

Promoting physical activity with e-mail and SMS: MoveM8! A tailored approach

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Introduction

In response to key government priorities to improve health through worksites, we developed the MoveM8 programme, a 12-week e-mail and text-messaging physical activity intervention targeting individual employees in the UK. Our study tests the Theory of Planned Behaviour (Ajzen, 1991), which has shown to explain and predict physical activity behaviour (Godin & Kok, 1996, Armitage, & Conner, 2001). Using individualised or tailored stimuli with the help of information and communication technologies represents a promising approach to promoting physical activity. Recent studies demonstrate the effective use of tailoring communication (Noar, Benac & Harris, 2007) in influencing health behaviours, and of technologies like e-mails (Plotnikoff et al., 2005) and mobile phones (Fjeldsoe et al., 2009), in the physical activity domain. The Elaboration Likelihood Model (Petty & Cacioppo, 1984) postulates that involvement, motivation and message relevance increase the probability that individuals thoroughly elaborate information and subsequently act on it. Nonetheless, there is limited evidence on the role of the perception of tailoring and on SMS supplementing e-mail communication on physical activity behaviour change. Therefore this study aims at examining: 1) the effects of adding SMS to weekly e-mail communication on perceived message relevance and physical activity behaviour and 2) if thinking that communication is “tailored” (“placebo tailoring”) influences perceived message relevance and physical activity behaviour.

Methods

This study is a randomised controlled trial with four study groups: Group 1 receives one weekly personalised e-mail; Group 2 receives one weekly personalised e-mail (participants are told that messages are tailored); Group 3 receives one weekly personalised e-mail plus two standard SMS messages each week; Group 4 receives one weekly personalised e-mail plus two SMS messages each week, and are told that messages are tailored. Study objectives are measured at baseline (pre-test), 2 mid-intervention and 2 post-tests through web-based surveys.

Preliminary Results

The first wave of the study commenced September 23rd 2009, hence only preliminary data analysis can be presented. Of the 168 participants who completed the baseline assessment 19.6% are men and 80.4% are women. Age ranges between 22 to 63 years (Mean= 40.6 SD=11.3). More than 80% state that their health status is good and very good. Participants show also high levels of motivation and confidence to increase their level of physical activity, with a mean rating of 7.4 (SD=1.9) and 6.4 (SD=2.1) on a scale from 1 to 10. Regarding the first two weeks of intervention (from September 23rd to October 2nd), all the participants received 2 weeks worth of program communication. SMS sent to groups 2 and 4 were successfully delivered and read by 95% and 92.8% respectively). The first e-mail was opened by 27.8% and the second by 30.5% of the participants. Online feedback and web-based participant tracking show that reading behaviour varies among the participants allocated in the different groups: those belonging to the “told to be tailored” groups open the e-mails less than the other two groups (-.3% and -6.4% from first and second message).

Discussion/Conclusion

Preliminary results show that even with high levels of motivation, only 30% of participants read the e-mail messages. The differences between the four groups in reading behaviour could depend on many different factors. Assuming a cultural-critical approach in health promotion, many non-individual factors could impact behavioural outcomes, such as government and worksite policies towards physical activity, environment characteristics. A promising approach that offers great potential would be linking health variables to geodemographic classifications (Abbas, et al., 2009). Tailored information about sport resorts, fitness facilities or events not only participants could find it useful and perceive it as more relevant, but also could enhance their physical activity experience. Moreover interventions that take into account these variables could also promote health and well-being tourism products based on the local and regional unique resources. This demands for further research upon final data analysis. Future implications for using other variables will be discussed.

References

- Abbas et al. (2009). *Public Health*, 123(1), e35-e39.
- Abraham & Graham-Rowe (2009). *Health Psychol. Rev.* 3(1), 108-144.
- Ajzen, (1991). *Organ. Beh. Hum. Dec.* 50(2), 179-211.
- Armitage & Conner (2001). *Br. J. Soc. Psychol.* 40, 471-499.
- Godin & Kok (1996). *Am. J. Health Promot.* 11(2), 87-98.
- Fjeldsoe et al. (2009). *Am. J. Prev. Med.*, 2(36), 165-173.
- Kreuter & Strecher (1996). *Health Educ. Res.*, 11(1), 97-105.
- Noar, Benac & Harris (2007). *Psychol. Bul.* 133(4), 673-693.
- Petty & Cacioppo (1984). *J. Pers. Soc. Psychol.* 46, 69-81.
- Plotnikoff et al. (2005). *Am. J. Health Promot.* 19(6), 422-429.