Employing Humour in Pre-Flight Safety Briefings
Objective

Examine the effectiveness of humour in delivering key safety message in pre-flight safety briefings

• Aim
  1. Test 3 different pre-recorded safety briefings for memorability
  2. Examine change in participants’ mood as a result of exposure to different briefings
Background

- Requirement to brief commercial aviation passengers about aircraft safety features prior to every flight (e.g., FAA and CASA)
- Authorities offer little, if any guidance on best method
- FAA do, however provide some encouragement –

“operators to be innovative in their approach” (FAA, 2003)
Informative not Prescriptive

• Must include information pertaining to:
  – Compliance with signs and placards
  – Smoking
  – Seat belts
  – Exits
  – Floatation equipment
  – Exit seating
  – Floor proximity emergency lighting
  – Portable Electronic Devices (PEDs)
  – Oxygen equipment
  – Etc
Existing Research

- Limited research
  - research largely focuses on safety placards, not briefings

- Limited research notes attending to the pre-flight safety briefing is particularly challenging for:
  - Males, and
  - Young males with high level of education (Johnson, 1979)
Existing Research

Attention to briefing material is not made easier by:

• Lack of flight attendants’ interest in briefing,
• Perceived poor quality of information in briefing,
• Perceived relevance of the material, and
• Method of delivery (Fennel & Muir, 1992; Parker, 2006)
Potential Lost Opportunity

• Pre-flight briefing is an opportunity to:
  – Gain passengers’ attention,
  – Educate passengers about key safety features, and
  – Positively influence passengers’ behaviour (through mood).

• Knowledge = improved (potential) performance
• Positive mood = improved performance (reduced errors and improved egress time) (Tehrani & Molesworth, 2013)
Humour and Communication

• Humour facilitates in obtaining and maintaining attention

• Humour also has been shown to:
  – Have medicinal benefits (Strean, 2009)
  – Facilitate in classroom learning (Stebbin, 2012)
  – Improve teamwork (Dean & Major, 2008).

• Word of caution – Humour positive in securing attention but may disrupt processing of key information (Chan, 2011)
• Emotions/moods are moderating factor which are known to influence behaviour.

• Positive mood improves:
  – Task performance (efficiency) (Miner & Clomb, 2010)
  – Number of solutions generated (Carnevale & Isen 1986)
  – Memory of information (Forgas, 1991)
  – Performance during an aircraft emergency evacuation (Tehrani & Molesworth, 2013)
Present Research

Aim

1. Test 3 different pre-recorded safety briefings for memorability
2. Examine change in participants’ mood as a result of exposure to different briefings

Participants

• 61 (36 male) participants – university students
• Average age 20 years (SD = 1.94)
• 32 English as a second language speakers (ESL)
## Experimental Design

<table>
<thead>
<tr>
<th>Content</th>
<th>Video A (no humour)</th>
<th>Video B (humour)</th>
<th>Video C (celebrity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audio humour</td>
<td>Nil</td>
<td>12</td>
<td>1</td>
</tr>
<tr>
<td>Visual humour</td>
<td>Nil</td>
<td>18</td>
<td>Nil</td>
</tr>
<tr>
<td>Celebrity endorsement</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Female voice-over</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Male narrator</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Staff delivering safety messages</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Number of key safety messages</td>
<td>41</td>
<td>34</td>
<td>38</td>
</tr>
<tr>
<td>Video duration</td>
<td>3.16</td>
<td>3.39</td>
<td>3.35</td>
</tr>
</tbody>
</table>
Dependent Variables

• Number of key safety messages recalled (%)
  – Following video
  – 2 hours post video

• Mood (Profile of Mood State – POMS)
  – Prior to video (pre)
  – Following video (post)
  – 2 hours post video (2hrs post)
## Results – Recall of Key Safety Messages

<table>
<thead>
<tr>
<th>Video</th>
<th>Post-test</th>
<th>Follow-up</th>
<th>% change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>% correct (SD)</td>
<td>% correct (SD)</td>
<td></td>
</tr>
<tr>
<td>Video A (no humour)</td>
<td>32.68 (13.76)</td>
<td>27.81 (13.42)</td>
<td>-4.878</td>
</tr>
<tr>
<td>Video B (humour)</td>
<td>45.25 (4.73)</td>
<td>39.37 (6.64)</td>
<td>-5.882</td>
</tr>
<tr>
<td>Video C (celebrity)</td>
<td>50.20 (6.11)</td>
<td>47.35 (9.36)</td>
<td>-2.857</td>
</tr>
</tbody>
</table>
# Results - The Effect of Video on Mood

<table>
<thead>
<tr>
<th>Video</th>
<th>Pre-test Mood Score (SD)</th>
<th>Post-test Mood Score (SD)</th>
<th>Follow-up Mood Score (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video A (no humour)</td>
<td>34.50 (17.21)</td>
<td>37.11 (16.76)</td>
<td>35.56 (18.13)</td>
</tr>
<tr>
<td>Video C (celebrity)</td>
<td>31.18 (15.93)</td>
<td>34.36 (20.01)</td>
<td>33.57 (16.51)</td>
</tr>
</tbody>
</table>

**p < .01**
Results

Summary

• Recall of safety related information superior immediately after video than 2 hrs later
•Retention rate fell ~ 4% 2hrs following video
• Recall greater with humorous video and celebrity video, compared to non-humorous video
• Humorous video positively affected mood immediately post
• Changes in mood not evident 2hrs following video
Known

- Retention rate poor overall - key safety messages, even with captive audience
- Humorous video – positively influenced mood
- Humorous video – little effect on recall

Unknown

- Whether humorous video improves attention
  - Anecdotal evidence suggests it does (Asia Pacific Cabin Safety Working Group - APCSWG)
Limitations & Future Research

• Limitations
  – University students
  – Captured audience
  – No noise (Molesworth et al., 2013a; 2013b; 2013c)

• Future research
  – Observational study
  – Investigate reasons why/why not passengers attend to such information
Thank you

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• Team
  – Asia Pacific Cabin Safety Working Group - APCSWG
  – Annie Zhou