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Examining the perception of miscommunication in a coalition environment

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Rationale for the work

- Many (most) military operations involve nations operating in a coalition
- National differences may reduce the effectiveness of collaboration
 - This has been observed qualitatively in coalition operations involving just two members, in this case the US & UK, who share many aspects of language and culture
- Most of this evidence has been anecdotal
 - And gathered after any events
- Need a more rigorous scientific approach to study coalition issues

Study 1. Background

- Exploratory qualitative research (Poteet et al. 2008)
 - Semi-structured interviews (5 UK & 5 US)
- Identified 5 types of language use that can lead to miscommunications:
 - (1) Acronyms
 - (2) slang & colloquialisms
 - (3) jargon
 - (4) speech acts
 - (5) literal vs. applied meaning
- Medium of communication important

Research Aims & Objectives

- Address methodological issues arising from previous research (Poteet et al. 2008)
 - e.g. Small sample size
 - Validate empirically claim miscommunications are frequent & lead to negative consequences
- Quantify perceived frequency & impact of miscommunications between UK & US military personnel resulting from:
 - Typologies of language use
 - Different communication media

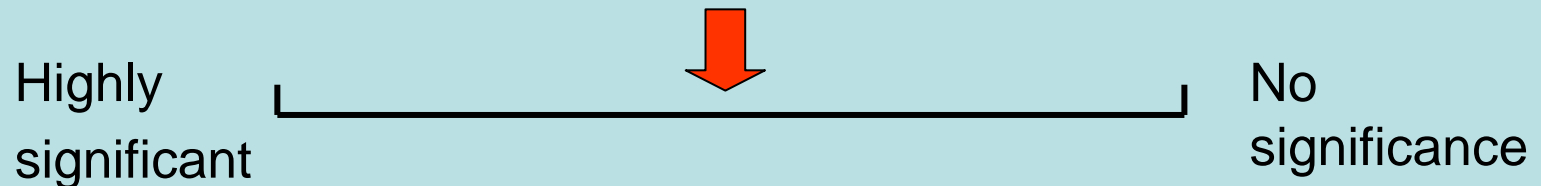
Study 1. Method

- Secure web-based questionnaire
 - 39 UK military participants
 - 10 questions
 - Cranfield & MoD ethical clearance
 - Defined 5 types of language use.
 - Drop-down menus & sliding scales - controlled information elicited.

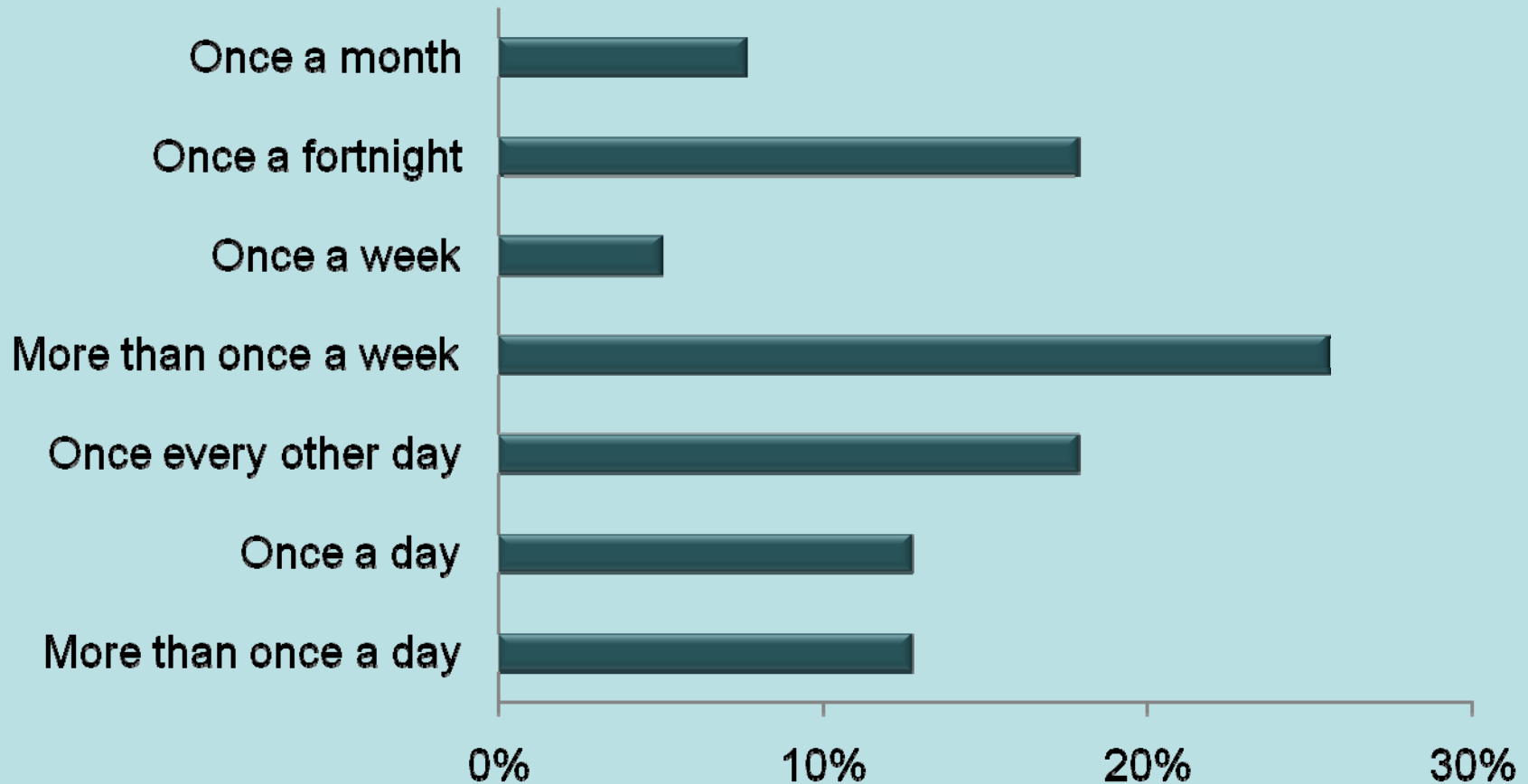
Study 1. Method

- Q5. In your experience, how significant is the impact of these miscommunications on work performance?

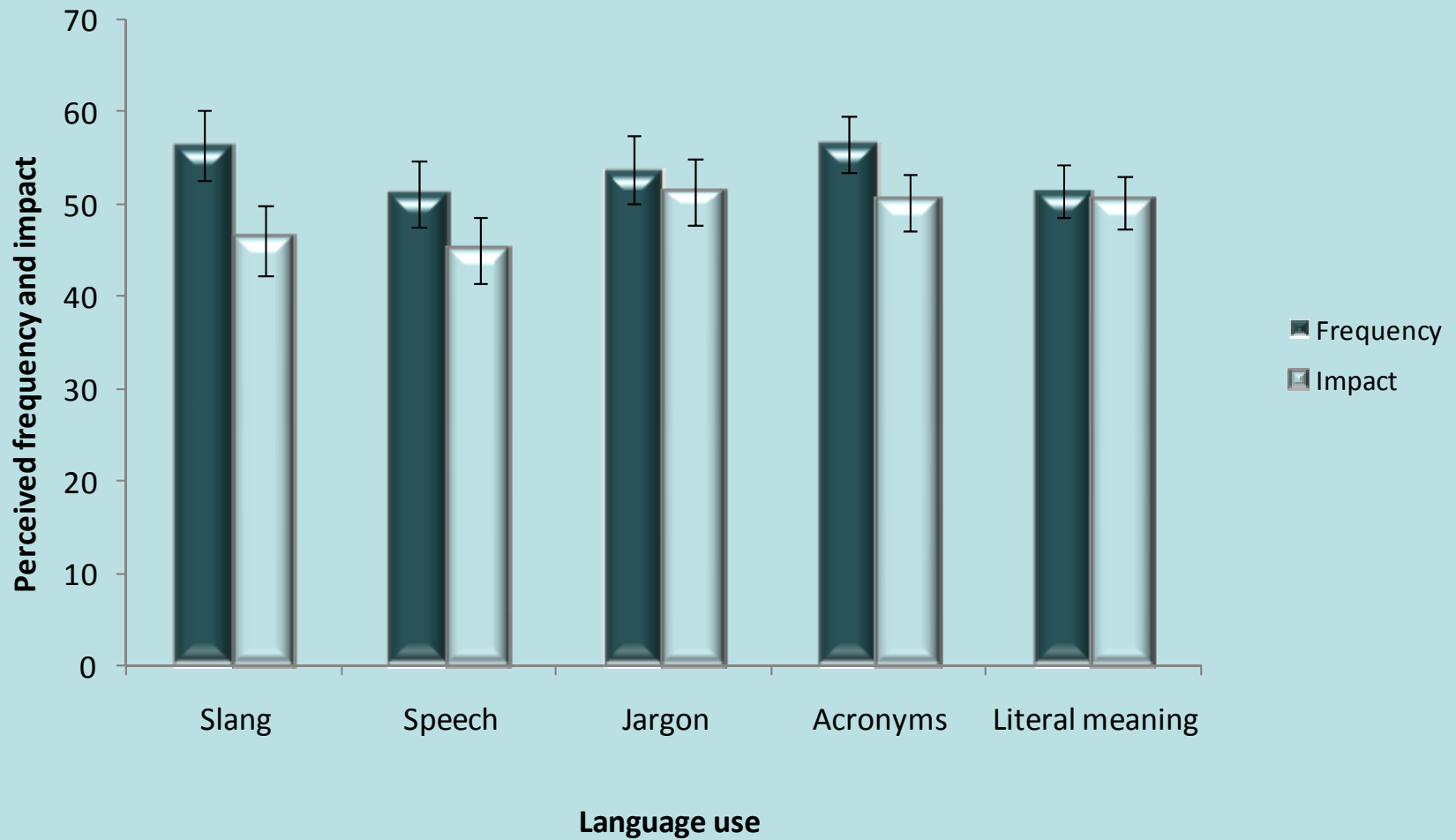
Please move the arrow to the position on the scale which best describes your experience.



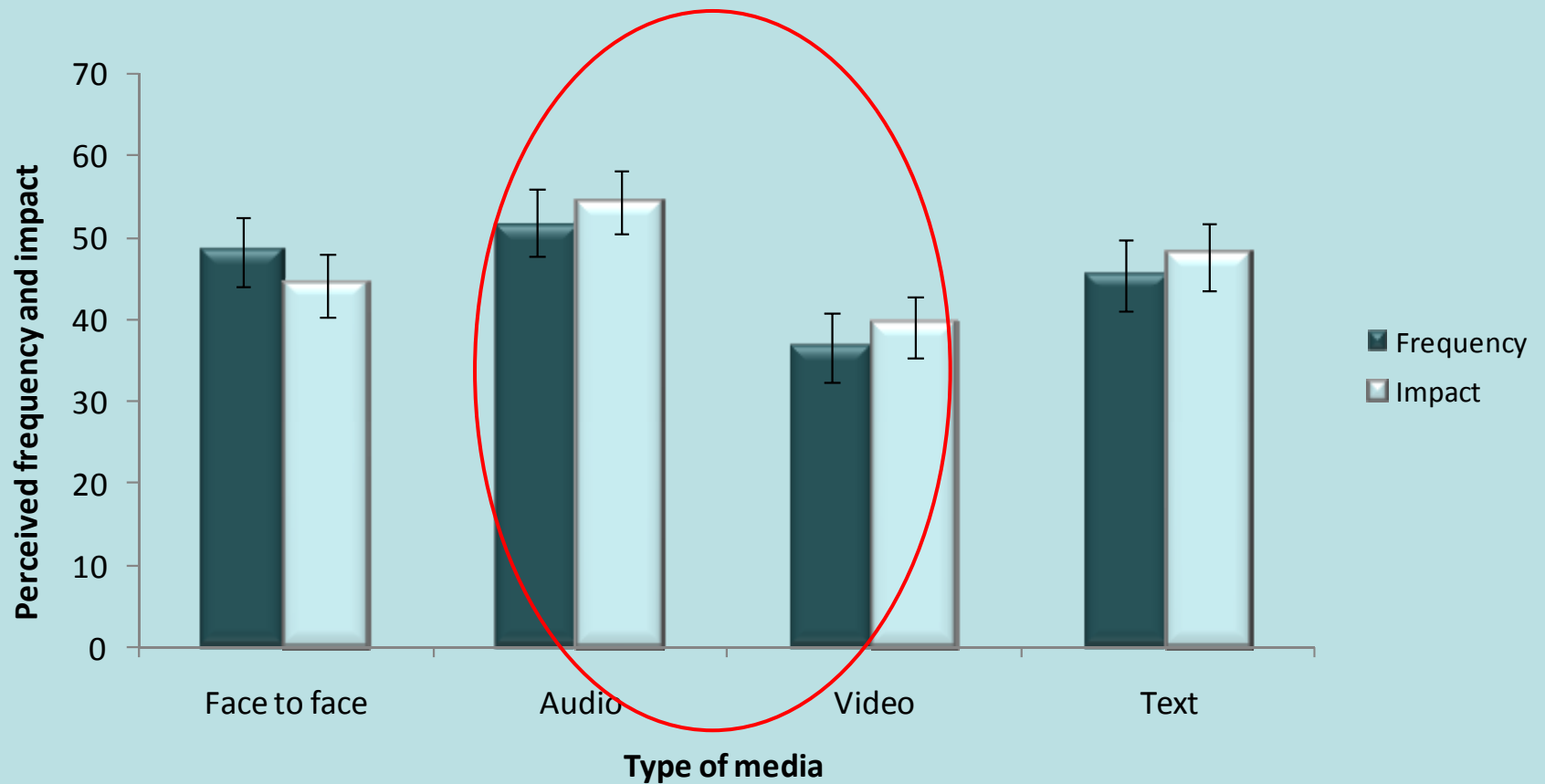
General frequency and impact of miscommunications



Results



Results



Discussion - Language use

- Miscommunications are somewhat frequent & have a significant impact on work performance
- Language use seems to be an important factor
- A second study identified differences in the effect different language uses have on the perceived frequency & impact of miscommunications.
 - The impact of acronyms on work performance seems to be more problematic for UK than US
 - Although the frequency of use of acronyms is the same, it could be that US personnel use more unknown acronyms than UK military personnel

Discussion - Language use

- Egocentricity (Keysar, 2008)
 - Addressees often interpret a speakers message from their own perspective
 - Speakers disambiguating their utterances with little consideration of addressee's mental states
 - Speakers tend to overestimate how effective they communicate intent
- Be aware of possible ambiguity of information

Discussion

- Frequency & impact for audio are different from video (& face-to-face in Study 2)
- Audio-only used > frequently?
- Little experience of VM?
- Importance of 'media richness'
- Visual cues can aid interpretation of intent
- Effects of visual cues on communication depend on:
 - Task type.
 - Participants are remote/co-present (Doherty-Sneddon et al., 1997)



Conclusions

- Importance of accent? – Participant's self report
- Snedeker & Trueswell (2003) – speakers of same language share implicit knowledge about link between prosody & syntax
 - Prosodic cues only provided to help disambiguate phrases when environment does NOT give other relevant information.
- Does accent modulate role of prosody in the disambiguation of phrases?
- Longer dialogues – turn taking
- Speaker rate – stressful environment
- Possible effect of anchoring?