Self Affirming via the Web; A potential lifestyle behaviour intervention?

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The potential for the internet to be utilised in the dissemination of health information is becoming increasingly apparent. This paper details the implementation of Self Affirmations into a web based programme, with the aim to assess the suitability of the web as a mode to deliver techniques that seek to motivate behaviour change. 58 undergraduate students participated in this pilot study. The results indicate that participants in the experimental condition (Self Affirmed) scored significantly higher on a measure to determine if they had Self Affirmed than the control group ($p=0.01$) and significantly higher on a measure of intent to change behaviour than the control group ($p=0.002$). This suggests that Self Affirmations can be successfully delivered online in order to impact on an individual's intention to change their behaviour. The results highlight the positive manner in which the internet can be used to promote healthier lifestyle behaviours.

Keywords: Web-based Interventions, behaviour change, self affirmation theory, lifestyle behaviours.

1. INTRODUCTION

There is increasing research evidence that the World Wide Web can be a powerful mode to disseminate health related interventions. For example Wantland et al. (2004) demonstrate that web-based and computer delivered health interventions can significantly improve participants' knowledge, attitudes and even behaviours. Researchers are increasingly aware however that the simple presentation of health related information often fails to persuade individuals to modify their behaviour (Jacks & Cameron, 2003). As Evers (2003) concludes; to be effective in a real world setting online interventions need to concentrate on initiating and motivating behavioural change as opposed to the presentation of simple health related information.

Cugelman et al. (2009) suggested one barrier to online interventions may be the overall 'credibility of the website'. This comprises trustworthiness, perceived expertise of the individuals behind the website and visual appeal. Interventions therefore should be designed to address these components. In addition, criticisms have also focussed on health related interventions that fail to describe their theoretical underpinnings (McClean et al. 2003). The study reported here focuses on the online delivery of an established method of intention and behavior modification; Self Affirmations (SA). Self Affirmation Theory (Steele, 1988), proposes that people are fundamentally motivated to protect themselves as 'adaptively and morally adequate', therefore when they receive information that threatens their view of themselves they respond in a biased and defensive manner, this results in a

resistance to the information that may have threatened their self-integrity. Through reflecting on one's cherished values, actions and attributes, self affirming reinforces personal identity. This acts as a defence mechanism, or repair tool when they receive threats to their identity. Self Affirmation has been shown to be an effective means by which to promote behaviour change in the health domain (Harris & Epton, 2009). Most recently it has been shown to be an effective tool to increase fruit and vegetable consumption (Epton & Harris, 2008). These findings demonstrate that the effects of self affirming may not be limited to promoting message acceptance but extend to actual health behaviour. It was hypothesized that those participants in the experimental condition and exposed to the SA manipulation would score significantly higher on the SA check (Napper Harris & Epton, 2009) than those participants in the control group. In addition it was hypothesized that the participants in the experimental (SA condition) would score significantly higher on measures of intent to change their behaviours than the control group.

2. METHOD

Undergraduate psychology students ($n=58$) participated in a study, they believed, looking at the communication of health information online. Participants were randomly assigned to either the control condition or experimental condition. Then guided the participants through a series of measures described below; Stage of Readiness to Change. The Self Affirmation manipulation (experimental condition) which poses a series of questions such

as; "Have you ever forgiven another person when they hurt you". Yes answers required an explanation of an event when the described situation had occurred.

The personal opinions questions (control condition) – "I think chocolate is the best flavour of ice cream".

When answering yes they were asked; Why?

The health message; developed from government websites relating to eating 'five a day' and physical activity, information.

Intention to change behaviour was measured by two questions, on a 7 point scale.

The manipulation check was included to ensure the SA manipulation had been successful when disseminated online.

3. RESULTS

The study successfully delivered a SA manipulation online. Participants in the experimental condition scored significantly ($p=0.01$) higher on the manipulation check. This suggests the participants in the experimental condition had self affirmed.

Participants in the SA condition scored significantly higher ($p=0.002$) on the intent measure than those in the control group. Suggesting the SA manipulation is associated with an increase in intent to change behaviour.

Fig.1 Mean scores on intent to change behaviour

Fig.2 Mean Scores on Manipulation check

4. DISCUSSION

This study was successful in its aims to deliver a SA manipulation online, and replicated other SA studies where the manipulation has increased intent to change behaviour. These are promising results and provide scope for future research which will focus on refining and developing the SA online programme. It is intended that future research will explore the role of the internet and other technologies to motivate and support actual behaviour change. This will focus on one lifestyle behaviour such as fruit and vegetable consumption. This research will require baseline and post manipulation measures to be taken. Technological devices are being explored in order facilitate recording of this data.

It is also apparent that the SA manipulation programme needs to be refined so that it is shorter to complete, this will also involve addressing the visual appeal and usability to optimise its

functionality. In addition, future studies must consider the most appropriate method to present health messages and should employ methods of self affirming that perhaps don't rely so heavily on the participant having strong literacy skills. Many behaviours contributing to 'lifestyle diseases' are more commonly found amongst individuals of low SES, a part of society who also are likely to face the most difficulties with literacy (Schillinger, 2006). In developing this potential online intervention utilising Self Affirmations, it will be imperative to follow the guidelines of the model set out by Cugelman et al to create trustworthy and credible websites.

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