Socio-psychological correlates of influenza vaccination behaviour: results from a 5-country study

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Two instruments for understanding attitudes to adult vaccination & in HCPs to vaccination & advocating vaccination

- **Vaxitrends Attitudinal Barometer** (vaccination general, adult vaccination)
  - 3-year, 6-country empirical multi-method study
  - Collaboration with Nick Sevdalis (Kings College, London)
  - Suite of instruments to measure socio-psychological determinants of vaccination [1-3]
  - N=850 per country, 18+ yo, unweighted

- **HCP Attitudinal Barometer** (vaccination, vaccination advocacy)
  - Collaboration with Gaelle Valle-Tourangeau (Kingston University, London)
  - MoVac® and MovAd® tools measure individuals’ autonomous motivation to get vaccinated & to engage with vaccination advocacy

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Attitudinal barometer studies

Adult barometer
HCP barometer
Adult & HCP barometer
# VaxiTrends Attitudinal Barometer Vaccination Acceptance Index (VAI)

**“I am personally in favor of vaccination”**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Global population (n=4178)</th>
<th>US (n=846)</th>
<th>UK (n=847)</th>
<th>France (n=848)</th>
<th>CN (n=800)</th>
<th>Mexico (n=837)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccination forms part of a healthy lifestyle</td>
<td>70</td>
<td>68</td>
<td>73</td>
<td>64</td>
<td>64</td>
<td>82</td>
</tr>
<tr>
<td>I feel it is important that I get vaccinated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I understand how vaccination helps my body fight infectious disease</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I generally trust vaccine manufacturers or pharmaceutical companies</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>I generally trust the NHS/Department of Health/National Health Authorities</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Significantly different from other countries (99% confidence level)
Trust underpins acceptance, shows significant variability across countries

("Agree" = % scores 8-9-10)

Base (n=4178)
HCPs are the most trusted source of information on flu vaccination

(“Agree” = % scores 8-9-10)

Information sources for flu shot

Q53. I trust the information provided by my doctor / GP / Point of Vaccination (POV) about the flu shot, Q50. I trust the information provided by the NHS / Department of Health / National Health Authority / Chinese Center For Disease Control and Prevention / The Mexican Government for Health Authorities about the flu shot, Q51. I trust the information provided by news reports on TV & radio or newspapers about the flu shot, Q52. I trust information provided by blogs, Facebook or Twitter about the flu shot.

Significantly different from 3 other countries (99% confidence level)

Unpublished data
<table>
<thead>
<tr>
<th>Item</th>
<th>US</th>
<th>UK</th>
<th>FR</th>
<th>HCP Reco</th>
<th>Threat appraisal</th>
<th>Coping Appraisal</th>
<th>Safety</th>
</tr>
</thead>
<tbody>
<tr>
<td>My GP thinks I should get the jab</td>
<td>✓</td>
<td>✓(3.7)</td>
<td>✓(5.0)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Severity - the flu could make me severely ill</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Vulnerable to flu without a jab</td>
<td>✓</td>
<td>✓(1.1)</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Likelihood - Without shot, sure I would get the flu</td>
<td>✓</td>
<td>✓(1.3)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Anticipated regret of not vaccinating</td>
<td>-</td>
<td>✓(1.3)</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Coping - Taking action to protect myself against flu</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Vaccine efficacy - The jab would protect me from flu</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Self-Efficacy - I can get a flu jab if I want one</td>
<td>-</td>
<td>✓(1.3)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Perceived control – I can avoid the flu without jab</td>
<td>✓</td>
<td>✓(0.8)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Worried some contents may be dangerous</td>
<td>-</td>
<td>✓(0.9)</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The flu shot could give me flu</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>The flu jab is painful</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Scary health experience (child)</td>
<td>✓</td>
<td>✓(3.0)</td>
<td>✓</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

✓ = significantly correlated with flu vaccination/non-vaccination; (odds ratio)


Unpublished data
Communicating likelihood of catching flu
Comparing HCW & public behavioural determinants of flu vaccination in UK (2013/14)

**Threat appraisal**
- Manager Recon
- Disease severity
- Vaccine worry
- Likelihood

**Coping appraisal**
- HCW Recon
- Vulnerability
- Anticipated regret
- Likelihood

Additional notes:
- Aged over 65 yrs old
- Chronic condition
- Scary health experiences as a child

Unpublished data
Comparing HCW & public behavioural determinants of flu vaccination in UK (2013/14)

Flu vaccination

- Trustful: 58%
- Unconvinced: 42%

Vaccination advocacy

- Confident: 57%
- Unpressured: 43%

P < 0.001

- VCR: 66%
- Reco: 76%

P < 0.001

18+

- Trustful vaccinees: 30%
- Selective: 13%
- Anxious vaccinees: 29%

P < 0.001

Older (60+)

- Trustful vaccinees: 63%
- Selective: 9%
- Anxious vaccinees: 16%
- Skeptical: 3%

P < 0.001

Unpublished data
Acceptance is not always the primary reason for non-vaccination

<table>
<thead>
<tr>
<th>Self efficacy in receiving the flu shot: comparison by flu vaccinee vs. non-vaccinee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Easy to get to a place where I can get a flu shot: 59% vaccinee vs. 70% non-vaccinee</td>
</tr>
<tr>
<td>Can make time to get the flu shot: 31% vaccinee vs. 27% non-vaccinee</td>
</tr>
<tr>
<td>Informed whether I should or could receiving the flu shot: 26% vaccinee vs. 34% non-vaccinee</td>
</tr>
<tr>
<td>Open to the idea of the flu shot: 47% vaccinee vs. 45% non-vaccinee</td>
</tr>
<tr>
<td>None of these statements apply to me: 9% vaccinee vs. 2% non-vaccinee</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ability to afford the flu shot: comparison by flu vaccinee vs. non-vaccinee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-vaccinee (n=537):</td>
</tr>
<tr>
<td>48% Yes</td>
</tr>
<tr>
<td>17% No</td>
</tr>
<tr>
<td>35% Don't know</td>
</tr>
<tr>
<td>Vaccinee (n=300):</td>
</tr>
<tr>
<td>60% Yes</td>
</tr>
<tr>
<td>12% No</td>
</tr>
<tr>
<td>28% Don't know</td>
</tr>
</tbody>
</table>

Q67. Which of the following statements apply to you?; Q67B. If you had to pay for the flu vaccine, do you think you can afford it?
Conclusions

- Trust is the bedrock of vaccine acceptance
- People ‘cope’ with flu
- We must understand what matters to people, not what matters to us
Acknowledgements

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- Bruno Rigole and Tim Subotkowski (Sanofi Pasteur, Lyon)
- Nick Sevdalis & Ana Wheelock (Kings College, London)
- Gaelle Valle-Tourangeau (Kingston University, London)
- Double Helix, London