

UNIVERSITI TEKNOLOGI MARA

**DETERMINING THE INFLUENCE
OF SOCIAL MARKETING APPEALS
IN DIGITAL ORAL HEALTH
PROMOTION**

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ABSTRACT

Introduction: Oral health impacts 3.5 billion people, requiring a shift to preventative strategies. Social marketing, using rational, humour, and fear appeals, effectively engages diverse audiences and drives behaviour change. Advances in digital technology and social media enhance this approach, making targeted health interventions, such as those for oral cancer, more impactful. **Objectives:** This study aims to identify the most appropriate social marketing appeal for enhancing knowledge, awareness, and practices related to oral cancer, with a focus on how sociodemographic factors influence these outcomes. **Methods:** Phase 1 focused on developing three digital oral health promotion (OHP) videos using rational, humour, and fear appeals, within a social marketing framework. It also involved creating and validating a questionnaire based on the Technology Acceptance Model (TAM) and Knowledge, Awareness, Practice (KAP) questionnaire on oral cancer to assess KAP immediately and six weeks post-exposure. Phase 2 comprised a three-arm randomized controlled trial with rational appeal as the control. Participants were selected through systematic sampling and then divided into twelve subgroups by gender, age, and education level using stratified random sampling. Data analysis included descriptive and inferential statistics such as one-way ANOVA, paired t-tests, chi-square tests, and regression analyses. **Results:** Phase 1- The videos achieved high PEMAT scores, highlighting their clarity and actionability in conveying health messages. The Modified Extended TAM framework effectively assessed user acceptance of digital tools, supported by favourable EFA results. The strong reliability scores further validate the oral cancer questionnaire's effectiveness in assessing knowledge, attitudes, and practices related to oral cancer. Phase 2 - A total of 322 participants provided pre- and immediate post-response data, with an even distribution across three appeals: rational (34.0%), humour (33.0%), and fear (33.0%). Out of 253 participants, the group was evenly divided by age, gender, and education level. Significant results include that the humour appeal was rated the highest for presentation style, with a notable difference ($p=0.025$). Additionally, the fear appeal was found to be most effective in increasing awareness of oral cancer, showing a significant result ($p=0.016$), though its impact on increasing knowledge was only marginally significant ($p=0.054$). A statistically significant difference in user acceptance of the humour appeal was observed between age groups, particularly between early adulthood and elderly participants ($p = 0.005$). All appeals significantly increased immediate knowledge, but their effectiveness over six weeks varied. Further linear regression analyses showed that humour appeals were effective for immediate engagement but less effective for long-term retention. Rational and fear appeals varied in their impact on knowledge retention and behaviour change **Conclusions:** The study concludes that humour appeal stood out for its favourable presentation style. Sociodemographic factors did not significantly affect the acceptance of these appeals, with responses consistent across diverse backgrounds. The humour appeal was most effective in maintaining knowledge and driving practical behaviour change across multiple subgroups. All appeals initially improved awareness, with similar retention over time. Thus, tailoring video appeals to user perceptions can improve their effectiveness in promoting lasting behaviour change.

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CHAPTER ONE

INTRODUCTION

1.1 Research Background

Oral health serves as a key indicator of overall health, well-being and quality of life; it encompasses oral conditions which range from dental caries, periodontal diseases as well as birth defects. (WHO, 2022b). Based on the Global Burden of Disease Study 2017, oral disorders harm 3.5 billion people globally (WHO, 2022b). The previously mentioned figure signifies oral disease as a public health issue that consequently requires a comprehensive strategy aimed to address the needs of oral health. These findings propagate the notion that public health sectors should further inculcate oral health into medical care while simultaneously implementing community programs as means of promoting healthy behaviours whilst also elevating accessibility to preventive services. The feasibility of ensuring a secure safety net should concurrently be evaluated to establish solidified services that cover preventive as well as restorative aspects. (Griffin et al., 2012).

In recent years, the focus of oral healthcare has evolved from a mostly curative strategy in the early days to preventative and promotive techniques (MOH, 2021b). This shift is essential as the limitations of curative therapy become evident and the cost of medical care continues to rise, highlighting the growing importance of disease prevention. (Wendimagegn & Bezuidenhout, 2019). Some of preventative techniques are advice on routine dental checkup, educational instruction such as proper brushing and flossing methods and advice on well-balanced diet. As for promotive techniques, usually it integrates the Ottawa Charter for Oral Health Promotion such as building healthy public policy, creating supportive environment, strengthening community action, developing personal skills and re-orienting health services. Although the concepts of health promotion and disease prevention are relatively distinguishable; the former can be difficult to be distinguished from the latter when both are simultaneously applied in practice. (Wendimagegn & Bezuidenhout, 2019).