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## Relating camping experience to emotional intelligence among college freshmen

Seungwon Nam  
*San Jose State University*

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RELATING CAMPING EXPERIENCE TO EMOTIONAL INTELLIGENCE  
AMONG COLLEGE FRESHMEN

A Thesis

Presented to

The Faculty of the Department of Hospitality, Recreation and Tourism Management

San Jose State University

In Partial Fulfillment

of the Requirements for the Degree

Master of Science

by

Seungwon Nam

May 2008

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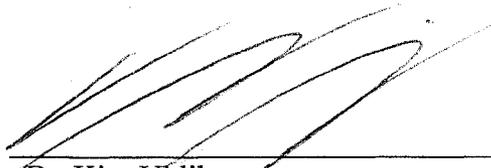
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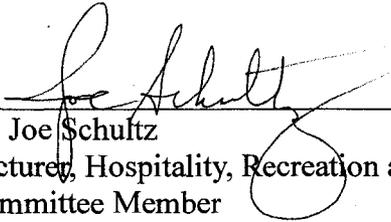
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APPROVED FOR THE DEPARTMENT OF HOSPITALITY,  
RECREATION, AND TOURISM MANAGEMENT



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## ABSTRACT

### RELATING CAMPING EXPERIENCE TO EMOTIONAL INTELLIGENCE AMONG COLLEGE FRESHMEN

by Seungwon Nam

The purpose of this research was to identify the relationship between camping experience and emotional intelligence in freshman. To examine the possible link between camping experience and emotional intelligence, this research employed quantitative methods to collect data for statistical analysis. Data collection consisted of two parts. First, a questionnaire was distributed to 202 freshman enrolled at San Jose State University to determine their level and type of camping experiences. Second, those same students were asked to complete the BarOn Emotional Quotient Inventory: Short (EQ-i:S), to assess and score their emotional intelligence. The collected data was analyzed using Statistical Package for the Social Sciences (SPSS) version 15 software, analysis of variance (ANOVA), and Tukey's HSD post-hoc test. The results of this study indicated that camping experience was positively correlated with a higher level of emotional intelligence in freshman.

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## DEDICATION

- Eunwoo Nam – My grandfather. Although I have never seen him, as his grandchild, I know that he will be happy for me in heaven.
- Duksil Lee – My grandmother. She passed away while I studied in America. She had hoped to see my success in America, and will be happy for me in heaven too.
- My family – Father (Gijoo Nam), Mother (Hyosik Lee), Sister (Soyoun Nam), Brother-in-law (Cheolmin Kim), Nephew (Junghaeng Kim), Niece (Chaelin Kim), Cousin (Jaehyun Nam), and my future wife.
- South Korea – my proud, native country.

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## CHAPTER 1: INTRODUCTION

Camping provides an opportunity for cooperative groups to create an educational experience derived from living in the out-of-doors. It utilizes the attributes of the natural surroundings to contribute significantly to affective, cognitive, behavioral, physical, social, and spiritual growth (Powell, 2003). Given these benefits, might camping also improve emotional intelligence?

Emotional intelligence refers to an “ability to recognize the meanings of emotions and their relationship, and to reason and problem-solve on the basis of them. Emotional intelligence is involved in the capacity to perceive emotions, assimilate emotion-related feelings, understand the information of those emotions, and manage them” (Mayer, 2001, p. 9). Intrapersonal skills, interpersonal skills, adaptability, general mood, and stress management are five main essential components comprising the social and emotional competencies of emotional intelligence (Goleman, 1998). Current research investigating emotional intelligence involves a range of outcomes including college students’ academic success and personal development (Nelson & Nelson, 2003; Reiff, Hetzes, Bramel, & Gibson, 2001).

The American Camp Association (ACA) sponsored research between 2001-

2004 and reported those qualities such as self-esteem, peer relationship, independence, adventure and exploration, leadership, environmental awareness, friendship, and spirituality underwent significant growth during the camping experience (ACA, 2005).

The purpose of this study was to examine the relationship between camping experience and emotional intelligence in first-year college students.

### *Statement of the Problem*

According to the American Camp Association (2002), more than 10 million campers annually joined camps at more 12,000 camps in the United States. Also, approximately 1,200,000 high school students, college students, teachers, doctors, nurses, and many others served as camp staff members. The American Camp Association collected data from over 5000 families that attended ACA-accredited camps from 2001 through 2004 to assess the in camping experiences (ACA, 2005).

The ACA (2005) reported that the camping experience promoted significant growth in positive identity, social skills, physical and thinking skills, and positive values. The research showed that the camping experience outcome was linked with emotional intelligence's five composite scales – Intrapersonal Scales, Interpersonal Scales, Adaptability Scales, Stress Management Scales, and General Mood Scales

(BarOn, 1997).

During the first half of the 20<sup>th</sup> century, Intelligent Quotient (IQ) tests were considered appropriate measures of both an individual's general intelligence and also potential for life success (Mandell & Pherwani, 2003). However, current research has moved away from IQ scores as the only measure of intelligence. In comparison, emotional intelligence was shown to be a better predictor of success in life (BarOn, 1997). Emotional intelligence contributes to the major factors affecting personal and professional success and college student development (Goleman, 1998; Nelson & Nelson, 2003). As areas of rapidly growing research, wide variety and large number of studies in both the camping field and emotional intelligence are being conducted (Jacobs, 2004). The *Handbook of Emotional Intelligence* stated that "in 1995 the terms emotional intelligence and emotional quotient (EQ) were selected as the most useful new words or phrases by the American Dialect Society" (BarOn & Parker, 2000, p. 92).

Despite ongoing research in the fields of camping and emotional intelligence, the relationship of the camping experience and emotional intelligence has not been adequately identified. Even though camping experiences are based on the assumption

that both the camper's and staff's emotional intelligence have some relationship with their camping experience, there has been no research on this topic. With approximately 10 million youths attending camps annually – representing more than 10 % of the American youth population (Jacobs, 2004), there is great potential for research in this area.

### *Purpose of the Study*

The purpose of this study was to identify the extent or level of the relationship between camping experience and emotional intelligence of first-year college students.

The main research question addressed is: What are the relationships between camping experience and emotional intelligence of first-year college students?

### *Research Questions*

1. What is the current level of emotional intelligence among first-year students at San Jose State University, and its comparison to the norm?
2. What types of camping experience have first-year students at San Jose State University had? and at what levels of participation?
3. What are the relationships between emotional intelligence and camping experience-related variables among first-year college students?

### *Design of the Study*

This research employed quantitative methods, using surveys and other methods to collect data pertaining to the relationship between camping experiences and the emotional intelligence of first-year college students. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 15 software analysis.

### *Significance of the Study*

The results of this study might add insight into the possible benefits of camping, not only for students, but for the general population as well. DeGraaf and Glover (2002) stated that the personal impacts of the camp experience were overwhelmingly positive in nature, with all campers recognizing the positive benefits attending camp had on their future personal lives. The impacts identified were varied and included such benefits as increased self-confidence, increased appreciation of nature, spiritual growth, as well as the development of specific life skills such as outdoor skills (DeGraaf & Glover, 2002). In addition, the camping experience could be used as the basis for a method of rehabilitating people with underdeveloped emotional intelligence, manifested as poor social skills or psychological problems (Erceg, 2007). For example, campers were found to gain in their development of feelings of self-worth and self-esteem

through camping (Erceg, 2007). Jacobs (2004) indicated that the camp experience led to changes in emotional intelligence and the ways in which camp experience is life changing. Finally, if a correlation between the first-year college student's participation as a camper and their emotional intelligence does exist, the result of this study can be used to support research into the causal effects of the camping experience on the emotional intelligence of first-year college students and their ability to handle a new, challenging environment (see Figure 1).

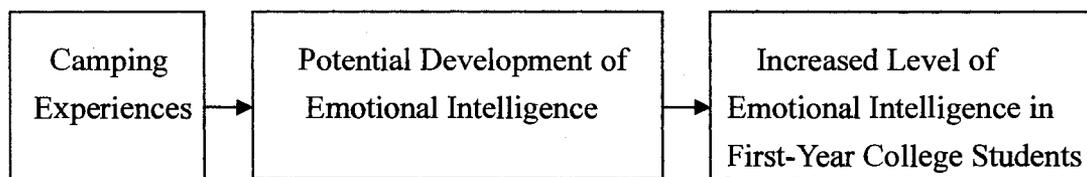


Figure 1. Basic Theoretic Framework to Ascertain any Measurable Improvements in Emotional Intelligence due to Camping Experiences in First-Year College Students.

#### *Definition of Terms*

(1) Camping Experience: An outdoor recreational activity experience, occurring in a group living and outdoor environment, under trained leadership, and offering campers significant opportunity for affective, cognitive, behavioral, physical, social and spiritual growth through a program of activities related to the natural surrounding and a distinct departure from their common lives (DeGraaf & Glover, 2002; Powell, 2003).

(2) 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” (Mayer & Salovey, 1997, p.10).

### *Structure of the Thesis*

This thesis is composed of five chapters. Chapter 1 is the introduction, containing the statement of the problem, purpose of the study, design of the study, significance of the study, and definition of the terms. Chapter 2 consists of the literature review including the camping experience, outcomes of camping experiences, historical advent and concept of emotional intelligence, measurement of emotional intelligence, and relationship between emotional intelligence and college students. Chapter 3 discusses the research method, containing research design, research targets, instruments, and data collection and analysis. Chapter 4 includes the results following data analysis. Finally, the conclusion, limitations, and suggestions for future research are described in Chapter 5.

## CHAPTER 2: LITERATURE REVIEW

This chapter includes the literature review in two sections: The first part reviews research on the camping experience and the outcomes of camping experiences.

The second part focuses on a review of emotional intelligence.

### *Camping Experience and Outcomes of the Camping Experience*

*Camping Experience.* The camping experience integrates play and work, and can be tailored to the interests and abilities of the campers (Elkind, 2007). Also, sometimes in the camping experience, campers are living in quarters with many different people, and they have to learn to deal with the different personalities, habits, and quirks of other campers (Elkind, 2007). Therefore, the camping experience may help people become more tolerant of others and more accepting of their differences (Elkind, 2007).

The most recent version of the mission statement of the American Camp Association defines it as enriching the lives of children, youth and adults through the camp experience (ACA, 2007). Although the language of the mission statement appears to have changed from the Camp Directors' Association of America published in 1910, the meaning remains the same (Toupenca, 2000). Camping is a distinct departure from our everyday lives. Hiking, rock climbing, and learning teamwork are useful

experiences for children and youth (Wilkinson, 1981; ACA, 2007). That is why camping has been in existence for such a long time and many youths still enjoy going out camping every year. Many fads and pastimes come and go, but with over 140 years of history (see Table 1), camping is a uniquely American tradition with roots in the basic American spirit of adventure, exploration, and rugged individualism (ACA, 2007). Camping has been a way for kids to play and have fun while learning personal, social skills to be productive adults (ACA, 2005). A conceptual framework for this research is described as follows:

Camps provide not only the setting for experiences of self-discovery and development, but the context as well. There is no need for an educator to construct an artificial experience with which to engage the learner, because the experiences are numerous and real. These authentic learning and living experiences are much more likely to produce lasting and fundamental change than are experiences a learner knows to be artificial. (Toupence & Townsend, 2000, p. 82)

Table 1.

*History and Development of Camping Experience* (adapted from Ball & Ball, 1990; Demeritte, 1999; Finley, 1999; ACA, 2007).

Year	Description
1861	The first recorded camping experience occurred in Washington, Connecticut.
1874	First YWCA camp at Asbury Park, Pennsylvania.
1876	The first private camp founded in Pennsylvania.
1885	First YMCA camp at Newburgh, New York.
1900	First Boys club camp at Salem, Massachusetts.
1910	The American Camping Association (ACA) is founded under the original name, Camp Directors Association of America(CDAA)
1910	The Boys Scouts of America was founded and the first official BSA camp was held at Lake George, New York.
1912	First Girl Scouts camp was held in Savannah, Georgia.
1914~ 1920	Camping began to spread westward, with camping springing up in Pennsylvania, West Virginia, Illinois, Missouri, and California.
1926	Camping Magazine is the official publication of the American Camping Association.
1930	National Park Service develops Recreation Demonstration Areas as part of federal government's work relief programs.
1948	ACA adopts the standards, which are the basis for ACA camp accreditation
1950	After World War II, a rapid expansion of camping paralleled the increased population of youth in the country.
1972	Association for Experimental Education (AEE) founded.
1987	International Camping Fellowship was organized in eight countries and under the auspices of the Canadian Camping Association and the ACA.
1996	Started Youth Development Outcomes of the Camp Experience project nationally.
1998	Many camps offer outdoor education for year round camp operation.
2004	ACA outcome study is completed and results are published.

*Outcomes of the Camping Experience.* The camping experience creates a positive impact in several different ways by providing natural, educational, and social benefits. According to Wilkinson (1981) and Gucker (2001), camping experience is distinct from schools, clubs, or athletic or recreation programs in that it:

- Is located in a natural outdoor environment
- Utilizes these natural surroundings in program development
- Provides an intensive experience in cooperative group living
- Provides leaders who are specially trained for this unique experience.

It is through these distinctions that the camping experience may evoke positive effects in campers. Specifically, camping experience potentially benefits children and youth by providing an outdoor experience, building emotional intelligence, providing a balance of freedom with supervision, and creating a community (Wilkinson, 1981; Madeyski, 2000).

Camp professionals and researchers have firsthand knowledge and experience in the benefits of camping; however, people outside the field may not be as convinced of camping's positive effects in the lives of its participants (Bialeschki, Krehbiel, Henderson & Ewing, 2003). For this reason, the American Camp Association was motivated by a desire to investigate and better understand the camping experience.

This stimulus resulted in the first large-scale national project designed to measure outcomes of the camp experience (ACA, 2005). According to this national project *Youth Development Outcomes of the Camp Experience* (ACA, 2005), the camping experience typically benefits camper in the following ways:

- Campers become more confident and experience increased self-esteem.
- Campers develop more social skills that help them make new friends.
- Campers grow more independent and show more leadership qualities.
- Campers become more adventurous and willing to try new things.
- In camps that emphasize spirituality, campers realize spiritual growth.

### *Emotional Intelligence*

*Historical Advent and Concept of Emotional Intelligence.* According to Guastello & Guastello (2003), the concept of emotional intelligence has its roots in Darwin and psychology. The earliest example in experimental psychology that was similar to emotional intelligence was the idea of “social intelligence” (Hedlund & Sternberg, 2000). Social intelligence was defined as “the ability to interpret social situations and make appropriate response there to” (Guastello & Guastello, 2003, p.665). The concept of social intelligence was further divided into interpersonal intelligence and

intrapersonal intelligence, and made up two of Gardner's eight intelligences (Gardner, 1983). It was from these ideas that the notion of emotional intelligence was created by Salovey and Mayer in 1990.

Salovey & Mayer defined it as "a type of emotional information processing that includes accurate appraisal of emotions in oneself and others, appropriate expansion of emotion, and adaptive regulation in such a way as to enhance living" (Salovey & Mayer, 1990, p.189). Some personality characteristics were also included in an earlier definition (Hedlund & Sternberg, 2000). Emotional intelligence then went through a phase of popularization and expansion by Goleman (Guastello & Guastello, 2003).

Goleman (1995) stated that emotional intelligence is a combination of five characteristics: knowing one's emotions, managing emotions, motivating oneself, recognizing emotions in others, and handling relationships. This concept of emotional intelligence was greatly expanded by BarOn into the construct domain of personality traits in 1997 (Guastello & Guastello, 2003). BarOn (1997) defined emotional intelligence using fifteen characteristics, which fell into six categories: personal awareness, interpersonal relationships, problem solving, reality testing, stress management, and general mood.

General intelligence is among the most useful definitions, one that lends itself to consider other forms of intelligence in addition to cognitive intelligence (Wechsler, 1958; Goleman, 1995; Hayashi, 2006). The definition of intelligence includes the ability to adapt to new situations and to reach success in life situations (Jacobs, 2004). From 1900 through the 1950s, an accepted measure of intelligence was the Intelligence Quotient (IQ) test. IQ scores were thought to measure an individual's potential for success in life (Weschler, 1958; Sunew, 2004). However, IQ is no longer seen as a reliable tool to help determine an individual's success. Because of the long history and use of the IQ concept, any new measure or definition of intelligence has to account for it (Encinas, 2001; Perkins, 1999). Traditional intelligence tests contribute only 20% to the factors that determine life success (Gardner, 1995). This led to the Multiple Intelligence (MI) theory being proposed by Gardner in the field of human cognition (Byron, 2000 & Gardner, 1993). Gardner divided intelligence into interpersonal intelligence and intrapersonal intelligence (Liptak, 2005). He defined interpersonal (or social) intelligence as "the ability to notice and make distinctions among other individuals and, in particular, among their moods, temperaments, motivations, and intentions" (Gardner, 1983, p. 239). Intrapersonal intelligence was defined as "the

capacity instantly to effect discriminations among these feelings and, eventually, to label them, to enmesh them in symbolic codes, and to draw upon them as a means of understanding and guiding one's behavior" (Gardner, 1983, p. 239). These two main concepts of interpersonal and intrapersonal intelligence have been the focus of much of the ongoing research in emotional intelligence (Hayashi, 2006).

Emotional, social, practical intelligence and the nonacademic intelligences, noncognitive intelligences, and nonintellective intelligence are separate from IQ (Hedlund & Sternberg, 2000). This concept of intelligence has gained popularity through the publication of a number of commercially successful books (Hayashi, 2006). The definition of emotional intelligence has been refined to reflect more strongly the notion that emotional intelligence is an ability.

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. (Mayer & Salovey, 1997, p.10)

*Measurement of Emotional Intelligence.* According to Jacobs (2004), measurement and assessment of emotional intelligence is essential. Methods of measuring emotional intelligence are relatively new and still await definitive

research proving the validity of these new assessment methods (Jacobs, 2004).

BarOn's EQ-i:S is an instrument used to help in the measurement of emotional intelligence and is based upon the BarOn model of emotional intelligence (BarOn, 2002). The BarOn Emotional Quotient Inventory (EQ-i) is also based upon this model and is the most widely used measure of emotionally intelligent behavior for adult respondents (BarOn, 2002). This test divides emotional intelligence into five general areas of competency and then subdivides those five areas into more specific sets of skills (BarOn, 2002). The five general areas are intrapersonal, interpersonal, adaptability, stress management, and general mood (see Table 2) (BarOn, 1997).

Table 2.

*BarOn EQ-i:S Scale* (adapted from BarOn, 2002)

Scales	Sub-components
Intrapersonal	Self Regard, Emotional Self Awareness, Assertiveness, Independence, Self-Actualization
Interpersonal	Empathy, Social Responsibility, Interpersonal Relationships
Adaptability	Reality Testing, Flexibility, Problem Solving
Stress Management	Stress Tolerance, Impulse Control
General Mood	Optimism, Happiness

BarOn's EQ-i:S is the only emotional intelligence instrument that has been adopted cross-culturally among various ethnic groups with no significant differences found in emotional intelligence based on ethnic or racial backgrounds (Hayashi, 2006).

*Relationship between Emotional Intelligence and College Students.* The importance of emotional intelligence in first-year college students has often been overlooked (Nelson & Nelson, 2003) and has become the focus of greater attention and investigation by researchers in the field of emotional intelligence. Emotional intelligence is one of the major factors of college student development and success (Chickering & Reisser, 1993). Significant differences can be found in the total scores on the EQ-i between academically successful and unsuccessful university students, using first-year grades as the criterion (Swart, 1996). Emotional skills development is helpful in assisting students to succeed in college (Upcraft & Gardner, 1996). In addition, freshman seminar programs nationally emphasize the development of emotional skills in the intrapersonal, interpersonal, and career/life management dimensions (Barefoot & Fidler, 1996).

Nelson and Nelson (2003) emphasized that a key factor in academic success in a university environment was emotional intelligence. Furthermore, emotional intelligence has emerged as a key factor in research investigating a range of outcomes in academic achievement (Goleman, 1995). According to Cyr (2006), correlations were found between a 33-item self-report measure of emotional intelligence and first-year

university grades. BarOn (1997) reported significant differences in self-reported success in the first year of military academy between successful, average, and unsuccessful students on all 5 of the EQ-i:S subscales. In addition, Emotional intelligence was significantly related to Grade Point Average (GPA) and cognitive age (Drago, 2005). Nelson and Nelson (2003) stated that as first-year college students, high-achieving students also had significantly higher goal achievement, time management and personal satisfaction scores when compared to low-achieving students. Further, emotional intelligence was found to be a very important factor in the achievement and retention of first-year college students (Nelson & Nelson, 2003). Finally, a significant correlation between emotional intelligence and academic success overall was found (Vela, 2004).

### *Summary*

Camping experiences are purported to provide numerous and real experiences for nurturing qualities linked to emotional intelligence. Through several studies done on the outcomes of camping experiences, camping professionals and researchers have found that camping provides an environment for building emotional intelligence.

Emotional intelligence has gained acceptance to reflect more strongly the modern notion

that different kinds of intelligence exist beyond just IQ. Emotional intelligence has been found to be an important factor in a college student's level of achievement and retention. Based upon the evidence derived from these prior studies, this study will try to ascertain whether any quantifiable relationship also exists between camping experiences and the measured level of emotional intelligence in first-year college students.

## CHAPTER 3: METHOD

The purpose of this study was to examine the relationship between the camping experience and emotional intelligence in college students. This chapter covers the research design, research target, instrument, data collection, and data analysis.

### *Research Design*

Since this study intended to allow generalizing of its findings to a larger population, a quantitative research method was appropriate, conducted in two parts. First, a questionnaire about camping experiences was distributed to 202 first-year students enrolled at San Jose State University. Second, those same students were asked to complete the BarOn Emotional Quotient Inventory: Short (EQ-i:S), to collect quantitative data to measure and assess emotional intelligence. Using the collected data, the researcher determined whether a statistically significant relationship, if any, exists between camping experiences and emotional intelligence among the students.

### *Research Target*

The target population for this study was first year college students who were taking HRTM 10 (Hospitality, Recreation, and Tourism Management Department), B 10(Business Department), and Eng 1A (English Department) at San Jose State

University. Those classes were composed of freshman students typically. Since the purpose of this investigation was to identify a relationship between camping experience and emotional intelligence of first-year college students, HRTM 10, B 10, and Eng 1A classes' students were appropriate for this study.

### *Instruments*

Both instruments represented an experimental, quantitative approach for exploring the level of relationship between the camping experience and emotional intelligence. The first instrument was a questionnaire that assessed the camping experience. A sample questionnaire is presented in Appendix A. The second instrument was the BarOn Emotional Quotient Inventory: Short (EQ-i:S). EQ-i:S was selected as the instrument to collect quantitative data to measure and assess emotional intelligence for this study. A sample questionnaire is presented in Appendix B. The BarOn Emotional Quotient Inventory (EQ-i) is the oldest and most well know instrument available to assess emotional intelligence (Jacob, 2004).

### *Data Collection*

Data was collected from San Jose State University HRTM 10, B 10, and Eng 1A classes' first-year college students. The researcher contacted and explained the purpose

of the study to each department chair and each class instructor to recruit potential participants. Each participant was presented with a consent form, a camping experience questionnaire and EQ-i:S, administered in the classes. In addition, the researcher explained to the participants the contents of the instruments and how to answer questions.

### *Data Analysis*

The mean, standard deviation, range of scores, and frequencies for all of the variables were calculated using the Statistical Package for the Social Sciences (SPSS) version 15 program. In addition, an Analysis of Variance (ANOVA) was conducted on the emotional intelligence variables, followed by Tukey's HSD post-hoc test, as both were a proper fit with the unit of measurement for the scale of this study (EQ-i:S scores). In particular, Tukey's HSD post-hoc test can provide a more detailed analysis with multiple comparisons of the different group means based upon a significant ANOVA result (Carver & Nash, 2006). For assessment of the mean emotional intelligence scores, the basic interpretation guidelines for EQ-i:S scores were used (see Table 3).

Table 3.

*Interpretive Guidelines for BarOn EQ-i:S Standard Scores (adapted from BarOn, 2002)*

Range	Guideline
130+	Markedly High – atypically well-developed emotional and social capacity.
120-129	Very High – extremely well-developed emotional and social capacity.
110-119	High – well-developed emotional and social capacity
90-119	Average – adequate emotional and social capacity
80-89	Low – underdeveloped emotional and social capacity, with room for improvement
70-79	Very Low – extremely underdeveloped emotional and social capacity, with considerable room for improvement
Under 70	Markedly Low – atypically impaired emotional and social capacity, with extensive room for improvement

For hypothesis testing, the assumptions for ANOVA are 1) the samples are random and independent, 2) each population has a normal distribution, and 3) the populations have the same variance. ANOVA was used to both relate and compare groups and to detect any statistically significant differences (Jacob, 2004).

*Reliability and Validity*

During the development of the EQ-i:S test, numerous statistical analysis studies were performed to assess the reliability and validity of the instrument. Reliability was defined as the extent to which a researcher could rely on the results obtained from the test instrument (Depoy & Gitlin, 2005). Their reliability testing checked for both

internal reliability and retest reliability. Internal reliability was defined as the ability to consistently measure the items on a particular scale for the same measured object (BarOn, 2002). Test-retest methods have been used to estimate temporal stability of instruments (Green and Srinivasan, 1978; BarOn, 2002).

Tests for internal consistency were based on samples from two countries (U. S. A. & Canada) and consisted of 3174 adults (1543males and 1631 females) who ranged in age from 16 to 93 years of age (BarOn, 2002). The internal reliability coefficients for the BarOn EQ-i:S scales are shown in Table 4 and are shown separated by gender and age groups. Five scales were tested and overall, internal reliability coefficients ranged from 0.76 to 0.93, with the exception of the Positive Impression scale (see Table 4). The coefficients were found to be satisfactory across the different normative groups (BarOn, 2002).

Table 4.

*Internal Reliability Coefficient for BarOn EQ-i:S Scales (by Age and Gender) (modified from BarOn, 2002)*

<b>Gender/ EQ-i:S Scale</b>	<b>&lt; 29 years</b>	<b>30-39 years</b>	<b>40-49 years</b>	<b>&gt;50 years</b>
<b>Males</b>				
Positive Impression	.71	.71	.72	.72
Total EQ	.93	.93	.91	.91
Intrapersonal	.83	.85	.76	.80
Interpersonal	.84	.84	.81	.81
Stress Management	.82	.83	.78	.81
Adaptability	.77	.79	.79	.81
General Mood	.81	.85	.84	.77
<b>Females</b>				
Positive Impression	.76	.65	.68	.51
Total EQ	.92	.92	.92	.92
Intrapersonal	.81	.82	.84	.81
Interpersonal	.82	.79	.79	.76
Stress Management	.82	.79	.81	.77
Adaptability	.81	.79	.81	.84
General Mood	.85	.85	.85	.85

*Note.*  $n = 1534$  males and  $1631$  females.

All correlations were significant ( $p < .05$ ).

The stability of responses to the same items over time is a measure of test-retest reliability (BarOn, 2002). A test-retest interval of 6 months was used to study reliability of the BarOn EQ-i:S in a sample of 352 adults (73 men and 279 women) (BarOn, 2002). Table 5 presents the test-retest correlations (separately, by gender). The test-retest reliabilities for the BarOn EQ-i:S scales were found to be excellent, ranging from 0.46 to

0.80 (see Table 5).

Table 5.

*Stability Coefficients for BarOn EQ-i:S Scales (by Gender) Based on a Retest Period of Six Months (modified from BarOn, 2002)*

<b>Scale</b>	<b>Males</b>	<b>Females</b>
Positive Impression	.60	.46
Total EQ	.72	.80
Intrapersonal	.80	.77
Interpersonal	.57	.61
Stress Management	.69	.76
Adaptability	.61	.57
General Mood	.60	.79

*Note.*  $n = 73$  males and 279 females.

All correlations were significant ( $p < .05$ ).

Studies have also been done to test the validity of the EQ-i:S as an instrument for measuring emotional intelligence. “Validity” is how well the instrument properly measures what it was intended to measure. Some definitions have also included the ability of measuring the accuracy of the instrument as part of validity (Ciou, 2006), and also how well the instrument addresses the relationship between a measurement and its concept (Depoy & Gitlin, 2005).

In the EQ-i:S test for determining emotional intelligence and its 5 scales, two types of validity studies were conducted: construct and predictive validity (BarOn, 2002).

For construct validity, Table 6 presents the correlations between the BarOn EQ-i:S scales

and scales on BarOn EQ-i (BarOn, 1997) using data from the normative sample described in Chapter 5 (BarOn, 2002). These correlations are presented separately by gender. The overlapping scales that appear on the two measures (Interpersonal, Intrapersonal, Stress Management, Adaptability, and General Mood) are highly correlated, ranging from 0.73 to 0.96 for males and from 0.75 to 0.97 for females (see Table 6).

Table 6.

*Correlations between Scales on BarOn EQ-i:S and BarOn EQ-i (modified from BarOn, 2002)*

EQ-i	EQ-i:S											
	Total EQ		Intra		Inter		Stress		Adapt		Mood	
	M	F	M	F	M	F	M	F	M	F	M	F
Total EQ	.97	.97	.83	.79	.74	.68	.66	.60	.61	.65	.85	.88
Intra	.89	.87	.90	.90	.61	.51	.51	.40	.51	.53	.81	.82
Inter	.78	.72	.58	.45	.93	.91	.42	.37	.45	.44	.58	.57
Stress	.82	.87	.60	.49	.44	.40	.90	.88	.51	.54	.67	.66
Adapt	.87	.87	.73	.66	.55	.51	.64	.61	.73	.75	.69	.73
Mood	.86	.87	.68	.66	.62	.59	.50	.44	.48	.51	.96	.97

*Note.* Intra=Intrapersonal; Inter=Interpersonal; Stress=Stress Management; Adapt=Adaptability; Mood; General Mood;  $n = 1543$  males and 1631 females. All correlations are significant ( $p < .05$ ). From (BarOn, 2002).

Some of the validity studies presented in this chapter were for the 51-item BarOn EQ-i:S and for the full-length 133-item BarOn EQ-I, but since there is a high overall positive correlation between the scales for the two instruments, the basic design of the

test instrument is valid (BarOn, 2002).

Predictive validity is defined as determining how effective a test is in predicting a person's performance in well-defined activities (BarOn, 2002). The BarOn EQ-i:S total and composite scale scores correlated significantly with job performance (see Table 7). The scores for Total EQ and Stress Management had the highest correlation with job performance ( $r = 0.52, p < 0.05$ ). The scores for interpersonal measurement had the lowest correlation with job performance, but was still significant (BarOn, 2002).

Table 7.

*Correlation between EQ-i:S Composite Scales and Job Performance* (modified from BarOn, 2002)

EQ-i:S Composite Score	Job Performance
Total EQ	.52*
Intrapersonal	.48*
Interpersonal	.38*
Stress Management	.52*
Adaptability	.49*
General Mood	.39*

$n = 44$  males and 56 females.

\* $p < .05$ .

### *Summary*

The research subjects for this study were first-year college students who were taking HRTM 10 (Hospitality, Recreation, and Tourism Management Department), B 10

(Business Department), and Eng 1A (English Department) at San Jose State University.

A quantitative method of research was applied in this study to assess statistically whether any significant relationships exist between prior camping experience and the level of emotional intelligence. This research was conducted in two parts. Part 1 consisted of a questionnaire given out to 202 students to assess their camping experiences. Part 2 used the Bar-On Emotional Quotient Inventory: Short: EQ-i:S to measure and assess levels of emotional intelligence. The Statistical Package for the Social Sciences (SPSS) version 15 program, Analysis of Variance (ANOVA), and Tukey's HSD post-hoc test were utilized to analyze the data and to determine whether any statistically significant relationship existed between camping experience and levels of emotional intelligence among first-year college students at San Jose State University.

## CHAPTER 4: FINDINGS

A total of 202 freshman college students provided responses that were used to analyze the relationship between the camping experience and emotional intelligence as perceived by first-year college students. This chapter includes a description of the sample, the results of the EQ-i:S survey, the results of the camping questionnaire, and an analysis of the relationship between those results.

### *Description of the Sample*

This section presents the respondents' demographic characteristics including gender, age, and class level of college students. The 202 valid respondents were divided almost evenly between 50.5% male students ( $n=102$ ) and 49.5% female students ( $n=100$ ) (see Table 8). Respondents ranged from 18 to 22 years of age (see Table 8), with most respondents being either 18 or 19 years. All of the 202 survey takers, 100% were freshman ( $n=202$ ).

Table 8.

*Demographic Characteristics of Respondents*

Variables	Description	<i>n</i>	%
Gender	Male	102	50.5
	Female	100	49.5
Age	18 years old	134	66.3
	19 years old	64	31.7
	20 years old	2	1.0
	21 years old	1	0.5
	22 years old	1	0.5
Class Level of Students	Freshman	202	100

*Level of Emotional Intelligence among First-Year College Students*

All 202 respondents completed EQ-i:S survey. The EQ-i:S is designed to measure emotional intelligence in individual over the age of 16. The EQ-i:S consists of 51 brief items and utilizes a 5-point response set, arranged 1 = “Not True of Me”, 2 = “Seldom True of Me”, 3 = “Sometimes True of Me”, 4 = “Often True of Me”, and 5 = “True of Me”. A typical respondent took about 10 minute to complete the EQ-i:S, but there was no imposed time limit. A completed and scored EQ-i:S yields a Total score and five scale scores.

EQ-i:S raw scores were converted to standard scores so that respondents’ scores could be compared to the scores of the normative group. The standard score uses

a mean of 100 and a standard deviation of 15. Scores above 100 indicate people with higher than average EQ within that group. Lower scores maybe a sign that the person has relatively less “emotion skill” in specific areas when compared to the overall group.

*Total EQ Scores and EQ Scales Scores.* The Total EQ scores are presented in

Table 9. The Total EQ mean for the 202 respondents was 100.26.

Table 9.

*Total EQ Scores of First-Year College Students*

	<i>N</i>	Mean	Median	Mode	Range	Minimum	Maximum
Total EQ	202	100.26	100	114	59	66	125

The scores generated for the five EQ-i:S scales are listed in Table 10. The average scores for the scales ranged from 95 to 103.

Table 10.

*Scales Scores*

	<i>N</i>	Mean	Median	Mode	Range	Min.	Max.
Intrapersonal	202	102.34	104	104	64	65	129
Interpersonal	202	101.21	103	104	60	65	125
Stress Management	202	103.49	106	111	62	65	127
Adaptability	202	95.82	97	87	64	65	128
General Mood	202	100.53	101	106	59	69	128

*Camping Experience of First-Year College Students*

*Camping Experience in First-Year College Students at SJSU.* Of the 202 respondent, 70.8% had some form of camping experience ( $n=143$ ), while 29.2% did not ( $n=59$ ) (see Table 11).

Table 11.

*Camping Experience in First-Year College Students at SJSU*

	<i>n</i>	%
Yes	143	70.8
No	59	29.2

*Day Camping vs. Resident Camping.* Of the 143 respondents who had camping experience, 20.3% primarily attended a day camping ( $n=29$ ) (went home at night) and 79.7% participated in a resident camping ( $n=114$ ) (stayed overnight) (see Table 12).

Table 12.

*Day Camping vs. Residents Camping*

	<i>n</i>	%
Day Camping	29	20.3
Resident Camping	114	79.7

*Main Type of Camping Experience.* Among the 143 respondents who had any camping experience, 24.6% mainly attended sports camping ( $n=34$ ); 18.9% attended church camping ( $n=27$ ); 28.6% participated mainly in family camping ( $n=41$ ); and 27.9%

respondents mainly attended sponsored camping ( $n=40$ ) (see Table 13).

Table 13.

*Main Type of Camping Experience*

	<i>n</i>	%
Sports Camping	35	24.6
Church Camping	27	18.9
Family Camping	41	28.6
Sponsored Camping	40	27.9

*Average Number of Camping Experiences per Year.* Among the 143 students who had camping experience, 60.8% went camping about once a year ( $n=87$ ) and 21% went camping about twice a year ( $n=30$ ). Not many respondents had more than three camping experience per year on average (see Table 14).

Table 14.

*Average Number of Camping Experiences per Year*

	<i>n</i>	%
1 time	87	60.8
2 times	30	21.0
3 times	9	6.3
4 times	3	2.1
5 times	6	4.2
6 times	1	0.7
7 times	3	2.1
8 times	1	0.7
9 times	3	2.1

*Note.*  $n$  = student number

*The Relationship between Camping Experience and Emotional Intelligence as Perceived by First-Year College Students*

*Comparison of Total EQ Mean Scores between Students with and without*

*Camping Experiences.* Among the respondents, Total EQ mean scores of students who had camping experience was 102.8. The Total EQ mean scores of students who had no camping experience was 94.1 (see Table 15). The difference is statistically significant at the .05 level with *p* value of .000 (see Table 15).

Table 15.

*Comparison of Total EQ Mean Scores between Students with and without Camping Experiences*

	Camping Students		Non-Camping Students		<i>p-value</i>
	<i>n</i>	Mean	<i>n</i>	Mean	
Total EQ	143	102.8	59	94.1	.000

Figure 2 depict the Total EQ mean scores difference between students who had camping experience and students who had non-camping experience.

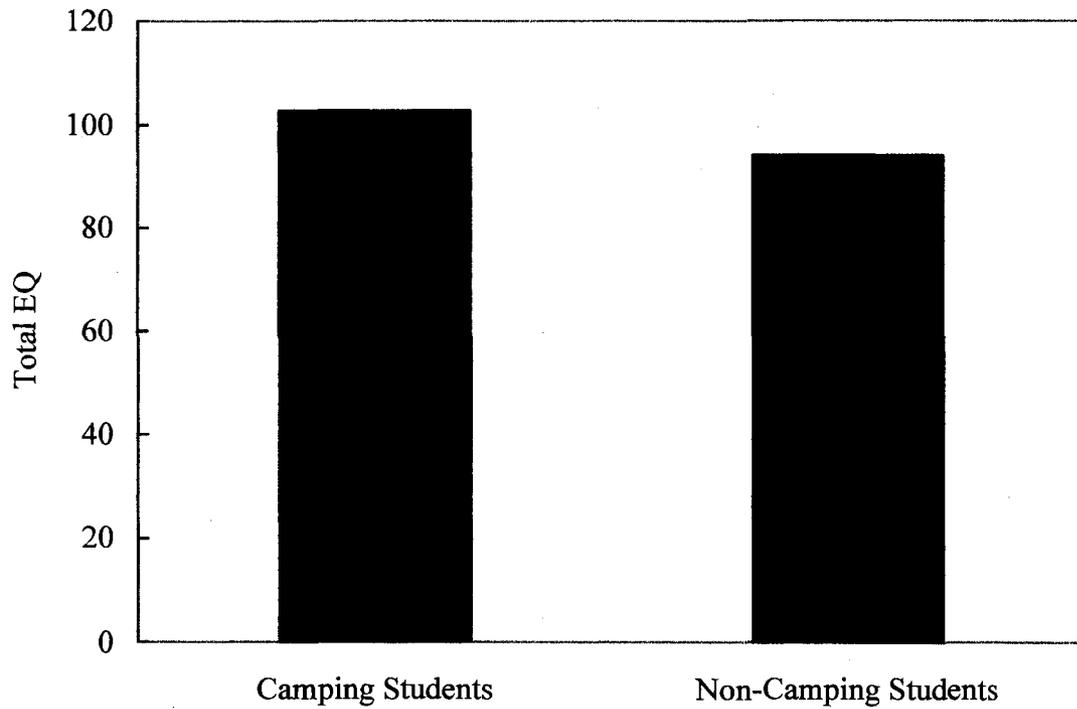


Figure 2. Total EQ Mean Scores Difference between Camping Students and Non-Camping Students.

*Comparison of Total EQ Mean Scores between Day, Resident, and Non-*

*Camping.* Of the 143 respondents who had camping experience, 29 were primarily at a day camping and 114 were primarily at a resident camping. The difference is statistically significant at the .05 level with a  $p$  value of .000 (see Table 16).

Table 16.

*Comparison of Total EQ Mean Scores between Day, Resident, and Non-Camping*

	<i>n</i>	Mean of Total EQ	<i>p-value</i>
			<i>(between groups)</i>
Day Camping Students	29	103.29	
Resident Camping Students	114	102.58	.000
Non-Camping Students	59	94.1	

These results seem to provide substantial evidence of at least one significant difference in Total EQ mean scores among three groups, but this conclusion is simple. Employing Tukey's HSD post-hoc test, allowing multiple comparisons, resulted in the following significant difference (see Table 17). An asterisk (\*) displayed next any score indicating the existence of statistically significant difference (see Table 17). The findings of this Tukey test could be indicated as follows:

- Students who had day camping experience and resident camping experience had better Total EQ Mean scores than students who had non-camping experience.
- Students who had day camping experience had comparable Total EQ Mean scores to students who had resident camping experience.
- Students who had any length type of camping experience had better Total EQ Mean scores than who had non-camping experience.

- Students who had day and resident camping experience's Total EQ Mean scores represents a significant difference with students who had non-camping experience's Total EQ Mean scores.

Table 17.

*Total EQ Mean Scores Multiple Comparisons between Day Camping, Resident Camping, and Non-Camping*

(I)	(J)	Mean Difference (I-J)	Sig.
Day Camping	Resident	1.111	.883
	Non	9.558*	.001
Resident Camping	Day	-1.111	.883
	Non	8.477*	.000
Non-Camping	Day	-9.588*	.001
	Resident	-8.477*	.000

\*. indicates the mean difference is significant at the 0.05 level

*Comparison of Total EQ Mean Scores between Sports, Church, Family,*

*Sponsored, and Non-Camping.* Of the 143 students who had camping experience, 35 were mainly at sports camping, 27 were mainly at church camping, 41 were mainly at a family camping and 40 were mainly at a sponsored camping. Those camp attendances' Total EQ Mean scores were above 100 (see Table 18). The difference is statistically significant at .05 level with  $p$  value of .000.

Table 18.

*Comparison of Total EQ Mean Scores between Sports, Church, Family Sponsored, and Non- Camping*

	<i>n</i>	Mean of Total EQ	<i>p-value</i>
			<i>(between groups)</i>
Sports Camping	35	103.26	
Church Camping	27	100.33	
Family Camping	41	102.12	.000
Sponsored Camping	40	104.78	
Non-Camping	59	94.1	

Tukey's HSD post-hoc test was done to multiple comparisons (see Table 19).

An asterisk (\*) displayed next to any scores indicated the existence of a statistically significant difference (see Table 19). The findings of this Tukey test showed the followings:

- Students who had sports, church, family, and sponsored camping experience had better Total EQ Mean scores than those who had non-camping experience.
- Students who had sports, family, and sponsored camping experience had Total EQ Mean scores comparable to each other.
- Students who had church camping experience had Total EQ Mean scores comparable to students who had non-camping experience.

- Students who had any types of camping experience had Total EQ Mean scores better than students who had non-camping experience.
- Students who had sport, family, and sponsored camping experience Total EQ Mean scores had significantly higher than students with who non-camping experience.

Table 19.

*Total EQ Mean Scores Multiple Comparisons between First-Year College Students, who had Sports Camping Experience, Church Camping Experience, Family Camping Experience, Sponsored Camping Experience, and Non-Camping Experience*

(I)	(J)	Mean Difference (I-J)	Sig.
Sports	Church	2.924	.847
	Family	1.135	.992
	Sponsored	-1.518	.977
	Non-Camping	9.155*	.002
Church	Sports	-2.924	.847
	Family	-1.789	.968
	Sponsored	-4.442	.505
	Non-Camping	6.232	.122
Family	Sports	-1.135	.992
	Church	1.789	.968
	Sponsored	-2.653	.824
	Non-Camping	8.020*	.005
Sponsored	Sports	1.518	.977
	Church	4.442	.505
	Family	2.653	.824
	Non-Camping	10.673*	.000
Non-camping	Sport	-9.155*	.002
	Church	-6.232	.122
	Family	-8.020*	.005
	Sponsored	-10.673*	.000

\*. indicates that the mean difference is significant at the 0.05 level

*Difference in Total EQ Mean Scores by Average Number of Camping Outings*

*per Year.* The 87 students who had around one camping outing per year and 30 students who had two camping outings per year had Total EQ Mean scores exceeding 100. Students with three camping experience outing per year or more also Total EQ Mean scores over 100 (see Table 20). However, students who had non-camping experience had Total EQ Mean scores below 100. Figure 3 shows the difference in Total EQ Mean difference between the groups.

Table 20.

*Differences in Total EQ Mean Scores by Average Number of Camping Outings per Year*

Number of Camping per Year on Average	<i>n</i>	Mean of Total EQ
0	59	94.1
1	87	100.32
2	30	104.83
3	9	106.33
4	3	103.33
5	6	114
6	1	117
7	3	107.67
8	1	107
9	3	110

*Note.* *n* = student number

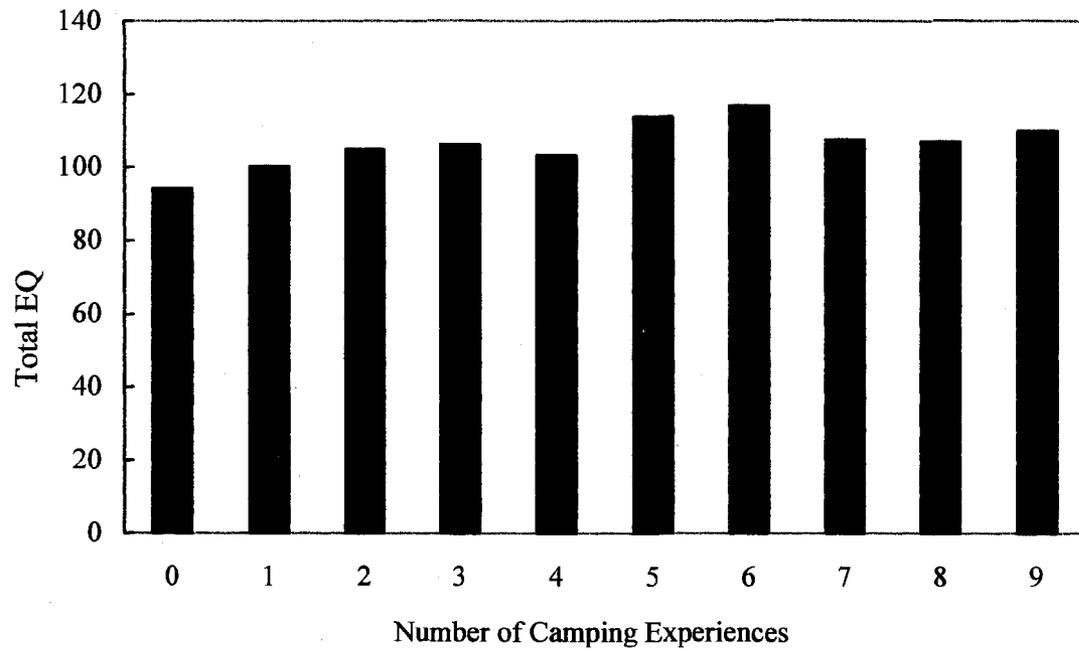


Figure 3. Differences in Total EQ Mean Scores by Average Number of Camping Outings per Year.

## CHAPTER 5: DISCUSSION AND CONCLUSION

This study was conducted to better understand the possible impact of camping experiences on the development of emotional intelligence in first-year college students. Utilizing a quantitative research design, data were collected from first-year students enrolled in three separate courses (HRTM 10, B10, and Eng 1A) held at San Jose State University between February 4 and February 11, 2008. The respondents were a convenience sampled recruited with the cooperation of their class instructor.

Out of a total of 277 distributed questionnaires, 202 questionnaires were fully completed, representing a valid return rate of 72.9%. The questionnaire consisted of two instruments, the first of which assessed the camping experience and the second assessing emotional intelligence using the BarOn Emotional Quotient Inventory: Short (EQ-i:S). The data analysis included a descriptive analysis of all independent and dependent variables in the study, followed by an Analysis of Variance (ANOVA) and Tukey's HSD post-hoc employed to relate variables, compare groups and detect any significant differences between them. This chapter discusses the research findings, limitations, and conclusions with suggestions for future studies.

## *Discussion*

*Level of Emotional Intelligence among First-Year College Students.* The results of the emotional intelligence tests among first-year college students revealed that the Total EQ Mean score was 100.26. Among the five EQ subcategories (Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood), the EQ mean scores ranged from 95 to 103 with four subcategories above 100 and one subcategory (Adaptability) below 100.

A Total EQ Mean score above 100 indicates an “emotionally intelligent” group (Jacob, 2004), suggesting that the overall level of emotional intelligence among first-year college students at San Jose State University is a little higher than standard groups, except perhaps on the Adaptability scale. These findings confirm BarOn’s (2002) research that the Adaptability scale’s mean score typically is the lowest (below 100) among the five scales (Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood). His study establishing the normative sample for BarOn EQ-i:S consisted of 1209 adults (539 males and 670 females) who ranged in age from 16 to 29. A second study (Jacob, 2004) of 81 camping staff who ranged in age from 18 to 30 found an Adaptability mean scale score below 100, which also was lower than the other four

scales. Thus, it appears that the Adaptability scale is the most difficult among the five scales on which to achieve a high score.

*Camping Experience of First-Year College Students.* The results of the camping experience questionnaire showed that over 70% of the respondents had some form of camping experience (organized or structured camping). Among those with camping experience, about 80% had attended a resident camp. About 80% of the respondents generally attended camping 1-2 times per year. The ACA's (2005) longitudinal research historically has indicated that camping experience seems to provide many benefits to the many children and youths who camp every year. The present study supports that contention, given that many of first-year college students who had camping experience also achieved higher emotional intelligence quotients.

*Comparison of Total EQ Mean Scores between Students with and without Camping Experiences.* The results of comparison of Total EQ Mean scores between first-year college students who had camping experience and those who had no camping experience revealed a significant difference between two independent variables. Students with camping experience had a Total EQ Mean score 8 points higher compared to students without camping experience. Since the standard scores for BarOn EQ-i:S

has a mean of 100 (BarOn, 2002), the Total EQ Mean (102.8) of camping students exceeded the standard mean score. In contrast, non-camping students' Total EQ Mean score (94.1) was below 100 suggesting that they had relatively less "emotion skill" in specific areas when compared to the overall group. This result again suggests that students having previous camping experience had better Total EQ Mean scores than non-camping students. This is also consistent with the result of prior research (ACA, 2005; BarOn, 1997) which indicated that camping experience contributes to significant growth in self-esteem, social skills, thinking skills and positive values, and that camping experience outcomes were linked with emotional intelligence's five composite scales (Intrapersonal, Interpersonal, Stress Management, Adaptability, and General Mood).

Further, the camping experience was found to have a positive effect on the camper's social, personal, and emotional growth (Bialeschki, Henderson, & Dahowski, 1998). Therefore, the present study's findings indicate that camping students were positively associated with achieving a higher level of emotional intelligence than non-camping students.

*Multiple Comparisons of Total EQ Mean Scores between Day, Resident, and Non-Camping.* The results of multiple comparisons of Total EQ Mean scores among

first-year college students who had day, resident, and no camping experience represented differences between three pairs of variables. Both day and resident campers had Total EQ Means that were higher than non-campers by a statistically significant amount. Day and resident campers had almost similar Total EQ Means. These results suggest that students who had any length of camping experience were associated with higher levels of emotional intelligence than non-campers. These results support Powell's (2003) camping experience study, which attempted to identify the benefits of camping experience in an effort to justify and validate the camping experience. Powell's research investigated the following outcomes for any forms of camping experience: affective, cognitive, behavioral, and spiritual growth. Those camping experience outcomes were associated with emotional intelligence's five composite scales (BarOn, 1997). This result may imply that day campers and resident campers received benefits throughout their camping experience, and camping experience's benefits provide positive impact on camper's emotional intelligence.

*Multiple Comparisons of Total EQ Mean Scores between Sports, Church, Family, Sponsored, and Non-Camping.* The results of multiple comparisons of Total EQ Mean scores among first-year college students who had sports, church, family, sponsored, or

non-camping experience revealed some differences between the five variables. Sports campers, church campers, family campers, and sponsored campers all had Total EQ Means higher than non-campers. The Total EQ Means for sports campers, family campers, and sponsored campers showed a significant difference from non-campers' Total EQ Mean. This research confirmed Chenery's (1994) study that organized or structured camping experience produced the following outcomes: learning specific activity, learning about oneself, learning about group living and interpersonal skills, having fun, and gaining an appreciation of nature. Sports campers, family campers and sponsored camp participants obtained those benefits throughout their camping experience and those benefits were positively associated with higher level of emotional intelligence compared to non-campers.

Although church campers' Total EQ Mean scores did not show a statistically significant difference from non-camper's Total EQ Mean, the church campers' Total EQ Mean (100.33) was above both the standard mean scores and non-campers' Total EQ Mean (94.1). According to Hoefner (2006), church camping experiences focus on enhancing religious community among congregation members, providing retreat and bonding opportunities for ministries, or serve as stimuli for transforming congregations.

Therefore, church camping experiences involve contexts differing from sports, family, and sponsored camping experience types. This result may imply that church campers are slightly different from sports camp and family sponsored camp participants, and also from non-campers.

*Differences in Total EQ Mean Scores by Average Number of Camping Outings*

*per Year.* The results of Total EQ Mean scores show that students who had one or more camping outings per year produced a mean above 100, but non-campers had a mean below 100. Unfortunately, some of the variable categories did not have a large enough sample number for multiple comparisons, so Tukey's HSD post-hoc test wasn't used for this analysis. In general, the findings indicated that participating in any number of camping outing experiences is positively associated with higher levels of emotional intelligence when compared to having no camping experience.

*Limitations*

The primary measurement instrument, the BarOn EQ-i:S has some limitations. The EQ-i:S would not be appropriate for use with individuals who are disoriented, impaired, or poor readers, or who are unable to comprehend English.

For comparative purposes, this study assumed that first-year college students'

emotional intelligence levels primarily were associated with camping experience variables. However, emotional intelligence may be influenced by other factors exclusive of camping experience, such as socio-economic status, so the significant associations revealed between emotional intelligence and camping experience may have other explanations.

Based on the small values for  $n$  associated with some variables, this study could not make a definitive statement as to whether camping more than once a year results in greater gains in EQ, or whether there is a diminishing return, or even whether there is an optimal number of outings per year. The sample size also decreased this study's statistical power, reducing the result's generalizability.

Because of the quantitative research design, the survey instruments did not assess all aspects of the first-year college students' emotional intelligence and camping experiences. Further, the surveys were administered at only one college rather than multiple colleges. Therefore, some of the nuances about first-year college students' relationships between camping experience and emotional intelligence, such as would be revealed by in-depth personal interviews, are missing and the sample may not be representative of all first-year college students.

### *Suggestions for Future Research*

One suggestion for future research would be to expand the number of samples, and another would be to add more comparison groups. Given a sufficient budget and research period, it would be helpful to recruit a larger number of first-year college students and perhaps to gather data from other schools in different regions. With a larger sample size, one could also statistically examine the effects of more than one outing per year. One could also investigate whether church campers are statistically different from non-campers and other types of campers.

In addition, it would be interesting to conduct studies with other class levels (2<sup>nd</sup> year, 3<sup>rd</sup> year, etc) of college students and with high school students. The EQ-i:S instrument is designed for administration to older adolescents and adults (aged 16 and older) (BarOn, 2002), so it is appropriate for these types of students. These suggestions for future research could produce valuable results that would be useful for the camping industry and beneficial towards the emotional well-being of students and society.

### *Conclusion*

This study examined relationships between the camping experience and emotional intelligence as perceived by first-year college students. The study was

conducted by administering a researcher-developed camping experience questionnaire and the BarOn Emotional Quotient Inventory: Short (EQ-i:S) to 202 first-year college students at San Jose State University. The results seemed to indicate that camping experience was positively correlated with a higher level of emotional intelligence.

Almost all of the different categories of the camping experience showed significantly higher levels of emotional intelligence when compared to having non-camping experience. In other words, camping experience seems to contribute to the development of emotional intelligence (see Figure 4). Previous evidence pointing to a significant and positive relationship between camping experience and emotional intelligence seems to be supported by the results of this research.

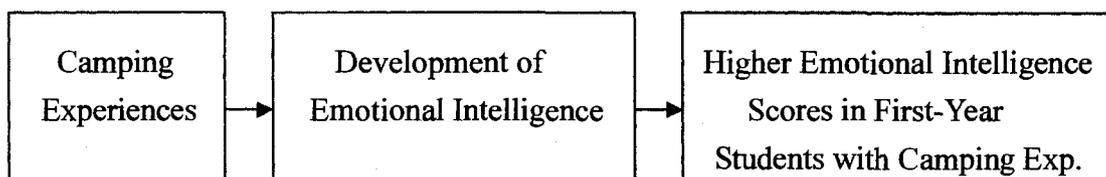


Figure 4. Framework of the Research the Relationship between “Camping Experience” and Emotional Intelligence as Measured in First-Year College Students.

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## Appendix A

### Questionnaire

Identifying relationship between the “camping experience” and emotional intelligence as perceived by first-year college students

Dear Student,

My name is Seungwon Nam, a graduate student in the Hospitality, Recreation and Tourism Management department of San Jose State University, CA, USA, majoring in Recreation Management. I am conducting research for the purpose of identifying any relationship between camping experiences and emotional intelligence in first-year college students. In addition, this research attempts to examine the significance of camping experiences of first-year college students. Your response will make a useful contribution towards research in the recreational field. I deeply appreciate your assistance and participation. Please take several minutes to complete this questionnaire according to your personal opinions. Your participation is completely voluntary. Your answers will be utilized only for this research and will not be used for other purposes.

Thank you very much for participating in this research. If you have any questions about this research, you can address to Seungwon Nam and Dr. Uhlik Kim, Department of Hospitality, Recreation and Tourism Management at (408) 924-2998. Complaints about this research can be proposed to Dr. Bethany Shifflet who is Interim Chair of Hospitality, Recreation and Tourism Management department of San Jose State University at (408) 924-3000. Questions about rights of research subjects and research-related injury can be reported to Pamela Stacks, Ph.D., Associate Vice President, Graduate Studies and Research at (408) 924-2480.

San Jose State University, California, U.S.A  
Seungwon Nam

## Part 1: Camping Experience

- *Basic demographic information*

1. How old are you? \_\_\_\_\_
2. Sex     \_\_\_ Male     \_\_\_ Female
3. What is your year at San Jose State University?  
   \_\_\_ Freshman  
   \_\_\_ Sophomore  
   \_\_\_ Junior  
   \_\_\_ Senior

- *Camping experience questions.*

**Note.** *“Camping experience” means organized or structured camping such as YMCA, YWCA, Boy Scout, Girl Scout, Sports camp, Church camp, Art camp, Family camp, and Music camp.*

1. Do you have any experience with camping?     \_\_\_ Yes     \_\_\_ No

If you answered “Yes,” go to question 2 below

If you answered “No,” **stop** this survey and begin the EQ-i: S survey instead

2. If you have any organized camping experience, what type of camping did you **mainly** do? (Check **only one**)

- \_\_\_ Sports camp
- \_\_\_ Church camp
- \_\_\_ Family camp
- \_\_\_ Sponsored summer camp (YMCA, Girl Scout, Boy Scout, etc.)

3. If you have any camping experience, was it primarily at a day camp or a resident

camp? (Check **only one**)

Day camp (go home at night)

Resident camp (stay overnight)

4. If you have had camping experiences, how many times did you attend camp per year

on average? \_\_\_\_\_

***Please begin the EQ-I survey now. Thanks for participating!***

## Part 2: EQ-i:S Item Booklet Examples

### Introduction

The EQ-i:S™ consists of statements that provide you with an opportunity to describe yourself by indicating the degree to which each statement is true about the way you feel, think or act most of the time and in most situations. There are five possible responses to each sentence.

1. Very Seldom or Not true of me.
2. Seldom true of me.
3. Sometimes true of me.
4. Often true of me
5. Very often true of me or True of me.

### Instructions

Read each statement and describe and decide which one of the five possible responses best describe you Mark your choices on the answer sheet by filling in the circle containing the number that corresponds to your answer.

### Item Examples

1. My approach to overcoming difficulties is to move step by step.
2. I prefer others to make decisions for me.
3. When faced with a difficult situation, I like to collect all the information about it that I can.

4. I'm good at understanding the way other people feel.
5. When trying to solve problem, I look at each possibility and then decide on the best way
6. I care what happens to other people.

Thank you very much for taking the time to contribute to this research.

## Appendix B

### Agreement to Participate in Research

**Responsible Investigator: Seungwon Nam (SJSU Graduate Student)**

**Title of Protocol: The Relationship between the “Camping Experience” and Emotional Intelligence as perceived by First-year College Students**

1. You have been asked to participate in a research study. The purposes of this study are to identify relationships between camping experience and emotional intelligence of first-year college students.
  2. You will be asked to respond to a self-administered questionnaire about camping experience and will take an EQ-i:S test.
  3. There are no anticipated risks to participating in this research study.
  4. There are no overt benefits to participating in the investigation.
  5. No alternative procedures will be employed.
  6. Although the results of this study may be published, no information that could identify you will be included.
  7. There is no compensation for participation in the study.
  8. Questions about this research may be addressed to Seungwon Nam, and Dr. Uhlik Kim, Hospitality, Recreation and Tourism Department, at (408) 924-2998. Complaints about the research may be presented to Dr. Bethany Shifflet, Interim Chair of Hospitality, Recreation and Tourism Department at (408) 924-3000. Questions about research subjects' rights or research-related injury may be presented to Pamela Stacks, Ph.D., Associate Vice President, Graduate Studies and Research, at (408) 924-2480.
  9. No service of any kind, to which you are otherwise entitled, will be lost or jeopardized if you choose to “not participate” in the study.
  10. Your consent is being given voluntarily. You may refuse to participate in the entire study or in any part of the study. If you decide to participate in the study, you are free to withdraw at any time without any negative effect on your relations with San Jose State University or with any other participating institutions or agencies.
  11. At the time that you sign this consent form, you will receive a copy of it for your records, signed and dated by the investigator.
- **The signature of a subject on this document indicates agreement to participate in the study.**
  - **The signature of a researcher on this document indicates agreement to include the above named subject in the research and attestation that the subject has been fully informed of his or her rights.**

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Investigator's Signature

\_\_\_\_\_  
Date