# The FBI develops a Translation Aptitude Test (TAT)

Maria M. Brau Chief, Language Testing and Assessment Unit

#### **TOPICS**

- Background
- Translation Ability Defined
- Construct
- Test Format
- Sample Items
- Piloting
- Results
- Proof of Concept

# Background

- FBI Applicant Test Battery:
  - DLPT Listening/Reading
  - Verbatim Translation Exam (VTE) FL to Eng
  - 2 SPTs: FL and Eng
- Recruiter's Questions:
  - "What if there is no VTE? What can we give them to find out if they have some ability to translate? How about a language-neutral test?"

#### Ability to Translate

- Prerequisite for any translation task: the translator must be able to
  - 1) read and comprehend the source language and
  - 2) write in the target language.
- Given these prerequisites, the translator must also be able to
  - 3) choose the equivalent expression in the target language that both fully conveys and best matches the meaning intended in the source language (normally referred to as *congruity judgment*).\*

\*ILR SLDs for Translation Performance

#### Construct

- Language-neutral?
  - Meaning no foreign language?
  - ∴ English to English
- Ability to Translate?
  - English to English equivalents?
  - : PARAPHRASE
- Hypothesis:
  - Paraphrase process similar to translation process

# English to English "Translation" Test Format

- Paraphrase Part I:
  - Simplification: Revise a text to make it easier to understand
    - To serve as warm-up
- Paraphrase Part II:
  - Equivalents: Reword a text without changing the original meaning
    - Process similar to translation

#### Paraphrase Instructions

- Do not use any words from the original, except for "the."
- Do not add or omit any content.
- Make sure your paraphrase is not awkward or difficult to understand.

#### Paraphrase Test Items

- Ten items
  - Eight short (one line) sentences
  - One two-line sentence
  - One three-line sentence
- All items authentic

## Paraphrase Examples Provided to Examinee

- Original text:
  - The sooner the better.
  - Paraphrase:
    - Earlier is preferable.
- Original Text:
  - I don't know too much about this.
  - Paraphrase:
    - It is not my area of expertise.

#### Paraphrase Test Item (a)

- In an evening interview, the president explained why he was resigning.
- During a late afternoon question and answer session, the Chief Executive clarified the reason for his stepping down.
- Around dinner time, the Chief Executive met with a reporter and made clear his reason for leaving office before finishing his term.

#### Paraphrase Test Item (b)

- Lack of an overall picture makes it difficult to detect long-term trends.
- Without a broad perspective, finding out developmental patterns through several time periods is not easy.

#### Paraphrase Test Item (c)

- Before choosing a course of action one should be aware of two things: the implications of the action and the range of possible options.
- Prior to making a decision better check: (1) likely consequences; (2) feasible alternatives.

# Piloting Procedure

- Administer:
  - FBI ILR-based Verbatim Translation Exam (VTE)
    - Foreign Language to English
  - Translation Aptitude Test (TAT)
    - English to English Paraphrase
  - Requisite:
    - DLPT (Reading) 2+ or higher
- Rate:
  - VTE and TAT with similar rating procedures
- Compare:
  - VTE scores to TAT scores

#### Rating Procedures for VTE

- ILR translation text level assigned to each passage
  - Passage 1: Level 2
  - Passage 2: Level 2+
  - Passage 3: Level 3
  - Passage 4: Level 4
- Translation for each of 4 passages is rated as:
  - SM: Successfully matches the source
  - MM: Mostly matches
  - IM: Intermittently matches
  - RM: Rarely matches
- Final ILR score

#### Rating Procedures for TAT

- Each sentence paraphrase rated as:
  - SM, MM, IM, or RM
- No ILR Descriptions for Paraphrase
- .: Number values were used:
  - $\circ$  4 = SM
  - $\circ$  3 = MM
  - ∘ 2 = IM
  - $\circ$  1 = RM

# **Piloting Participants**

Subjects: 164 Usable Tests: 144

NSA: 128
 NSA: 111

DIA: 25
 DIA: 19

• FBI: 17 FBI: 14

#### Languages

 Albanian, Arabic, Bulgarian, Chinese, Croatian, Farsi, French, German, Hebrew, Hindi, Italian, Japanese, Korean, Pashto, Portuguese, Russian, Spanish, Turkish, Urdu

# Participant VTE Ratings

VTE Rating	Number of Participants
1	4
1+	30
2	50
2+	43
3	13
3+	4
Total	144

#### ILR Level Ranges for TAT Scores

VTE Rating	Number of Participant s		Below Range	In Range	Above Range
1/1+	34	0 - 21	0	29	5
2	50	22 - 26	8	37	5
2+	43	22 - 26	8	29	6
3/3+	17	27 - 40	1	16	0
Total	144				

According to the ILR SLDs for Translation Performance, 'translation' does nor occur until the Level 3.

#### TAT Inter-rater Reliability

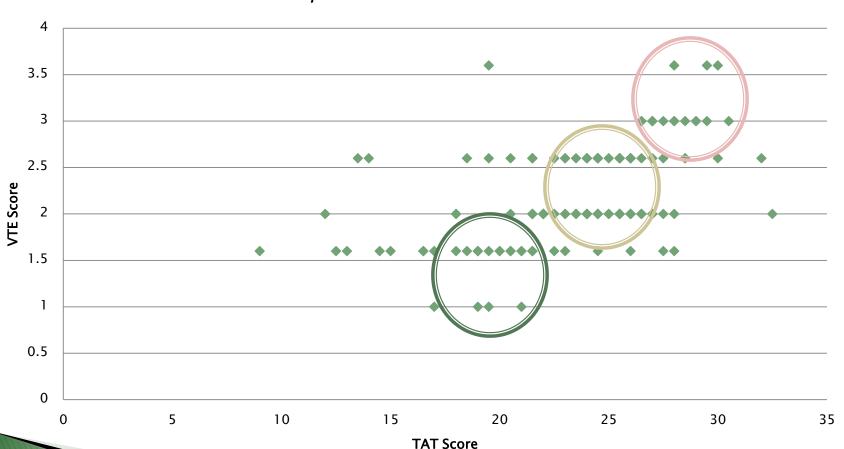
- 2 raters
- 144 cases
- 288 decisions
- Krippendorff's alpha (interval): 0.90
  - High inter-rater reliability (> 0.80) indicates that there was a measurable construct to be evaluated.

#### Results: Correlation

- Is there a relationship between paraphrasing (TAT) and translating (VTE)?
- Pearson Correlation
  - $\circ$  R = 0.52
    - A moderate positive correlation: there is a tendency for high TAT scores to go with high VTE scores and vice versa.
  - P < .001
    - Indicates that the correlation is significant.

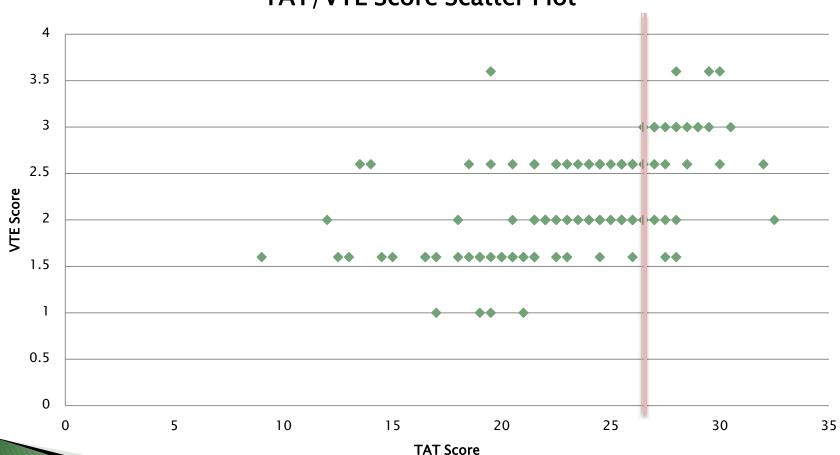
#### Scatter Plot of VTE and TAT Scores

#### **TAT/VTE Score Scatter Plot**



#### Scatter Plot of VTE and TAT Scores





# **Proof of Concept**

- There is a relationship between paraphrasing and congruity judgment (translation).
- ▶ The TAT construct shows promise for predicting translation ability if...
  - It had more items.
  - The items were aligned with the ILR.

# Maria M. Brau

>>> maria.brau@ic.fbi.gov