

ATV & ORM Health Benefit Study Fact Sheet – Quality of Life

- Study conducted by York University Physical Activity and Chronic Disease Unit, Faculty of Health, and supported by the Canadian Off-Highway Vehicle Distributors Council, the All-Terrain Quad Council of Canada, The Motorcyclists Confederation of Canada and the Government of Nova Scotia
- A ground breaking, first ever comprehensive probe of the fitness and health benefits of all-terrain vehicle (ATV) and off-road motorcycle (ORM) recreational riding. The national study expanded on an Ontario pilot study of the health benefits of off-road motorcycle (ORM) riding.
- Jamie F. Burr, Veronica K. Jamnik, Jim A. Shaw and Professor Norman Gledhill at York University’s Physical Activity and Chronic Disease Unit, Faculty of Health agreed to conduct the study and for Jamie Burr, a kinesiologist and exercise physiologist at York, the research would be part of his PhD. The purpose of the research -- exploring quality of life issues of off-road riders.
- The study was approved by the university’s human research ethics review board, and in accord with research ethics guidelines, written and informed consent was provided by all participants, with those younger than 18 yr also providing parental consent after verbal explanation of procedures.
- This report – entitled “Health-related Quality of Life of Habitual Recreational Off-Road Vehicle Riders” (Health & Fitness Journal of Canada 3.1 (2010)) – is the first study of this scope exploring quality of life issues of off-road riders
- A secondary purpose was to compare the levels of mental and physical functioning Quality of Life (QOL) of recreational off-road vehicle riders to Canadian population norms
- Study began in 2007 with a nationwide survey involving 310 participant to determine the characteristics of a “typical” rider and of a “typical” ride (Phase I). This information was then used as the basis to determine the health and fitness impacts of off-road riding (Phase II).
- This study explores the little known area of health-related participation outcomes in alternative forms of Physical Activity (PA) and consequently how this may affect the mental and physical health of Canadians.
- This report compared off-road riding to non-traditional forms of physical activity participation, such as video game based exercise, martial arts and adventure sports, which are becoming increasingly popular among segments of the population for whom traditional forms of exercise (i.e., jogging, swimming, resistance training) and physical activity (PA) may be impractical, unavailable or unappealing.

- “Given the importance of PA in preventing avoidable morbidity and mortality and the associated cost savings to the health care system, involvement in any recreational pursuit that increases activity and decreases sedentary living is important.”
- Study revealed that significant differences existed for the Physical Component Summary scores (measures which reflect physical status) between off-road riders and the Canadian population norms
- “Research has consistently shown that physical activity is related to a postponement of disability and increased independent living in older adults.”
- Off-road riders also have higher Mental Component Summary (measures which reflect mental status) scores than the non-riding normative Canadian population – based on MCS scores, riders are “expected to have lower levels of stress and depression...and a higher overall life satisfaction”
- The first published study was released in the July 2010 issue of *Medicine & Science in Sports & Exercise*, the Official Journal of the American College of Sports Medicine (ACSM) and focused on the physiological demands of off-road vehicle (ORV) riding, compares them to the demands of other recreational activities, and explores the health and fitness benefits that ORV participation can provide to Canadians
- Subsequent publications will examine the fitness and health of habitual recreational off-road riders; and fitness and health training adaptations from six to eight weeks of ORV riding (i.e. how much ORV riding is required for health and fitness benefits to be derived).