Evaluating the Risk Acceptance Ladder (RAL) as a basis for targeting communication aimed at prompting attempts to improve health related behaviours

A pilot randomised controlled trial

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The Risk Acceptance Ladder (RAL)

- A tool designed to gauge the reasons why people participate in risky health behaviours, or do not participate in protective health behaviours

- Currently 4 versions of the RAL covering the following behaviours - smoking, alcohol consumption, physical activity, fruit and vegetable consumption

- Users self-select one of nine statements which best describes the reason for their behaviour

- This selection serves as a basis for delivering targeted interventions
The RAL and the COM-B model of behaviour

- The COM-B model is the central component of the behaviour change wheel.
- In order for a behaviour to occur, a person must have the necessary capability, opportunity and motivation.
- The RAL is a way of putting the COM-B model into practice to understand health behaviour.

The COM-B model
(Michie, van Stralen & West, 2011, Implementation Science)
The RAL

<table>
<thead>
<tr>
<th>Option</th>
<th>Statement</th>
</tr>
</thead>
<tbody>
<tr>
<td>A)</td>
<td>I have not heard that XXXX was harmful or risky</td>
</tr>
<tr>
<td>B)</td>
<td>I have heard that XXXX is risky but never fully understood what the problem is</td>
</tr>
<tr>
<td>C)</td>
<td>I understand what people are saying about the risks of XXXX, but I don’t believe it</td>
</tr>
<tr>
<td>D)</td>
<td>I accept that XXXX is risky but don’t care enough to do anything about it</td>
</tr>
<tr>
<td>E)</td>
<td>I think it is worth XXXX, but it is not a priority at the moment</td>
</tr>
<tr>
<td>F)</td>
<td>I don’t think I can XXXX because things in my social world make it too difficult</td>
</tr>
<tr>
<td>G)</td>
<td>I don’t think I can XXXX because things going on in my life make it too difficult</td>
</tr>
<tr>
<td>H)</td>
<td>I don’t think I can XXXX because I don’t have the self-control</td>
</tr>
<tr>
<td>I)</td>
<td>I want to XXXX, but I don’t know how best to do it</td>
</tr>
<tr>
<td>J)</td>
<td>None of the above - Please specify…………….</td>
</tr>
</tbody>
</table>
The RAL – Capability

I have not heard that XXXX is harmful or risky

I think it is worth XXXX, but it is not a priority at the moment

I don’t think I can XXXX because things in my social world make it too difficult
I have not heard that XXXX is harmful or risky

I think it is worth XXXX, but it is not a priority at the moment

I don’t think I can XXXX because things in my social world make it too difficult
I have not heard that XXXX is harmful or risky

I think it is worth XXXX, but it is not a priority at the moment

I don’t think I can XXXX because things in my social world make it too difficult
The present study

Primary Aim:
Assessing the ability of the RAL as a self-report tool to understand people’s participation in a range of health behaviours

- Acceptability
- Distribution of responses

Secondary Aim:
Evaluate the utility of the RAL as a basis for developing tailored interventions aimed at prompting attempts at behaviour change

- Behavioural test
Procedure and participants

816
Participants recruited into online study
Convenience sample

601
With target for behaviour change

175
No plans to change behaviour

Remaining participants assigned to one target behaviour

The RAL

Randomised to on-target or off-target intervention
RAL – Interventions

Participants were randomly assigned to either a brief, behaviour specific on-target or off-target intervention.

- **On-target intervention**
  - Relates to RAL position
  - \( N = 83 \)

- **Off-target intervention**
  - Does not relate to RAL position
  - \( N = 92 \)
RAL – Intervention example

RAL response – ‘I have not heard that smoking was harmful or risky’

On-target intervention

Not everyone knows quite how harmful smoking is. If they do not stop, smokers die an average of 10 years earlier than non-smokers and smokers suffer from diseases of old age much earlier than non-smokers. There is no safe level of smoking. People who do not smoke every day still suffer a huge increase in risk, particularly from heart disease.

Stopping smoking at any age leads to a longer, happier, healthier life.

Off-target intervention

It can be hard to stop smoking when people around you smoke – there are just too many temptations. But people do manage it every day and if one person in a group stops this can prompt others to stop.

Stopping is incredibly important, whatever the obstacles and there is lots of good advice available on how to cope with others smoking when one is trying to stop.
RAL – The behavioural test

Are people who received an on-target intervention more likely to click on a link offering advice than those who received an off-target intervention?

INTERESTED IN
FINDING OUT MORE?

Thank you for using our website and answering our questions. We hope you found it interesting. We have done the research to find what we think is the best website right now for expert advice on how to stop smoking.

Click on the link below and this will take you to that website. Otherwise you can simply close this page in your browser to finish the session.

FOR EXPERT ADVICE ON QUITTING SMOKING, CLICK ON THE LINK BELOW...
Results
Acceptability of the RAL and response distribution

- 70% of participants were able to select an existing RAL item
- 63% of participants thought that it was quite or very easy to select one RAL item

RAL responses by COM-B classification

- Capability: 30%
- Opportunity: 12%
- Motivation: 46%
- Other: 11%
Results

Behavioural test

Percentage of Participants Clicking on the Web-link in On and Off-Target Groups

- Off-target: 15.20%
- On-target: 37.30%

Logistic regression – Grouping (on/off-target) as a predictor of link clicking

**OR=3.321, 95% CI = 1.613-6.838, P=.001**
Conclusions

- The RAL appears to have reasonable acceptability – but there is need for improvement
- The RAL might be a useful screening tool and basis for targeted interventions as indicated by the behavioural test

Future directions

- Using ‘other’ responses to expand / refine the RAL
- Selecting multiple RAL items
- More complex interventions
- Measures of behaviour change
Thank you

Questions?