

Assessment and Evaluation of Outdoor Recreation Facilities and Activities in Luzerne County, Pennsylvania

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Background

The benefits of parks, trails, and outdoor recreation have been widely studied in the context of health and wellness. Besides improving health outcomes in the community—reducing the risk of heart disease, type II diabetes, and metabolic syndrome among others [1]—outdoor activity has also been shown to improve mental as well as social well-being [2]. Thus, in order to improve the overall well-being of the community, it is important to encourage outdoor recreation and understand what factors go into consideration for use of park services.

This research project aims to identify the patterns of utilization of parks and recreational trails in Luzerne County, specifically by geographic area, recreational activity, and respondent-reported assessment of available facilities. This comprehensive analysis will help identify need for additional trails and address barriers that prevent active participation in outdoor recreational activities from all members of the community.

[1] Gladwell VF, Brown DK, Wood C, Sandercock GR, Barton JL. The great outdoors: how a green exercise environment can benefit all. *Extrem Physiol Med*. 2013. 2(1): 3.

[2] Volker K. Activity in daily living and health outcome: Factor or fiction? *Internist (Bert)* 2012. 53(6): 671-677.

Methods

Recruitment

A randomized sample of 1,000 postal addresses, stratified by postal route, was obtained across thirteen towns in Luzerne County.

Survey

The survey used to develop the Pennsylvania Statewide Comprehensive Outdoor Recreation Plan [3] was adapted to reflect locally available facilities. Respondents were asked to provide basic demographic information, describe which activities they participate in, and rate their experiences with their local facilities.

Data Collection

A 27-question was distributed via mail. Written responses were collected over the course of four weeks from March—April 2014.

Data Analysis

75 surveys were returned, yielding a response rate of 7.5 %. Data from each survey was compiled and analyzed for descriptive statistics in Microsoft Excel.

[3] Graefe AR, Mowen AJ, Trautwein NE, Covelli EA. Outdoor Recreation in Pennsylvania: Resident Survey. Department of Recreation, Park, and Tourism Management, Penn State Univ. 2009.

Results

- The average respondent to the survey administered was a married white male, above the age of 55.
- A majority of individuals who responded owned their own transportation (99% of respondents) and worked full time (57% of respondents).
- Very few respondents reported poor health (6% of respondents).

Figure 1

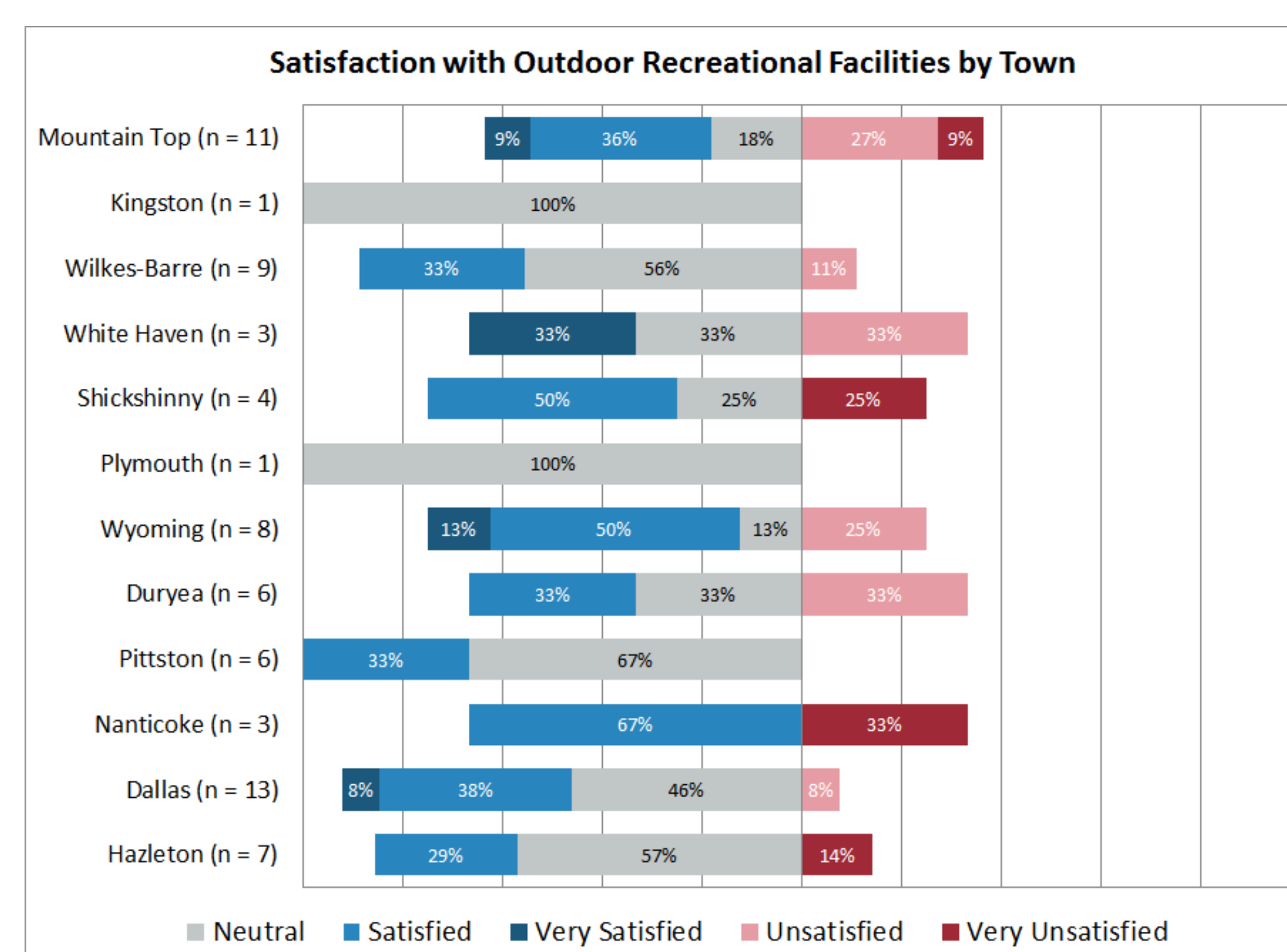


Figure 3

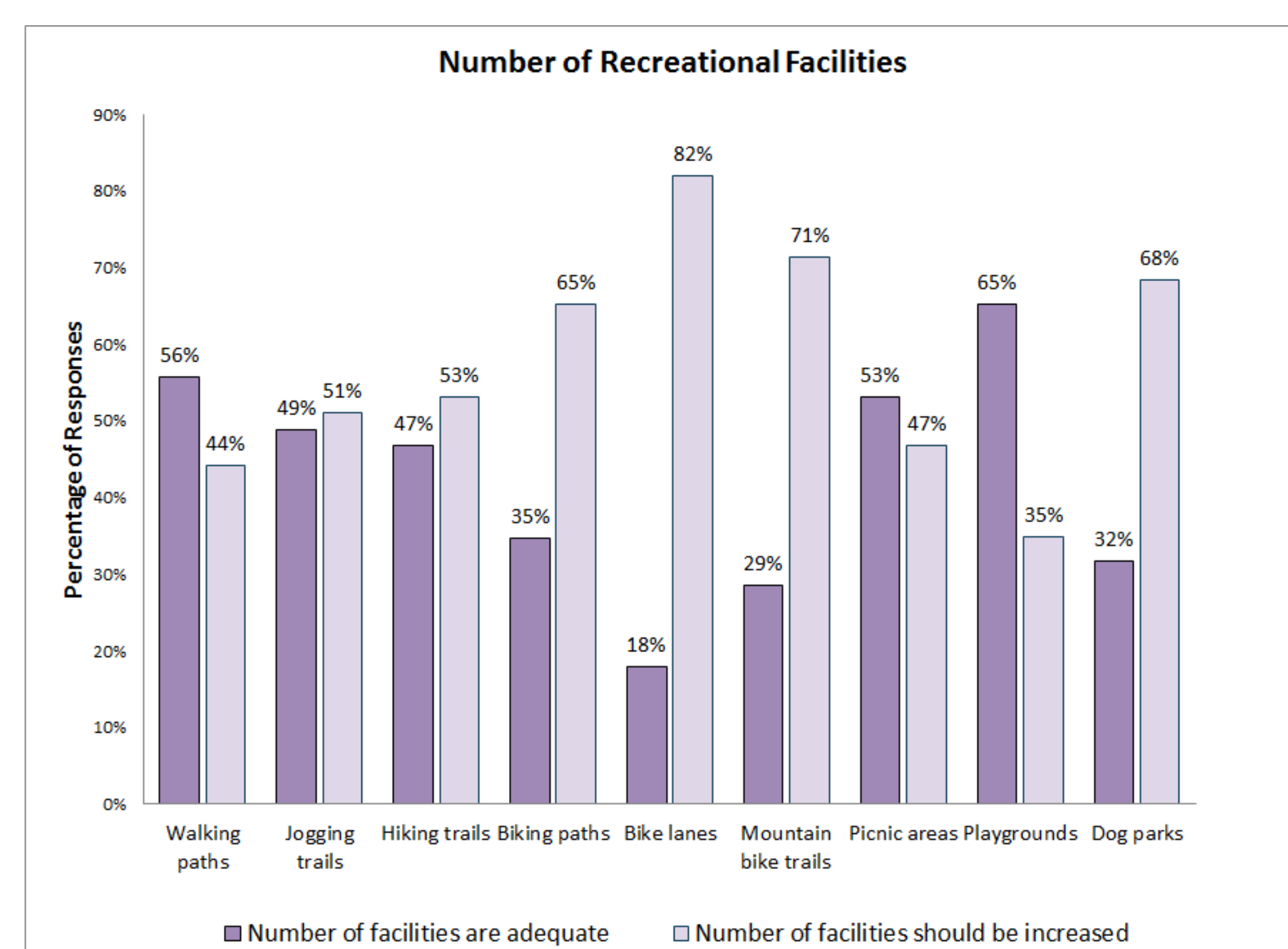


Figure 2

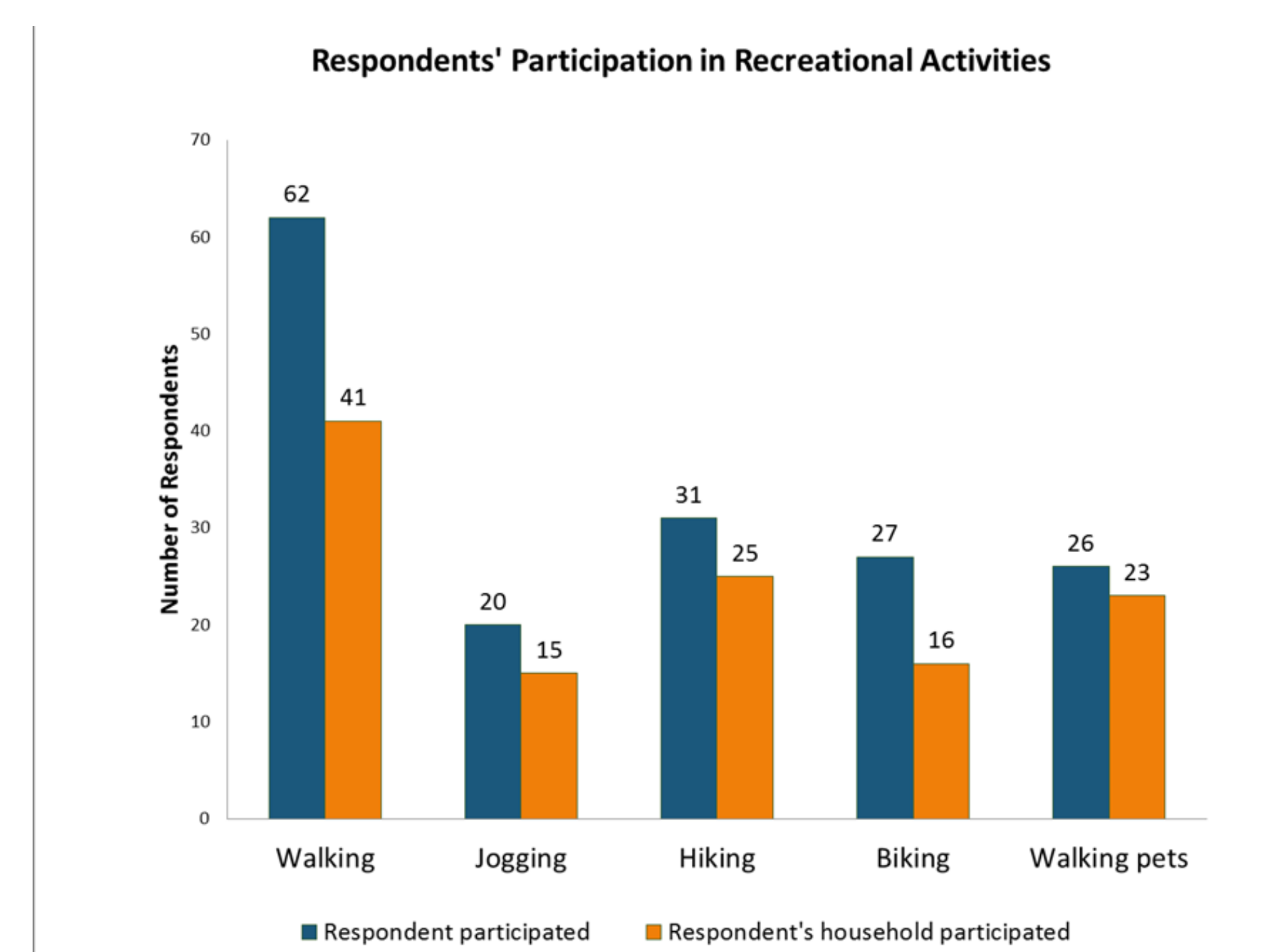
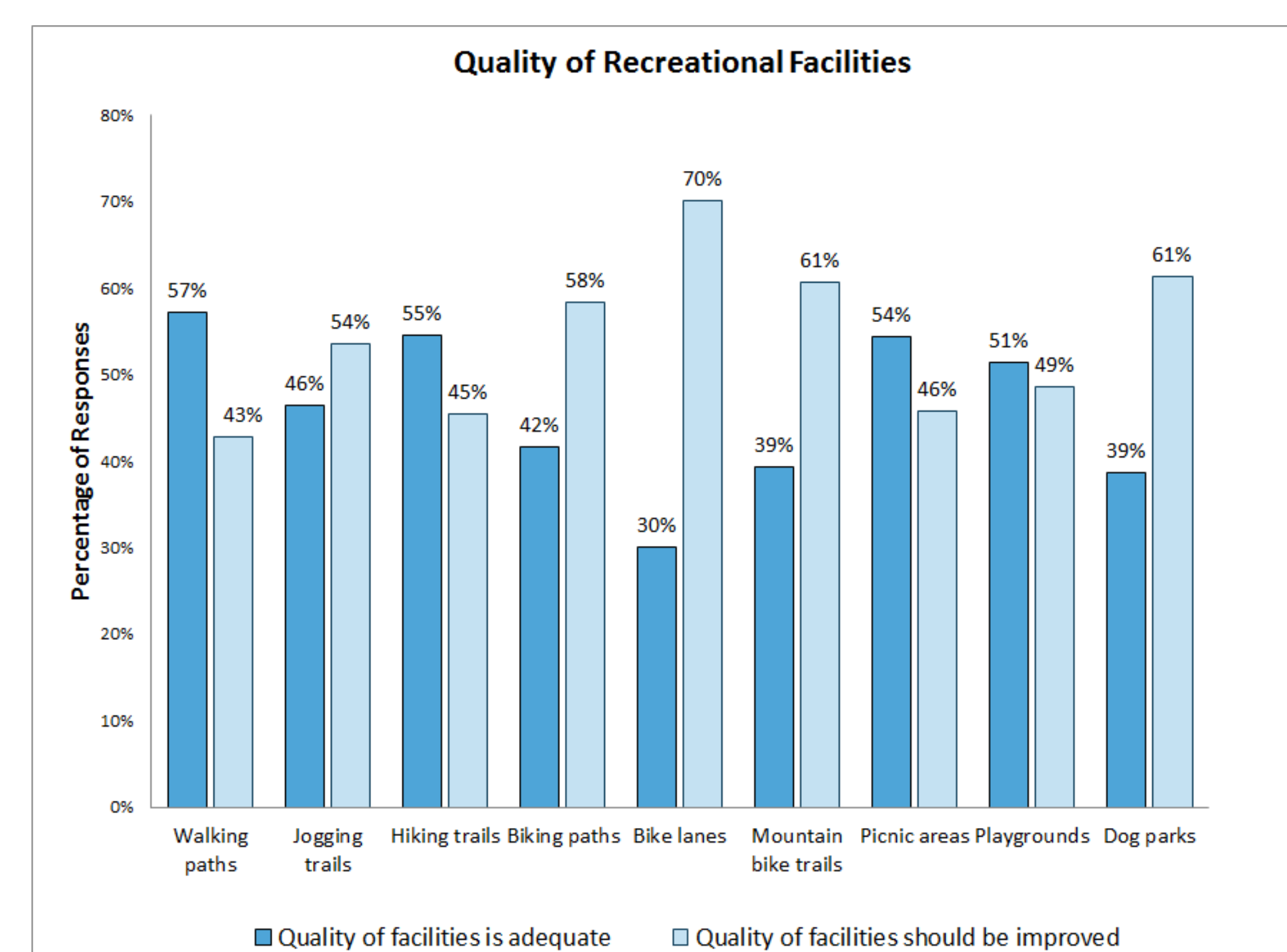


Figure 4



Discussion

- There is a varied distribution of satisfaction with outdoor recreational facilities within the towns sampled in the study (Fig. 1). On average, respondents were generally neutral to satisfied with the facilities available in their areas. However, there were some towns in which multiple respondents were either unsatisfied or very unsatisfied with local facilities. These included Mountain Top (4 of 11 respondents reported being either unsatisfied or very unsatisfied), Wyoming (2 of 8), and Duryea (2 of 6). These results may reflect a general lack of facilities close to these towns or may also reflect a lack of awareness about nearby facilities within the general population.
- Walking was found to be the most popular outdoor recreational activity for respondents, with jogging being the least popular (Fig. 2). Given that walking and jogging require similar outdoor facilities, this difference can likely be attributed to the relative older age of the participants.
- For the majority of outdoor recreational facilities available in Luzerne County, more participants indicated that the number of facilities should be increased and the quality of those facilities should be improved (Fig. 3, 4). The only facilities for which the majority of respondents believed the current number and quality of facilities were adequate were walking paths and picnic areas.

Limitations & Future Research

- Relatively small sample size; 67 surveys were returned due to inaccurate or incomplete mailing address information.
- Future research should make an attempt at collecting information from a larger sample size that may be more representative of the overall population.
- Efforts should be made to ask respondents to describe their experiences at specific locations, thereby allowing for targeted improvement in those areas.

Acknowledgements

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