

**Anna Mrkusic - School engagement in the Project Energize health intervention programme. 'What works, what does not work, what next?'**

Primary Supervisor: Professor Elaine Rush

Rates of overweight and obesity have continued to rise amongst primary school children including those in New Zealand, with higher prevalence in non-European children and those living in more deprived areas. The school setting has been identified as an ideal environment for interventions to improve child health by supporting daily moderate and vigorous physical activity and healthier eating patterns.

Project Energize has been operating in Waikato primary schools since 2005. In 2011 the Project Energize programme delivered by Sport Waikato included 40,000 children, 244 schools, and 27 "Energizers" including one dietitian. Energizers are assigned 8-12 schools each and act as a "one stop shop" to support activities that promote and coordinate improved nutrition and physical activity within schools. In early 2011 a formal evaluation involving 192 schools which had been engaged with the Project Energize for eighteen months or more was undertaken. The evaluation included anthropometric measurements, school stocktake, home-questionnaire and lead teacher interviews to assess student health outcomes and Project Energize programme implementation.

This body of work aimed to identify factors associated with school engagement and participation in Project Energize and to develop an understanding of the context of those factors so recommendations can be made to raise levels of engagement in low-engaged schools. This projects asks, are engagement and participation associated with programme effectiveness in Project Energize?

**Methods:**

In a purposively selected sub-sample of the 2011 Project Energize evaluation study, lead teachers in 25 of the 192 schools undertook a structured interview. Independently, scores for engagement were derived from stocktakes of the nutrition and physical activity environment (n=192), Energizer school ratings (n=192) and responses from school leader interviews (n=25). Scores were compared using Spearman rank coefficients. Responses from open ended interview questions were thematically analysed to identify common perceptions.

**Results:**

School ratings based on measures and perceptions of levels of engagement and participation showed strongest agreement between the Energizer ratings and the score derived from the school interviews ( $p=0.676$ ,  $P<0.000$ ,  $n=24$ ), levels of engagement and participation mediated by socio-economic status and ethnicity. Themes derived from the interviews relating to positive engagement were perceptions of a school community health need, commitment of school leaders, and effective interaction with Energizers. All school leaders agreed that the Energizers were a vital part of the programme. Challenges to engagement related to levels of parental support, curriculum demands, perceived need to fundraise with unhealthy food, transience and limitations in the time of interaction with the Energizer.

**Conclusions:**

Positive, meaningful engagement was observed in all schools, however factors were identified that restrict programme uptake. Engagement and participation in Project Energize are associated with programme effectiveness. The Project Director can use Energizer engagement ratings to prioritise programme resources to provide extra support to low engaged schools, in particular low decile schools with a high percentage of Māori students.