Computer-adaptive measurement of acculturation in multicultural contexts: The Multicultural Assessment of Participation and Identity Domains (MAP ID)

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Outline

- Multicultural social context
- Acculturation and its measurement
- Objectives of the MAP ID
- The MAP ID
- Preliminary pilot study in preparation for computer formatting
  - Method
  - Results
  - Improvements
- Considerations, implications and future directions

Multicultural social context

- Canadian population is comprised of peoples from multiple cultural backgrounds:
  - European, Asian, African, Caribbean, Central and Latin American, Native/First Nations
  - First, second + generation, individuals with multiple cultural heritages, etc.

  (Statistics Canada, 2006).
- Continuous multicultural exposure
- Cultural communities interact across generations
  - Intermarriage
  - Adoption of new customs and policies
  - Etc.

Acculturation

- Adaptation that occurs at the individual and societal level as a result of continuous and direct contact with others from diverse cultural groups

  (Redfield, Linton & Herskovits, 1936)

  - Adaptation process involves the incorporation, retention, and creation of cultural identity, attitudes, values, behaviours, etc.
  - Includes contact with majority and minority cultures

Acculturation:
conceptualization and measurement

- One dimension
  - Heritage → majority cultural alignment
- Two dimensions
  - Degree of identification and participation in dominant culture
  - Degree of identification and participation in heritage culture

- Measurement
  - Self-report questionnaires about participation in heritage and mainstream activities

    (e.g., Berry, Phinney, Sam & Vedder, 2006; Ryder, Alden & Paulhus, 2000).

Acculturation:
conceptualization and measurement

- Limitations to conceptualization and measurement
  - Narrow scope of individual's internal and social processes
  - Assumes independence of involvement in each culture (e.g., Rudmin, 2003, 2006)
  - Tendency to account for only one majority and one heritage cultural alignment
  - Does not thoroughly measure the extent of cultural participation for either heritage or majority involvement

Objectives

To develop an acculturation measure with the following features:

- Accounts for multiple heritage and mainstream cultural affiliations, as well as hybrid cultural affiliations, without needing to change the structure of the measure itself for different populations
- Captures both independent and overlapping cultural experiences
  - Can record multiple cultural associations per life domain
- Comprehensively accounts for diverse areas of cultural involvement, compared to conventional scales.
- Ultimately adaptable to a user-friendly computer format

The Multicultural Assessment of Participation and Identity Domains (MAP ID)

MAP ID Content:

- Part 1: Cultural affiliations
  - Provide participants with descriptions of mainstream, heritage, hybrid, superordinate, subcultural and religious cultural categories
  - Participants then list their cultural affiliations and catalogue them according to these provided cultural categories.

MAP ID: Culture Sheet

℘ Example: Participant M

	Mainstream	Heritage	Hybrid	Superordinate	Religious/ Spiritual	Subculture
A. English-Canadian	✓					
B. French-Canadian	✓					
C. Indian		✓				
D. Jewish (Ashkenazy)		✓				
E. Indo-Canadian			✓			
F. Asian				✓		
G. Judeo-Christian				✓		
H. Hindu					✓	
I. Otaku						✓

MAP ID - Part 2:
Domains of participation and involvement

- Heroes and idols
- Group memberships
- Events attended
- Games
- Field of work or study
- Volunteer activities/donations
- Food
- Shopping
- Audiovisual media
- Reading
- Internet
- Attire
- Routine practices/disciplines
- Holidays and festivities
- Achieved and thwarted aspirations
- Values
- People
- Lifestyle choices
- Greetings and salutations
- Etiquette
- Symbolic objects
- Home décor
- Life transitions

MAP ID: Domains

- Example:
  - Food domain: Item no. 9

9. Please list **up to** 10 of the most common dishes that you eat.

9.1 Dahl and rice

9.2 Tofu, rice and vegetables

9.3 Borscht

9.4 Pasta

9.5 Collard greens, beans, and rice

9.6 Miso soup with rice

9.7 Oatmeal

9.8

9.9

9.10

MAP ID – Part 3:
Associating cultural affiliations to one's domains

- Using the culture sheet (Part 1),

- Participants go over their domain question responses (Part 2)

- Match each activity entry to its personally corresponding cultural affiliation(s)

MAP ID: Associations

ꕥ Example: Item no.9

Part 1

A. English-Canadian
B. French-Canadian
C. Indian
D. Jewish (Ashkenazy)
E. Indo-Canadian
F. Asian
G. Judeo-Christian
H. Hindu
I. Otaku

Part 2

9. Please list **up to** 10 of the most common dishes that you eat.

9.1 Dahl and rice
9.2 Tofu, rice and vegetables
9.3 Borscht
9.4 Pasta
9.5 Collard, beans, and rice
9.6 Miso soup and rice
9.7 Oatmeal

Part 3

Question 9.

9.1 C, F, E, H
9.2 F, H
9.3 D
9.4 A, B, other
9.5 A
9.6 F
9.7 A, B, E

MAP ID process summary

- Steps:
  - Part 1 acquires all possible response options for one's cultural groups
  - Part 2 involves all possible queries for one's spheres of activity
  - Part 3 acquires all possible pairings
- Result is a customized questionnaire
- Data is still quantitative
  - Comparable across the sample
  - Accounts for the affiliation *types* for all participants rather than their specific cultural *groups*

MAP ID Pilot Study

Objectives:

- Test the MAP ID in order to optimize the measure prior to computer formatting
  - Eliminate questions which are generally unproductive across the sample
  - Elucidate ambiguous questions
  - Fix formatting foibles

- Test the inclusive applicability of the MAP ID with a diverse, multicultural sample

MAP ID Pilot Study
Method

- Participants (n = 26)
  - Sex: 5 men, 21 women;
  - Age: range = 19-41 yrs, mean = 22.9 yrs

- Participants were of first, second, and third generation status and/or of bicultural heritage

MAP ID Pilot Study
Participants

Reported cultural affiliations:

- Mainstream cultural affiliations:
  - English-Canadian, French-Canadian, Québecois
- Heritage cultural affiliations:
  - American, Hispanic, Peruvian, Cuban, Jewish, German, Irish, Greek, Italian, Polish, Ukranian, Russian, Iranian (Persian), Armenian, Mauritian, Pakistani, Chinese, Indian
- Hybrid cultural affiliations:
  - Indo-Canadian, Chinese-Canadian, Russian-Canadian, Ukranian-Canadian, Russian-Ukranian, Vietnamese-Canadian

MAP ID Pilot Study
Participants

- Superordinate cultural affiliations:
  - European, Russian, Asian, North American, American (both North and South Americas)
- Religious/spiritual affiliations:
  - Buddhist Hindu Jewish Muslim Christian Christian greek orthodox Christian Anglican Christian catholic
- Subcultural affiliations
  - Montrealer, Chinese (Cantonese), gay/lesbian/bisexual, student, Psychology student, Academic, Dog owner, MTG Player

MAP ID Pilot study
Procedure

Procedure

- Sample recruited through Concordia University's Psychology participant pool
- Participants completed the measures in the Culture, Health, and Personality Laboratory (CHAP Lab) at Concordia University for credit
- Testing duration: approximately 90 – 120 minutes

MAP ID Pilot study
Procedure

Measures:

- Demographics:
  - age, sex, length of time in Canada, birthplace, languages spoken, parent's birthplace and first languages, relationship status, and number of siblings.
- MAP ID:
  - Culture sheet,
  - Domains,
  - Cultural associations sections

MAP ID Pilot Study
Results: Data preparation

All analyses done using only question 9 (dishes) as exemplar

To analyse the data from the MAP ID paper and pencil pilot:

Part 1

A. English-Canadian
B. French-Canadian
C. Indian
D. Jewish (Ashkenazy)
E. Indo-Canadian
F. Asian
G. Judeo-Christian
H. Hindu
I. Otaku

Each culture listed by the participant is coded according to their corresponding affiliation type (as defined by the participant)

Mainstream English Canadian,
Mainstream French Canadian,
Heritage (all),
Hybrid (all),
Superordinate (all),
Religious/spiritual (all),
Subculture (all)

MAP ID Pilot Study
Results: Data preparation

To analyse the data from the MAP ID paper and pencil pilot:

Part 2	Part 3
9. Please list **up to** 10 of the most common dishes that you eat.	Question 9.
9.1 Dahl and rice	9.1 C, F, E, H
9.2 Tofu, rice and vegetables	9.2 F, H
9.3 Borscht	9.3 D
9.4 Pasta	9.4 A, B, other
9.5 Collard, beans, and rice	9.5 A
9.6 Miso soup and rice	9.6 F
9.7 Oatmeal	9.7 A, B, E

Each question has 10 sub-questions, and each sub-question has a potentially unlimited number of associations.

Each association is coded as a new variable

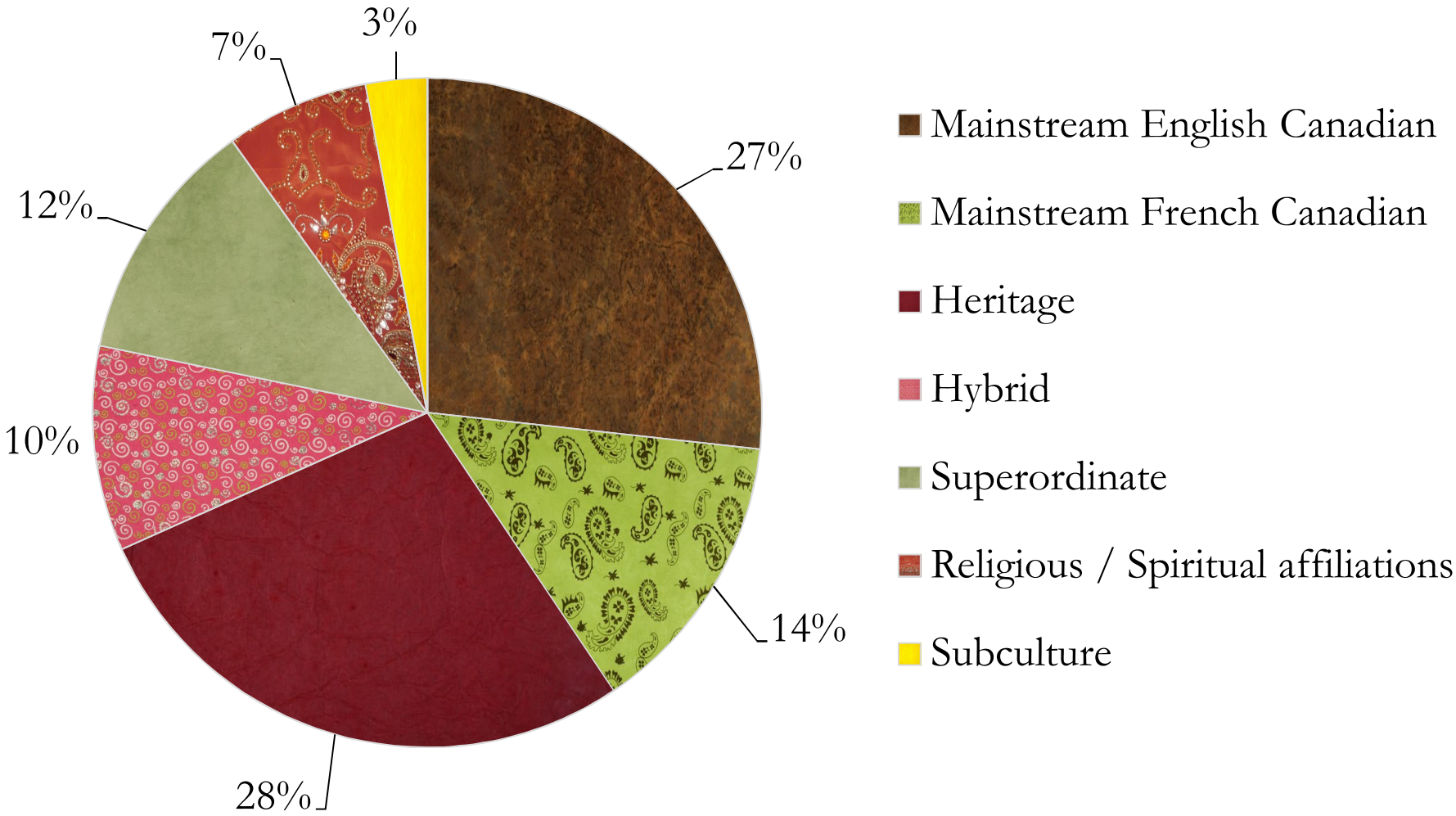
MAP ID Pilot Study
Results: Data preparation

- To create the indexes for each cultural affiliation type:
  - Each association is coded for its cultural affiliation type
  - Each mention of the respective affiliation types are added up to create a total score
    - E.g., Total number of Mainstream English Canadian associations for participant = 10
  - Total number of X affiliations is then divided by the total number of affiliations given
    - E.g., 10 English Canadian associations / 100 total cultural associations given by the respondant

MAP ID Pilot Study

Results

Mean percentage of each association type to total associations for Q.9



Results and Implications

- MAP ID enables participants to report their own diverse cultural associations with their actual, specific activities
  - Participants make use of the multiple cultural affiliation possibilities

- MAP ID enables researchers to account for the diverse, interdependent cultural experiences and associations of individuals in their daily life
  - The number and diversity of associations given for one question on the MAP ID yields more cultural affiliation information than any other conventional measure

Computer formatting

- More efficient for the participant
  - Visually clear, including check-boxes, menus, etc.
  - Participant is guided through the complex sequence of steps
  - Computer generates custom questions for step 3 using participant's input for steps 1 and 2
- More efficient for the researcher
  - Computer automates much of the coding
  - Renders unconventional, extensive data more manageable
  - Can be implemented as an online study
  - Can be shared with the academic community easily
    - MATLab software

Improvements for the computer version

- Delineate specific number values to each cultural affiliation category
  - In culture sheet, numbers 3-9 will always be heritage cultures, numbers 10-16 will always be hybrid cultures, etc.

- Limit the number of activities one can list for each domain question
  - Instead of asking participants to list up to 10 items per question, we will ask them to list up to 5 items.

Improvements for the computer version

- Limit the number of cultural associations one may have with each item (2 or 3)
  - Ensures that the associations given are those which are essential to the participant
  - Ensures that only the most salient associations are listed

Future directions

- Test the computer formatted MAP ID
- Test the MAP ID with different samples
  - Immigrants, second generation individuals, specific cultural groups
- Validating the MAP ID against conventional acculturation measures
  - Limited to heritage and mainstream cultures
- Examine predictive value of the MAP ID
  - Intraindividual outcomes: well-being, stress, adjustment

Thank you