Promoting Social-Emotional Education: Practitioners and Researchers Exploring Evidence Based Practice, Izmir, Turkey. Retrieved from <a href="http://ezproxy.marshall.edu:2891/contentdelivery/servlet/ERICServlet?accno=ED5064">http://ezproxy.marshall.edu:2891/contentdelivery/servlet/ERICServlet?accno=ED5064</a>

Rorty, A. O. (Ed.). (1980). *Explaining Emotions*. Los Angeles: University of California Press.

Salovey, P., and Sluyter, D. (1997). Emotional development and emotional intelligence: Educational implications. New York: Basic Books.

Shelton, C. (2000). Portraits of Emotional Awareness. *Educational Leadership*, 58(1), 30.

- Spackman, M., & Miller, D. (2008). Embodying Emotions: What Emotion Theorists Can Learn from Simulations of Emotions. *Minds & Machines*, 18(3), 357-372.
- Stough, C. C., & De Guara, D. D. (2003). Examining the relationship between emotional intelligence and job performance. *Australian Journal of Psychology*, 55145
- Ulutaş, İ., & Ömeroğlu, E. (2007). The effects of an emotional intelligence education program on the emotional intelligence of children. *Social Behavior and Personality*, *35*(10), 1365-1372. doi:10.2224/sbp.2007.35.10.1365.

## Myra Beam Curriculum Vitae

Education: Marshall University Graduate College, South Charleston, WV

Candidate for Education Specialist Degree in School Psychology, July

2012

Master's Degree in Elementary Education, May 2012

Marshall University, Huntington, WV

Bachelor of Arts in Counseling; Psychology Minor, August 2009

#### **Certification:**

Crisis Prevention Intervention (CPI)-2011 Comprehensive IRB Training Initiative (CITI) Certified- 2011

## Professional Experience:

## **Monongalia County Schools**

School Psychologist Intern (August 2011 to June 2012)

- Independently completed and assisted in completing many comprehensive psycho-educational evaluations that addressed varying needs under West Virginia Policy 2419, including ADD, ADHD, autism, PDD/NOS, TBI, learning disabilities, depression, anxiety, post-traumatic stress disorder, and genetic growth disorder.
- Completed Autism Diagnostic Observation Schedule (ADOS) training and co-administered the ADOS
- Consulted with parents and teachers in explaining psychoeducational evaluation results as well as help problem-solve related concerns
- Participated in Individualized Education Plan (IEP) meetings, Eligibility Committee (EC) meetings, Student Assistance Teams (SAT), and multidisciplinary teams (MDT), such as behavior management and problem-solving teams
- Assisted in implementing trainings for school staff development
- Analyzed quantitative data for progress monitoring purposes with academic and behavioral referrals
- Utilized Goal Attainment Scaling to assess qualitative data and design intervention
- Developed contacts with community resources for advocacy purposes
- Completed group and individual counseling sessions with elementary and middle school students

• Completed functional behavioral analyses (FBAs) and designed intervention plans to decrease target behaviors.

## Marshall University Graduate College Summer Enrichment Program Practicum Student (June 2011 to July 2011)

- Worked with a team in caring for the education and socialemotional well-being of students in a classroom setting
- Developed and implemented character education lessons
- Assisted in developing interventions for academic and behavioral difficulties using data-based problem solving methods
- Designed a classroom behavior management plan
- Completed psycho-educational evaluations

## **Fayette County Schools**

Practicum Student (February 2011- June 2011)

- Performed consultative services to parents and teachers concerning academic and behavior problems
- Completed Functional Behavioral Assessments
- Developed and monitored Positive Behavioral Intervention Plans
- Performed individual and group counseling
- Performed psychological and psycho-educational assessments

#### **Dunbar Intermediate.** Dunbar WV

Practicum Student (September 2009-December 2010)

- Completed Functional Behavioral Assessments to assess behavioral concerns
- Performed classroom observations to obtain quantitative data
- Created Positive Behavior Intervention Plans
- Consulted with parents and teachers in implementing positive behavior intervention plans
- Tutored students in Mathematics
- Administered curriculum-based measures in Reading, Mathematics, and Written Language

#### Related

## **Experience:** Friends-R-Fun Child Development Center, Inc

Substitute Teacher – After school program (February 2011- June 2011)

- Supervised, cared for, and instructed children ages 6-7 in the after-school program
- Coordinated programs and learning activities for the children

## **H.E.L.P. Program (Higher Education for Learning Problems)**

Graduate Assistant Tutor (August 2010- December 2010)

- Tutored students with learning disabilities and/or other diagnoses in various collegiate subjects
- Assisted students in developing strategies that would optimize their memory and learning skills
- Administered exams to students
- Utilized assessment results to develop tutoring techniques

### **Cammack Children's Center**

Supportive Counselor (March 2009- October 2009)

- Provided daily individual supportive counseling sessions to adolescents
- Held group therapy sessions
- Supervised children and adolescents that resided at the center in daily activities

#### **Presentations:**

- Watson, A., O'Rourke, M., Beam, M. (2012). Using Screening Tools for SATs. Presented to Monongalia County Schools Staff, Morgantown, WV.
- Watson, A., O'Rourke, M., Beam, M. (2011). *Oh No, It's the WoJo: Woodcock Johnson Tests of Achievement.* Presented to Monongalia County Schools Staff, Morgantown, WV.
- Beam, M. (2010). *Tourette's syndrome*. Presented to graduate students at Marshall University Graduate College, South Charleston, WV.
- Beam, M. (2010). *Instructional strategies: Raft and author's chair*. Presented to graduate students at Marshall University Graduate College, South Charleston, WV.
- Beam, M. (2009). *The Importance of Reading Fluency*. Presented to graduate students at Marshall University Graduate College, South Charleston, WV.

## **Professional Affiliations:**

- National Association of School Psychologists (N.A.S.P.)- member since 2009
- West Virginia School Psychologist Association (WVSPA)member since 2011

### **Activities:**

- Basic skills in American Sign Language
- I have volunteered at Goodwill industries by helping store clerks with general tasks. I also interacted with job and life skill training groups that were held there.

- I have volunteered in the Pastoral Care Department at Cabell Huntington Hospital. I assisted the counselor in consulting with patients in the emergency room.
- I have volunteered at a food pantry in Ironton, Ohio. Here, meals were passed out to over two-hundred recipients.