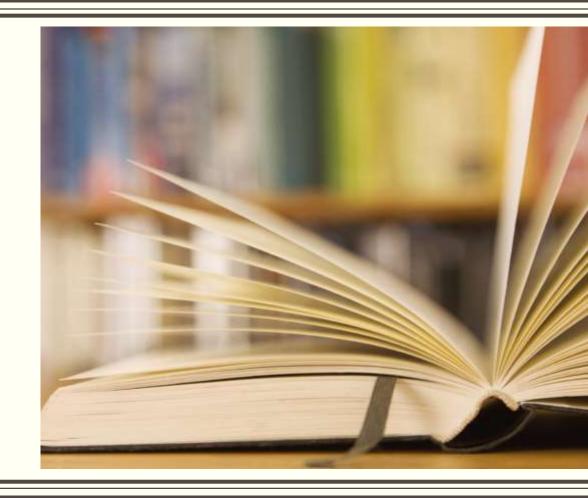# DEVELOPING THE TILLS
(TAIWANESE INVENTORY OF LANGUAGE LEARNING STRATEGIES)

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Background – The SILL

- The SILL has been widely used since 1990 in a variety of contexts.

- It has always been shown to be highly reliable and valid.

- Why do we need *another* instrument?

Problems with the SILL

- The SILL is a generalized questionnaire for all learners, not applicable to specific sociocultural contexts (Oxford, 1990).

- Oxford has subtly stepped away from the SILL and reclassified strategies according to four categories with four meta-categories (Oxford, 2017).

- The SILL is not psychometrically valid (Dörnyei, 2005).

- Some items are outdated (e.g., TV shows/movies/flashcards, but no mention of apps, YouTube, or newer multimedia)

The TILLS

- Taiwanese Inventory of Language Learning Strategies
  - Provides a more socioculturally-based questionnaire
  - Psychometrically valid (follows Pintrich's 1991 MSLQ)
  - Developed from qualitative data (interviews with Advanced level learners & writing prompts from Intermediate+ level learners)
  - Can be used in place of or along with the SILL and other questionnaires
  - Will also provide blanks at the end of questionnaire for open-ended responses (e.g., Oxford 2017).

Creating the TILLS

- Sampled students from Northern, Central, and Southern Taiwan
  - Taiwanese university students (all of whom have studied English)
  - Students of all ranges sampled. Demographic data, including a self-report rating scale, collected.
  - Writing prompt data (N = 420) came from students that rated themselves as intermediate or above (N = 271).
  - Interviews (N = 30) done with students that were identified by teachers as advanced/highly fluent.

The TILLS – Sample Strategies

- When learning and using vocabulary…
  - I use English multimedia (apps, news, online media, TV/movies)
  - 英語多媒體（app，英語新聞，線上多媒體，電影，影集）
  - I practice orally
  - 口語能力（用比較簡單的字）
  - I practice in writing
  - 寫作能力（英文寫作，使用比較難的字在作文上，應用同意字，造句）

The TILLS – Sample Strategies

- When listening to English…
  - I practice by listening to foreigners or native English speakers
  - 找外國人聊天
  - I listen for keywords
  - 關鍵字

- When speaking English…
  - I practice by talking in English with foreigners, friends, or myself.
  - 英語聊天（找外國人聊天，用英語跟朋友聊天，自言自語）
  - I speak clearly (repetition, speaking slowly, using keywords)
  - 講清楚一點（再講一次，講慢一點，用關鍵字，字簡單的單字）

The TILLS – Sample Strategies

- When reading English...
  - I use a dictionary or other resources to understand words
  - 查字典（查單字，翻譯工具，網路資源）
  - I ask other people for help (teachers, classmates, or others)
  - 問其他人（問老師，問同學，問看得懂的人）

- When writing English...
  - I practice in class (writing classes, working on questions)
  - 課程練習（寫作課，英文課，練習題）
  - I use applications to help me write (emails, templates, Chinese drafts, notes)
  - 寫作練習（寫Email，寫作，看書模仿範例，中文草稿，筆記）

The TILLS – Sample Strategies

- When learning and using English…
  - I learn and use English in classes (taking tests, speaking with teachers, joining English camps)
  - 上英語課（英文考試，和老師說英文，加入英語營隊）
  - I learn by teaching English (teaching/helping in English classes or camps)
  - 教英語課（在英文營隊幫忙）

The TILLS – What's missing?

- There does appear to be ample cognitive strategies, as well as some social strategies (or strategies that can be used in social ways).

- Does not appear to be many metacognitive strategies
  - Perhaps even advanced subjects are not capable of thinking about them, or simply do not feel that they are "strategies."

- Does not appear to be many affective strategies
  - Taiwanese traditionally score low on the SILL affective scale, so this is to be expected.

The TILLS Survey

- Learner-generated strategies were supplemented with the Indirect Strategies from the SILL.
  - 66 total strategies
- This survey, along with demographic data and other questions (English learning motivation, level of liking English, etc.) was distributed to teachers at 9 schools in Northern, Central, and Southern Taiwan

The TILLS Survey

- 852 completed surveys (with informed consent)
  - 46 from non-Taiwanese students were removed.
  - 4 were missing 10% or more answers and were removed.

- 802 surveys had 231 missing values throughout 120 cases (14.96%) and 45 variables (59.21%).
  - Replaced using Regression Imputation (Hair, 2014).

- Some variables showed slight kurtosis or skewness, but none exceeded ±2.2 (Sposito, Hand, & Skarpness, 1983).

The TILLS – Descriptive Statistics

- 802 completed cases
  - 301 males (37.5%) and 501 females (62.5%)
  - Nine national and private schools in Southern, Central, and Northern Taiwan
  - Ages 18-26 (M = 19.6)
  - 356 freshmen (44.4%), 270 sophomores (33.7%), 98 juniors (12.2%), and 78 seniors (9.7%).
  - A variety of majors, both English and non-English.
  - Cronbach's α of .976
  - Means for the TILLS items ranged from 2.61 to 5.02

The TILLS - EFA

- Indirect Factors from the SILL
  - Maximum Likelihood with Promax Rotation
  - Three factors (not Aff/Soc/Metacognitive)
  - Results forthcoming

The TILLS - EFA

- Direct Factors (learner-generated)
  - Analysis underway; results forthcoming
  - Likely 4-5 factors across a variety of language skills.

The TILLS – EFA Avenues

- Limit to only higher-level students (advance and intermediate)?
  - Or perform an EFA on each subset (some need more data for their own subset).

- Different extraction/rotation methods

- Increase the cutoff coefficient (up to .50?)

How Can You Help?

- Taiwanese subjects for CFA (This year? Next year?)
- AFL.Ryan@gmail.com | LINE: drberg
- May be possible to compensate students in some way (gifts, vouchers, etc.) – dependent upon fiscal supplies
- Create your own for your students
- Results presented at ETRA (Tunghai) in May

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