

# Translation of Clinical Tools for Heart Research with Women Internationally

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# Conceptual Framework

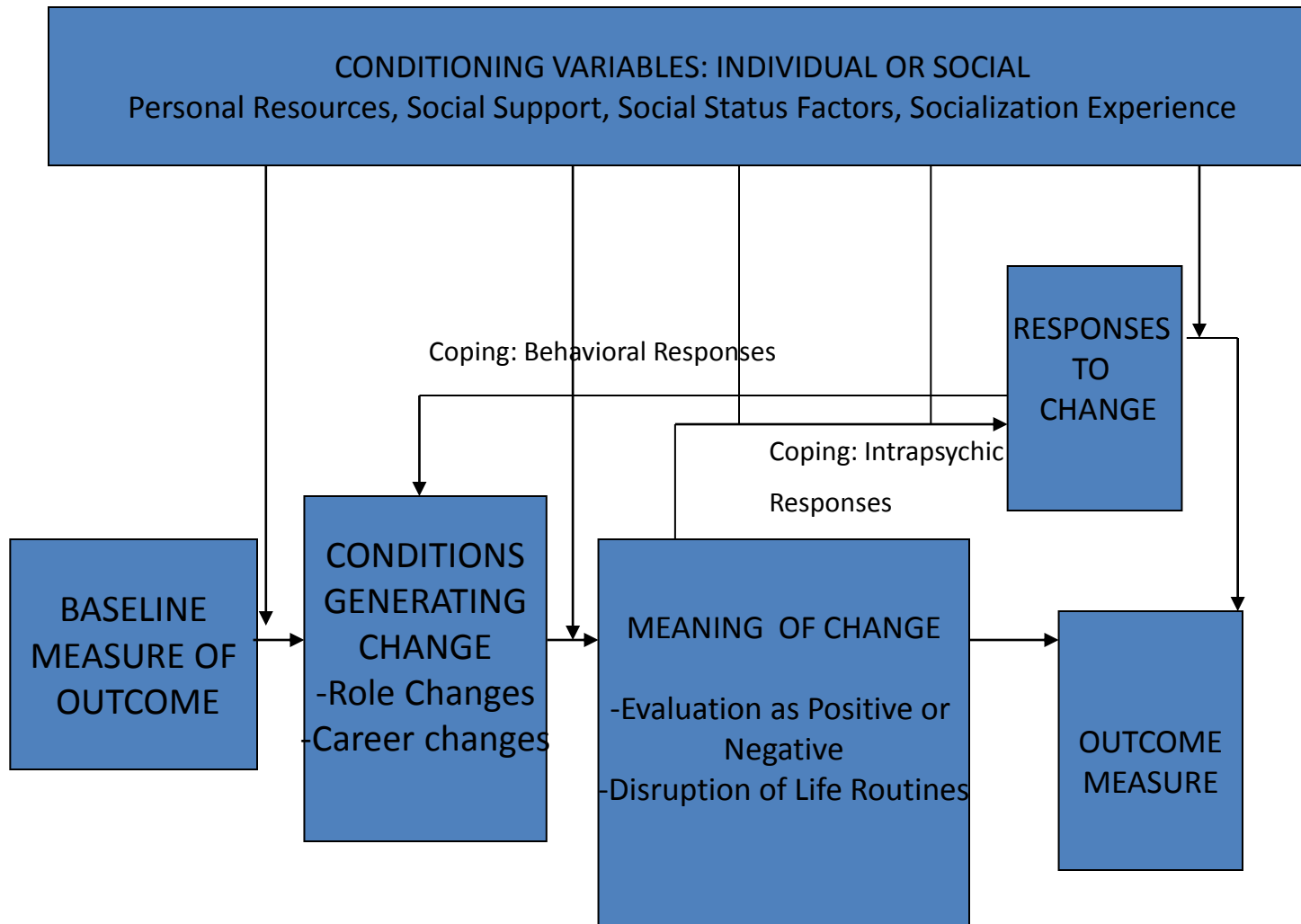


Figure 1-1 Model of Adaptation to Adult Transitions (George, 1982)

# Selection of tools guided by conceptual framework

- Meaning of change
  - Outcome Expectations for Lifestyle physical activity
  - Self Efficacy for Lifestyle physical activity
- Conditions generating role change
  - Role quality
- Coping
  - Religiosity
- Conditioning variables--Personal resources
  - Koci-5
  - Life Orientation Tool-Revised
  - Demographic



# Instruments

Instruments	# Questions
Demographic	(9)
Koci Marginality 5	(5)
DUREL (Duke Religious Index)	(5)
Index of Religiousness	(3)
Outcome Expectations Lifestyle Physical Activity	(10)
Role Quality Measure	(30)
SF 12 V 2	(12)



# The Translation Process

- Objective: To identify and follow a recognized translation process recommended by a psychometrics expert in preparing clinical tools for research internationally
  - Dr. Strickland, Dean, Florida International University; Editor of The Journal of Nursing Measurement and author of “Guidelines for translating questionnaires into another language”. *Journal of Nursing Measurement* 9 (2), 111-113 (2001) .



# The Translation Process

1. Native translator translates the tool;
2. Native translator proofreads the draft;
3. Bilingual editor edits the draft;
4. Translator and editor review 2nd draft;
5. Three translators review the 2nd draft:
  - Expert in target groups for which draft intended
  - Knowledge of goals of intended message
  - Avoid changing style and substituting another correct and preferred word
6. Review and incorporate appropriate edits from 3 translators;



# The Translation Process

7. When there are differences of opinion, use broadcast standards experts to settle differences;
8. Perform pilot test with target audience;
9. Create 3<sup>rd</sup> draft;
10. Produce galleys;
11. Editors proofread;
12. Pilot test for reliability and validity;
13. Make changes to instruments based on pilot testing;
14. Bilingual editors review the final draft.



# Native translator translates tool

- Use professional connections to identify translators.
  - Dr. Gee is active with Ukraine medical mission, proposed site for women’s research. Translator for Russian is affiliated with medical mission. He is Chief of Language Institute in Moscow.
  - Dr. Gonzales and husband built chapel in Metro Manila Philippines , proposed site for women’s research. Translator for Tagalog is distinguished faculty from DeLaSalle University in Metro Manila with PhD from U.S.A.





# Native translator translates tool

- Tagalog
  - While Tagalog is the official language, there is a preference for “Taglish” —a combination of Tagalog and English used on broadcast media (Dr. Gonzales’ subsequent grant requests are for Taglish )
- Russian
  - Ukrainian is the official language, Russian has been spoken in eastern Ukraine due to being part of the USSR (Dr. Gee has been funded for translation to Ukrainian by Georgia Southern University)



# Translator confers with bilingual editors

- Each translator used the method described in the Strickland translation process article
  - Raised awareness for process of translation psychometric standards used in USA
- Requested list of names of translation editors; paragraph on the process
  - Preference for using already established translation practice—“simple, straightforward task, no need”



# Demographics-English

characteristic	n	Per cent
Lives with spouse	49	80.3
College educated	56	91.8
White Caucasian	57	93.4
Ages 65-74	12	18
Ages 55-64	20	29.5
Ages 45-54	18	32.8
Ages 35-44	11	19.7
Household income-annual \$50,000-75,000	14	23
75,001-100,000	15	24.6
More than \$100,000	23	37.7



# Demographics- Tagalog

characteristic	n	Per cent
Lives with spouse	8	72.7
College educated	11	100
Asian	11	100
Ages 65-74	1	9.1
Ages 55-64	2	18.2
Ages 45-54	1	9.1
Ages 35-44	7	63.6
Household income-annual \$40,000-50,000	1	9.1
\$50,001-75,000	3	27.3
75,001-100,000	1	9.1
More than \$100,000	6	54.5



# Pilot testing for validity

## Russian focus group:

- Demographic form
- Marital status: need selection for widowed
- Education of Spouse: could we add a choice for N/A (wanted to know about single women and how they were to answer this question – survey monkey does not allow them to skip a question).
- Income: for Ukraine and Russia a yearly salary of \$20,000 is above average, majority of families live with less than \$350 a month.



# Pilot testing for validity

- Russian focus group October 2011
  - 3 women, Russian native language
  - Currently residing in the United States
- Tagalog focus group May 2011
  - 12 women, born in Metro Manila, Philippines
  - Living in Los Angeles and San Diego area



# Pilot testing for validity

## Russian focus group:

- Koci instrument: Tool makes sense and questions are straight forward - easy to understand
- Column with Neither Disagree or Agree could have read “neutral” (Normal survey terms were not used on the instruments). The translation of “Neither Disagree or Agree” was more complex than needed to be.
- Duke instrument: Need a choice of Orthodox under religion (National religion in Ukraine is Orthodox)



# Pilot testing for validity

## Russian focus group:

- Self-Efficacy: Formulation of introduction question too long and complicated. May be can lay out questions differently. Make shorter. One actually laughed at questions: these are things that are done on a daily basis anyway does not matter about the weather or how we feel – things have to get done (house work, walking to store, etc). Regarding mention of a gym, only “show off” wives go to the gym.
- The SELPA may not be a tool that would work in Russian/Ukraine culture. Initially we might do better to first look at barriers or actually activity levels of individuals.
- Role Quality: very straight forward, easily understood
- How are participants suppose to answer if they are not a Mother or a Grandmother – there is not a “N/A” choice





# Pilot testing for validity

- Tagalog focus group:
  - Make it simpler, with some animation like a comic book, more yes or no and less multiple choice or ranking
  - Make it shorter, less than 10 minutes
  - Concerns about the “exercise survey”
    - Motivation about mental alertness—not a focus for the midlife woman maybe elder woman (OELPA)
    - Exercise motivation for women is to “look better” not “muscles stronger” (OELPA)
    - Instructions were not clear, I had to read twice (SELPA)
  - Someone needs to guide the research participant, explaining the questions or translating them



# Pilot testing for validity

## Tagalog focus group:

- Participation must be incentivized. “Learn from the politicians, give a bag of groceries to participants... and only after completion of the task”
- “It needs to be ‘fun’, offer cooked food, drink”



# Pilot testing for validity

## Tagalog focus group:

- ...About the woman and heart disease
  - “We don’t understand why this is a heart disease study of women. We don’t have heart disease—that is a men’s illness; we explode, we scream, we ‘let it all out’, we talk to other women.” “In the Philippines the men work long hours, hold in their emotions, talk less, smoke, drink, are ‘too serious’”.
  - “The research should be an intervention about lifestyle changes, how to substitute brown rice for white and not to eat salty fish or oily meat”



# Incorporate appropriate feedback

- Future plan is to use computer application to talk participants through the survey in native language using IPAD
- Reduce subject burden (80 questions less)
  - Reduce Role Quality Measure from 9 roles to: worker, wife, mother (less by 60)
  - Eliminate 1 of 2 Exercise surveys (less by 10)
  - Eliminate the Life Orientation Tool (less by 10)



# Incorporate appropriate feedback

- Reduce target number for recruitment per researcher
- Increase incentives for participating, include food, medical necessities
- Check for an ethnocentric perspective, review data on heart disease in women of target populations



# Incorporate appropriate feedback

- Make specific changes to the surveys (e.g. change “neither disagree or agree” to neutral; add religious choice of orthodox, n/a for roles when they do not apply).
- Review the annual salary figures adding more categories in the below \$20,000 range. Categories for annual salary should be more congruent with cultural incomes



# Use Broadcast Standards Experts

- For Tagalog translation, use “taglish” that is used on television and radio broadcasts.
- For Russian translation, use Ukrainian that is used on television and radio broadcasts.



# Pilot testing for reliability

- Pilot testing May - October 2011.
- Recruited 75 participants (61 English, 11 Tagalog and 3 Russian speaking).
- Used snowball technique on email.
- Surveys with letter of introduction and consent on [www.surveymonkey.com](http://www.surveymonkey.com) in native language.
- Reliability data analyzed using SPSS 19.

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# English Scale Reliabilities n=61

Scale	Cronbach's Alpha
Koci-5	.908
DUREL (Duke Religiosity)	.886
Index of Religiousness	.763
Life Orientation Test-Revised	.735
Self-Efficacy Life-Style Physical Activity	.881
Outcome Expectations Life-Style Physical Activity	.941
Role Quality/Role Concerns (9 roles)	.895-.995/.873-.976



# Tagalog Scale Reliabilities n=11

Scale	Cronbach's Alpha
Koci-5	.789
DUREL	.681
Index of Religiousness	.683
Life Orientation Test-Revised	.640
Self-Efficacy Life-Style Physical Activity	.807
Outcome Expectations Life-Style Physical Activity	.966
Role Quality/Role Concerns (9 roles)	.732-.999/.789-.991



# Implications for research

Pilot testing for validity and reliability is key to the successful research project;

Survey tools must take into consideration the low literacy target audiences.

Researchers must guard against ethnocentricity in the planning and the implementation of the project

“Recruitment for the sake of research” is a concept as yet unfamiliar to our target population: the international woman who attends a medical mission.

Recruitment must be incentivized in order to attract our participants.



# Implications for research

- Respect for diverse cultures should be demonstrated in the manner in which researchers conduct business internationally
  - Preferred to be directly addressed solely through person known to translator
  - Preference for more controlled email, written conversations rather than face-to-face, Skype meetings



# Conclusion/Recommendations

- There is great value in identifying and following a recognized translation process recommended by a psychometrics expert in preparing clinical tools for research internationally



# Recognition: Resource Funding

- Recognition: Resource Funding
  - Dean Sally Brosz Hardin's award for Faculty Development, Hahn School of Nursing, University of San Diego, San Diego, CA,
  - Georgia Southern University, School of Nursing
- Recognition: Research Assistance
  - Francisco Magno, Assistant Professor, DeLaSalle University, Manila, Philippines;
  - Alexey P Nogovitsyn, Chief Language Teacher, Institute of Languages, Moscow, Russia;
  - Amado Marquez, Coordinator, Los Angeles, Tagalog Focus Group;
  - Olga Yanochik, Advisor, Statesboro, GA, Russian Focus Group
  - Sasha Malov, Director of Eastern Ukraine mission, Coordinator Russian Focus group
  - Leah Brown, assistant, Merit Scholar, University of San Diego Hahn School of Nursing.

