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TELLING A STORY TO CHANGE BEHAVIOUR: EVALUATION OF A NARRATIVE BASED INTERVENTION

L. Irvine¹, B. Williams², F. F. Sniehotta³, A. Melson⁴, I. K. Crombie¹¹Population Health Sciences, School of Medicine, University of Dundee, DUNDEE, Scotland²Nursing, Midwifery & Allied Health Professions, University of Stirling, STIRLING, Scotland³Institute of Health and Society, Newcastle University, NEWCASTLE UPON TYNE, England⁴Institute of Health and Wellbeing, University of Glasgow, GLASGOW, Scotland

Introduction: Narrative transportation, a mechanism by which an individual engages with a storyline, may assist in behavior change interventions by influencing beliefs, attitudes and intentions. This study evaluates the use of a narrative in a novel text message intervention designed to reduce binge drinking among disadvantaged men.

Methods: The intervention was based on the Health Action Process Approach. A narrative featuring a fictional protagonist, Dave, described his journey from regular binge drinking to moderate drinking. It also included Dave's friends who demonstrated varying degrees of success in reducing drinking. A framework, which incorporated the causal chain to behavior change, guided the construction of the narrative. The narrative was rendered into text messages that were delivered to participants over three months.

Results: The intervention comprised 112 text messages. Characters from the narrative featured in 50 messages. Dave and his friends modelled steps to behavior change, e.g. goal setting and identifying benefits of reduced drinking. This encouraged participants to report their own experiences. They demonstrated narrative transportation by responding to the text messages. Empathy with the characters was frequently elicited: e.g. Dave's friend's misfortune prompted the response '*So sorry about the news Dougie*'. When Dave modelled one method to reduce alcohol consumption, one man replied '*Tonight I drank shandy with my meal, you're a good influence Dave! :-)*'.

Conclusions: A high level of engagement was achieved with a narrative delivered by text message. Participants may be more receptive to health messages when modelled by characters with whom they can identify and empathize.

CORRESPONDING AUTHOR: I. K. Crombie, Division of Population Health Sciences, School of Medicine, University of Dundee, Dundee, Scotland

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AN INVESTIGATION OF THE INFLUENCE OF "ALTERNATE" PROTOTYPES ON INCIDENTAL SUN EXPOSURE IN A HIGH-RISK REGION

K. Morris, A. Swinbourne

Department of Psychology, College of Healthcare Science, James Cook University, TOWNSVILLE, Australia

Introduction: There is a growing body of evidence suggesting that prototype perceptions are associated with both motivation to engage in, and actual performance of various health behaviors. The current study adopts the prototype willingness (PW) model as a framework for predicting incidental exposure in an extreme ultra-violet radiation (UVR) environment. Specifically, this study aimed to investigate the influence of actor vs. alternate behavioral prototypes on incidental sun exposure.

Methods: A cohort study was conducted to examine whether community members' (N=231) perceptions of various sun-related prototypes influenced their prospective incidental sun exposure. Behavior was assessed using a comprehensive sun diary, and skin reflectance spectrophotometry was used to measure skin color at baseline and at 1-month follow-up.

Results: A path analysis was conducted to examine the relationships between perceptions of sun protector and incidental prototypes and the performance of incidental sun exposure behaviors. Findings indicated that perceptions surrounding sun protection were related to intentions and willingness to incidentally expose. Specifically, perceived dissimilarity to the typical sun protector was directly associated with greater intentions and willingness to expose, and indirectly associated with greater incidental exposure.

Conclusions: Overall, an 'alternate' behavioral prototype was found to influence incidental sun exposure behavior. Specifically, perceptions of similarity to the typical sun protector were found to impact upon sun exposure. This finding has implications for skin cancer prevention messages in high-risk regions. Future health promotion strategies in such regions should focus on increasing perceptions of similarity to the sun protector prototype in order to target incidental sun exposure.

CORRESPONDING AUTHOR: K. Morris, Department of Psychology, College of Healthcare Science, James Cook University, Townsville, Australia

Personalizing behavioral medicine interventions through N-of-1 studies

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PERSONALIZING BEHAVIORAL MEDICINE INTERVENTIONS THROUGH N-OF-1 STUDIES

R. Vieira¹, K. Davidson², R. Kravitz³, I. Kronish²¹Newcastle University, NEWCASTLE ON TYNE, Tyne and Wear, United Kingdom²Columbia University Medical Center, NEW YORK, New York, United States of America³University of California at Davis, DAVIS, California, United States of America

All too often, conventional RCTs are not successful at identifying best behavioral medicine treatments as when patients are pooled together for analysis in RCTs, they fail to account for the potentially idiographic and dynamic processes that may influence the harms and benefits of treatments among individuals. Thus, we must look elsewhere for study designs that can better identify best treatments for individual patients. With recent advances in mobile health technology, N-of-1 (single patient) studies in which the individual patient serves as the unit of analysis represent promising, innovative approaches to solving this problem. This Symposium brings together individuals with expertise in N-of-1 methodologies who will share their experiences applying N-of-1 methods to answer questions in behavioral medicine. The first presentation uses data from recently conducted studies in the area of weight loss and physical activity to review key statistical approaches pertinent to N-of-1 observational and N-of-1 randomized trials. The second presentation presents data from an observational study aimed at determining the directionality of the association between stress and physical activity. Results indicate that unique insights can be obtained using N-of-1 methods, and these insights can be used to personalize behavioral health recommendations. The third presentation describes the methods and results from an ongoing, multicenter smartphone app-enabled N-of-1 trial for chronic musculoskeletal pain. Results indicate that the N-of-1 trial approach is feasible and helpful to patients. The Symposium ends with a discussion of the opportunities and challenges of incorporating N-of-1 studies into the practice of behavioral medicine.

CORRESPONDING AUTHOR: I. Kronish, Center for Behavioral Cardiovascular Health, Department of Medicine, Columbia University Medical Center, ik2293@columbia.edu

DISCUSSANT: I. Kronish, Center for Behavioral Cardiovascular Health, Department of Medicine, Columbia University Medical Center, New York, New York, USA

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