

# **University Outdoor Recreation Program Participation: Comparing Benefits, Constraints, and Willingness to Pay Between Males and Females**

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This study examined and compared differences between gender groups regarding benefits, constraints, and willingness to pay related to university outdoor recreation programs. This information furthers understanding of these demographic groups and could assist decision makers with developing, marketing, and funding outdoor recreation programs targeted at higher education groups. Researchers crafted five hypotheses: Hypothesis 1: Females will participate in outdoor recreation less frequently than males will. Hypothesis 2: Females will rate benefits for participating in outdoor recreation higher than males will. Hypothesis 3: Females will rate constraints to participating in outdoor recreation higher than males will. Hypothesis 4: Females will rate the importance of outdoor programs higher than males will. Hypothesis 5: Female respondents will be willing to pay less for university programs than males will.

## **Method**

Influenced by Raymore's (2002) model of motivation, facilitators, and constraints, this study began with an accessible video education tutorial that showcased campus outdoor recreation programs and the benefits of outdoor recreation activities. After viewing the educational tutorial, Minnesota State University (MNSU) students and staff were provided with an electronic survey that gauged their reactions and opinions concerning the topics presented in the video. The tutorial and questionnaires were administered to the MNSU campus population of 17,000 via a campus-wide electronic mailing list, which garnered a response sample of 525 (Salant & Dillman, 1994).

## Results

Researchers found that the majority (81%) of respondents participate in outdoor recreation frequently. Females (82%) and males (83%) participate comparably to the overall results. Respondents who participate in outdoor recreation reported self-esteem as the highest rated benefit to participation. Females rated all benefits of participating in outdoor recreation higher than males did, with the exception of feeling more confident after participating in activities. However, none of the mean ratings for each statement between gender groups was considered statistically significant. With these results, it is difficult for the researchers to confirm that females will participate in outdoor recreation less frequently than males, for Hypothesis 1.

For Hypothesis 2, with the exception of confidence, results indicate that females rated all benefits of participation in outdoor recreation items higher on average than males did. These benefits included self-esteem, class performance, campus community support, learning inspiration, after-school time usage, health, and student retention. None of the variances or means for rating benefits were statistically significant and cannot statistically confirm Hypothesis 2.

For Hypothesis 3, an independent samples test using Levene's test for equality of variances and a *t* test for equality of means resulted in statistically significant differences in the variance and means reported between females and males at the  $p < .01-.001$  level, dependent on the constraint. Constraints that females rated higher than males did and were statistically significant included (1) I do not think I am fit enough, (2) I am not confident, (3) The fee to participate is too high, and (4) I am afraid of getting hurt (see Table 1). Females rated all the constraints higher as preventing them from participating in outdoor recreation activities than males did, with the exception of "I am not interested." Although females rated most of the constraints higher than males did, the results confirm Hypothesis 3 as accepted for only the statistically significant mean ratings for certain constraint items.

**Table 1**

*Mean Ratings of Respondent Constraints to Participation in Outdoor Recreation Activities<sup>a</sup>*

<b>Constraint</b>	<b>Female</b>	<b>Male</b>
<b>For those who participate in outdoor recreation</b>		
I do not have the energy	2.68	2.26
I do not think I am fit enough <sup>b</sup>	2.53	2.00
I am not interested	1.92	1.98
I am not confident <sup>b</sup>	2.43	1.99
I did not enjoy it before	1.94	1.67
I do not have transportation	2.04	1.94
No opportunity close to home	2.93	2.55
I do not have enough money	3.49	3.18
The fee to participate is too high <sup>b</sup>	3.35	2.83
I do not have the time	3.29	3.18
I have several social commitments	2.81	2.67
I have several family commitments	2.69	2.51
I do not have anyone to teach me	3.24	2.81
I do not have anyone to participate with	3.30	3.14
I do not know where to participate	3.48	3.15
My friends do not have time	2.96	2.89
I do not have access to adequate facilities	3.30	2.92
I am afraid of getting hurt <sup>b</sup>	2.11	1.59
I think that it is unsafe	1.77	1.52

**Table 1 (cont.)**

Constraint	Female	Male
<b>For those who do not participate in outdoor recreation</b>		
I do not have the energy	2.93	2.81
I do not have enough money	3.30	3.63
I do not have the time	3.59	3.40
I do not have anyone to participate with	2.91	3.33
I do not have access to adequate facilities	3.29	3.67
I think that it is unsafe	1.54	1.74

<sup>a</sup>Mean values were derived from a Likert-type scale where 1 = *strongly disagree* and 5 = *strongly agree* that the item was a constraint. <sup>b</sup>Independent samples test, 2-tailed *t* test resulted in  $p < 0.01-0.001$ , indicating statistical significance in the difference of mean ratings for constraints to participation in outdoor recreation between females and males.

For Hypothesis 4, females responded with a higher mean rate of importance for outdoor recreation skills and certification courses than males did. Males reported that they feel rental and event/excursions are more important; however, the differences between those means were not statistically significant. The researchers can confirm statistical significance on skills courses and certification courses, but cannot confirm events/excursions as significantly significant between gender groups.

For Hypothesis 5, results indicated that females (\$1.30) were willing to pay less per credit than males (\$1.33). Females (\$15.58) were also willing to pay less per semester than males (\$19.34). Results found statistical significance in the variance and difference between means for the dollar amount of willingness to pay per semester between females and males. These results confirm females are willing to pay less for outdoor recreation programs per semester than males are. Differences between willingness to pay per credit between females and males was not significant.

## Discussion

This study has several implications for future research and decision makers planning outdoor recreation programs for higher education populations. First, future researchers could target groups that do not participate in outdoor recreation, especially underrepresented and minority groups (Schwartz & Corkery, 2011). Researchers could additionally collect and compare data from groups that did not respond to this survey. Second, given high interest in participation among all groups, a further study could ask follow-up questions for groups in terms of motivations, negotiation skills, and reduction of constraints for shedding light on strategies that could help students and employees overcome barriers to participation (Ghimire, Green, Poudyal, & Cordell, 2014). Third, a comparison of willingness-to-pay fees for programs with constraints for lack of money and too high of fees could provide insight into overcoming monetary participation issues for females (Loomis & Walsh, 1997).

Fourth, campus outdoor recreation planners could create inclusive promotion materials for female or underrepresented and minority groups (Little, 2002). Fifth, campus outdoor recreation programmers could provide more courses on skills and certification targeting female groups. Sixth, self-esteem ranked as the top benefit of participating in outdoor recreation activities, which could serve as a major justification for developing outdoor recreation programs for college campus communities. Seventh, a critical need exists for future studies to examine strategies for reducing females' perceived constraints for participating in outdoor recreation activities (Shores, Scott, & Floyd, 2007; White, 2008).

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