

Designing Information Materials to Reduce Blame and Build Trust in Health Screening: The Roles of Stereotype Content and Perceived Control ^{1, 2}

Olga Poluektova, Deirdre A. Robertson*, Alexandros Papadopoulos, Peter D. Lunn

ESRI Research Bulletins provide short summaries of work published by ESRI researchers and overviews of thematic areas covered by ESRI programmes of research. Bulletins are designed to be easily accessible to a wide readership.

INTRODUCTION

Population-based health screening is a cornerstone of public health but has limitations. False positives can lead to unnecessary further testing, treatment and psychological burden. False negatives can delay diagnosis and treatment. The limitations stem from the inherent uncertainty of medical testing—screening tests are not perfectly accurate. Inaccurate results can lead to frustration, blame, and diminished trust in screening systems. Existing information materials, such as booklets given to eligible participants about screening, typically inform people about the chance of experiencing false results, but not about how testing is done and why false results happen. This study examined whether new information materials could help to correct misconceptions by enhancing understanding about the screening process and limitations.

DATA AND METHODS

We developed new information materials with three parts: a journey map that visually explained the screening process from taking the test to receiving results, a video featuring a medical scientist discussing how samples are tested, and a diagram illustrating the testing pathway. Participants were 800 women eligible for

¹ This Bulletin summaries the findings from: Poluektova O., Robertson D.A., Papadopoulos A., and Lunn P.D. "Designing Information Materials to Reduce Blame and Build Trust in Health Screening: The Roles of Stereotype Content and Perceived Control", Psychology and Health. Available at: https://doi.org/10.1080/08870446.2025.2598041

^{*} Correspondence: Deirdre.Robertson@esri.ie

² This research was funded by the National Screening Service/ESRI Research Programme investigating public perceptions of cervical screening.

cervical screening in Ireland. They were randomly assigned to view either standard information materials alone or standard information materials with either (1) just the journey map, (2) the journey map and video, or (3) the journey map, video and diagram.

Participants then read fictional stories describing women who developed cervical cancer after being screened. Participants evaluated to what extent different organisations and individuals were to blame for the cancers described. They were also asked about their trust in screening and perceptions of scientists' warmth, competence and control over outcomes.

RESULTS

Participants who saw the video of the medical scientist describing the testing process had improved understanding of how controllable false results are. They assigned less blame to laboratories, had greater trust in screening results and perceived scientists to be warmer and more competent. The journey map and diagram produced opposite effects. They decreased understanding about how controllable false results are and, as a result, heightened anger, blame for false negatives and reduced trust in screening results.

CONCLUSIONS

The results show the importance of humanising communications. Technical diagrams and process maps may inadvertently imply that limitations in screening are more preventable than they are while the video, featuring a real scientist discussing her role, reduced these misconceptions. The findings also demonstrate the benefit of using experimental methods to test and improve important health communications.