AN EXPLORATION OF COLLEGIATE OUTDOOR RECREATION PROFESSIONALS' PERSONALITY TRAITS AND JOB TASK AFFECT

by

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The investigator of the present study examined the Big Five personality traits of 94 Collegiate Outdoor Recreation (COR) professionals employed within a campus recreation setting. Using the Five Factor Model (FFM) of personality, the researcher explored the relationship between personality traits (Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness) and level of affect toward common COR program duties (General Office, Personnel Management, Interpersonal, and Program Specific). Results indicated Extraversion was positively correlated with Interpersonal job task affect. Implications to practice and suggestions for future research are discussed.

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Introduction

The concept of outdoor recreation in America is rooted in the westward expansion and settlement of the New Frontier (Watters, 1986). Pioneers explored the wild lands and mountains of the west cultivating a perceived sense of adventure. As the years progressed and the west was settled, environmentalist writers such as Henry David Thoreau, Rachel Carson, John Muir, Anna Bostford Comstock, Aldo Leopold, Margaret Murie, and Roderick Nash published works on the importance of connecting people with natural lands of the wilderness. With this notion, people like Muir organized the environmentally minded Sierra Club in 1876 (Cohen, 1988). In the early years, outing clubs and scouting organizations were the primary means by which primarily boys and men accessed recreational outdoor activities. Often, these programs had an organizational structure with a designated leader giving form to outdoor programming (Watters, 1986).

Kurt Hahn took organized outdoor recreation to another level through his development of the Outward Bound School in the early twentieth century. Teaching young people important practical skills, such as map and compass navigation and shelter building needed for survival in wilderness travel, Hahn set the tone for outdoor recreation programming with his Outward Bound model (Watters, 1986). Today many outdoor programs continue to use components of Hahn's model of wilderness education through outdoor pursuits. Contemporary leaders employed in outdoor programming use elements of wilderness education to teach participants about the environment; they also offer a platform for self-discovery and development through a perceived sense of adventure (Davis-Berman & Berman, 2002; Galloway, 2000; Hinton, Twilley, & Mittelstaedt, 2007).

Outdoor recreation agencies and organizations employ individuals who want to make a living showing others how to enjoy the outdoors. Outdoor recreation programs are found in a variety of settings such as commercial, educational, military, and public government agencies. One unique program setting for outdoor recreation found throughout the U.S. are colleges and universities – commonly found in departments or divisions of student affairs. Such programs often include components of adventure recreation, outdoor leadership, and environmental education as a basis for their offerings to collegiate clientele. Collegiate outdoor programs within a university recreation department are staffed with professionals as well as students both full- and part-time. These qualified individuals who manage the day to day business operations of outdoor programs in collegiate settings are the subjects of interest for this study.

Individuals working in the outdoor recreation field may have distinct personality characteristics that differ from individuals employed in more traditional jobs; therefore, the interest of this study is to determine if personality fosters a desire to live, work, and play in the outdoors. The study of individual differences has the potential to help determine what makes the community of outdoor recreation professionals unique from other professionals.

While people within certain communities have similar likes and tendencies we all have individual differences, which are portrayed to the exterior world through personality. Genetics, life experiences, and social interactions with others all have an impact on identity development (Erikson, 1980). Commonly individuals working in the outdoor recreation industry have had life experiences and influences that have exposed them to the culture of the outdoor community (Humberstone, 2000; Loeffler, 1995). For some, this exposure occurred in their college years after being involved with an outdoor adventure program on campus.

Outdoor programs at universities provide recreation experiences to students, faculty and staff through adventure trips and clinics, gear rentals, and climbing wall facilities. Outdoor programs often employ full time professional staff to oversee the day-to-day operations as well as manage student staff. Throughout the rest of this manuscript these individuals will be referred to as Collegiate Outdoor Recreation (COR) professionals.

Pursuing a career in the outdoor recreation field may have resulted because of one's exposure to the outdoor culture; social scientists have also hypothesized that personality has an influence on career and work setting choices (Holland, 1959; 1997). According to Holland's RIASEC model (1997) individuals with particular personality types have been shown to thrive in corresponding work environments. At the same time, work environments foster aptitudes and abilities common to characteristics of identified personality types. Using theoretical frameworks in personality psychology, the researcher investigated the types of personalities found among the COR field. In addition, the researcher was interested in discovering if there is a correlation between personality type and the COR professional's affect toward characteristics of their work environment.

Several researchers have addressed personality as it relates to occupational psychology (Pseekos, Bullock-Yowell, & Dahlen, 2011; Törnroos et al., 2013). In a number of these studies, the investigators utilized the Five Factor Model (FFM) as a framework to understand personality. While a few researchers have explored personality as a contributor to outdoor leadership qualities in a range of settings (Buell & Rorer, 1983; Riggins, 1985), personality has yet to be studied among professional staff working in a collegiate outdoor recreation setting. Utilizing the Five Factor Model of personality (McCrae & Costa, 1987; McCrae & John, 1992) this researcher sought to (1) investigate personality traits of collegiate outdoor recreation professionals, (2)

determine which job tasks are enjoyed most by COR professionals, and (3) examine the relationship between professional outdoor recreation staff personality and their affect toward their work responsibilities.

Theoretical Framework

Personality. Theories explaining personality have roots in trait theory. The major theories used in personality research are Holland's career theory (RIASEC, Holland, 1997), Jung's type theory (Jung, 1923), Eysenck's PEN theory (Eysenck & Eysenck, 1985), and the Big Five theory of personality (Goldberg, 1990, McCrae & John, 1992; McCrae & Costa, 1997). Based on these major theories explaining personality, a variety of models and assessments have been developed. Holland's career theory inspired the Self Directed Search as an assessment tool for the RIASEC Model and Myers-Briggs developed the Myers-Briggs Type Indicator (MBTI, Myers & Briggs, 1976). Eysenck produced the EPQ-R (Eysenck, Eysenck, & Barrett, 1985) and McCrae and Costa produced the NEO-Five Factor Inventory (NEO-FFI, Costa & McCrae, 1992). Career counselors have used personality assessments like those listed to help individuals identify the types of careers that appear to be a good fit for their aptitudes and attitudes (Miller, 1994; Kennedy & Kennedy, 2004; Pike, 2006; Carson, Evans, Gitin, & Eads, 2011; Chauvin, Miller, & Eaton, 2011).

The Factor Five Model (FFM), which examines personality through five specific personality characteristics, defines how individuals represent certain traits (McCrae & Costa, 1987). The traits are Neuroticism (also called Emotional Stability), Extraversion, Openness to Experience, Agreeableness, and Conscientiousness (NEOAC). The FFM is a widely accepted theoretical construct within the psychology community and has been used in various realms of the psychology field including occupational psychology and organizational behavior (Judge et

al., 2013; Panaccio & Vandenberghe, 2012; Sutin & Costa, 2010; Templer, 2012; Törnroos et al., 2013). The FFM has been called a "well accepted framework for describing personality attributes" (Dwight, Cummings, & Grenar, 1998, p. 541) and according to several personality researchers, "is widely accepted among personality researchers and theorists" (Reynierse, 2012, p. 1). Definitions of each of the five factors in the Five Factor Model of personality are provided in Table 1.

Table 1

Characteristics of the Five Factors

Factor	Definition
Neuroticism (Emotional Stability*)	Represents emotional stability or lack thereof; represents individual differences in the tendency to experience distress and the cognitive and behavioral actions that result. Those high in neuroticism tend to be nervous, sensitive, and emotionally reactive, while those low in neuroticism (referred to as 'Emotionally Stable") tend to be calm, secure, and free from persistent negative feelings.
Extraversion	Represents positive emotionality, which characterizes individuals who consistently display dominant, sociable, energetic, and warm characteristics. Low Extraversion individuals represent a reserved or sober demeanor and are often described as introverted.
Openness	Represents the tendency to seek out and appreciate new experiences displayed through intellectual interests, curiosity, creativity, sensitivity to aesthetics, and unconventional values. Individuals scoring low on openness may be viewed as unartistic, conventional, and narrow-minded.
Agreeableness	Represents the compassionate aspects of humanity such as selflessness, caring and compassion, emotional support, trust, and nurturing tendencies; the other end of the continuum addresses such traits as indifference to others, jealousy, cynicism, spitefulness, hostility, and self-centeredness.
Conscientiousness	Represents the level to which an individual methodically organizes and directs his or her behaviors; it indicates an individual's persistence and motivation toward a goal (i.e., governed by a conscience). Individuals scoring low on conscientiousness may be described as easy-going, spontaneous, and disorderly.

*The term Emotional Stability will be used in reference to Neuroticism throughout this manuscript, except in existing studies where researchers have used the term in the literature. (adapted from McCrae & John, 1992)

Costa and McCrae (1992) explain several reasons why the five factors within the FFM (NEOAC) are one of the most helpful explanations of personality theory. While they acknowledge that the model is not all-inclusive or able to explain all the facets of personality, they offer longitudinal and cross-sectional evidence to show how the five factors are enduring dispositions that present themselves in patterns of everyday behavior across cultures (McCrae &

Costa, 1997). The traits related to the five factors are pervasive in various cultures and have been found to be appropriate descriptors in a variety of languages (McCrae & Costa, 1997). McCrae and Terracciano (2005) found that the factors were identifiable in a variety of groups based on age, sex, race, and language spoken, though the descriptors may be expressed differently in different cultures. Additionally, support for heritability suggests a biological basis from which personality dispositions are inherited.

Because of its empirical support and practical utility, the FFM was selected for use in the current study. According to Barrick and Mount (1991), Conscientiousness is the best indicator of job performance as well as a predictor of academic achievement (Digman & Takemoto-Chock, 1981). Seibert and Kraimer (2001) found a positive correlation between Extraversion and career satisfaction, promotion, and salary level. Costa, McCrae, and Holland (1984) found Openness to be an important predictor of vocational interests. Vocational behavior researchers such as Holland believe interest and personality inventories result in indicators of vocational preference, thereby explaining how personality type affects career choice (Holland, 1997). Thus, knowing one's personality can provide insight to assess the interests an individual may have when it comes to career choice.

Personality as a determinant of career choice has been examined broadly in the field of vocational behavior and counseling psychology, yet minimal research has been conducted on personality as a career determinant particularly in the field of outdoor recreation. Therefore, two primary components to this study are (1) personality as it relates to assessment and career choice, and (2) outdoor recreation as it relates to collegiate recreation.

Authors have written about the hiring and staffing of outdoor programs (Garvey & Gass, 1999; Maningas & Simpson, 2003; Phipps & Claxton, 1997; Priest & Gass, 1997), however,

research on what influences individuals to select outdoor leadership as a career choice is lacking. To investigate career assessment within the field of outdoor recreation, a reliable and valid theory was needed to provide a structure on which to base the argument for quantitative scientific inquiry. The Five Factor Model (Goldberg, 1990; McCrae & Costa, 1987; McCrae & John, 1992) provides a lens through which the researcher examined personality traits of professional outdoor leaders. The FFM has yet to be applied to the outdoor recreation field in any setting and may be valuable in helping to understand the composition of outdoor professionals. Examination of personality traits within the collegiate outdoor recreation (COR) field may provide insight into the make-up of the COR professional population and, more practically, assist campus recreation directors in assigning individuals to outdoor recreation tasks or job responsibilities.

Outdoor Recreation. Outdoor recreation services have been professionalized over the past century. Development of professional membership organizations like the Association of Outdoor Recreation and Education (AORE), Association of Environmental Education (AEE), and National Recreation and Park Association (NRPA) as well as certification-granting institutions such as Outward Bound and the National Outdoor Leadership School (NOLS) demonstrate the progression of the field. Individuals passionate about providing outdoor recreation experiences for others have many resources and opportunities to grow professionally due to the existence of these certification-providing institutions (Garvey & Gass, 1999). The need for certain certifications as prerequisites for job consideration, such as Wilderness First Responder and American Canoe Association courses, also signifies a certain professionalization of employment within the outdoor recreation field.

Agencies that provide services within the field of outdoor recreation are numerous and commonly categorized as public, nonprofit, and private. Residential camps, environmental education centers, outdoor leadership schools, guiding/outfitting organizations, retail and sales, and wilderness medicine schools are just a few of the many examples of services provided by organizations under the umbrella of outdoor recreation. These program offerings require leaders to be in the field as guide staff delivering the program, as well as behind the scenes supervisors and directors managing logistics and personnel, to provide recreational opportunities to their clientele. Practical application of outdoor leadership theory has been derived from professional outdoor leaders within the field studying and writing about the unique experiences that arise in the adventure recreation setting.

Outdoor Recreation Professional Competencies. Related to understanding outdoor leadership traits is an understanding of core competencies. Priest (1987) identified twelve core competencies that an effective outdoor leader must possess: technical skills, safety skills, environmental skills, organizational skills, instructional skills, facilitation skills, flexible leadership style, experience-based judgment, problem-solving skills, decision making skills, effective communication skills, and professional ethics. Additionally, Phipps and Claxton (1997) provided a foundation of environmental themes and skill sets needed by outdoor leaders to be effective instructors, and successful in their career as outdoor professionals. Building upon this research Shooter, Sibthorp, and Paisley (2009) reviewed the literature related to the necessary skill sets of outdoor leaders. Their goal was to propose a leadership model that might have implications in the field of outdoor leadership in terms of hiring, training, evaluating, and mentoring outdoor program staff. A competency based leadership model that contains the skills

needed in outdoor leaders has the potential to become a tool used to filter job applicants by skill sets.

The terms *hard* and *soft* skills have historically been used to refer to the technical and interpersonal skills of outdoor recreation leadership settings, respectively, but have since been adapted to more accurately reflect the constructs under review. For many years, outdoor recreation staff training and development has focused primarily on technical skill acquisition and development; more recently educators have shifted their focus to the cultivation of interpersonal skills. Shooter et al. (2009) proposed a program perspective model that incorporates three skill sets outdoor leaders must possess: technical, interpersonal, and the meta-skills of judgment and decision-making. The model does not assess skills in a hierarchy; rather it conceptualizes them as a holistic set of skills necessary for a balanced, effective outdoor leader. Thus, these skill sets are viewed as important contributing factors to staffing outdoor recreation programs.

Garvey and Gass (1999) designed a study to examine hiring trends and employer preferences in the field of outdoor adventure programming. They explored selection preferences for individuals seeking employment as professional leaders in adventure programs, and how those preferences changed between the years of 1983 and 1997. Hiring preferences, changes in hiring preferences, and changes in hiring staff for outdoor professionals were all addressed. Typically, individuals responsible for hiring were interested in candidates who possessed a mix of personal as well as institutional training experiences. In addition, a more rigorous selection process could be indicative of an increase in sophistication within the recreation field. As individuals pursue employment within the outdoor recreation field, collegiate recreation careers offer a unique option outside of professional guiding and seasonal positions.

Campus Recreation Work Setting. Campus recreation centers include facilities and programs that provide recreational opportunities for university affiliates (student, faculty, staff patrons). Full-time staff, along with student employees, facilitate the daily operations of these recreation facilities. Certain characteristics are required to work as a professional in a higher education setting. Schneider, Stier, Kampf, Haines, and Wilding (2006) examined hiring preferences of campus recreation directors by assessing the competencies, attributes, and characteristics of professional new hires. The investigators surveyed campus recreation directors in the National Intramural-Recreational Sports Association (NIRSA) membership database to see what characteristics were sought after when hiring for professional positions, graduate assistantships, and part-time student employees. The most desired qualifications for the collegiate professionals included prior experience in campus recreation, excellent written and verbal communication skills, neat overall appearance, and possession of a graduate degree.

In a related study, Barcelona and Ross (2004) examined the core competencies necessary for managing recreational sports programs in a variety of settings. The authors sought to determine if practitioners and sport management faculty differed in their preferences for competencies. The researchers used factor analysis to determine the skill sets noted as necessary in campus, military, and public recreation environments. The four factors were classified as (1) management techniques, (2) sport programming, (3) business administration, and (4) theoretical perspectives. Campus recreation administrators placed a greater emphasis on theoretical perspectives compared to those employed in the public and military settings. Overall, the practitioners placed emphasis on theoretical perspectives and sport programming competencies while faculty in sport management programs placed more emphasis on business administration and management methods. Having the desired qualifications and competencies allows outdoor

professionals the opportunity to be considered for a position within a campus recreation department.

Stier, Schneider, Kampf, Wilding, and Haines (2006) examined hiring practices across institutional members of NIRSA by surveying directors of campus recreation departments who were professional members of NIRSA. Participants were asked about practices, policies, and procedures in the hiring process for professional staff, graduate assistants, and student employees. The areas assessed included the use of search committees, job descriptions, advertisement/announcement of position, application evaluation, reference checking, interview structure, and the impact of national professional organization affiliation on the hiring process. General findings indicated that a more involved, thorough search process was employed when seeking job candidates for higher level positions. Search committees were utilized more often and directors were more actively involved in the process of hiring professional full-time staff when compared to Graduate Assistants and student staff. Additional findings included a preference for an advanced degree for entry level positions, potentially indicating higher qualifications than previously desired by campus recreation administrators. Stier et al. also reported that the majority of respondents did not have a preference for the area of the applicant's academic discipline when hiring for entry and mid-level positions.

Several studies have been conducted to assess job satisfaction among campus recreation administrators. Stier, Schneider, Kampf, and Gaskins (2010) sought to determine the level of job satisfaction among campus recreation professionals by assessing the following work related aspects: (a) personal/individual satisfaction, (b) staffing and organizational structure, (c) financial support, (d) salary and professional development, (e) department and individual expectations, (f) campus recreation facilities, and (g) campus collaboration and communication.

Findings indicated that 93% of campus recreation administrators were satisfied with their job; however, a higher level of satisfaction was reported among employees who had more experience within an organization (i.e., loftier job titles) than those who were in lower, entry-level positions.

Kaltenbaugh (2009) also investigated job aspects that influenced employment satisfaction among campus recreation professionals and found that the level of supervision and nature of the work were ranked highest among administrators at four-year institutions. While certain features of campus recreation employment have been found to have an effect on job satisfaction, personality as it applies to vocational assessment has yet to be investigated in the context of a COR setting.

Research Questions

1. What are the personality characteristics of collegiate outdoor recreation professionals?
2. What job tasks have the highest affect from outdoor professionals employed in a collegiate setting?
3. Is there a relationship between the personality characteristics of collegiate outdoor recreation professionals and their affect toward job tasks and responsibilities?

Methods and Procedures

Sample Description. This study was delimited to individuals who were registered in the AORE membership database as COR program professionals. For purposes of this study, COR professionals were those who: worked at least 32 hours per week within a collegiate outdoor recreation program, had a signed contract with the university, and performed supervisory duties related to the outdoor program. In addition, to be included in this study COR professionals must have qualified experience to teach at least four of the following activities: backpacking, whitewater kayaking/rafting, canoeing, sea kayaking, stand-up paddleboarding, cross country

skiing, snowshoeing, rock climbing, downhill skiing, snowboarding, mountain biking, cycling, low impact camping, map and compass navigation, and wilderness medicine. Further, study participants must have held professional certifications in at least two of the following: Wilderness First Responder, American Canoe Association (ACA) Kayak/Canoe Instructor, Leave No Trace Master Educator, ACA swift water rescue, American Mountain Guide Association (AMGA)/Professional Climbing Instructor Association (PCIA) mountain guide or single pitch instructor, International Mountain Bike Association (IMBA) Level 1, 2, or 3 instructor, Level 1, 2, or 3 avalanche certification from the American Institute for Avalanche Rescue and Education (AIARE), CPR/AED, or Lifeguard.

A review of existing literature aided in the compilation of the preceding characteristics and justified the need to include professional certifications as a trait of a COR. According to Collins et al. (2009) both experiences and certifications hold value in the professional development of outdoor leaders. Professionals indicated that recreation experiences and certifications nurture one another; however, certifications had a stronger impact on competency than experiences in the field.

The investigator chose these characteristics based on common expectations of COR professionals as noted by those individuals attending an AORE national conference. In addition to talking with COR professionals, the researcher gathered information from current job description postings on the AORE listserv to inform the selection of COR professional skill sets.

Similarly, Young and Ross (2004) reported that professionals in recreational sports need to stay current in their area of expertise. Certifications specific to outdoor recreation enable COR staff to maintain updated skill sets in their areas of specialized knowledge. Successful completion of certification courses and skill-based trainings make COR staff more marketable

during the hiring process when seeking jobs within their field (Schneider et al., 2006). Involvement in professional organizations allows collegiate recreation staff to acquire industry certifications, which aid in professional development.

Within the stated parameters of a COR professional, the population for this study was the professional members of the AORE who were registered in its national membership database. Utilizing this professional membership group enabled the investigator to target individuals working in the COR community. Target individuals were program directors and coordinators currently employed in a COR work environment. A list of the professional members was compiled by the AORE's national office manager and sent to the researcher. The investigator sorted the database to filter the professional members who were affiliated with a university outdoor program. This was achieved by initially filtering the database by Membership Type to include "Organization," "Associate," "Professional," and "Professional – OD" members. The researcher further distilled the list by sorting the spreadsheet by Member Organization. The organizations that included the terms "university," "college," "recreation," "director," "coordinator," or "outdoor program" were identified and selected. The investigator then checked the emails of this sorted list for the ".edu" suffix to email addresses, which signified an association with a college or university. The final list generated through these methods ensured that the individuals in the sample population were professional members associated with a COR program; some potential respondents may have been missed if the identifiers used to sort the list were not identified in the raw database.

Instrumentation

Online Survey. Questions related to the Five Factor Model, common COR job tasks, and demographics were combined to develop an online survey utilizing Qualtrics,™ an online survey

tool. The first section of the instrument was Saucier's (1994) mini-marker assessment, a reliable, forty-item questionnaire adapted to assess participants' self-rating on each of the Big Five personality traits. The subjects rated themselves on a scale of 1 to 9 for how accurately or inaccurately the adjective described them. To ascertain job task affect, a second section with a 7-point Likert scale ranging from "I love this part of my job!" to "I hate this part of my job!" was created. This consisted of thirty-five items. The third section of the survey consisted of 10 questions about respondent demographics as well as the characteristics of the COR program at which they worked (e.g., questions about job title, number of staff, certifications, program offerings). Participants in the study completed an online questionnaire with the three previously listed sections of questions that address personality, job task affect, and demographic information.

Assessment of Personality. Saucier's (1994) mini-markers were used to assess personality traits of the COR sample. The scale consists of a forty-question instrument developed by psychologists that uses a lexical approach to personality evaluation. Saucier's assessment is part of the International Personality Item Pool (IPIP), a free database of personality measures that are increasingly popular among personality researchers, which aligns with the Big Five personality characteristics that comprise the FFM (Goldberg et al., 2006). The assessment is available for access online; the scoring key is provided and the instrument can be adapted to suit the needs of a research study.

Several studies have provided empirical support for the reliability and validity of the IPIP measures and Saucier's mini-markers. Gow, Whiteman, Pattie, and Deary (2005) assessed the internal consistency of Goldberg's Big Five assessment tool by administering the IPIP scales along with NEO-FFI and EPQ-R to three different groups. The overall measure of sampling

adequacy (MSA) for three populations was above acceptable limits: .74 for students, .80 for volunteers, and .85 for the LBC1921 cohort. Concurrent validity demonstrated high correlations between the IPIP scales and determined Conscientiousness, Extraversion, and Neuroticism were highly correlated with NEO-FFI (.76, .69, and -.83 respectively). IPIP scales were also highly correlated with EPQ-R Extraversion (.85) and Neuroticism/Emotional Stability (-.84). The negative direction of the IPIP associations for Neuroticism/Emotional Stability is because those factors are inversely scored on the NEO and EPQ.

In a 2004 study, Palmer and Loveland aimed to assess the correlation between Saucier's mini markers and Goldberg's Big Five assessment tool. Demonstrated criterion validity, as well as modest evidence for convergent and divergent validity of the mini markers relative to Goldberg's model of psychometric measurement, make Saucier's assessment an acceptable instrument to measure the Big Five traits in this study. In a study of 360 students using the 9 point rating scale of the 40 item mini-markers, Saucier (1994) listed norms for the mini-marker scales as follows: $M = 5.92$, $SD = 1.46$ for Extraversion, $M = 7.18$, $SD = 1.09$ for Agreeableness, $M = 6.24$, $SD = 1.23$ for Conscientiousness, $M = 4.83$, $SD = 1.20$ for Emotional Stability, and $M = 6.65$, $SD = 1.10$ for Openness.

According to Dwight, Cummings, and Glenar (1998), Saucier's assessment tool demonstrated acceptable levels of internal consistency with alpha coefficients of .90 for Extraversion, .90 for Conscientiousness, .75 for Neuroticism (emotional stability), .79 for Agreeableness, and .86 for Openness (intellect). As an abbreviated version of Goldberg's Big Five markers (Emotional Stability, Extraversion, Openness, Agreeableness, and Conscientiousness) Saucier's mini-markers maintained predictive validity and reliability. Overall, Saucier's mini-markers, were found to be valid measures of Goldberg's full set of

markers. Because a tool to conceptualize the commonalities of the work environment for COR professionals did not exist, the job task affect portion of the instrument was created for use in this study.

Assessment of Common COR Job Tasks. To create this instrument the researcher compiled a list of responsibilities and job tasks common to the management and operation of a COR program. Based on personal knowledge and experience of the subject matter and conversations with outdoor professionals at a national conference, the investigator generated a list of thirty-one tasks (see Appendix 1). The list was then sent to seven experts who work in the campus-based outdoor recreation field and who were knowledgeable of the job tasks and responsibilities typical to COR programs. The panel was asked to group the items into categories of similar tasks and responsibilities. This resulted in seven similar groupings that had a few variations. After a conceptual analysis, four themes emerged that encompassed the identified job tasks. To ensure appropriateness of identified COR duties and responsibilities, the groupings were cross-referenced with the Bureau of Labor Statistics' Occupational Outlook Handbook and the ONET OnLine summary report for job descriptions related to Recreation Worker, First-Line Supervisor of Service Workers, and General and Operations Manager (Bureau of Labor Statistics, 2014; ONET Online Summary Report, 2014;). Table 2 presents the four COR job task categories with specifically identified duties and responsibilities.

Table 2

List of COR job tasks grouped by category

Categories	COR Job Tasks/Responsibilities
General Office tasks	Organizing trip logistics
	Scheduling (e.g., staff work shifts, trips, clinics, special events)
	Program development (e.g., creating new programs, modifying existing programs)
	Managing gear and equipment inventory
	Purchasing equipment and supplies
	Evaluation of programs (generating annual reports, participation numbers, revenue generated)
	Preparing justifications, making funding requests
	Determining funding needs (e.g., budgeting)
	Preparing payroll related documents
	Marketing design and planning
	Researching current trends in the field
	Policy design and implementation (i.e., writing/revising manuals & handbooks)
	Organizing files and workspaces
	Understanding and implementing risk management policies and processes
	Utilizing business writing skills
Personnel Management Duties	Training staff
	Accepting and utilizing feedback from others for improvement
	Evaluation of staff
	Management of staff (e.g., scheduling, training, monitoring task completion)
	Mentorship of staff
	Providing feedback to others
Interpersonal/ Relational Duties	Interacting with a variety of campus and community individuals (e.g., students, administrators, business members)
	Teaching technical skills
	Interactions with coworkers in your campus recreation department
	Marketing trips, clinics, and other program offerings (formal or informal)
	Facilitating group development
	Seeking external funding/partnerships
Program Specific Tasks	Rental operations
	Climbing wall supervision/management
	Gear repair
	Setting climbing routes
	Trip leading/guiding
	Trip preparation (e.g., confirming logistics, pre-trip meetings, food buy, gear pull)
	Scouting new areas for trips
	Maintenance of gear/facility

Lastly, it was important to gather demographic data for the study. A series of items pertaining to individual as well as program specific information were gathered at the end of the

questionnaire. These items related to personal information (e.g., age, race, gender, job title, certifications) as well as information related to the COR program for which the respondent worked (e.g., program offerings, facilities, number of staff).

Procedure. The research proposal was submitted to the University and Medical Center Institutional Review Board (UMCIRB) for approval before the research began. Survey procedures were designed using Tailored Design Method (Dillman, Smith, & Christian, 2009) for online surveys and administered using Qualtrics™, an online survey distribution tool. The target COR population generated from the filtered list of the AORE membership was 244. Of the 244 initial contacts 11 emails bounced and were eliminated from further use; this resulted in 233 potential respondents. An invitation to participate in the study was sent to participants in late fall 2014 using email addresses. The survey link was distributed in early December; a series of reminder emails was sent two weeks after initial distribution, one month after the initial reminder, and two weeks after the second reminder. The questionnaire was delivered to the population through a personalized email explaining the components of study, potential implications, informed consent, how long the survey would take, and how to participate. Individuals in the target population were assured anonymity and confidentiality as the researcher was collecting no identifying information on the questionnaire or via electronic tracking (e.g., IP addresses).

Participants

Response Rate. Of the 233 delivered emails 111 respondents started the survey. After excluding incomplete surveys, a total of 94 usable data sets were collected from the potential 233 survey recipients for a response rate of 40%. The number of useable surveys was above the necessary minimum of 50 participants and an adequate number for running regression analyses

(VanVoorhis & Morgan, 2007). Participants were all employed in a collegiate recreation setting; 85% held a graduate or post graduate degree. Thirty-five percent of the respondents were employed at a small university (< 10,000 students); 30% of respondents worked for a mid-sized college/university (10,000-21,999 students); and 35% were employed at a large university setting (> 22,000 students).

Demographics. Seventy-nine percent of respondents identified as male. The sample was 94% white with one participant identifying as African American or Black; 5% preferred not to respond. Thirty-two percent of respondents held the title of "Assistant Director," 23% identified themselves as "Director," 17% defined as "Program Coordinator," 5% denoted "Associate Director," and 21% as "Other." Examples of titles listed in the 'other' category included assistant coordinator, assistant professor/coordinator, program manager, and associate professor who works with the COR program. When asked about their age, 88 participants offered a response ranging from 25 to 66 years old ($M = 38$, $SD = 8.79$). Age data were transformed into categories to determine the most frequent age group. See Table 3.

Table 3

Age group frequencies of COR professionals

Age Range	Number of respondents	Percentage of respondents
25-34	39	41.5%
35-44	32	34.0%
45-54	12	12.8%
55-64	4	4.3%
65+	1	1.0%

In addition to asking about age, the survey included a question about years of experience in the field. Eighty-seven COR professionals in the sample reported an average of 10.76 years of

experience working in the field; the years of experience ranged from 1 to 41 years (Range = 40). See Table 4 for years of experience group frequencies.

Table 4

Years of experience of COR professionals

Years of Experience	Number of respondents	Percentage of respondents
1-5	22	23%
6-10	31	33%
11-15	19	20%
16-20	5	5%
21+	11	12%

The researcher gathered program demographic information in addition to individual respondent demographics. Eighty-six (92%) respondents reported oversight of a trips program, 87% reported that their program offered educational clinics and teaching sessions such as kayaking pool sessions and belay clinics. Eighty-five percent of programs provided a staff training program and 73% had a climbing wall facility. Fifty-two percent of the respondents reported having high/low ropes courses and 88% reported managing a gear rental program. Nineteen percent reported a waterfront or boathouse facility and 53% reported an outdoor resource library. Sixty-four percent of respondents reported a maintenance/equipment repair facility as part of their program. Twenty-seven percent reported oversight of a trail system within their outdoor program. Additionally, the majority of the respondents (87%) who answered the demographic questions held a WFR certification or higher.

Findings

Variables. The independent variables in this study were the five personality types (NEOAC) identified in the FFM. The dependent variable was affect toward the work

environment, which was measured by the respondent's likeability of job tasks and responsibilities. These variables were chosen to illuminate answers to the following questions.

Research Question 1. *"What are the personality characteristics of collegiate outdoor recreation professionals?"*

To answer the first research question the investigator ran a variety of descriptive statistics. Individual scores on each of the five FFM factors were used to compute the average score for the participants. The lowest possible score on the personality assessment was 8 for each trait and the highest score was 72. Of the forty items in the personality portion of the survey, eight items pertained to each of the five factors. As per the scoring instructions, the corresponding eight items for each of the factors were summed to get an individual score for each respondent. After computing scores for the five factors, the researcher divided the individual scores by 8 (the number of survey items per factor) to obtain the average scale rating for each of the factors for each respondent. The investigator then averaged these scores to find the mean rating score for the entire sample. The internal consistency estimates for the each of the five factors on the mini-marker assessment were also calculated. The alpha coefficients are at acceptable levels and support the internal validity of Saucier's instrument. See Table 5 for descriptive statistics and reliability coefficients of the personality traits.

Table 5

Descriptive statistics for personality traits

Trait	*M*	*SD*	Alpha Coefficient
Extraversion	6.23	1.28	.86
Agreeableness	7.27	0.95	.81
Conscientiousness	7.14	1.02	.83
Emotional Stability	6.54	1.10	.80

Openness to Experience	6.94	0.99	.84

Note: Highest possible score was 9

Research Question 2. *"What job tasks have the highest affect from outdoor professionals employed in a collegiate setting?"*

As with research question 1, the investigator employed descriptive statistics to determine respondent affect toward each of the task categories. In creating the job task affect instrument expert panelists grouped discrete COR job tasks into four categories of similar duties. As a result, the number of individual tasks within each category varied. The General Office Tasks category consisted of 15 identified job tasks, Personnel Management Tasks and Interpersonal Tasks were comprised of 6 items, and Program Specific Tasks included 8 distinct job tasks. Simply summing the ratings for affect related to each job task resulted in a wide range of total affect scores, which were difficult to interpret in the overall analysis. Thus, to mediate the varied total scores, the researcher elected to divide the summed affect score for each job task category by the number of items in that task group. For example, if the summed score for a particular respondent in the General Office Tasks grouping (which consisted of 15 items) totaled 60, that score was divided by 15 resulting in an adjusted score of 4. The adjusted score allowed for the summed scores within each job task category to be reported on the same scale. Participants rated task affect items on a 7-point scale ("love this part of my job" to "hate this part of my job"). Reliability coefficients were calculated for each job task category and are reported in Table 6.

Table 6

Descriptive statistics for task affect scores

Task Grouping	*M**	*SD*	Alpha Coefficient
General Office Tasks	4.61	0.73	.81
Personnel Management Tasks	5.65	0.79	.76
Interpersonal Tasks	5.20	0.83	.60
Program Specific Tasks	4.65	1.05	.64

*Note: the raw responses were reverse coded before calculating the mean in order to prevent negative correlations in the regression models (i.e. the higher the score, the more the respondent 'loved' doing the task)

In nine instances on the questionnaire respondents missed or skipped a question resulting in missing data. Missing data were managed by assuming that individuals would rate the missed item similarly to the way they rated other items in that job task category. After consulting with a second rater the most likely response was inserted into the missing data cell.

Research Question 3. *"Is there a relationship between the personality characteristics of collegiate outdoor recreation professionals and their affect toward job tasks and responsibilities?"*

Question three was analyzed using multiple linear regressions to examine if a relationship existed between participants' affect toward job characteristics and their personality type. A series of four regression analyses were performed for each of the job task groupings as the dependent variable (General Office Tasks, Personnel Management Tasks, Interpersonal Tasks, and Program Specific Tasks) and each of the five factors as independent variables (NEOAC). The investigator chose multiple regression as the analysis tool because it allows the researcher to examine the relationship between multiple independent variables and a single dependent variable. According to Tabachnick and Fidell (2007), regression analyses are helpful when independent variables are

correlated, as is the case with personality factors of the FFM (Goldberg, 1990; McCrae & John, 1992). Further, regression techniques are useful in experimental research in which the "researcher is interested in real-world problems that cannot be meaningfully reduced to orthogonal designs in a laboratory setting" (Tabachnick & Fidell, 2007, p. 118).

A standard linear regression analysis was conducted to examine the relationship between General Office affect scores and each of the Big Five factors: Emotional Stability, Extraversion, Openness, Agreeableness, and Conscientiousness. Results of the analysis are found in Table 7. The regression model was not significant.

Table 7

Predictors of General Office task affect

Variables	General Office Tasks (DV)**	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	B	β
Extraversion	.054						.000	.000
Agreeableness	.207*	.205*					.082	.106
Conscientiousness	.275*	.013	.255*				.153	.213
Emotional Stability	.196*	.092	.276*	.382*			.056	.084
Openness to Experience	.134	.213*	.235*	.031	.017		.075	.102
						Intercept = 2.044		
Means	4.61	6.23	7.27	7.14	6.54	6.94		
Standard deviations	.73	1.28	.95	1.02	1.10	.99		
							R^2 = .111	
							Adjusted R^2 = .060	
							R = .333	

*$p < .05$

**Dependent Variable

A second linear regression analysis was conducted to examine the relationship between Personnel Management affect scores and each of the Big Five factors. Results of the analysis are found in Table 8. The regression model was not significant.

Table 8

Predictors of Personnel Management task affect

Variables	Personnel Management (DV)**	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	B	β
Extraversion	.065						.004	.007
Agreeableness	.156	.205*					.060	.072
Conscientiousness	.153	.013	.255*				.087	.112
Emotional Stability	.111	.092	.276*	.382*			.033	.045
Openness to Experience	.197*	.213*	.235*	.031	.017		.140	.174
						Intercept = 3.382		
Means	5.65	6.23	7.27	7.14	6.54	6.94		
Standard deviations	.79	1.28	.95	1.02	1.10	.99		
							R^2 = .068	
							Adjusted R^2 = .015	
							R = .261	

*$p < .05$

**Dependent Variable

A third linear regression analysis was conducted to examine the relationship between Interpersonal Task affect scores and each of the Big Five factors: Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience. Results of the analysis are found in Table 9. The regression model was significant, $F(5,88) = 2.76$, $p < .05$, $R^2 = .135$. The adjusted R^2 value of .135 indicates that the model explains almost 14% of the variability in Interpersonal Task affect. Results demonstrated a significant positive relationship between Extraversion and Interpersonal Task affect. Agreeableness and Openness to Experience were also positively correlated to Interpersonal Task affect. As Extraversion, Agreeableness, and Openness all increase, Interpersonal Task affect scores also increase. All other relationships in the model were not significant.

Table 9

Predictors of Interpersonal task affect

Variables	Interpersonal Tasks (DV)**	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	B	β
Extraversion	.298*						.158*	.244
Agreeableness	.184*	.205*					.063	.072
Conscientiousness	.098	.013	.255*				.053	.065
Emotional Stability	.086	.092	.276*	.382*			.012	.016
Openness to Experience	.243*	.213*	.235*	.031	.017		.143	.171
						Intercept = 2.304		
Means	5.20	6.23	7.27	7.14	6.54	6.94		
Standard deviations	.83	1.28	.95	1.02	1.10	.99		
							R^2 = .135	
							Adjusted R^2 = .086	
							R = .368	

*$p < .05$

**Dependent Variable

A fourth linear regression analysis was conducted to examine the relationship between Program Specific affect scores and each of the Big Five factors. Results of the analysis are found in Table 10. The regression model was not significant.

Table 10

Predictors of Program Specific task affect

Variables	Program Specific Tasks (DV)**	Extraversion	Agreeableness	Conscientiousness	Emotional Stability	Openness to Experience	B	β
Extraversion	.032						.028	.034
Agreeableness	.112	.205*					.145	.132
Conscientiousness	.032	.013	.255*				-.020	-.019
Emotional Stability	.086	.092	.276*	.382*			.054	.057
Openness to Experience	-.119	.213*	.235*	.031	.017		-.167	-.157
						Intercept = 4.371		
Means	4.65	6.23	7.27	7.14	6.54	6.94		
Standard deviations	1.05	1.28	.95	1.02	1.10	.99		
							R^2 = .039	
							Adjusted R^2 = -.016	
							R = .197	

*$p < .05$

**Dependent Variable

Discussion and Implications

Utilizing the Five Factor Model of personality, the researcher was able to assess the personality traits of COR professionals as well as their attitudes toward four groups of job tasks. The unique setting of collegiate recreation programs offered another work environment in which to the investigator was able to investigate the relationship between personality and job task affect.

Research Question 1. *"What are the personality characteristics of collegiate outdoor recreation professionals?"*

When compared to Saucier's (1994) normative data for the mini-markers, COR professionals scored above the mean on all five factors. These findings suggest that COR professionals are generally extraverted, agreeable, motivated, open individuals who are emotionally stable. Individuals who work in outdoor campus recreation programs may be found at both ends of the Extroversion/Introversion spectrum, as suggested by the largest standard deviation for Extraversion (SD = 1.28). This variability amongst the respondents suggests that there may be professional positions that require highly social and outgoing individuals to place more emphasis on interpersonal interactions in their job tasks (e.g., through trip leading and working on the frontlines interacting directly with customers). Additionally the more introverted respondents may have a professional position that does not require them to directly interact with student patrons or work directly in the field leading trips. See Table 11, which illustrates the mean scores of the collegiate outdoor recreation professionals in this study as compared to the normative mean scores provided by Saucier (1994).

Table 11

A comparison of mean scores between respondents and normative data

Factor	COR mean rating scale unit	COR *SD*	Saucier's mean rating scale norms*	Saucier's *SD*
Extraversion	6.23	1.28	5.92	1.46
Agreeableness	7.27	0.95	7.18	1.09
Conscientiousness	7.14	1.02	6.24	1.23
Emotional Stability	6.54	1.10	4.83	1.20
Openness to Experience	6.94	0.99	6.65	1.10

*(Saucier, 1994)

Research Question 2. *"What job tasks have the highest affect from outdoor professionals employed in a collegiate setting?"*

Ratings for all job task categories were above the mid-point of the rating scale (3.5), however, based on frequency data, the COR professionals in this study most enjoyed job tasks that represented the Personnel Management and Interpersonal Task categories (M = 5.65 and 5.20, respectively; 7-point scale). Program Specific Tasks and General Office Tasks were least liked (M = 4.65 and 4.61, respectively; 7-point scale).

Because of the hands-on nature of the job duties within the Program Specific Tasks category the researcher anticipated a higher positive affect rating for this grouping. Upon further examination of the distinct tasks within the Program Specific Tasks grouping many of the tasks seemed unrelated to one another. This category appeared to be a 'catch-all' grouping and this may have impacted the less positive rating. A factor analysis to determine best clustering would aid in clarifying like job tasks and perhaps provide more accurate results.

Research Question 3. *"Is there a relationship between the personality characteristics of collegiate outdoor recreation professionals and their affect toward job tasks and responsibilities?"*

The last research question was designed to explore any relationships between job task affect and personality traits, as is suggested by the RIASC Model. One significant relationship was found between the trait of Extraversion and Interpersonal job duties. COR professionals who had higher scores on the factor of Extraversion were more likely to enjoy interpersonal job duties than professionals who scored lower on Extraversion. According to the literature, this was expected. However, the nonprobability sampling method does not enable the findings to be generalized to the larger outdoor recreation population. The self-reported data gathered from this study was also a limitation. Self-awareness and perception of one's own personality are contributing factors to consider with self-reported statistics. People may be more likely to answer in a socially acceptable response because they think they exemplify that trait.

This exploratory study suggests that individuals with a higher rating on the FFM trait of Extraversion would be well suited to work in a collegiate outdoor recreation setting. Thus, campus directors would be encouraged to look for individuals who are sociable, outgoing, and who possess an open mind and agreeable demeanor. This demeanor would hopefully carry over into their work and shape the way they operate a COR program. When approaching projects and tasks within an outdoor program an agreeable and open mind set suggests that COR professionals would be creative problem solvers who can work well in a group. Extraverted, open, and agreeable individuals appear to be satisfied with the social aspects of a COR position. Individuals in this sample scored low on conscientiousness which is defined as the level to which an individual methodically organizes and directs his or her behaviors (McCrae & John, 1992).

Thus this scoring pattern was expected based on anecdotal evidence among COR professionals. The general attitude toward desk work amongst outdoor professionals is anecdotally enjoyed less than the field work or interpersonal/relational aspects of the job due to the mundane nature of office work. The results of this study suggest that outdoor professionals may not enjoy the task/office oriented responsibilities as much as working with people. While the administrative demands of the job would be suited to a highly conscientious individual, the interpersonal component is crucial to consider. People can develop systems to become organized by learning and practicing habits over time to accomplish office oriented tasks in a timely manner (e.g., setting deadlines, blocking/scheduling times to work on routine tasks). The social tact and people-oriented skills would seem harder to teach a person as there are more intricate idiosyncrasies that occur when interacting with others (e.g., reading body language, emotional intelligence, conversing in a clear, coherent manner, active listening). A higher level of thinking is also required as individuals are required to take on the perspective of the other person or people they are interacting with. People can learn social skills, but these would potentially require more time to master, rather than utilizing systems to become more organized. The 'people aspect' of COR programs is an integral component, that ideally carries more weight than the paperwork and office tasks. The nature of the job is to expose others to and develop people by utilizing the outdoor classroom. Thus, hiring professionals that understand people can potentially produce more benefits to campus recreation departments.

Three of the four regression models were not significant, which could be due to a number of factors. While the sample size was adequate for this type of analysis, a larger number of participants might provide more meaningful results. With a bigger sample, the analysis would be more statistically powerful and potentially be able to explain more of the variance. Additionally,

several of the independent variables were found to be significantly correlated in the regression models. This shared variance between these variables could be a contributing factor to the lack of significance.

Anecdotally, outdoor recreation professionals are thought to be extraverted due to the nature of the position (e.g., focus on human development, teaching and empowering others, developing potential in students)—this research supports that assumption. Working with people in an outdoor environment requires an individual who is sociable, energetic, and dominant in personality type in part due to the dynamic nature of the natural environment and interacting with people. The three non-significant models represent job tasks that might be perceived by COR professionals as mundane, indoor desk work.

The three regression models pertaining to General Office, Personnel Management, and Program Specific tasks were not significant while the Interpersonal task regression model was significant. The three non-significant models all had a technical-skill based theme, while the interpersonal job tasks include a human-based, people oriented component. General office tasks, managing personnel, and doing the hands-on work to help the program run may not require a high level of human skills set to complete the task. These job tasks are perceived to require a person to follow a certain procedure, organize a system, and check items off of lists. The interpersonal tasks required to mentor and coach staff are more fluid and ambiguous, as people skills usually are. The professionals in this sample who scored high on extraversion encompass those who enjoy being around and developing potential in others; thus, it would be expected that they like the social and interpersonal job duties.

It is important to note that 94% of respondents were self-identified as white and mostly male. This percentage is indicative of a lack of diversity within outdoor program management

personnel. A lack of diversity in the field may make outdoor sports and programs seem inaccessible to those who do not see themselves fitting in. People who cannot identify with the predominantly white, male environment do not have figures to emulate or aspire to. COR professionals in the field who enjoy talking and interacting with others can use this aspect of their personality to engage different populations and get them involved in outdoor programs, potentially aiding in an increase of diversity for the field.

This study has implications for individuals involved not only in campus recreation, but also administrators of the wider outdoor recreation community. By knowing the personalities of their staff, as well as the traits of potential candidates, administrators in recreation departments can better assign tasks that employees may enjoy. Hiring qualified professionals is crucial to the successful functioning of a business or department; thus, knowing the personalities of the people employed at an organization has the potential to offer benefits that may enhance a positive experience in the workplace. Benefits could include increased productivity (Holland, 1997), stronger motivation to work, increased organizational commitment (Panaccio & Vanenberghe, 2012), feelings of value and meaning (Barrick, Mount, & Li, 2013), and positive affect toward an individual's job duties (Holland, 1997). Further, supervisors can be educated on how people with different personalities may interact with one another, and have the potential ability to predict and monitor conflict between certain staff members.

In addition to examining an under-studied subset of the professionalized outdoor recreation field, this study can provide practical applications for those responsible for hiring outdoor leaders. As part of the hiring process, candidates can be screened during the search process to see if they have traits that will make them successful in the position of a program coordinator or director. To complement the interviews, presentations, and campus tours, a

personality assessment could be utilized as a potential indicator of how well a candidate might fit into the existing culture of a campus recreation department. Through assessing personality traits among professional outdoor leaders, supervisors and directors of collegiate recreation programs can be made aware of the different types of personalities that compose the staff membership. Knowing the types of tasks conducive to certain personalities may allow managers to assign job tasks to employees that are theoretically more enjoyable based on an individual's personality traits.

By knowing the make-up of employee personality traits, campus directors and supervisors can potentially gain a better understanding of how to best work with each individual employee on their staff. As a director responsible for hiring a COR professional, knowing the tendencies and personality traits would help indicate whether or not that person is suited for the tasks required of the job. With programs that have a large student development focus, hiring a professional who enjoys exercising human skills such as mentoring students, guiding trips, leading trainings, and developing people could be crucial to the success of the program. In addition to enjoying the people skills of the job, hiring an open and agreeable individual for a department might help address the issue of diversity (or lack thereof) in the broader field of outdoor recreation. By getting a variety of students from different backgrounds and cultures involved in outdoor programs, COR professionals have an opportunity and capacity to contribute to the achievement of institutional goals of diversity in higher education.

A vocational assessment of outdoor professionals has never been undertaken and further investigation is needed to begin the systematic process of studying the career choice of outdoor recreation professionals. Using personality assessments to examine affect toward vocational tasks has the potential to assist aspiring COR professionals by providing information to

individuals thinking about a career in collegiate outdoor recreation. Additionally, vocational assessments help to provide campus recreation directors with information to aid in hiring COR professionals. This study may also provide a basis from which to further examine career satisfaction among outdoor recreation professionals – an aspect that is beyond the scope of the current proposed study.

Recommendations. A factor analysis of the job task groupings is recommended to increase validity of the job task affect assessment within the instrument. This refinement of task groupings (which was not statistically determined for this study) has the potential to yield better data and additional findings. Additionally, replicating this study with a larger sample could produce more significant results. Future directions for related studies would be to investigate professionals within various outdoor recreation settings (e.g., park rangers – both interpretive and enforcement officers, military wellness and recreation staff, guides and outfitters, city/county parks and recreation employees) which could provide further evidence to support the theories behind personality and career choice.

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Section II: Extended Literature Review

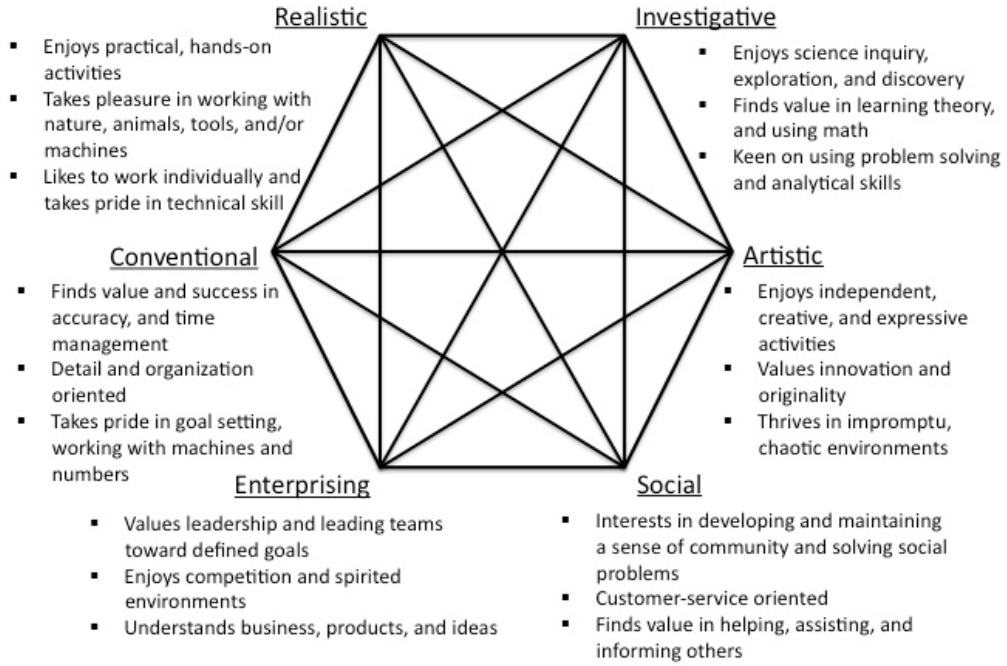
To further elaborate on the theories and constructs pertaining to this study, additional research was examined. Various formats are used to present the information in this extended literature review. This review includes the concept of Holland's RIASEC theory, Carl Jung's theory of psychological types, Myers-Briggs Type Indicator, and a background on the Big Five personality traits and the Five Factor Model. Additional information on outdoor recreation and collegiate recreation are also presented.

Holland's RIASEC Theory

As a pioneer in career theory, Holland (1959) developed a typology with six different categories relating personality to vocational choice. Holland's RIASEC model is a typology that classifies people and environments into six different categories: Realistic, Investigative, Artistic, Social, Enterprising, and Conventional (RIASEC). The model operates under four assumptions: (1) people can be categorized into six different personality types; (2) there are six model environments; (3) people search for environments that will allow them to exercise their skills and abilities, express their attitudes and values, and take on agreeable problems and roles; and (4) behavior is determined by an interaction between personality and environment (Holland, 1997). The theory suggests that a higher congruency of the pairings of personality type to a corresponding environment can identify certain predictable outcomes. Outcomes include: vocational choice, stability and achievement, educational choice and achievement, social behaviors, and personal competency, among others (Holland, 1959; 1997).

Figure 1.

Holland's RIASEC Model



(Adapted from Holland, 1997)

Throughout the development of the model, Holland and colleagues designed a variety of assessment instruments. The original instrument is the Vocational Preference Inventory (VPI), which assess individuals' personality types and vocation choices (Holland, 1958). Other instruments developed from Holland's career theory include the Self Directed Search (SDS), a user-friendly assessment tool that asserts the RIASEC typology as personality traits (Holland, 1999) and the Position Classification Inventory (PCI) that classifies work environments using RIASEC types (Gottfredson & Holland, 1991). The SDS assessment offers the user a three letter code which identifies an individual's top three personality types (e.g., SEC reads as Social-Enterprising-Conventional, IAE would be Investigative-Artistic-Enterprising). With this code individuals are provided a unique classification that can assist in career choice or provide information about potential job satisfaction.

The RIASEC model suggests personality as a career determinant by examining person-environment fit. Three main assumptions apply to Holland's theory: (1) people within the same vocations have similar personalities; (2) people tend to choose environments that fit their personality type; and (3) vocational success, satisfaction, and career achievement are dependent on the congruence between one's personality and environment (Chauvin, Miller, & Eaton, 2011). Congruence is defined as "the degree of similarity between an individual's personality and any given work environment" (Toomey, Levinson, & Palmer, 2009, p 82). As the most tested career theory (Ehrhart & Makransky, 2007; Nauta, 2010; Toomey, Levinson, & Palmer, 2009), the RIASEC model offered inspiration for the current study.

Previous uses of the model have occurred in the field of career assessment (Carson, Evans, Gitin, & Eads, 2010; Ehrhart & Makransky, 2007), as well as application to the collegiate setting in helping determine college major choice (Pike, 2006). Another application of Holland's model has been in the realm of avocational interests. Several studies have examined leisure activity choice and its congruence with personality type (Melamed & Meir, 1981; Taylor, Kelso, Cox, Alloway, & Matthews, 1979; Varca & Shaffer, 1982). Holland's model has also been implemented in studies aiming to determine career satisfaction within occupations. Chauvin, Miller, and Eaton (2011) performed a congruence study with a nonprofessional occupation: taxidermy. The study found a moderately high congruency score for one subject in the study, with two of the three letters corresponding in each code. The subject also ranked a moderately high job satisfaction score of 8 on a range of 1-10.

In a different study exploring job satisfaction and interpersonal conflict at work, researchers found that as person-environment fit decreased interpersonal conflict increased, signifying a relationship between job satisfaction and an increase in person-environment fit

(Pseekos et al., 2011). In other words, the higher level of congruency between a person's environment and personality type, the less likely they were to experience interpersonal conflict with coworkers. In another study examining congruence, Toomey, Levinson, and Palmer (2009) studied a group of school psychologists and found no significant correlations between congruence and overall job satisfaction; however, the authors did find a significant correlation between differentiation and extrinsic job satisfaction, which offers support for Holland's theory.

In contrast to the many authors providing evidence to support the RIASEC model, Arnold (2004) raised congruence issues with Holland's theory of vocational decisions. Arnold addressed fourteen reasons within three broad categories for congruence problems within Holland's model. The three most pertinent congruence problems are neglect of important constructs within the measurement tools for people and environments, poor measurement and conceptualization of environments, and lack of precise and comprehensive data used to determine congruence within studies that employ Holland's model. Arnold suggested the associated measurements used to determine congruence need to be further developed.

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator (MBTI) is based in Carl Jung's (1971) theory of psychological types. The MTBI assessment is widely used in the field of counseling and has been specifically used in the realm of career counseling (Kennedy & Kennedy, 2004). The framework proposes four dichotomous preferences that pertain to energizing, attending, deciding, and living. The four behavioral dichotomies are: Extraversion-Introversion, Sensing-Intuition, Thinking-Feeling, and Judging-Perceiving. Hirsch and Kummerow (1992) outline the complementary opposites of the four preferences:

1. People can be energized in two ways. Extraversion is the preference that relates to drawing energy from outside oneself in the external world or peers, activities or things whereas Introversion is the preference that relates to drawing energy from one's inner world of ideas, emotions, and impressions.
2. Sensing and Intuition are the two preferences for attending. Sensing relates to the preference for paying attention to information that is perceived directly through the five senses and for focusing on what actually exists. Intuition refers to the preference for paying attention to what is taken in through a "sixth sense" and for noticing what might or could be, rather than what actually exists.
3. The deciding preferences are Thinking and Feeling. Thinking is the preference that relates to organizing and structuring information to decide in a logical and objective way. Feeling is related to the preference for organizing and structuring information to decide in a personal, value-oriented way.
4. Judgment and Perception are the two preferences that relate to how one likes to live one's own life. Judgment is the preference that relates to living a planned and organized life. Perception refers to the preference for living in a more spontaneous way (p. 5-6).

The MTBI determines which of the preferences a person gravitates toward producing a four letter code identifying a particular personality type. Sixteen compositions of preferences exist for sixteen unique psychological types. Barbuto (1997) offers criticism of the model stating that the creation and representation of attitudes and functions as discrete rather than continuous variables is misleading and inaccurate. Personality and cognitive functioning measures are not dichotomous and should be treated as a spectrum rather than polar opposites. The purpose of the

MBTI is to help people increase their self-awareness by understanding their natural strengths, motivations, and growth potential (Myers, 1998).

Personality types are socially constructed whereas traits are not. Traits are based in language as unique descriptors and are objective. Typologies are a collection of traits that form a socially desirable or undesirable 'type' of person and is subjective to the observer. Additionally personality researchers have suggested that typologies oversimplify the discussion of complex, continuous data (Mendelsohn, Weiss, & Feirner, 1982).

The Big Five

This framework for personality is rooted in trait theory and was developed out of a family of trait models. Allport and Odbert (1936) distilled trait descriptors in the dictionary, which Cattell (1943) cut down to 35 clusters using factor analysis. Norman (1967) then added to the list from Allport and Odbert using the next edition of the dictionary. The big five traits have been used in part and in entirety to form various conceptual frameworks such as the 3 factor PEN model (Eysenck, 1990) and the more popular Five Factor Model (McCrae & Costa, 1987). Goldberg (1990), along with other personality researchers (Goldberg et al., 2006), have been proponents of providing scholars access to personality measures in the public domain, rather than paying per assessment as with popular models, like the FFM. This gave rise to the International Personality Item Pool (IPIP; Goldberg, 1990). The Big Five traits are labeled as Surgency (Extraversion), Agreeableness, Conscientiousness (or Dependability), Emotional Stability (versus Neuroticism) and Culture (also called Intellect or Openness) (Goldberg, 1990). The Big Five traits were found to be fairly universal and used as a foundation for the Five Factor Model

Five Factor Model

The literature pertaining to this model is discussed in Section I of the thesis manuscript. McCrae and Costa's (1987) model has been used in many studies since its inception. Researchers have applied the model in a variety of settings and have used the model to investigate how personality plays into a variety of vocational outcomes.

Authors	Seibert & Kraimer (2001)
Research Question/Purpose	Hypotheses were generated to examine the relationship between the Big Five factors and career success (both extrinsic and intrinsic) HYPOTHESIS 1 a. There is a negative relationship between an individual's level of neuroticism and extrinsic career success after controlling for several career-related variables. b. There is a negative relationship between an individual's level of neuroticism and intrinsic career success after controlling for several career-related variables. HYPOTHESIS 2. a. There is a positive relationship between an individual's level of conscientiousness and extrinsic career success after controlling for several career-related variables. HYPOTHESIS 3 a. There is a positive relationship between an individual's level of extraversion and extrinsic career success after controlling for several career-related variables. b. There is a positive relationship between an individual's level of extraversion and intrinsic career success after controlling for several career-related variables. c. Occupational type moderates the relationship between extraversion and career success such that extraversion is more strongly related to extrinsic and intrinsic career success in people-oriented occupations than in occupations without a strong interpersonal component. HYPOTHESIS 4 a. There is a negative relationship between an individual's level of agreeableness and extrinsic career success after controlling for several career-related variables. b. There is a negative relationship between an individual's level of agreeableness and intrinsic career success after controlling for several career-related variables. c. Occupational type moderates the negative relationship between agreeableness and career success such that agreeableness is more strongly related to extrinsic and

	intrinsic career success in people-oriented occupations than in occupations without a strong interpersonal component.
Sample	Participants were drawn from an undergraduate alumni for MBA, business, and engineering programs. Four hundred and ninety six useable responses were gathered from employees who worked in a variety of occupations and organizations.
Methods	Survey data pertaining to career success, personality traits (using Saucier's mini markers), occupational type, and demographic information were gathered using a researcher-developed questionnaire. Hierarchical multiple regression analyses were used to assess the research hypotheses.
Findings	Extraversion was significantly related to career satisfaction. Individuals who scored high on Extraversion received more promotions and higher salaries than individuals who scored low on Extraversion. Individuals who scored high on agreeableness reported being less satisfied with their careers. A significant negative relationship between openness and salary indicated that more open individuals did not make as much money as their reserved counterparts. Participants in the sample who were more extroverted, less agreeable, and emotionally stable within the sample experienced higher levels of satisfaction in their career.

Authors	McCrae & Terracciano (2005)
Research Question/Purpose	To test the universality of personality traits across multiple cultures
Sample	College students in 50 cultures who were native born citizens of their respective country
Methods	Participants in the sample (as a third party observer) were asked to assess the personality traits of someone they knew well who is a native born of their same country using the NEO-PI-R
Findings	Median Alpha scores for the sample were .90, .90, .88, .92, and .94 for N, E, O, A, and C. Only 4.8% of alpha scores were below .70. This study confirms other findings with a new sample of cultures. Provides evidence for the universality in trait psychology. Women are more positive in their assessment of others than men; shows gender differences in person perception across cultures.

Authors	Sutin & Costa (2010)
Research Question/Purpose	To examine the relationship between personality and occupational experiences over an extended period of time
Sample	An economically diverse, middle aged adults employed in a wide variety of occupations (n=297)
Methods	In a longitudinal study from 1993 (baseline) to 2004 (follow-up), participants rated their occupational experiences using the Quality of Employment Survey; personality was measured using the Revised NEO Personality Inventory for each of the five factors. Occupation classification was determined using Nam-Powers-Boyd rating of

	occupational prestige.
Findings	Using a series of cross-lagged analyses personality was found to shape occupational experiences. Individuals high in extraversion and conscientiousness, and low on neuroticism had jobs characterized by high decision latitude. Conversely, individuals low in agreeableness and conscientiousness were employed in jobs defined by hazardous working conditions and increased physical demands.

Authors	Neal, Yeo, Koy, & Xiao (2012)
Research Question/Purpose	To examine the relationship between personality traits and work role performance by developing and testing a nine factor model that integrates role theory and trait activation theory. • Hypothesis 1: Openness to experience positively predicts adaptivity and proactivity. • Hypothesis 2: Agreeableness positively predicts team proficiency, team adaptivity, organizational proficiency, and organizational adaptivity, but negatively predicts individual proactivity. • Hypothesis 3: Extraversion positively predicts team proficiency, team adaptivity, and team proactivity. • Hypothesis 4: Conscientiousness positively predicts all nine dimensions of work role performance; however, it is a stronger predictor of individual task proficiency than the remaining eight dimensions. • Hypothesis 5: Neuroticism negatively predicts all nine dimensions of work role performance.
Sample	Drawn from a population of 27,641 Australian government staff and supervisors. The final sample size was 1375. The majority of respondents were female (80%) and average age was 39 years.
Methods	Survey methods were used to gather information on demographics, personality traits (alpha scores from .66 to .87), and performance dimensions (alpha scores from .91 to .96). Individuals filled out the survey and sent a link or paper copy to their supervisor (for self and other to assess interrater agreement)
Findings	Openness was positively related to proactivity at the individual and organizational levels and negatively related to team and organizational proficiency. Agreeableness was negatively related to individual proactivity, which is consistent with the passive nature of highly agreeable individuals. Extraversion did not predict work role performance behaviors that contribute to team effectiveness at each level and was negatively related to individual task proficiency. It was suggested that in highly administrative settings, extraversion can be viewed negatively by supervisors. Conscientiousness and neuroticism predicted all dimensions of work role performance as expected. Conscientiousness was highly correlated with individual task proficiency. Neuroticism was negatively correlated due to its nature as a

	reverse-coded variable.

Authors	Panaccio & Vandenberghe (2012)
Research Question/Purpose	Using the Big Five traits in tandem with Affective Events Theory, the researchers aimed to investigate the relationship between personality and organizational commitment.
Sample	Two hundred twenty employees from multiple organizations; 51% were female, average age of 35.
Methods	A one year longitudinal study where personality (Big Five), organizational commitment (4 components), and demographics were measured at time 1. Positive and negative affective states and the four components of organizational commitment were measured at time 2.
Findings	Using confirmatory factor analysis, multiple regression, and intercorrelations the researchers found the following: extraversion, agreeableness, and neuroticism predict change in commitment types, which are partially mediated by positive and negative affective states. Agreeableness was associated with the most indirect effects on commitment types. This study suggests that organizations should consider employees' extraversion, neuroticism, and agreeableness to gauge how an individual's organizational commitment develops over time.

Authors	Consiglio, Alessandri, Borgogni, & Piccolo (2013)
Research Question/Purpose	To present the Big Five Competencies grid, a conceptual framework for assessing competencies in the workplace. The researchers conducted a preliminary test of reliability and construct validity of the grid as well as examined relationships between the Big Five personality traits and the competencies assessed with the grid. Convergent validity between other and self-ratings was also examined.
Sample	Sample for Study 1 included 1,307 employees from a variety of organizations and occupational roles (28% were clerks, 32% were professionals, 29% were blue-collars). The participants in Study 2 were 150 employees from a mail-delivery company. Individuals in this sample were assessed through peer rating from a colleague.
Methods	Using a researcher-developed questionnaire, survey data were collected. Questions pertaining to the proposed BFC grid model included 4 scales (Proactivity, Innovation, Emotion Management, and Accomplishment). The personality portion included 25 adjective markers that assessed each of the five factors. Reliability scores ranged from .70 to .85. For Study 2 the same methods were utilized, but the instrument was reworded to reflect a third person's perspective to evaluate a coworker's competencies and personality. Reliability scores ranged from .79 to .92.
Findings	Using exploratory structural equation modeling, results indicated that all six factors of the competency scale were strongly associated with participant personality traits. Teamwork was associated with agreeableness, Proactivity was associated with Extraversion, Emotion

	Management was correlated with Emotional Stability, and Innovation was related to Openness. Process Management and Accomplishment were both associated with Conscientiousness. For the second study, confirmatory factor analysis was used to evaluate interrater agreement; convergent validity was found for all competencies.

Employment in Outdoor Recreation

Individuals often choose to work in the field of outdoor recreation because they get a sense of empowerment. The unique environmental setting of adventure recreation provides employees an opportunity to grow and learn about themselves (DeGraaf & Glover, 2003). In a study of former resident camp employees in western Michigan looked at the long-term impacts on seasonal staff members. DeGraff and Glover (2003) discovered several positive benefits gained through seasonal staff employment. The purpose of the study was to gain a greater perspective of how the employment experience impacted camp counselors in later life as well as examine if females and males process the camp experience differently over time. Through conducting semi-structured interviews with twenty-nine former camp staff members, the researchers were able to identify the following themes: personal impacts of camp experience, professional impacts of camp experience, and reflections on camp. Findings from the study included remembering the camp employment experience in a positive light and recognizing the positive impacts of working in an outdoor education, residential camp setting on personal and professional aspects of the respondents' lives. Respondents further removed from their camp employment experience were more likely to remember their experience in a positive light and noted working with children was an important motivator for seasonal summer camp employment.

Development of life skills differed for men and women; men reported gaining interpersonal, relational-building skills, whereas women identified a gain of practical, technical

skills along with an increase in self-confidence. Other noted impacts dealt with a sense of community and social benefits of building life-long friendships. Respondents reported developing a sense of vocation and purpose from working at camp in an environment described as being removed from the 'real world.' The distinct camp environment offered a chance for the respondents to live simply and with a sense freedom to experiment with who they were separate from the outside community. This notion of a sense of community is another benefit of working as seasonal employees in an outdoor recreation setting. The authors suggested that interpersonal relationships and connectedness with others were among the top benefits and motivations for working at summer camps. McCole, Jacobs, Lindley, and McAvoy (2012) also reported the importance of social network between employees in the outdoor recreation environment.

Gender Differences in Outdoor Recreation

Saunders and Sharp (2002) assessed leadership styles between male and female outdoor leaders and found that regardless of gender, situational leaders were the most desirable individuals in the outdoor recreation field. Respondents believed the most effective leader had a mix of masculine and feminine leadership attributes, exemplifying a flexible leadership style. Masculine and feminine attributes refer to characteristics which society has constructed and typically assigned to males or females, depending on the attribute. Possessing a flexible style, situational leaders appear to be the best fit to adapt to a group's needs and the environmental conditions. All in all, the literature seems to recommend a flexible, situational leadership style as most conducive in an adventure recreation setting.

As individuals are motivated to work in the outdoor recreation field, a gender disparity between male and females exists. Outdoor recreation is considered to be a male dominated field and as a result researchers have studied gender role incongruence within the field of outdoor

leadership (Carter & Colyer, 1999; Humberstone, 2000; Jordan, 1991; Warren & Loeffler, 2007; Wittmer, 2001). With an increase in the numbers of female outdoor activity participation, these authors suggest employing more women in the field of outdoor recreation so as to give women in leisure role models to emulate.

Outdoor Programs in Campus Recreation

Very little literature exists on the topic of outdoor recreation with respect to collegiate outdoor programs. One study by Taylor, Gilbert, Kaufman, and Morgan (2003) examined participant benefits and preferences of students who participated in collegiate outdoor recreation programs. The sample was drawn from freshman participants in outdoor pursuit activities at eight different university outdoor programs which were associated with NIRSA. The sample size was 76 sophomore students who were also participants in outdoor pursuits as a freshman in the prior school year. The most common facilities of the outdoor program reported from the eight universities included an equipment rental center, climbing wall, and challenge course. The reported participant benefits included a top ten list ranked from highest to lowest: sense of accomplishment, stress reduction, sense of adventure, feeling of well-being, outdoor skill, developing friendships, self-confidence, fitness, communication skills, and group cooperation skills.

Students in the sample were asked to rank the programs/facilities on campus that aided their retention from freshman to sophomore year. Academic major was listed as the highest contributing factor. Outdoor pursuit programs were listed as the second most important reason for returning, followed by residence halls and sports programs. Overall, the authors suggested the contribution of outdoor pursuits programs in aiding the retention of second year students. The perceived participant benefits also speak to practitioners in COR programs, giving professional

staff programmatic elements to incorporate into their outdoor recreational programming to college students.

Poff, Stenger-Ramsey, and Stuessy (2005) surveyed 94 outdoor programs to build upon existing data to assess the status of outdoor recreation programs in the United States. Of the 94 participating organizations 68 respondents represented college/university programs. Other organizations included military recreation and wellness and city/county parks and recreation programs. The top 20 activities offered by the programs that participated in the study were listed. See Table 12 for list of the most common activities offered by outdoor programs.

Table 12

Top twenty outdoor activities/pursuits offered in US outdoor programs

Ranking	Activity	# programs	Percentage of surveyed programs
1	Backpacking	71	76%
2	Canoeing	70	74%
3	Rock climbing	70	74%
4	Day hiking	62	66%
5	Climbing (wall)	61	65%
6	Kayak Instruction	59	63%
7	Rafting	59	63%
8	Sea kayaking	47	50%
9	Ski-downhill	47	50%
10	River kayaking	46	49%
11	Mountain bike	43	46%
12	Caving	41	44%
13	Nordic skiing	37	39%
14	Ropes course	32	34%
15	Wilderness Orientation	30	32%
16	Fly fishing	19	20%
17	Telemark ski	17	18%
18	Cycling – road	12	13%
19	Sailing	11	12%
20	Inline skating	4	4%

(adapted from Poff, Stenger-Ramsey, & Stuessy, 2005, p 125)

This information was helpful in designing the demographic information for the instrument used in this research project; however, this study does not provide current (within the last ten years) information as to the current status of the outdoor programs.

The bulk of the pertinent literature related to outdoor recreation is discussed in the main body of the manuscript (see section I of this thesis). Additionally, the information below is based on anecdotal observation of the researcher gleaned in conversations with other COR professionals at conferences, as well as site visits/experience working in a variety of programs around the country.

Department Structure

Most commonly Campus Recreation departments are housed within the Student Affairs branch of the university. In special cases universities may house their campus recreation programs under academics or athletic departments. Each division is unique to the way each university is structured (public versus private). Common departments within campus recreation include: Intramurals and Sport Clubs, which generally organize the non-College athletic sports (i.e., recreational sports that are not performed by college athletes); Aquatics which oversees pool facilities within the recreation centers; Fitness manages the weight room areas as well as the group fitness classes provided to members; Wellness programs promote healthy lifestyles and organize campus initiatives to educate students about common health concerns; Facilities management oversees all the indoor and outdoor operations of the building facilities for the department and manages all the aspects of the fields/facilities utilized by the university recreation population; and Outdoor Adventure programs, which operate the adventure recreation division of the department. Some departments may include all or some of the above listed program areas. All departments are responsible for training their professional and student staff

(both graduate and undergraduate) about the policies and procedures common to their program area. For example, fitness instructors may participate in trainings that teach them how to instruct weight lifting, cardio classes, and kickboxing; lifeguards are enrolled in certification classes; and sport officials attend trainings that teach them how to referee a game in a specific sport. Industry standard requires all staff to hold a CPR First Aid certification to be employed with campus recreation.

Staffing Structure

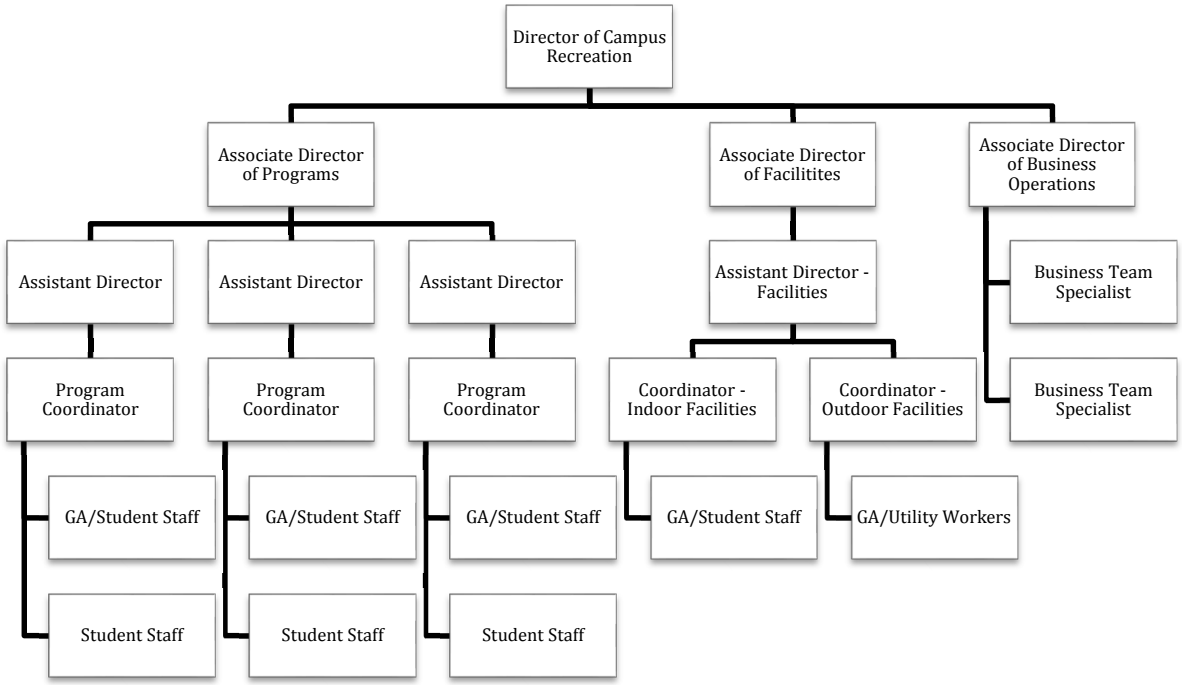
Staffing of Campus Recreation programs generally starts with student staff who are responsible for front line interactions with the student/faculty/staff/member on a daily basis. In many cases student workers who have been working in a department for more than one semester can become supervisors or managers who oversee newer staff. Student staff may report to a Graduate Assistant, Coordinator, or directly to an Assistant Director depending on how the chain of command is structured. Some programs do not have Graduate Assistants and student staff report directly to a Coordinator. Graduate Assistants report to a Program Coordinator or Assistant Director.

The professional staff begins with an entry-level Program Coordinator who oversees the student staff and general operations of the program in which they are employed. Coordinators generally train staff and organize the logistics of their respective program area. Program Coordinators generally report to an Assistant or Associate Director. Assistant Directors can fulfill the duties of a Coordinator and in some cases function in lieu of one. Assistant Directors are concerned with the operations of the program but function at a higher level than Coordinators, designing tactics for how the program should grow and develop with the needs of the members as well as the department (e.g., how to best utilize resources of staff, funding, and

local region to promote the program). Generally, an Assistant Director reports to the Associate Director who reports to the Director of the campus recreation department. The Associate Director and Director are primarily concerned with allocating resources (budgetary) to each program area within the department. They are the professional staff that give approval for implementation of new programs and purchases for existing needs. See Figure 2 for one example of campus recreation departmental staffing structure.

Figure 2

Example of Departmental Staffing Structure for Campus Recreation



Structure of Typical Collegiate Outdoor Recreation Programs

Common facilities in an outdoor program include a rental center/office that has staff who educate the patrons that visit the center. Staff are trained to provide information on local recreation locations and destinations, suggest outfitting advice, and provide education to rental users about how to safely and effectively operate the gear. Other facilities may include an indoor

or outdoor climbing facility. Climbing facilities can include a wall with top-rope set-up, a bouldering area (un-roped low climbing), training area with hangboards, and other fitness equipment. Staff are trained to monitor the climbing facility and provide proper and safe use of the gear used at the climbing facility (e.g., harnesses, belay devices, ground anchors, crash pads, ropes). Outdoor programs may also have a boathouse or storage facility for aquatic rental equipment. Other common facilities include a challenge course (either high or low ropes), a resource library, and/or local trail systems (mountain bike/hiking/skiing) managed by the COR program.

Common activities found in COR programs include educational clinics/teaching sessions and trips for climbing, mountain biking, cycling, hiking/backpacking, paddlesports (e.g., sea-kayaking, white water kayaking, canoeing, standup paddle board), caving, skiing, and low impact camping ethics. Program offerings and activities are dependent on the location and region of the university. Programs utilize the resources around them (e.g., rivers, forests, public lands) to engage students in local recreational opportunities near the college/university.

Status of COR Programs/field

A review of the membership database used for this study accounted for 208 collegiate outdoor programs represented in the AORE professional organization at the time of this research. There is currently no established database or known source that collects information related to tracking outdoor recreation programs. Additionally there is minimal data collection pertaining to student involvement nationwide. Individual programs generally track their own student involvement, retention, and other program statistics that are only for use in-house at their respective university.

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APPENDIX A: UNIVERSITY AND MEDICAL CENTER INSTITUTIONAL REVIEW BOARD APPROVAL LETTER

EAST CAROLINA UNIVERSITY
University & Medical Center Institutional Review Board Office
4N-70 Brody Medical Sciences Building· Mail Stop 682
600 Moye Boulevard · Greenville, NC 27834
Office 252-744-2914 · Fax 252-744-2284 · www.ecu.edu/irb

Notification of Exempt Certification

From: Social/Behavioral IRB
To: Brittany Turnis
CC:
Deb Jordan
Date: 11/21/2014
Re: UMCIRB 14-001787
Personality of Outdoor Professionals

I am pleased to inform you that your research submission has been certified as exempt on 11/21/2014 . This study is eligible for Exempt Certification under category #2 .

It is your responsibility to ensure that this research is conducted in the manner reported in your application and/or protocol, as well as being consistent with the ethical principles of the Belmont Report and your profession.

This research study does not require any additional interaction with the UMCIRB unless there are proposed changes to this study. Any change, prior to implementing that change, must be submitted to the UMCIRB for review and approval. The UMCIRB will determine if the change impacts the eligibility of the research for exempt status. If more substantive review is required, you will be notified within five business days.

The UMCIRB office will hold your exemption application for a period of five years from the date of this letter. If you wish to continue this protocol beyond this period, you will need to submit an Exemption Certification request at least 30 days before the end of the five year period.

The Chairperson (or designee) does not have a potential for conflict of interest on this study.

APPENDIX B: LETTER OF CONSENT

You are being invited to participate in a research study titled "An Exploration of Collegiate Outdoor Recreation Professionals' Personality Traits and Job Task Affect." The goal is to survey approximately 200 professional members of the AORE membership. The survey will take approximately 15 minutes to complete. Analyzing the data we collect may result in recommendations to assist college-based outdoor recreation professionals in personnel and management functions. We are not asking for any personally identifying information. When you hit SUBMIT at the end of the survey your answers will go directly into an anonymous database; we collect no information that can be tracked back to you or your institution. In addition, only the researchers will have access to the raw data and all reporting will be done with only aggregated data. Thus, responses are both anonymous and confidential. By clicking NEXT at the bottom of this page, you are consenting to participate in the research.

Your participation in the research is voluntary. You may choose not to answer any or all questions, and you may stop at any time. There is no penalty for not taking part in this research study.

This research project is being conducted by Brittany Turnis (252-XXX-XXXX), a graduate student in the Recreation and Leisure Studies department at East Carolina University and member of the Association of Outdoor Recreation and Education (AORE), along with her advisor, Dr. Deb Jordan (252-XXX-XXXX). The project has been reviewed and approved by the ECU Institutional Review Board. You may contact the Office of Research Integrity & Compliance (ORIC) at 252-XXX-XXXX for questions about your rights as a research participant. Please feel free to contact any one of us if you have questions about this survey.

Thank you in advance for taking the time to participate! Your contributions will help expand the body of research on collegiate outdoor recreation programs.

By continuing with the survey you are indicating that you have read and understand the information above, thus giving your consent to participate. Please click the "Next" button in the lower right corner to continue.

APPENDIX C: SURVEY INSTRUMENT

You are being invited to participate in a research study titled "An Exploration of Collegiate Outdoor Recreation Professionals' Personality Traits and Job Task Affect." The goal is to survey approximately 200 professional members of the AORE membership. The survey will take approximately 15 minutes to complete. Analyzing the data we collect may result in recommendations to assist college-based outdoor recreation professionals in personnel and management functions. We are not asking for any personally identifying information. When you hit SUBMIT at the end of the survey your answers will go directly into an anonymous database; we collect no information that can be tracked back to you or your institution. In addition, only the researchers will have access to the raw data and all reporting will be done with only aggregated data. Thus, responses are both anonymous and confidential. By clicking NEXT at the bottom of this page, you are consenting to participate in the research.

Your participation in the research is **voluntary**. You may choose not to answer any or all questions, and you may stop at any time. There is **no penalty for not taking part** in this research study.

This research project is being conducted by Brittany Turnis (252-412-2778), a graduate student in the Recreation and Leisure Studies department at East Carolina University and member of the Association of Outdoor Recreation and Education (AORE), along with her advisor, Dr. Deb Jordan (252-737-2990). The project has been reviewed and approved by the ECU Institutional Review Board. You may contact the Office of Research Integrity & Compliance (ORIC) at 252-744-2914 for questions about your rights as a research participant. Please feel free to contact any one of us if you have questions about this survey.

Thank you in advance for taking the time to participate! Your contributions will help expand the body of research on collegiate outdoor recreation programs.

By continuing with the survey you are indicating that you have read and understand the information above, thus giving your consent to participate. Please click the "Next" button in the lower right corner to continue.

Block 7

The following items include a list of traits on which we would like you to score yourself. Please respond to each of the items on how *accurately* or *inaccurately* describe you.

Individual Traits

For each of the items below please indicate on a scale of 1 to 9 how accurately this trait describes you.

1 = Extremely Inaccurate — 9 = Extremely Accurate

	Extremely Inaccurate 1	2	3	4	Neither Inaccurate or Accurate 5	6	7	8	Extremely Accurate 9
Bashful	○	○	○	○	○	○	○	○	○
Bold	○	○	○	○	○	○	○	○	○
Careless	○	○	○	○	○	○	○	○	○
Cold	○	○	○	○	○	○	○	○	○
Complex	○	○	○	○	○	○	○	○	○

Cooperative	○	○	○	○	○	○	○	○	○
Creative	○	○	○	○	○	○	○	○	○
Deep	○	○	○	○	○	○	○	○	○
Disorganized	○	○	○	○	○	○	○	○	○
Efficient	○	○	○	○	○	○	○	○	○

For each of the items below please indicate on a scale of 1 to 9 how accurately this trait describes you.

1 = Extremely Inaccurate 9 = Extremely Accurate

	Extremely Inaccurate 1	2	3	4	Neither Inaccurate or Accurate 5	6	7	8	Extremely Accurate 9
Energetic	○	○	○	○	○	○	○	○	○
Envious	○	○	○	○	○	○	○	○	○
Extraverted	○	○	○	○	○	○	○	○	○
Fretful	○	○	○	○	○	○	○	○	○
Harsh	○	○	○	○	○	○	○	○	○
Imaginative	○	○	○	○	○	○	○	○	○
Inefficient	○	○	○	○	○	○	○	○	○
Intellectual	○	○	○	○	○	○	○	○	○
Jealous	○	○	○	○	○	○	○	○	○
Kind	○	○	○	○	○	○	○	○	○

For each of the items below please indicate on a scale of 1 to 9 how accurately this trait describes you.

1 = Extremely Inaccurate 9 = Extremely Accurate

	Extremely Inaccurate 1	2	3	4	Neither Inaccurate or Accurate 5	6	7	8	Extremely Accurate 9
Moody	○	○	○	○	○	○	○	○	○
Organized	○	○	○	○	○	○	○	○	○
Philosophical	○	○	○	○	○	○	○	○	○
Practical	○	○	○	○	○	○	○	○	○
Quiet	○	○	○	○	○	○	○	○	○
Relaxed	○	○	○	○	○	○	○	○	○
Rude	○	○	○	○	○	○	○	○	○
Shy	○	○	○	○	○	○	○	○	○
Sloppy	○	○	○	○	○	○	○	○	○
Sympathetic	○	○	○	○	○	○	○	○	○

1 = Extremely Inaccurate 9 = Extremely Accurate

	Extremely Inaccurate 1	2	3	4	Neither Inaccurate or Accurate 5	6	7	8	Extremely Accurate 9
Systematic									
Talkative									
Tempermental									
Touchy									
Uncreative									
Unenvious									
Unintellectual									
Unsympathetic									
Warm									
Withdrawn									

Block 3

In this section we would like to know about your feelings toward your job tasks at a collegiate outdoor recreation program.

Job Tasks

For the following items please indicate how much you enjoy the following job tasks on a scale of 1 to 7, 1 being "I absolutely love this part of my job!" to 7 "I absolutely hate this part of my job!"

1 = "I absolutely **love** this part of my job!" 7 = "I absolutely **hate** this part of my job!"

	LOVE! 1	2	3	Neutral 4	5	6	HATE! 7	N/A
Organizing trip logistics								
Training staff								
Interacting with a variety of campus and community individuals outside the department								
Rental operations								
Scheduling								
Evaluation of staff								
Seeking external funding/partnerships								

1 = "I absolutely **love** this part of my job!" 7 = "I absolutely **hate** this part of my job!"

	LOVE! 1	2	3	Neutral 4	5	6	HATE! 7	N/A

	1	2	3	4	5	6	7	N/A
Climbing wall supervision and management								
Program development								
Teaching technical skills								
Accepting and utilizing feedback from others								
Purchasing equipment								
Policy design and implementation								
Facilitating group development								

1 = "I absolutely **love** this part of my job!" 7 = "I absolutely **hate** this part of my job!"

	LOVE!			Neutral			HATE!	
	1	2	3	4	5	6	7	N/A
Mentorship of staff								
Managing gear inventory								
Organizing files and workspaces								
Interactions with coworkers within the campus recreation department								
Marketing design and planning								
Scouting new areas for trips								
Setting climbing routes								

1 = "I absolutely **love** this part of my job!" 7 = "I absolutely **hate** this part of my job!"

	LOVE!			Neutral			HATE!	
	1	2	3	4	5	6	7	N/A
Making funding requests, preparing justifications								
Management of staff								
Marketing trips, clinics, and other program offerings (formal or informal)								
Trip leading/guiding								
Researching current trends in the field								
Determining funding needs (budgeting)								
Maintenance of gear/facility								

1 = "I absolutely **love** this part of my job!" 7 = "I absolutely **hate** this part of my job!"

	LOVE!			Neutral			HATE!	
	1	2	3	4	5	6	7	N/A

	1	2	3	4	5	6	7	N/A
Preparing payroll related documents	○	○	○	○	○	○	○	○
Evaluation of programs	○	○	○	○	○	○	○	○
Trip preparation	○	○	○	○	○	○	○	○
Understanding and implementing risk management policies and procedures	○	○	○	○	○	○	○	○
Gear Repair	○	○	○	○	○	○	○	○
Utilizing business writing skills	○	○	○	○	○	○	○	○
Providing feedback to others	○	○	○	○	○	○	○	○

Demographics

What is your title at the collegiate outdoor program where you are employed?

- ○ Director
- ○ Associate Director
- ○ Assistant Director
- ○ Program Coordinator
- ○ Graduate Assistant
- ○ Other (please describe)

What professional certifications do you currently hold? Please check all that apply.

- ☐ Wilderness First Responder (WFR) or higher
- ☐ America Canoe Association (ACA) Kayak/Canoe Instructor (flat-water or whitewater)
- ☐ ACA Swiftwater Rescue
- ☐ Leave No Trace Trainer/Master Educator
- ☐ American Mountain Guide Association (AMGA)/ Professional Climbing Instructor Association (PCIA) Mountain Guide or Single Pitch Instructor
- ☐ International Mountain Bike Association (IMBA) Level 1, 2, or 3 Instructor
- ☐ American Institute for Avalanche Rescue and Education (AIARE) Level 1, 2, or 3 Avalanche Certification
- ☐ CPR/AED
- ☐ Lifeguard
- ☐ Other

What is the size of the college/university at which you are employed at (total number of students)?

- fewer than 2,000
- 2,000-5,999
- 6,000-9,999
- 10,000-13,999

- 14,000-17,999
- 18,000-21,999
- more than 22,000

What facilities/programs does your collegiate outdoor program provide? Please select all that apply.

- [ ] Outdoor trips program
- [ ] Educational clinics/teaching sessions (e.g. pool sessions, belay clinics)
- [ ] Staff training program
- [ ] Climbing wall facility
- [ ] Challenge course facilities (e.g. high/low ropes course)
- [ ] Gear rental program
- [ ] Waterfront/boathouse facility
- [ ] Resource library
- [ ] Trail systems (MTB, hiking, skiing)
- [ ] Equipment repair/maintenance facility
- [ ] Other

Please enter years of experience within the collegiate outdoor recreation field

What is your gender?

- Male
- Female
- Prefer not to respond

What is your age?

What is the highest level of education you have completed?

- Some high school
- High school graduate
- Some college
- AA/AS
- BA/BS
- Some post graduate work
- Post graduate degree (master's or doctorate)

What is your race/ethnicity?

- African American/Black
- Asian/Pacific Islander
- Multiracial
- Native American/American Indian
- Caucasian
- Prefer not to respond

How many staff members are employed at your outdoor program?

Full-time Professional Staff (i.e Directors, Coordinators)	
Part-time Professional Staff (i.e. contracted trip leaders/other professionals)	
Graduate Assistants (half or full time)	
Hourly Student Staff (undergraduate and graduate)	

APPENDIX D: ORIGINAL LIST OF TASKS FOR GROUPING

Please clump the following tasks in like groups

Training staff
Rental operations
Organizing trip logistics
Interacting with clients/participants
Scheduling
Implementing participant/customer feedback
Teaching technical skills
Climbing wall supervision/management
Gear repair
Program development
Managing gear inventory
Route setting
Trip leading/guiding
Purchasing new equipment
Interactions with coworkers
Evaluation of program
Selling trips and clinics
Facilitating group development
Management of staff
Requesting funding
Trip preparation
Mentorship of staff
Budgeting
Payroll
Meeting with supervisor
Scouting new areas for trips
Marketing design
Researching current trends in the field
Maintenance of gear/facility
Policy design and implementation
Giving/receiving feedback

Is there any other task you think should be included? If so in which grouping?

APPENDIX E: ADDITIONAL COLLECTED DEMOGRAPHIC DATA

Certifications of COR Professionals

Certification	# of respondents
Wilderness First Responder	82
American Canoe Association Kayak/Canoe Instructor	28
American Canoe Association Swiftwater Rescue	24
Leave No Trace Trainer/ Master Educator	44
American Mountain Guide Association/Professionals Climbing Instructor Association Mountain Guide or Single Pitch Instructor	22
International Mountain Bike Association Level 1, 2, or 3 Instructor	3
American Institute for Avalanche Rescue and Education Level 1, 2, or 3 Avalanche Certification	26
CPR/AED	80
Lifeguard	8
Other	34

*Other Certifications listed include: EMT Basic, PCIA Climbing Wall Instructor, ACCT Challenge Course Manager, ACCT Level 2 Facilitator, CWA Climbing Wall Manager, NOLS Instructor, Outward Bound Instructor, PSIA Ski Instructor, American Red Cross CPR/AED/First Aid Instructor, AMGA Ski Guide, National Cave Rescue Association Level 2 SAR Member, LAB Bike Instructor, British Canoe Union 3-Star, American Sailing Association Bareboat Charter, ACA SUP Level 1 Instructor

Number of Staff

Staff	N of Respondents	*M*	Range	*SD*
Professional Staff (full time)	89	2.31	0-12	2.22
Professional Staff (part time)	64	3.7	0-60	9.22
Graduate Assistant	60	.73	0-6	1.16
Student Staff (hourly)	86	25.7	0-200	25.32

APPENDIX F: OPERATIONAL DEFINITIONS

Adventure Recreation – A style of recreation within the context of outdoor recreation; contains an element of perceived risk, sense of exploration, and self-discovery through the utilization of outdoor pursuits

COR – Collegiate Outdoor Recreation

Job Characteristic – a task or duty performed in the context of the work environment

Outdoor Adventure – "a self-initiated activity engaged in a natural setting that contains elements of real or apparent danger (risk) in which the outcome, sometimes uncertain, can be influenced by the actions of the participant and circumstance" (Ewert, 1987, 149)

Outdoor Leader – an individual who has the technical skill and interpersonal skill capabilities to lead others in outdoor pursuits

Outdoor Program – organizational structure within a campus recreation department that provides programs and services to its members oriented toward outdoor adventure and/or recreation

Outdoor Pursuits – activities that require moving across land or water through a non-mechanized form of transportation (i.e., human powered)

Outdoor Recreation – Leisure based activity voluntarily pursued in the out of doors for the purpose of individual enjoyment and satisfaction (Phipps, 1990)

Personality – a pattern of relatively permanent traits and unique characteristics of feelings, thoughts, and behaviors that give both consistency and individuality to a person's behavior

Professional Staff – employees at a college or university outdoor recreation program including salaried individuals, working at least 32 hours per week, with a signed contract and benefits; referred to in this proposal as COR Professional

Program managers – individuals in charge of daily operations of an outdoor program

Work Environment – a compilation of characteristics in a COR work setting