

Session: **Research for management and marketing I.**

Abstract nr: **EASM-0031**

Organisation intervention factors in increasing and sustaining participation in physical activity. A case study of triathlon

A. Martin¹, P. Pancoska²

¹*Massey University, Management, Palmerston North, New Zealand*

²*University of Pittsburgh, Medicine, Pittsburgh, USA*

a.j.martin@massey.ac.nz

Background

‘Push Play’ SPARC’s (New Zealand’ Sport & Recreation government agency) national physical activity campaign was launched in 1999 to raise New Zealander’s awareness of the benefits of physical activity and the need to do at least 30 minutes of moderate intensity physical activity on most days of the week (Bauman et al, 2003). Since 2005 the campaign has been a call to action for more New Zealanders to get ‘more active more often’ (SPARC, 2010). Although there is research on intervention in sporting environments, the organisation factors associated with increasing and sustaining accessibility and opportunities for physical activity are among the least understood (Humpel, Owen & Leslie, 2002).

This current study focuses on the sport of triathlon (run, bicycle and swimming in combination), which is now the fastest growing sport in New Zealand with a 94.4% increase since 2000 (Triathlon New Zealand, 2009). It specifically evaluates the success of a city-wide public triathlon series in Palmerston North, New Zealand. Palmerston North is a University City in the North Island of New Zealand (Manawatu-Wanganui region), population of about 80000 (2009). What started as a challenge for few enthusiasts in 1997 has evolved into an event in which organizers managed from initially 300 (1999) to close to 1000 adults and from 300 (2004) up to 2300 children in all events in 2009/2010. Additionally, due to the increased demand from the community, the number of events per year has been increased – for example, there were 3 adult and 3 kid’s triathlons first organized in 1997 and 2004 respectively, while from 2007 to current, there are series of 5 adult and 5 kid’s triathlons organized.

Objectives

To evaluate the organisation factors for increasing and sustaining accessibility and opportunities for community involvement in physical activity related intervention activities

Method

Data archives storing the results of the respective events were reviewed (date, location, lengths of the triathlon parts, participant names and ages). Data was processed during the period 1999-2010.

Ethics approval was sought to collect additional data (age, gender, height and weight) needed to determine the distribution of age-corrected BMI for the current participants (n = 280 adults & kids) in the respective triathlon series. It is acknowledged that the authors were involved in the study as initiators, organizers as well as event participants (regular or occasional).

Results

The sample distribution was similar to the regional population (52% female, median age 32.4 years; ethnicity New Zealand European 71%, 19% Maori & Pacific Islanders). Participation developed from being primarily initially “attenders” (those already enthusiastically committed), to involving “intenders” (some sport & leisure interest & involvement), and the “indifferent” (influenced by positive intervention). Age correlated BMI indicated a mainly homogeneous distribution with slight emphasis to BMI over 30. Of those surveyed 80% indicated that there is now other family involvement in triathlon. Five key factors, both internal and external to the organisation, were evident from the findings: Major events – (1) major events – external promotion (2) key individuals –external role models & internal key volunteers (3) funding (4) organisational structure (5) safety. These factors were implemented in sequence, and were successful in increasing and sustaining participation in physical activity.

Conclusion/Application to Practice

This case study of regional community based triathlon intervention has demonstrated how effectively an organisation can increase and sustain family and whole community involvement in physical activity. The five key organisation factors identified were important in developing the significantly increased and sustained participation and can be used as a model for participation in other sport & recreation interventions. Whilst it is accepted that participation in triathlon can be rather unique to the socio cultural context, the findings may be generalised in broader contexts. The findings of our study might be used as guidance for intervention in communities where increased and sustained physical activity is required to decrease risk factors for health related diseases. First, for the New Zealand Maori and Pacific Islanders community, where health related obesity and diabetes is significantly higher compared to other ethnic groups, for example, 5%-10% of Maori are disproportionately represented within the diabetes pattern of 2%-5% of all New Zealanders (Mallard, 2001). Second, comparison of the age correlated BMI from this regional physically active community with West Virginia community data (Bardwell et al, 2009; Pancoska et al, 2009) indicated that the obesity components were missing in the New Zealand data.

References

Bardwell, G., Morton, C., Chester, A., Pancoska, P., Buch, S., Cecchetti, A., Vecchio, M., Paulsen, S., Groark, S., & Branch, R. (2009). Feasibility of adolescents to conduct community-based participatory research on obesity and diabetes in rural Appalachia. *Clinical and Translational Science*, 2(5), 340-349.

Bauman, A., McLean, G., Hurdle, D., Walker, S., Boyd, J., van Aalst, I., & Carr, H. (2003). Evaluation of the national 'Push Play' campaign in New Zealand – creating population awareness of physical activity. *Journal of the New Zealand Medical Association*, 116(1179).

Humpel, N., Owen, N., & Leslie, E. (2002). Environmental factors associated with adults' participation in physical activity: A review. *American Journal of Preventive Medicine*, 22(3), 188-199.

Mallard, T. (2001). *Getting set for an active nation: Report of the sport, fitness and leisure ministerial task force*. Retrieved from www.executive.govt.nz/minister/mallard/sflreview

Pancoska, P., Buch, S., Cecchetti, A., Parmanto, B., Vecchio, M., Groark, S., Paulsen, S., Bardwell, G., Morton, C., Chester, A. & Branch, R. (2009). Family networks of obesity and type 2 diabetes in rural Appalachia. *Clinical and Translational Science* 2(6), 413-421.

SPARC (2010). *Push Play*. Retrieved from <http://www.sparc.org.nz/pushplay-oveview>.

Triathlon New Zealand (2009). *Annual report*. Retrieved from <http://www.triathlon.org.nz/Resource.aspx?ID=4567>