AVENUES OF INFLUENCE:
CROSS-CULTURAL IMPLICATIONS
(BRIEFING CHARTS)

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Avenues of Influence: Cross-Cultural Implications (Briefing Charts)

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) AND ADDRESS(ES)**

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**14. ABSTRACT**

An avenue of influence is a channel through which a message is socio-culturally contextualized in order to enhance an actor’s or group of actors cognitive and emotional vulnerabilities. To identify and guide our understanding of potential systemic vulnerabilities evident across cultures, a three-year, large-scale, basic research study was designed to explore cross-cultural implications for social influence and determine if culturally-specific effects were moderated by message tone or communication modality. Dependent variables were to include measures of behavioral intent as well as measures of explicit behavioral actions taken as a result of the experimental manipulations. Data collection efforts focused on the NATO School located in Oberammergau, Germany and was to take place in the third year of the study, pending receipt of funds. These funds had not been received as of the date of the November 2012 Interim Report.

**15. SUBJECT TERMS**

Cross-cultural, Social Influence, Communication modality, Emotional contagion, Individualistic, Collectivistic, Group orientation, Behavioral influences

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<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Questions &amp; Hypotheses</td>
<td>2</td>
</tr>
<tr>
<td>Short-Term Goal (3-5 Year)</td>
<td>3</td>
</tr>
<tr>
<td>Objectives</td>
<td>4</td>
</tr>
<tr>
<td>Long-Term Goals</td>
<td>5</td>
</tr>
<tr>
<td>Challenges</td>
<td>6</td>
</tr>
<tr>
<td>Design Revised</td>
<td>7</td>
</tr>
<tr>
<td>Research &amp; Development (R &amp; D) Approach</td>
<td>8</td>
</tr>
<tr>
<td>Method</td>
<td>11</td>
</tr>
<tr>
<td>Materials</td>
<td>13</td>
</tr>
<tr>
<td>Pilot Testing</td>
<td>15</td>
</tr>
<tr>
<td>FY11 Achievements</td>
<td>17</td>
</tr>
<tr>
<td>FY12 Achievements</td>
<td>18</td>
</tr>
<tr>
<td>Link to Future Applied Research</td>
<td>19</td>
</tr>
<tr>
<td>LIST OF ACRONYMS</td>
<td>20</td>
</tr>
</tbody>
</table>
Avenues of Influence: Cross-Cultural Implications

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AFOSR Trust and Influence Program Review – Jan 14-17, 2013, Dayton OH Dr. Joseph
Lyons, Program Manager
AFMC 711HPW/RHXS Work Unit #2313HX03

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Research Questions & Hypotheses

Are positively-tones messages more influential than negatively-toned messages in generating information retrieval behavior?

H1: Positive message affect will have a positive relationship with information retrieval behavior

Does message tone mediate attitude toward information retrieval behavior?

H2: The mediating effect of message tone on attitude toward behavior varies by culture.

Does the social proof bias moderate behavioral influences?

H3: The percentage of people stated to moderate their behavior will moderate the relationship between media type and emotional contagion

Does culture influence the impact of social proof?

H4: Collectivistic cultures will engage in information retrieval behavioral to a greater extent than individualistic cultures when social proof is high
Short-Term Goal (3-5 Year)

Develop and validate an empirically based, theoretically grounded behavior model to provide a basic understanding of the mechanisms that drive specific influence strategies and determine if they are differentially effective across cultures

- Define cross-cultural measures and metrics not previously used in cross-cultural research
- Identify cross-cultural differences in underlying mechanisms that influence specific behavioral intent and action
- Expand research venues to include U.S. Partnership for Peace Training Centers (17)
- Government (e.g., Air Force Office of Scientific Research (AFOSR) Reviews, Scientific Advisory Board (SAB), Industry (e.g., Human Social Cultural Behavior (HSCB), and Professional (e.g., Society for Personality and Social Psychology (SPSP) Conferences
Objectives

- Develop novel measures and metrics for assessing contextualized trust dynamics using psychological and social data
- Examine cross-cultural implications of trust
  - Examine cultural differences in trust of persuasive messages
- Inform the Intelligence Community (IC) and MISO community on trust-based, contextualized influence tactics

IMPACT: Provides the science foundation to understanding trust calibration in interpersonal and culturally diverse scenarios
Long-Term Goals

• Identify cognitive biases that may create vulnerabilities subject to persuasive appeals and determine how these biases manifest across cultures and organizations
• Determine the degree to which different biases, if any, are dominant in shaping behavior
• Explore causal mechanisms that explain why these factors may influence attitude and/or behavioral change
• Investigate how influence strategies and tactics can be applied to selected organizational and national cultural biases to create attitude and/or behavioral change
• Determine measures of effectiveness for assessing attitude and/or behavioral change resulting from the application of influence strategies and tactics to vulnerabilities rooted in organizational and national cultural biases
Challenges

• Designing an experiment to measure cross-cultural differences
  − While there are several noteworthy and large-scale questionnaire studies (e.g., Globe Study, Hofstede Value Survey), questionnaire-based assessment, while useful, is inherently limited in that the cultural dimensions assessed typically evidence considerable overlap within cultures (Fiske, Kitayama, Markus, & Nisbett, 1998); and this overlap can mask otherwise evident cultural differences
  − Experimental design minimizes the variance accounted for by individual differences through the random assignment to conditions

• Obtaining non-American subjects, specifically non-European subjects
  − Cross-cultural research findings are often limited in interpretability and generalizability due to subject pool composition

• Securing the quantity of non-American subjects needed to ensure conventional statistical power
  − The scale of the study will produce volumes of data to be mined
Design Revised

2 (Message Affect: Strong Positive, Strong Negative) \times 2 (Social Influence: High Social Proof, Low Social Proof)

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<tr>
<th>Video: A1</th>
<th>Text: A2</th>
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<td>Low Social Proof: C2</td>
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<tr>
<td>High Social Proof: C1</td>
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</tr>
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<td>IND a1b1c2</td>
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<tr>
<td>COLLa1b1c1</td>
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<td>Negative Emotion Message B2</td>
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<td>IND a1b2c1</td>
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<td>COLLa1b2c1</td>
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Research & Development (R & D) Approach

• Two Independent Variables in a 2 (Social Influence: High Social Proof, Low Social Proof) x 2 (Message Tone: Positive, Negative) Experimental Design

• Two primary Dependent Variables: Behavioral Intent and Behavioral Action
  – Targeted behavioral act is “actively seeking cultural adaptability training” (i.e., voluntarily showing up on a different day to a specific location for training
    o The training is based on GlobeSmart® Commander, developed as an Army SBIR and a NATO Allied Command Transformation CD&E program by Dr. Sutton (Sutton & Gundling, 2004)
    o Training content is highly relevant to the NATO School Oberammergau (NSO)

• Subject Pool
  – 9000+ (annual) officers, non-commissioned officers, and civilians representing over 60 NATO Alliance, Partnership for Peace, Mediterranean Dialogue, and other nations attend NSO annually for 100+ courses
  – Unprecedented access to Non-European subjects
Research & Development (R & D) Approach (Cont.)

• Methodology: Ss from two cultural groups will be given persuasive appeals to take additional training
  - Culture groups: Individualistic and Collectivistic
  - Six persuasive appeals will be used in the stimuli: rational persuasion, rational/appraising persuasion,
  - collaboration, legitimizing, ingratiation, and consultation (see Fu et al., 2001, and Yukl et al., 2008, for a discussion of specific influence techniques).
  - Message tone is pilot testes for positive / less positive content
  - Social proof bias (Cialdini, 2001) introduced in message text, for example, by including a statement similar to this: “increased team effectiveness and mission success through greater cultural awareness has already been reported by approximately (10% in the Low Social Proof condition; 95% in the High Social Proof condition) of NATO officers that have viewed the material.”
Research & Development (R & D) Approach (Cont.)

- Primary Measures
  - Group Orientation (Individualism/Collectivism)
  - Pre- and Post-manipulation measures of affect (Under review for exclusion)
  - Post manipulation measures of attitude (Forgas, 1995) and behavioral intent
  - Observed behaviour

- Pilot Tests to determine...
  - Perception of intended message tone as positive/negative
  - What constitutes High Social Proof or Low Social Proof to primary population
  - Which GlobeSmart® Commander training module is perceived to be most valuable for this population
  - Feasibility of final protocol
Method

Participants will…

• complete a measure of individualism / collectivism / attitude toward multicultural teamwork training

• read a persuasive appeal with pre- and post-manipulation measures of affect and post-manipulation measures of attitude (Forgas, 1995)

  Message presented by text in English, no back translation
  - Message is positive or negative toward multicultural teamwork
  - High or Low social proof for the perceived value of specific multicultural teamwork training material is provided
  - Six influence techniques are used: rational persuasion, rational/appraising persuasion, collaboration, legitimizing, ingratiation, and consultation (see Fu et al., 2001, and Yukl et al., 2008)
Method (Cont.)

- complete behavioral intent and experimental manipulation questionnaire

The primary DV is for participants to actively seek out (i.e., retrieve) the offered information on multicultural teamwork
Materials

- GlobeSmart® Commander cultural adaptability training for multicultural teamwork at the operational level (*Army SBIR*, *Sutton*)
- Message content based in part on
  - experimental studies on barriers and enablers of effective multicultural teamwork at Headquarters Stabilization Force (HQ SFOR)– Bosnia Herzegovina, Joint Force Command (JFC)-Naples, Joint Command (JC)-Lisbon, Deployable Joint Task Force (DJTF)-Verona (Allied Warrior 04 Command Post Exercise (CPX)), DJTF- Montijo (Allied Warrior 05 CPX), and HQ Allied Command Transformation (*Stokes et al., 2010; Sutton & Gundling, 2005; Sutton, et al., 2008*)
Materials (Cont.)

- experimental studies on manipulation of different leadership styles
  *(Lyons & Schneider, 2009)*

- The stimuli delivery mechanism was created by Dr. Lyons at the
  AFRL Culture and Cognition Laboratory, WPAFB
Pilot Testing

- Individualism / collectivism assessment
- Readability, understandability, view ability of stimuli across communication modalities
- Perception of message tone presented in stimuli message
- Social Proof Bias anchor ratings
- Specific GlobeSmart® Commander training content perceived most valuable to subject population
- Three pilots conducted with 206 participants to inform on two IVs of the final experimental stimuli
- 27 nations: Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Portugal, Spain, Turkey, USA, South Africa, Bosnia and Herzegovina, Slovenia, Norway Switzerland, Austria, Poland, Belarus, U.K., Slovakia, Croatia, Hungary, Serbia, Czech Republic
Pilot Testing (Cont.)

• Data analysis in progress to (1) verify tone of a message (positive / negative) was perceived as we intended, (2) determine break-point between high- and low-social proof for our specific populations, and (3) identify the cultural adaptability training with the greatest perceived relevance to multinational military teamwork

Lessons Learned

• Trust is the currency of the realm, and it is hard-won through time and effort invested in establishing respectful relationships with the NSO Command and Academic staff.
FY11 Achievements

• AFRL Letter of Intent to NATO School
• Research team expanded
• First NATO School Institutional Review Board established
• Federal Wide Assurance assigned to the NATO School IRB
• Pilot studies designed and briefed to NATO School
• Command and Academic Staffs
• Technical Agreement drafted
• AFRL WPAFB site visit by Ms. Liliana Serban
  - 711HPW/RH Director
  - 711HPW/RH Chief Scientist
  - 711HPW/XP International Chief
  - 711HPW Wing Director
  - 711HPW/RH Technical Advisors and Scientists
FY12 Achievements

• Technical Agreement officially signed by AFRL and NSO
• Research team trained in Human Use Research (Citi and experiential)
• Second NATO School Institutional Review Board (w/Federal-Wide Assurance (FWA)) established
• Pilot studies approved by NSO Dean of Academics
• Pilot studies conducted
Link to Future Applied Research
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<tr>
<td>AFOSR</td>
<td>Air Force Office of Scientific Research</td>
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<td>AFRL</td>
<td>Air Force Research Laboratory</td>
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<td>CPX</td>
<td>Command Post Exercise</td>
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<td>DJTF</td>
<td>Deployable Joint Task Force</td>
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<td>FWA</td>
<td>Federal-Wide Assurance</td>
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<td>Headquarters Stabilization Force</td>
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<td>Human Social Cultural Behavior</td>
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