Outdoor Recreation Research Proposal

Project

REC 4740
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Chapter 1
Introduction


**Introduction**

In today’s society, recreation is viewed as a structured activity done for enjoyment outside of the work setting. Recreation plays a substantial role in people’s daily lives, though it is viewed differently from one person to the next. Recreation provides numerous physical, social, emotional, and economical benefits. Physically, recreational activities provide individuals with a means of staying fit and active, as well as improving one’s quality of life. Socially, recreation is a way for individuals to meet new people and form personal relationships amongst members of the community. Emotionally, recreation is a way for people to relieve themselves of daily stressors and provides a relaxing environment. Lastly, recreation provides economic benefits by bringing in more revenue in the community or setting in which the activities or services are held. Finding out the community’s recreational wants and needs are important for providing new recreational opportunities.

When referring to a needs assessment, it is defined as a systematic process for determining and addressing needs, or gaps between current conditions, and desired conditions, or wants. A needs assessment is a valuable tool to utilize when looking at the needs and interests of a larger population.

Eastern Illinois University is located in Charleston, Illinois and has a student body of 8,784 undergraduate and graduate students. The use of recreation plays an integral part in the lives of students, however Eastern lacks outdoor recreation opportunities. Expanding outdoor recreation opportunities at Eastern Illinois University would positively benefit the student population. By providing new experiences, students could get more recreational use out of the campus.

**Research Question:** What are the students’ outdoor recreation participation rates, recreation interests, attitudes towards existing services, and future needs at Eastern Illinois University?
Definitions

Outdoor Recreation - Recreational or leisure pursuits that are engaged in outdoors

Participation Rates - Frequency of recreation engagement by students at Eastern Illinois University

Recreation Interests - Eastern Illinois University students’ preference in activities in free time

Attitudes - Positive and negative feelings toward outdoor recreational activities at Eastern Illinois University

Existing Services - Recreational activities and facilities available to students on Eastern Illinois University’s campus

Future Needs - Expressed desires of outdoor recreational activities Eastern Illinois University students would like to see on campus

Students - Individuals enrolled in undergraduate and graduate programs at Eastern Illinois University

Eastern Illinois University - College institute located in Charleston, Illinois with a student body of 8,784 students

Limitations

There are two main limitations the research team might encounter during our research. The first is the length of the study. A project of this size would usually take 6 months or longer to complete, but the research team only has 4 months to complete the project. This issue will be addressed by working alongside a professional who has experience doing research, using time wisely, and following the outline for conducting research. The second potential limitation would be a limited response to the surveys and questions that will be sent to Eastern students. This issue will be addressed by contacting students, and sending them emails.
Chapter 2

Literature Review

The purpose of this study was “to collect baseline information regarding community partnerships in the county, this collaborative project addressed the following research questions: what is the need for community partnerships to eliminate health disparities in a rural county of Northern Colorado? and, What is currently being done by local agencies to establish and improve partnerships?”. A survey was used to gain data for this research. The survey contained 26 single answered items and included two initial demographic questions. The participants were also asked to partake in one of two focus group meetings to provide additional information regarding community partnerships. The results for the online survey concluded that most participants had a strong support of community partnerships as well as adequate resources available for the development and improvement of community partnerships. The focus groups results concluded, “a common theme related to both barriers and solutions to human service delivery.” Conducting both a survey and a focus group was able to give the researchers more detailed data to conclude their findings.

The purpose of this study was to identify capacities, facilitators, and barriers to the uptake of cancer-focused programming by ASOs (AIDS service organizations). A community advisory board was formed to explore mutual interests and needs at the intersection of HIV/AIDS and cancer for community-based organizations (CBOs) serving persons living with or at risk for HIV/AIDS, and was comprised of 10 representatives from New York City metropolitan area CBOs. Focus group discussions were conducted with the 10 representatives over a 4-month period, and five focal point emerged in the discussions: (a) current or past cancer-related programming activities/experiences, (b) for of cancer-related programming with organizations missions and current activities (barriers and facilitators, (c) capacities to expand or integrate cancer-focused activities (capacities), (d) interest in specific types of cancer programming (interest/readiness), and (e) perceptions about potential cancer research relationships (research receptivity), given the commonly held community mistrust of academic researchers. The study’s results presented six themes: 1.) most agencies had limited experience implementing cancer-focused programs, and when they had, the programs were not framed as cancer specific, 2.) agencies need resources and collaborative partnerships to effectively incorporate cancer services, 3.) staff and clients must be educated about the relevance of cancer to HIV/AIDS, 4.) agencies are interested in education about linkages between HIV/AIDS and cancer, 5.) cancer care providers should be culturally competent and understand the needs of people living with HIV/AIDS, and 6.) agencies see opportunities to improve their services by participating in research but are wary about the loss of autonomy and irrelevant research findings.

The purpose of this study was to explore emotional sensitivity and the need for counseling-related services at HBCUs (historically black colleges and universities) located in the southwest region of the United States. The sample was 114 African American college students who attended a HBCU in the southwestern region of the United States. The sample was nearly 50% male and 50% female, with an age range of 19-35 years, and two years being the average number of years attending college. Two surveys were used in this study. The first survey assesses three areas of emotionality, where emotion sensitivity was operationally defined at the individual’s self perceived sensitivity, attribution, and regulation of emotions. The second survey, based on focus group discussions concerning the needs of students attending the HBCU, emphasized academic advising, drug/alcohol awareness, campus life/activities, HIV/STDs education, relationship issues, date rape education, international student support, health issues, dorm life conditions, library, computer technology, class instruction, spirituality, and financial aid. The survey instructed each respondent to rate their perceived needs on a 4 point rating scale with 1 = not needed and 4 = greatly needed. The results of the study suggested there were significant relationships between age and perceived counseling-related needs at HBCUs. The results also showed a significant negative relationship between age and the need for drug education on campus. It showed that 75% reported themselves as “emotionally sensitive”, 56% “living by emotions”, and 25% “allowing things to happen naturally”.

The purpose of this study was to assess the academic needs of graduate students and to determine how students perceive the role of a departmental graduate student organization (GSO) in meeting expressed needs. Study data was collected from graduate students enrolled in a child and family studies (CFS) department at a land grant institution, with the sample representing CFS masters (thesis and non-thesis) and doctoral students from a large state university. With the assistance of a faculty advisor, GSO officers developed a 30-item questionnaire that was divided into 5 sections. The first section was comprised of demographic items to form a general profile of the CFS student body. The next three sections assessed needs in the following areas: (a) academic and professional interests, (b) orientation to graduate life, and (c) social activities. Students then rated their degree of interest in the availability of activities that support each of the broad categories, with 1 = not interested and 5 = extremely interested. In the fifth and final section, students were asked to give suggestions on how the GSO could better meet their needs. The results of the study showed there were 5 distinct themes among respondents, which showed a need for communication, orientation, research opportunities, physical space, and technological resources.
The purpose of this study is to “define the needs of young people for personal
development and socialization and to determine how to satisfy these needs. So that campus open
spaces become places that support and strengthen the psychological situation of students”. The
researchers first wanted to determine the number of open spaces that students preferred. This data
was collected using visitor employed photography (VEP), which is based on the users
judgements rather than the experts’. The researchers asked 100 students to take photos of the
opens spaces that they preferred to go to the most using their own cameras. They then were asked
to write down what activities they participated in and why they used those spaces. The results
showed that students prefered spaces that were open for socialization and were independent of
the departments of which they studied. Students wanted to be out of the academic setting when
socializing or relaxing with friends.

In this study, the purpose was to identify “the unique health related needs of the chinese International student in the United States.” The needs assessment used a survey approach, called the Qualtrics survey, and was administered to 650 students. The questions asked were all health related. The survey was reviewed by several people, some having english as a second language (ESL). It was reviewed like this incase the survey needed to be altered based on the different ethnicities taking the survey. The results of this study showed the Qualtrics survey approach allowed “for question logic, meaning not every participant received all of the available questions”. The survey was not set in place to force a response for each question. The researcher felt that forced responses would result in the subjects stopping the survey if there was any concerns in understanding the question being asked.
The purpose of this study was to (a) assess the counseling needs of a Greek university student sample, (b) examine their knowledge regarding the function of a university counseling center, and (c) explore their attitudes towards visiting such a service. Respondents consisted of 312 students from two Greek universities, 73 male and 238 female, with an age range of 17-40 years. The questionnaire consisted of 23 questions that provided demographic information about the sample, including socio-economic status, living conditions, involvement in romantic relationships, participation in academic and other activities and frequency of communication with parents. Questions were also included to reflect the respondents’ self-evaluation of their physical and mental health, as well as to better understand variables related to “Greek reality.” The Rutgers Research Scale was used as the basis for developing the questionnaire.

Questionnaire items were scored using a 5-point Likert type scale, with 1 = never and 5 = very often. Results of the study suggested that the prevalence of psychological difficulties among Greek students exits to a large extent, with the students’ main problems being concerned with personal relationships and emotional difficulties, life planning, decision making, and time management.

The purpose of this study was to acquire health data specific to the City of Seat Pleasant, including 1.) Identifying community health needs to serve as a guide for prioritizing Health Partnership health promotion interventions and programs, 2.) To be able to demonstrate health-related needs when applying for grants and contracts, 3.) To track changes in health status over time, and 4.) To serve as a model for other jurisdictions who also want to acquire health data specific to their jurisdictions. Resident interviewers were trained and used to collect the data; it was decided that neighbors could best obtain data from neighbors, so a convenience sample was used in the study. A door-to-door survey was developed for the study using questions from the *National Health and Nutrition Examination Survey* (NHANES). It consisted of 36 items that collected data relative to demographics, health, dental and prescription drug insurance status, hospital utilization and access to care, medical conditions, health screening history, vaccination history, social support, tobacco use, alcohol use, physical activity, nutrition and weight, vision, oral health, and physical functioning and activities of daily living, and took approximately 30 minutes to complete. Results of the study showed that Seat Pleasant respondents reported generally healthier behavior than the national sample, though the levels of some of these behaviors were wanting, showing a need for the Health Partnership to plan future interventions and health promotion activities, as well as provide evidence to funding agencies of health-related needs.

The purpose of this study was to “obtain credible park planning data from county residents and to evaluate how well focus group interviews perform in a recreation needs assessment context.” This study used 26 focus groups which were selected based on socio-economic characteristics and geographical location. When implementing the study, each group leader sent a letter inviting his or her group to participate in the study. They then sent letters with questions to follow to schedule interviews for the study. Some of the sample questions they used for this study included “What types of outdoor recreation activities do you participate in?”, “Where do you participate in these?”, and questions related to the county parks. The results of the study showed that focus groups were highly effective based on the performance it showed. This study shows how to used focus groups and could potentially be beneficial when surveying Eastern Illinois Students.

The purpose of this study was to determine the quantity of participation and the status of that participation in physical activity among international students at specific colleges and universities around the U.S. 521 international students from several colleges around the Midwest. These students were chosen at random as long as they were international students. The study administered questionnaires through mail, email, and was also posted on a website for access at any point in time. "Results showed that surveyed students spent an average of 3.4 hours a week participating in physical activity." It also showed that males tended to spend more time than females participating in physical activity.
Chapter 3
Research Methods
Study Population

Eastern Illinois University is located in east central Illinois in Charleston, Illinois. The campus is spread out amongst 320 acres. As of Spring 2014, the university’s population was 8,833. This is broken down into 1,308 freshman (15%), 1,351 sophomores (15%), 1,949 juniors (22%), 2,858 seniors (32%), and 1,318 graduate students (15%). Student ethnicity, as of Fall 2013, is calculated at: 17 American Indian/Alaska Native (0.19%), 68 Asian (0.77%), 1,494 Black/African American (17%), 407 Hispanic (5%), 71 International (0.8%), 154 Multiple (1.7%), 5 Native Hawaiian/Other Pacific Islander (0.06%), 249 Unknown (2.8%), and 5,884 White (67%). With graduate and undergraduate students combined, female students outnumber male students 4,981 to 3,368. Eastern’s graduation rate is 60%.

Sample Selection

The sampling method the research team decided would be the most appropriate for the study is the random sampling technique. Random sampling selects subjects so that all members of the population have an equal and independent chance of being selected. The advantages of this method include being easy to conduct, having a high probability of achieving a representative sample, meeting assumptions of many statistical procedures, and is the most unbiased sampling technique. The most useful way of gathering data with this method is through the use of a random table of numbers.

With Eastern Illinois University’s population of 8,833, the sample size of the study will be 368 students. To choose sample participants, the research team will be given a list of all Eastern Illinois University students. Each of these students will be randomly assigned a number, which will then be put into a random table of numbers. After deciding on the appropriate number
of digits, pick a random starting point on the table. If the number selected corresponds to a number assigned to a student, then they are in the sample. If the number is not assigned to a student, then ignore that number. Continue until 368 students have been selected.

**Research Methods & Design**

The type of evaluation design used in this study will be descriptive design. The purpose of descriptive design is to describe the way things currently are and compare how sub-groups view issues and topics. This design is important because it allows study participants provide their input on outdoor recreation they would like to see at Eastern Illinois University. To gather this information, descriptive research can utilize a number of different tools, such as surveys, interviews, and questionnaires. For this study, the researchers felt that a questionnaire was the most appropriate tool to gather data from the participants. This questionnaire will ask participants questions related to outdoor recreation in three categories, usage rate, attitudes towards existing services, and future interests & needs; it will also ask a number of socio-economical questions.

**Procedures/Instruments**

For this study, the research team identified the need for outdoor recreation opportunities on Eastern Illinois University’s campus. The second step was to conduct a literature review, focusing on literature pertaining to needs assessment studies, as well as outdoor recreation. Upon reviewing the literature, the research team developed a research question to direct the study, which was, “What are the students’ outdoor recreation participation rates, recreation interest, attitudes towards existing services, and future needs at Eastern Illinois University?” Next, the
research team interviewed stakeholders who held insight into the students’ outdoor recreation needs on Eastern Illinois University’s campus. The information from these interviews helped create a questionnaire to be distributed to Eastern Illinois University students asking about their thoughts and interests towards outdoor recreation opportunities on campus. After the questionnaire data is collected, the research team will evaluate the data and conclude whether students are for or against more outdoor recreation opportunities at Eastern Illinois University.
Chapter 4
Results
Introduction

This chapter presents the results of the data analyses used to test the questions of interest in this research study. A description of the preliminary and substantive analysis on the variables of interest is conducted. In particular, frequency distributions for the questionnaire items are provided. The findings are organized into three sections based on the study objectives. First, the sample characteristics for the study will be identified and discussed. Next, the general outdoor recreation participation patterns and attitudes will be assessed. Finally, the outdoor recreation interests and future needs for Eastern Illinois University are reviewed. A variety of tables, charts, and graphs will be used to present the findings.

Sample Characteristics

Questions 10 through 14 of the needs assessment questionnaire assessed respondent and household characteristics. The key findings are summarized in the following sections:

*Household Characteristics*

Household characteristics obtained with this study included residential location. A majority of the respondents were off-campus: Charleston, 46.0%; the second highest group of respondents was residence halls, 28.6%; third, off campus: other, 10.5%, and; fourth, off-campus: Mattoon, 6.5%. The remaining three groups of respondents were under 5.0%. The household characteristics are found in Figure 1.
Respondent Characteristics

Respondent characteristics obtained with this study included: gender, race, current year in school, and academic status. The majority of respondents were female, 72.4%, and the remaining respondents were male, 27.6% (Figure 2.1).
90.3% of respondents were White. The remaining five respondent groups were under five percent, with the second highest respondent group being Black/African American, 4.3% (Figure 2.2).

Figure 2.2 Race
29.6% of respondents were seniors, 20.6% juniors, 18.1% graduate students, 14.8% sophomores, 11.6% freshman, and 5.4% seniors (5+), (Figure 2.3).

**Figure 2.3 Class Status**

![Class Status Chart](image)

The majority of respondents were full-time undergraduate students, 77.9%, followed by full-time graduate students, 13.4%, part-time graduate students, 5.8%, and part-time undergraduate students, 2.9% (Figure 2.4).

**Figure 2.4 Academic Level**

![Academic Level Chart](image)
General Outdoor Recreation Participation Patterns & Attitudes

Question 1 of the needs assessment questionnaire asked students how many times (in the last 12 months) they had participated in outdoor recreation programs and activities. The following summarizes the key findings:

Outdoor Recreation Programs and Activities

Respondents were asked the question, “During the last 12 months, approximately how many times have you participated in the following outdoor recreation activities or programs?” From a list of 17 options, the respondents were asked to choose from one of five categories for each option: none, 1-5 times, 6-10 times, 11-25 times, and more than 25 times.

In the more than 25 times category, swimming (lake/outdoor pool) was first (28.2%), biking/cycling was second (18.6%), hiking/nature walk was third (12.2%), fishing was fourth (7.6%), and boating was fifth (6.4%), (Figure 3.1).

Figure 3.1 More Than 25 Times
Note: The remaining 12 outdoor recreation program options each received less than 5% of respondents who had participated more than 25 times in the past 12 months.

In the 11 to 25 times category, hiking/nature walk was first (14.8%), followed by swimming: lake/outdoor pool (13.5%), biking/cycling (9.6%), and both fishing and picnicking options (5.2%), (Figure 3.2).

Figure 3.2 11-25 Times

Note: the remaining 12 outdoor recreation program options each received less than 5% of respondents who had participated 11-25 times in the past 12 months.

In the 6 to 10 times category, swimming: lake/outdoor pool was first (18.1%), second was biking/cycling (15.7%), third, hiking/nature walk (14.8%), fourth, both the picnicking and boating options (10.4%), and fifth, fishing (9.9%), (Figure 3.3).
Figure 3.3 6-10 Times

Note: the remaining 11 outdoor recreation programs each received less than 5% of respondents who had participated 6 to 10 times in the past 12 months.

In the one to five times category, first was hiking/nature walk (37.8%), followed by boating (34.2%), camping: tent and picnicking options (32.1%), biking/cycling (30.1%), canoeing/kayaking (27.2%), fishing (24.5%), rock climbing: indoor/outdoor (22.0%), swimming: lake/outdoor pool (19.8%), river rafting (14.8%), horseback riding (14.4%), camping: RV (14.3%), bird watching (13.5%), paintball (11.9%), backpacking (11.7%), and archery (8.6%), (Figure 3.4).
Question 2 of the needs assessment questionnaire asked students about the marketing and publicity methods of Eastern Illinois University’s outdoor recreation programs. The following summarizes key findings:

Respondents were asked the question, “How have you found out about the outdoor recreation programs and services offered at Eastern Illinois University and the Charleston area?” From a list of 11 options, students were asked to indicate the ways they have learned about outdoor recreation programs and services and choose all that applied to them specifically.

Students identified friends and neighbors (44.5%) and campus brochures/flyers (36%) as the two most widely utilized methods for learning about outdoor recreation activities. Four other
popular methods included social media (22.3%), other (16.8%), Agency website (16.4%) and Daily Eastern News (15.1%), Conversations with EIU staff (13%), and Flyers and other facilities (12%) were almost identical with the percentage of respondents who had found out about outdoor recreation programs and services through those methods. We had three methods that fell below 10 percent; Greek organizations (7.2%), Local newspaper (5.1%), and Radio/TV stations (2.7%). Complete results are shown in Figure 3.5.

Figure 3.5 Marketing Methods

*Students’ Satisfaction with Outdoor Recreation Opportunities*

Question 3 of the questionnaire asked respondents how satisfied they were with outdoor recreation opportunities at Eastern Illinois and the Charleston area. For each facility/area they were asked to indicate their level of satisfaction. Nine items were used to assess Eastern Illinois University’s and Charleston’s facilities, park areas and programs. The following sections summarize the key findings:
Two items were used to assess students’ satisfaction with Eastern Illinois/Charleston’s outdoor recreation facilities/programs. First, students were asked, “How satisfied are you with the outdoor recreation opportunities at Eastern Illinois University and the Charleston area?” Students rated each item on a 5-point satisfaction scale (1=very unsatisfied, 2=unsatisfied, 3=neutral, 4= satisfied, 5= very satisfied.)

The findings indicate that the majority of students are very satisfied or satisfied with Eastern Illinois and Charleston’s facilities and programs. Six out of the 9 items we used to assess satisfaction were over 50% when very satisfied and satisfied were combined. The following were open fields (55.8%), panther trail (60.7%), campus pond (51.1%), Lake Charleston (55.6%), Community parks (59.5%) and Fox Ridge State Park (63.3%). The remaining three items fell under the 50% mark. These items were Lincoln Log Cabin State Historic Site (39.3%), Skate Park (13.6%) and Pavilions/Shelters (43.1%). Results are shown on Figure 3.6.

**Figure 3.6 Outdoor Recreation Satisfaction**
Question 4 asked specifically for students overall satisfaction with all outdoor recreation opportunities offered. Four items were used to assess student satisfaction with Eastern Illinois University and the Charleston areas recreation facilities. Students rated each item on a 5-point satisfaction scale (1=very unsatisfied, 2=unsatisfied, 3=neutral, 4= satisfied, 5= very satisfied.) The following section summarizes the key findings:

Participants were asked how satisfied they were with outdoor recreation opportunities at EIU. Results showed that the highest percent of students were neutral (39.6%) about outdoor recreation opportunities, followed by satisfied (38.3%), unsatisfied (12.1%) very satisfied (5.1%) and very unsatisfied (4.8%). Results are shown on Figure 3.7.

Figure 3.7 Overall Satisfaction with Current Outdoor Recreation Opportunities
Outdoor Recreation Interests & Future Needs

Barriers to Outdoor Recreation Participation

Question 5 of the needs assessment questionnaire asked students “Which of the following reasons prevent you from using outdoor recreation programs, facilities and parks areas at Eastern Illinois University and Charleston area?” The students were asked to pick from a list of 11 items and to choose all that apply to them specifically. The following summarizes the key findings:

From the list of 11 items, the top two highest reasons for lack of participation in outdoor programs, facilities and park areas from Eastern Illinois University and Charleston area were lack of free time (64.7%) and unaware of outdoor recreation programs, facilities, or areas (55.3%). Shortly behind the top two picked was facilities or programs (26%), transportation (22.7%), lack of desired equipment (17.3%), do not offer a particular recreation program, area facility of interest (16.3%), financial status (16.3%), no interest in the recreation services offered (15.3%), and operating hours (13.7%). There was a big drop off with the last two items; other (3.7%) and customer service issues (1.3%). Complete results are shown in Figure 4.1.

Figure 4.1 Barriers to Outdoor Recreation
Opinion Regarding Future Outdoor Recreation Opportunities

Question 6 of the needs assessment questionnaire asked students “What is your opinion concerning the outdoor recreation issues and opportunities at Eastern Illinois University as well as the Charleston area?” For each of the following statements students were asked to indicate their level of agreement. Students rated each item on a 5-point satisfaction scale (1=strongly disagree, 2=disagree, 3=neutral, 4= agree, 5= strongly agree.) The following section summarizes the key findings:

The findings indicated that students generally strongly agreed or agreed, though a significant percent of responses were on the fence in the neutral category. In strongly agree, additional outdoor recreation opportunities (35.9%), outdoor recreation equipment rental services (35.7%), and outdoor recreation classes (31.9%) held the highest ratings. In agree, additional outdoor recreation opportunities (42.5%), outdoor recreation classes (39.3%), outdoor recreation equipment rental services (37.1%), and outdoor recreation equipment rental price (36.4%) were the highest. Results are shown in Figure 4.2.

**Figure 4.2 Outdoor Recreation Opportunities**
Outdoor Recreation Activity Interest Level

Question 7 pertained to student’s interest level in outdoor recreation activities. The key findings are summarized below:

Question 7 asked students, “Please indicate your level of interest in the following outdoor recreation activities.” From a list of 18 options, students were asked to rate each option in one of five categories: very uninterested, not interested, neutral, little interested, and very interested. In the very interested category, the three options with the highest response rates were: nature walks (46.1%), hiking (45.7%), and boating (45.2%). In the little interested category, the three options with the highest response rate were: cycling (39.1%), swimming (33.5%), and canoeing/kayaking (32.5%). Complete results are shown below in Figure 4.3.

Figure 4.3 Outdoor Recreation Interest Level
Future Outdoor Recreation Programs and Improvements

Question 8 of the needs assessment focused on outdoor recreation programs or improvements that the students felt were most needed at Eastern Illinois University and in the Charleston area. The key findings are summarized below:

Question 8 asked students, “Which of the following outdoor recreation projects or improvements do you feel are most needed at Eastern Illinois University, as well as in the Charleston area?” Students were asked to choose all that apply out of a list of 11 options. First was outdoor recreation fitness classes (50.5%), followed by campfire rings (49.5%), outdoor adventure recreation trips (49.5%), and outdoor walking and biking paths (48.4%). There was a significant drop between the fourth (outdoor walking and biking paths= 48.4%) and fifth (canoeing/kayaking equipment rentals=35.9%) highest options. Complete results are shown in Figure 4.4.

Figure 4.4 Outdoor Recreation Improvements
Question 9 of the needs assessment questionnaire asked students, “Are there program needs for Eastern Illinois University and the Charleston area?” From a list of 12 programs, students were asked to rank their top four choices they felt were the most important to them (1=most important, etc.) The key findings are summarized below:

**Future Outdoor Recreation Program Needs (First Choice)**

Fifty-four percent (54.5%) of students responded that the other option was most needed. Responses for the other category indicated a need for outdoor recreation programs such as: horseback riding, safety/firearm safety, swimming, golfing, cricket, dog park, and running trails. Outdoor recreation classes (i.e., nature yoga, canoeing, kayaking, etc.) had the second highest response rate by students as their top choice (40.8%) There was a significant drop between the second (outdoor recreation classes= 40.8%) and third (archery= 25.9%) ranked options as students’ top choice. Complete results are shown in Figure 4.5.

**Figure 4.5 Outdoor Recreation Programs (First Choice)**
**Future Outdoor Recreation Program Needs (Second Choice)**

Students identified nature/environmental education programs (30.7%) as their second choice in needed outdoor recreation programs. Three other options were over 25% as students’ second choice for needed outdoor recreation programs: canoeing/kayaking (28.7%), backpacking/hiking (27.3%), and outdoor living/survival skills (25.2%). Complete results are shown in Figure 4.6.

**Figure 4.6 Outdoor Recreation Programs (Second Choice)**

**Future Outdoor Recreation Program Needs (Third Choice)**

Twenty-seven percent (27.1%) of students identified camping as their third choice for needed outdoor recreation programs at Eastern Illinois University and the Charleston area. Fishing was next (25.6%), followed by backpacking/hiking (24.8%) and outdoor recreation trips (24.8%). Complete results are shown in Figure 4.7.
Figure 4.7 Outdoor Recreation Programs (Third Choice)
**Future Outdoor Recreation Program Needs (Fourth Choice)**

Thirty-three percent (33.1%) of students identified geocaching as their fourth choice for needed outdoor recreation programs. Three other options were over 25% as students fourth choice: camping (30.6%), backpacking/hiking (28.1%), and rock climbing (26.3%). Complete results are shown in Figure 4.8.

**Figure 4.8 Outdoor Recreation Programs (Fourth Choice)**

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**Student Respondent Feedback**

Question 15 was an open-ended question, which asked students to share additional comments or feedback relating to outdoor recreation programs at Eastern Illinois University and in the Charleston area. Based on the students’ responses, there were several common themes that
emerged pertaining to programs they thought would be beneficial or important to Eastern Illinois University and the Charleston area. These themes were as follows:

- **Canoeing & Kayaking:** Students expressed an interest in having a rental service that makes boats available to the student body.

- **Rock Climbing Wall:** Students expressed an interest in having a rock climbing wall, either indoor or outdoor.

- **Biking & Cycling:** Students expressed a need for additional riding trails, a bike co-op program, and a biking & cycling club.

- **Archery:** Students expressed a need for an indoor or outdoor archery range, intermural archery team, and archery classes.

- **Outdoor Recreation Classes/Activities:** Students expressed a need for various outdoor recreation classes and activities. These included hunters safety courses, outdoor living/survival skills, outdoor fitness classes, adventure trips, an outdoor club, family-oriented activities, and outdoor recreation classes that are available to the whole student body.
Chapter 5
Conclusions & Recommendations
Eastern Illinois University wanted to determine students’ needs and interest in outdoor recreation programs and activities, both on campus and in the Charleston area. In our study, the research team was able to collect roughly 286 completed surveys back from students at Eastern Illinois University. Overall, the feedback was positive for incorporating or improving outdoor recreation programs and activities at Eastern Illinois University and in the Charleston area.

**Current Participation Patterns & Attitudes**

During the past 12 months, most students at Eastern Illinois University have only participated in outdoor recreation programs and activities one to five times. Most of these students found out about the outdoor recreation programs and activities through either friends and neighbors or campus brochures and flyers. Also, Eastern Illinois University students are most interested in nature walks, hiking, and canoeing and kayaking. Less than half of the students were satisfied with outdoor recreation opportunities at Eastern Illinois University and in the Charleston area. In particular, the two areas with the highest satisfaction rate were Fox Ridge State Park and the Panther Trail. However, the results showed that the majority of the students were unsatisfied with the current outdoor recreation opportunities that were available to them on campus and in the surrounding area.

**Future Participation Needs & Interests**

Overall, students feel that additional outdoor recreation opportunities would enhance the quality of life for students, would use an outdoor recreation equipment rental facility and its services, would be willing to pay a rental price for outdoor recreation equipment, and would participate in outdoor recreation fitness classes if they were available at Eastern Illinois
University and in the Charleston available. When asked what reasons prevent students from using outdoor recreation programs, facilities, and park areas, most students indicated a lack of free time as the highest reason for non-participation. A high percentage of students also indicated that they were unaware of outdoor recreation programs, facilities, and areas as a reason for lack of participation. When asked which outdoor recreation programs and improvements were most needed at Eastern Illinois University and in the Charleston area, students felt that outdoor recreation fitness classes were most needed. Outdoor recreation adventure trips, campfire rings, and outdoor walking and biking paths also had a high need, as indicated by students. When students were asked to rank the top four outdoor recreation program needs, the other category had the highest response rate, with suggestions from students for programs such as: horseback riding, safety/firearm safety courses, swimming, golfing, cricket, a dog park, and running trails. Their second choice for outdoor recreation program needs was additional outdoor recreation classes. Students’ third choice for outdoor recreation program needs was archery. Finally, the fourth outdoor recreation program need indicated by students was canoeing and kayaking.

**Recommendations**

The feedback received from Eastern Illinois University indicated a potential need for additional outdoor recreation programs and opportunities, both on campus and in the Charleston area. Based on the results of the study, the research team feels strongly that the addition and/or improvement of hiking and biking trails or paths, the creation of an outdoor recreation equipment rental facility, the creation of additional outdoor recreation programs and/or classes, and the increased promotion of outdoor recreation programs, facilities, and areas would benefit Eastern
Illinois University and the Charleston area, as well as enhance the quality of life and well being of the students and community.


Appendix

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• Outdoor Recreation Survey p. 48
Dear student:

Eastern Illinois University, in cooperation with the Department of Recreation Administration, is conducting a survey to discover the present and future needs for outdoor recreation programs, areas and facilities as identified by students at Eastern Illinois University. With the data provided we hope to present a comprehensive plan that will be used to develop short and long-range goals for the delivery of outdoor recreation services on Eastern’s campus.

You have the opportunity to provide Eastern with significant information that will aid in recommendations for changes and improvements. Only through your input can Eastern truly provide facilities and areas which are suitable to your leisure interests. Please take the time now to complete the questionnaire – the questionnaire takes 10-15 minutes to complete. Participation in this study is completely voluntary. Your feedback is confidential and only data in grouped form will be published. Since the accuracy of the findings depends on a high rate of response from the population, we urge you to take time to submit your answers to the questionnaire by April 4, 2014. The link to the questionnaire is provided below:

If you have any questions, please contact me at (217) 581-6589 or by e-mail at mamulvaney@eiu.edu. I appreciate your time and assistance.

Sincerely,

Michael Mulvaney, Project Director
Eastern Illinois University

Sponsored by:
Eastern Illinois University
&
Eastern Illinois University
Department of Recreation Administration
Outdoor Recreation Study 2014

Q25 Section I: Outdoor Recreation Participation Patterns & Attitudes

During the last 12 months, approximately HOW MANY TIMES have you participated in the following OUTDOOR recreation activities or programs?

<table>
<thead>
<tr>
<th>Activity</th>
<th>More than 25 times (1)</th>
<th>11-25 times (2)</th>
<th>6-10 times (3)</th>
<th>1-5 times (4)</th>
<th>None (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hiking/Nature Walk (1)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Backpacking (2)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Camping (Tent) (3)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Camping (RV) (4)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Canoeing/Kayaking (5)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Rock Climbing (Indoor/Outdoor) (6)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Horseback Riding (7)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Biking/Cycling (8)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Fishing (9)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Boating (10)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Swimming (Lake/Outdoor Pool) (11)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>River Rafting (12)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Bird Watching (13)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Paintball (14)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Picnicking (15)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Hunting (16)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
<tr>
<td>Archery (17)</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
<td>☒</td>
</tr>
</tbody>
</table>
How have you found out about the outdoor recreation programs and services offered at Eastern Illinois University and the Charleston area? (Indicate all that apply)

- Campus brochures/flyers (1)
- Daily Eastern News (2)
- From friends and neighbors (3)
- Radio/ TV Stations (4)
- Greek organizations (5)
- Flyers at other facilities (6)
- Agency website (EIU, Charleston, etc.) (7)
- Conversations with EIU staff (8)
- Other (please specify) (9) ______________________
- Social Media (10)
- Local Newspapers (11)
How SATISFIED are you with the OUTDOOR RECREATION OPPORTUNITIES at Eastern Illinois University and the Charleston area? For each of the following parks and facility areas, please indicate your level of satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>Very Unsatisfied (1)</th>
<th>Unsatisfied (2)</th>
<th>Satisfied (3)</th>
<th>Very Satisfied (4)</th>
<th>Don't Know/Don't Use (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open Fields (4)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Panther Trail (5)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Campus Pond (6)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Lake Charleston (7)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Community Parks (i.e., Morton Park, Sister City Park, Kiwanis Park, etc.) (8)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Fox Ridge State Park (9)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Lincoln Log Cabin State Historic Site (11)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Skate Park (13)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Pavilions &amp; Shelters (14)</td>
<td>●</td>
<td>●</td>
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</tr>
</tbody>
</table>

Overall, how SATISFIED are you with the OUTDOOR RECREATION OPPORTUNITIES at Eastern Illinois University and the Charleston area?
● Very Unsatisfied (1)
● Unsatisfied (2)
● Neutral (3)
● Satisfied (4)
● Very Satisfied (5)
Section 2: Future Outdoor Recreation Needs & Interests

Which of the following reasons prevent you from using outdoor recreation programs, facilities and park areas at Eastern Illinois University and Charleston area? (Indicate all that apply)

- Location of area, facilities or programs (1)
- Transportation (2)
- The operating hours (3)
- Customer-service issues (4)
- No interest in the recreation services offered (5)
- Unaware of outdoor recreation programs, facilities, or areas (6)
- Do not offer a particular recreation program, area or facility of interest (7)
- Lack of desired equipment (8)
- Other (please specify) (9) ____________________
- Lack of free time (10)
- Financial status (11)
What is your opinion concerning the outdoor recreation issues and opportunities at Eastern Illinois University as well as the Charleston area? For each of the following statements, please indicate your level of agreement.

<table>
<thead>
<tr>
<th>Additional outdoor recreation opportunities would enhance the quality of life for myself and other students at Eastern Illinois University. (1)</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neutral (3)</th>
<th>Agree (4)</th>
<th>Strongly Agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I would use a full indoor climbing wall if it was available at Eastern Illinois University or in the Charleston community. (7)</td>
<td></td>
<td></td>
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<td></td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>I would be willing to pay an entrance/user fee to use an indoor climbing wall if it was available at Eastern Illinois University or in the Charleston community. (10)</td>
<td></td>
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<td></td>
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<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I would use an outdoor recreation equipment rental facility and its services (i.e., canoes, kayaks, camping gear, fishing rods, etc.) if it was available at Eastern Illinois University or in the Charleston community. (8)</td>
<td></td>
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<tr>
<td></td>
<td>○</td>
<td>○</td>
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</tr>
<tr>
<td>I would be willing to pay a rental price for outdoor recreation equipment (i.e., canoes, kayaks, camping gear, fishing rods, etc.) if it was available at Eastern Illinois University or in the Charleston community. (11)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I would participate in outdoor recreation classes (i.e., rowing, rock climbing, nature yoga, etc.) if they were available at Eastern Illinois University or in the Charleston community. (9)</td>
<td></td>
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<td></td>
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<td></td>
<td>○</td>
<td>○</td>
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<td>○</td>
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</tr>
<tr>
<td>I would be willing to pay a registration fee to participate in outdoor recreation classes (i.e., rowing, rock climbing, nature yoga, etc.) if they were available at Eastern Illinois University or in the Charleston community. (12)</td>
<td></td>
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</tr>
</tbody>
</table>
Please indicate your level of interest in the following outdoor recreation activities.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Very Uninterested (1)</th>
<th>Not Interested (2)</th>
<th>Neutral (3)</th>
<th>Little Interested (4)</th>
<th>Very Interested (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canoeing/Kayaking (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Geocaching (2)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rafting (3)</td>
<td></td>
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<tr>
<td>Hiking (4)</td>
<td></td>
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<tr>
<td>Swimming (5)</td>
<td></td>
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<tr>
<td>Environmental Programming (6)</td>
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<tr>
<td>Fishing (7)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Nature Walks (8)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Cycling (9)</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>Archery (10)</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Photography (11)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Camping (12)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Rock climbing wall (13)</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Hunter’s safety (14)</td>
<td></td>
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<td></td>
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<tr>
<td>Skiing (15)</td>
<td></td>
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<td></td>
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<tr>
<td>Horseback riding (16)</td>
<td></td>
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<tr>
<td>Boating (17)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Camping (18)</td>
<td></td>
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</tr>
</tbody>
</table>
Which of the following outdoor recreation projects or improvements do you feel are most needed at Eastern Illinois University, as well as in the Charleston area? (Chose all that apply)

- Camping Equipment Rentals (i.e., tents, backpacks, etc.) (1)
- Outdoor Adventure Recreation Trips (i.e., climbing, canoeing, backpacking, geocaching, fishing, camping, etc.) (2)
- Rock Climbing Wall (3)
- Canoeing/Kayaking Equipment Rentals (4)
- Picnic Areas & Pavilions (5)
- Outdoor Walking and Biking Paths (6)
- Campfire Rings (7)
- Outdoor Recreation Certification and/or Safety Classes (i.e., wilderness first responder, basic outdoor safety, etc.) (8)
- Outdoor Recreation Fitness Classes (i.e., nature yoga, rock climbing, rowing, etc.) (9)
- None - I am not interested in any outdoor recreation projects or improvements (10)
- Other (please specify) (11) ____________________

Are there PROGRAM NEEDS for Eastern Illinois University and the Charleston area? RANK THE TOP FOUR PROGRAMS you feel are most important to you. (Using the space next to each program, place a “1” next to your top choice; “2” for your 2nd choice; “3” for your 3rd choice and; a “4” for your 4th choice).

- Outdoor Recreation Classes (i.e., nature yoga, canoeing, kayaking, etc.) (1)
- Nature/Environmental Education Programs (2)
- Outdoor Recreation Trips (i.e., rock climbing, camping, backpacking, skiing, canoeing, etc.) (3)
- Canoeing/Kayaking (4)
- Backpacking/Hiking (5)
- Outdoor Living/Survival Skills (6)
- Fishing (7)
- Rock Climbing (8)
- Archery (9)
- Camping (10)
- Geocaching (11)
- Other: (12)
Section 3: Demographics

Which best describes the individual(s) who completed the survey?: (Choose one)
- Male (1)
- Female (2)

What is your race?
- American Indian and Alaskan Native (1)
- Asian (2)
- Black or African-American (3)
- Hispanic or Latino (4)
- White (5)
- Other (please specify) (6) ____________________

Which best describes your residential location?
- Residence Halls (1)
- University Apartments (2)
- Greek Court (3)
- University Court (4)
- Off-Campus: Charleston (5)
- Off-Campus: Mattoon (6)
- Off-Campus: Other (please list) (7) ____________________

What is your current year in school?
- Freshman (1)
- Sophomore (2)
- Junior (3)
- Senior (4)
- Senior (5+) (5)
- Grad Student (6)

Which best describe your academic status?
- Full-time graduate student (1)
- Part-time graduate student (2)
- Full-time undergraduate student (3)
- Part-time undergraduate student (4)

Thank you for your time and feedback! Feel free to share any additional comments below: