

REFERENCES

- 1 Raupach T, Al-Harbi G, McNeill A, Bobak A, McEwen A. Smoking cessation education and training in U. K. Medical schools: a national survey. Nicotine Tob Res. 2015;17(3):372–375
- 2 National Institute for Health and Clinical Excellence. Smoking cessation in secondary care: acute, maternity and mental health services. PH48. London: NICE, 2013

S80 GAME ON? THE GAMIFICATION OF MHEALTH APPS IN THE CONTEXT OF SMOKING CESSATION

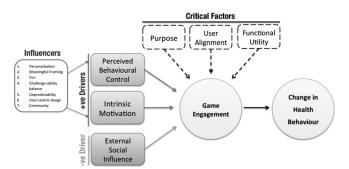
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Introduction and objectives Increasing emphasis has been placed on behavioural therapy in smoking cessation efforts. mHealth aims to join today's arsenal of smoking cessation techniques. Many apps are utilising 'gamification' (the use of game design elements in non-game contexts) as a tool to drive positive behaviour change. However, a significant knowledge gap currently remains regarding how gamification can affect health behaviour. Our study seeked to elucidate the motivational mechanisms exploited by gamification in promoting positive health behaviours in the context of smoking cessation, with a view to generating recommendations on how to create effective gamified mHealth interventions.

Methods We conducted a qualitative longitudinal study using a sample of 16 smokers divided into two cohorts. The first cohort used a non-gamified mHealth intervention, whilst the second used a gamified mHealth intervention. The added game components allowed us to isolate the effects of gamification. Each participant underwent 4 one-on-one, semi-structured interviews over a period of 5 weeks. Interviews were transcribed verbatim after which thematic analysis was undertaken.

Results We observed that perceived behavioural control and intrinsic motivation acted as positive drivers to game engagement and consequently positive health behaviour. Importantly, external social influences exerted a negative effect. We identified three critical factors, whose presence was necessary for game engagement; purpose (explicit purpose known by the user), user alignment (congruency of game and user objectives), functional utility (a well-designed game). We summarise these findings in a framework (Figure 1), which we propose to guide the development of gamified mHealth interventions.



Abstract S80 Figure 1 A framework proposing effective use of gamification to promote positive health behaviour

Conclusions Our framework outlines the characteristics critical to consider when developing any gamified mHealth intervention to promote a particular health behaviour. Gamification holds the potential for low-cost, highly effective mHealth solutions that may replace or supplement the behavioural support component found in current smoking cessation programmes. Our proposed framework has been built on evidence specific to smoking cessation, but is versatile and can be extended to health interventions in other disease categories. Future research is now required to evaluate the effectiveness of the above framework directly against current behavioural support therapy interventions in smoking cessation.

FEASIBILITY AND UPTAKE OF ENHANCED SMOKING CESSATION SERVICES WITHIN AMBULATORY HIV CARE

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Background HIV infected individuals are at increased risk of smoking-related illness and smoking rates amongst populations with HIV are often significantly higher than the general population. Interventions that reduce the prevalence of smoking in this population are urgently required.

Aims We sought to establish the impact of initiating regular smoking screening and advice by healthcare assistants (HCAs) or nurses as part of routine care appointments in a HIV ambulatory care service.

Methods Individuals attending for ambulatory HIV care appointments were asked brief screening questions regarding cigarette smoking by Healthcare Assistants (HCAs) or nurses. This was completed whilst clinical observations were performed, allowing this intervention to be delivered as part of routine care. Those who were current smokers were given Very Brief Advice (VBA) regarding smoking cessation and offered referral to smoking cessation services. The number of referrals to smoking cessation services was compared to the six months prior to the introduction of the enhanced service.

Results 1,031 individuals were screened between October 2014 and March 2015: 262 (25%) reported that they were current smokers. 248 (93%) of these smokers were provided with VBA and the opportunity of referral to smoking cessation services. Of these, 103 (38%) accepted referral compared to 6 referrals from the HIV outpatient service in the preceding 6 months.

Conclusions An intervention to ask service users about smoking and provide smoking cessation advice can be undertaken as part

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