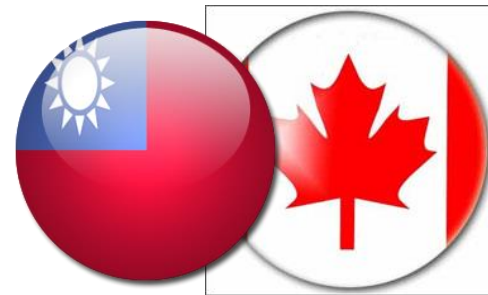


Taiwan and Canada: Self-Construal, Video Game Play and Dreams

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Culture and Media

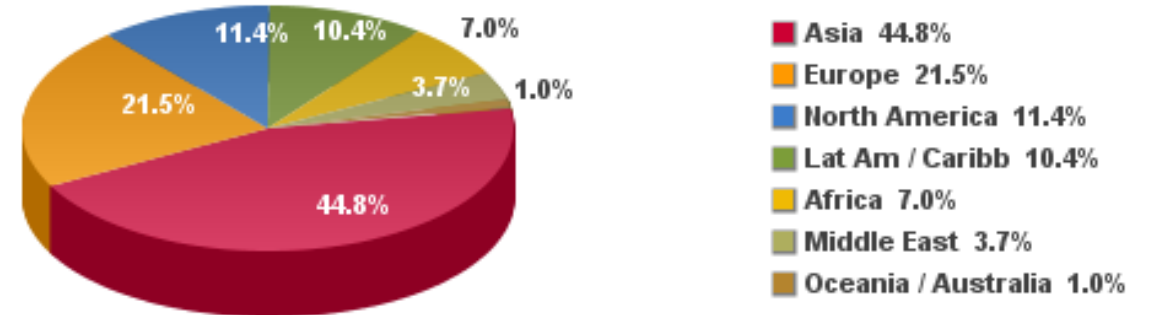
- US has 85% Internet penetration
- Canada has 83% Internet penetration
- China has 41% Internet penetration
 - With 591 million users
 - World Bank (2012)

Internet World Stats

Usage and Population Statistics

[Stats](#) | [Africa Stats](#) | [America Stats](#) | [Asia Stats](#) | [Europe Stats](#) | [EU Stats](#) | [Mid East Stats](#) | [O](#)

Internet Users in the World
Distribution by World Regions - 2012 Q2



Source: Internet World Stats - www.internetworldstats.com/stats.htm
Basis: 2,405,518,376 Internet users on June 30, 2012
Copyright © 2012, Miniwatts Marketing Group

Reality Construction

- Sense of reality is increasingly influenced by media immersion.
- In waking we see the game-transfer phenomena
 - responses in the virtual reality (VR) of video games overflow to non-play experiences.
 - Ortiz de Gortari, Aronsson and Griffiths (2011).
- Due to pervasiveness of screen experience, increasingly people see reality as “like a movie”, called inverse presence (i.e. 911) (Timmins & Lombard, 2005)
- Screen experiences can also influence dream responses

Why Study Dreams?

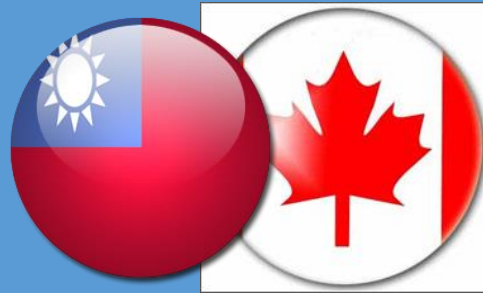
- Attitudes towards dreams
 - in west they are seen as not important
 - In east viewed more positively
- Function of dreams
 - Memory consolidation
 - Emotional regulation
 - Problem solving
 - Creative inspiration
- Dreams are autobiographies
- Response Bias
 - Tendency to present oneself in a positive light
 - Not present in dreams, which while metaphoric, are relatively free of waking defense mechanisms.
 - Dream records and reports of dream experiences may offer a more unobtrusive way to measure attitudes and experiences

Domains of Interest to Present Inquiry



Dreams

- Dreams and Culture



Culture

- Culture and Media



Media

- Dreams and Media

Dreams and Culture and Media

Method

- Participants
 - 200 each from three Chinese universities
 - This presentation: Taiwan (National Dong Hwa University)
 - Data also being gathered but not reported on here
 - Wuhan (Central China Normal University)
 - Hong Kong (Hong Kong Polytechnic University)
 - 450 from one Canadian university
 - MacEwan University
 - Chinese paid for participation
 - Canadians got course credit



Instruments

- **Demographics:** sex, age, education, marital status, city and country of residence, race/ethnicity, occupation, and languages spoken.
- **Media Use Questionnaire:** Video game play and social media use (including Chinese social media; i.e., Sina Weibo and Tencent Weibo. *Weibo* means “microblogging” in Mandarin. Weibo products offer many of the features of Facebook and Twitter).
- **Dream Intensity Scale** (Yu, 2008): The underlying principle of the Dream Intensity Scale (DIS) is that dream intensity is composed of multiple dimensions. The higher-order dimensions are: dream quantity, dream vividness, diffusion, and altered dream episodes. Dream intensity is also composed of eight lower-order dimensions, including regular dreams, paramnesia, lucid dreaming, and bad dreams. The DIS sees dream intensity as being a trait variable; while the content may shift, how intensely it is experienced stays about the same. This tool is useful for examining general awareness of dreams. The DIS is administered as self-report scale containing 23 items and was developed and normalized in China.
- **Dream Recording:** Specific instructions were given for recording a recent dream. The participant was asked to rate their dream along 15 emotional dimensions.
- **Independent versus Interdependent Self Scales** (IISS; Liu & Gilmour, 2007): This 42 item scale assesses the degree to which an individual considers themselves as independent or interdependent. The authors claim that reasonable support was found for reliability and validity of the IISS in both the Chinese and British samples.

Procedure

- All scales were translated into Traditional and Simple Chinese with each translation sent to the participating institution for checking.
 - Yue Yu was the translator. She is a psychology major at the University of Alberta who has taken a course in dreaming. She was born in Liaoning, China and attended Canadian primary schools in China.
- Scales were offered in the order listed in Instruments section on Qualtric.
 - This survey software is located in the US and offers direct access from all three Chinese locations.
 - Survey's were mounted so that items and item responses were parallel
 - This was done by the translator and a research assistant on the grant, Sarah Gahr.

Results

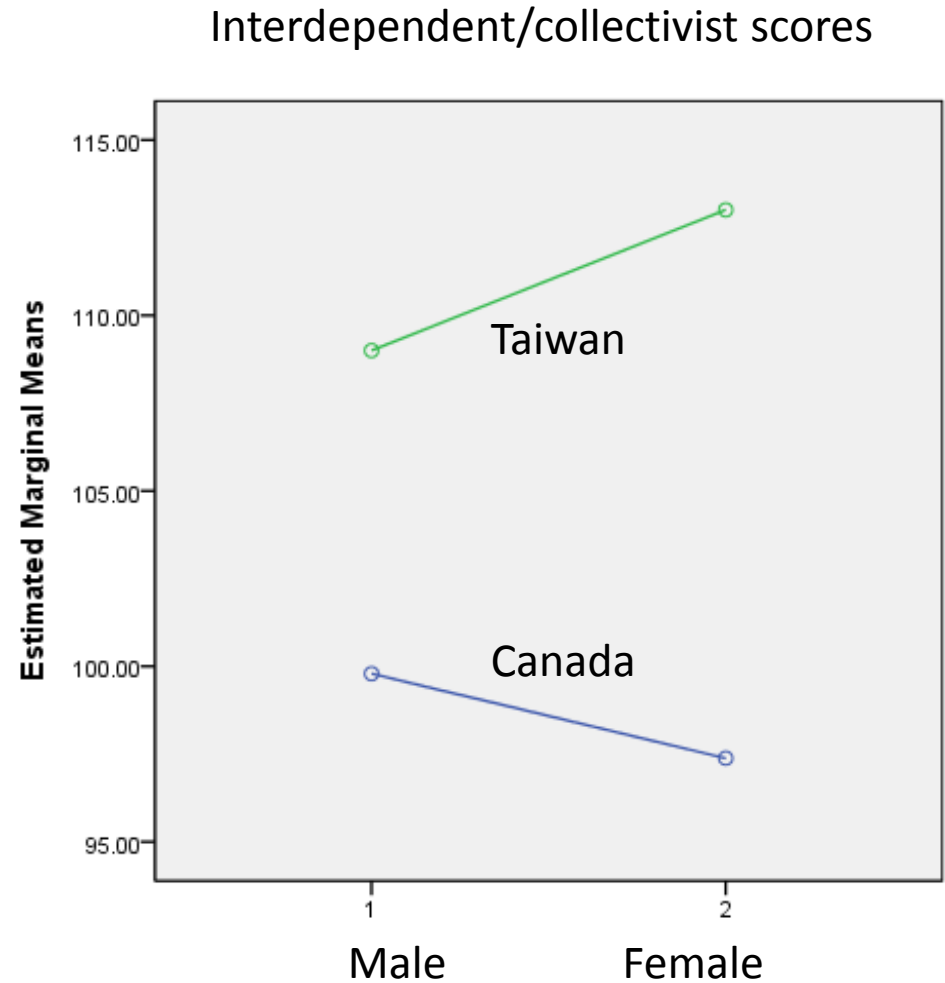
- Taiwan and Canada data only
- Only closed ended questions
 - Translation of dreams and other open ended questions currently occurring
- Total was 451 from Canada and 205 from Taiwan = 656 respondents

	Canada	Taiwan
Male	135	40
Female	316	151

14 did not report gender information

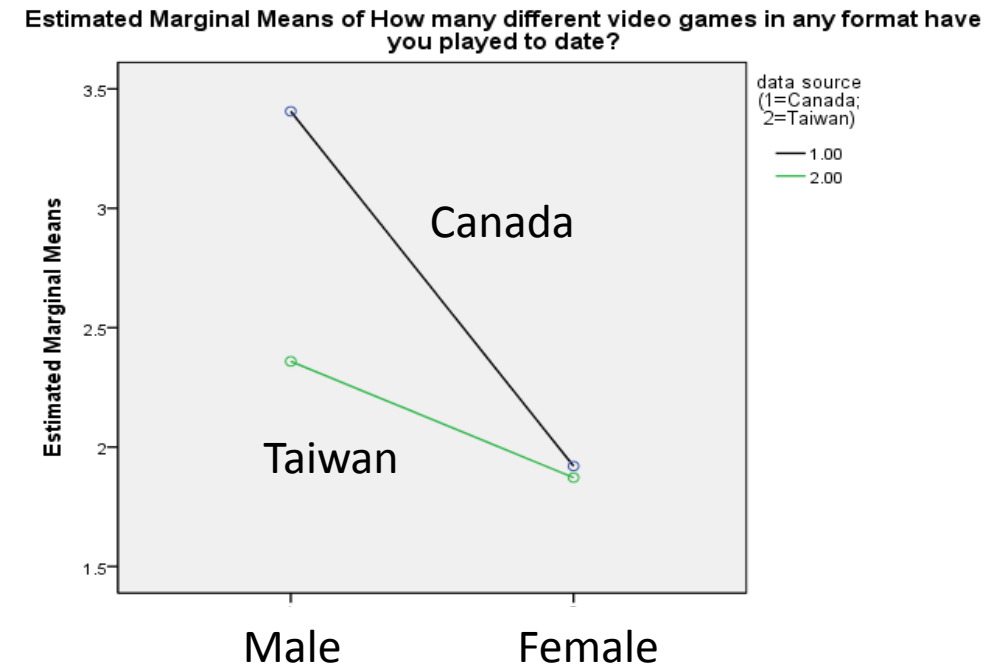
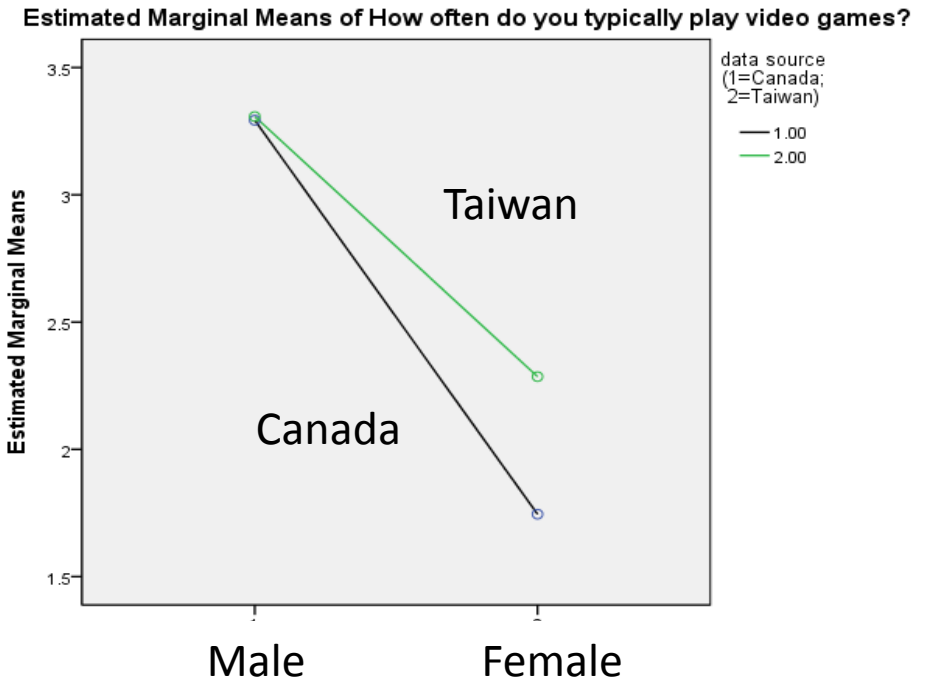
Self Construal

- ANOVAs for Sex X country on two self construal measures
 - Independent subscale
 - Collectivist or interdependent subscale
- Main effects:
 - sex no difference
 - Country: Taiwan > Canada on collectivist;
 - no diff for country for independent



Video Game Play

- Gaming variables asked about
 - Frequency
 - Length of play
 - Number of games played
 - Age began gaming
- Sex x Country ANOVA's
 - Sex for all M > F
 - Country
 - Frequency: Taiwan > Canada
 - Rest variables: Canada > Taiwan
 - Interactions: Frequency and number of games



Genre of game played

	Canada	Taiwan
Hard Core	50.4%	37.35
Sport/driving	18%	11.2%
Casual	31.5%	51.3%

Gackenbach, J.I. & Bown, J. (2011).
Video game presence as a function of
genre. *Loading*. 5(8). Retrieved from
<http://journals.sfu.ca/loading/index.php/loading/index>.

- Hard Core (highest in presence)
 - Canada
 - adventure games (19.1%)
 - First Person Shooters (12%)
 - Taiwan
 - Role Playing (online) (7.5%)
 - FPS & MMO's (6.4% each)
- Casual (lowest in presence)
 - Canada
 - Board Games (8.7%)
 - Puzzle (6.4%)
 - Taiwan
 - Puzzle (21.9%)
 - Casual (9.1%)

Considering Gaming and Social Media Use

- Cirucci (2013a) hypothesized that video game players would display similarities to social media users and that this relationship should be examined.
- Gackenbach & Boyes (2014) found the high gamers who were also high social media users had the thinnest psychological boundaries and thus were perhaps most susceptible to media effects

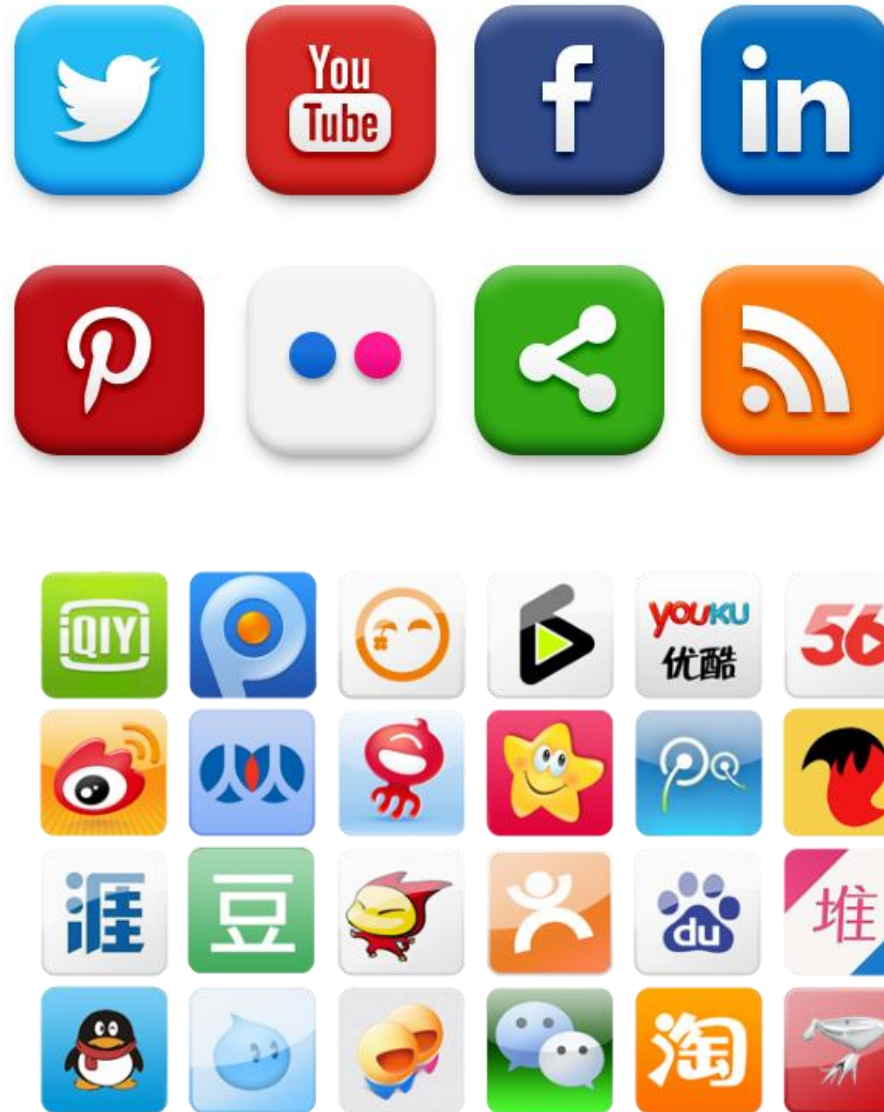
Social Media Use Frequency Means

Mean frequency of use for Chinese

Mean frequency of use for North American

- Facebook
- Linkedin
- Twitter
- Tumblr
- Instagram
- Myspace
- Youtube
- Google+
- Pinterest
- Other

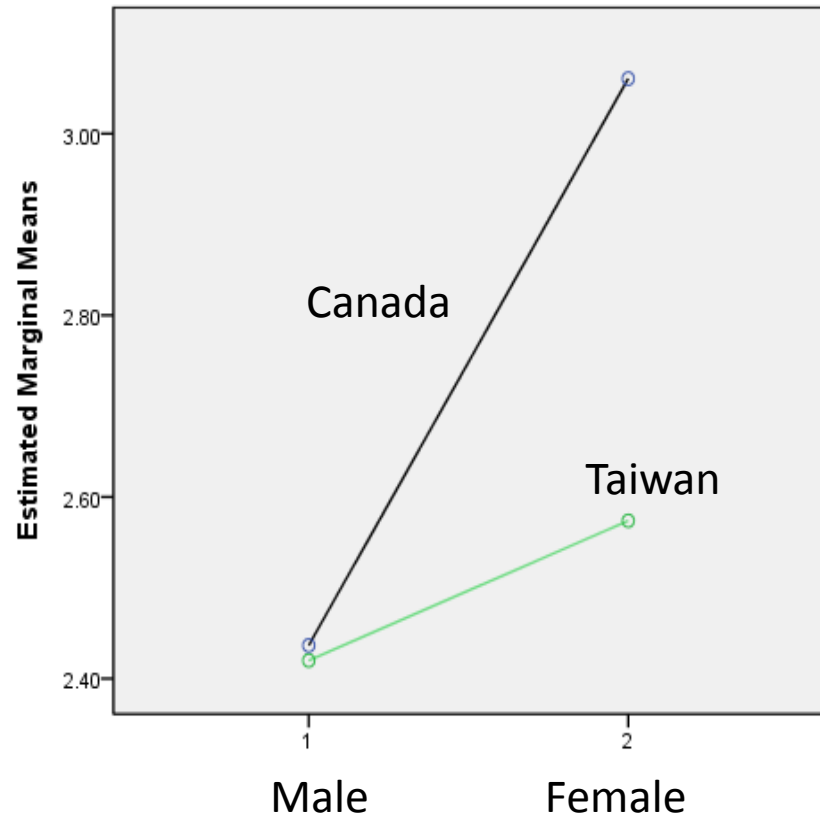
- Qzone
- Sina Weibo
- Neteasse Weibo.
- Tencent Weibo
- Renren
- Kaixin
- Kaixin011
- Youku Tudou
- Baidu
- Douban
- Tianya
- Maopu
- Guoke
- Zhihu
- Other



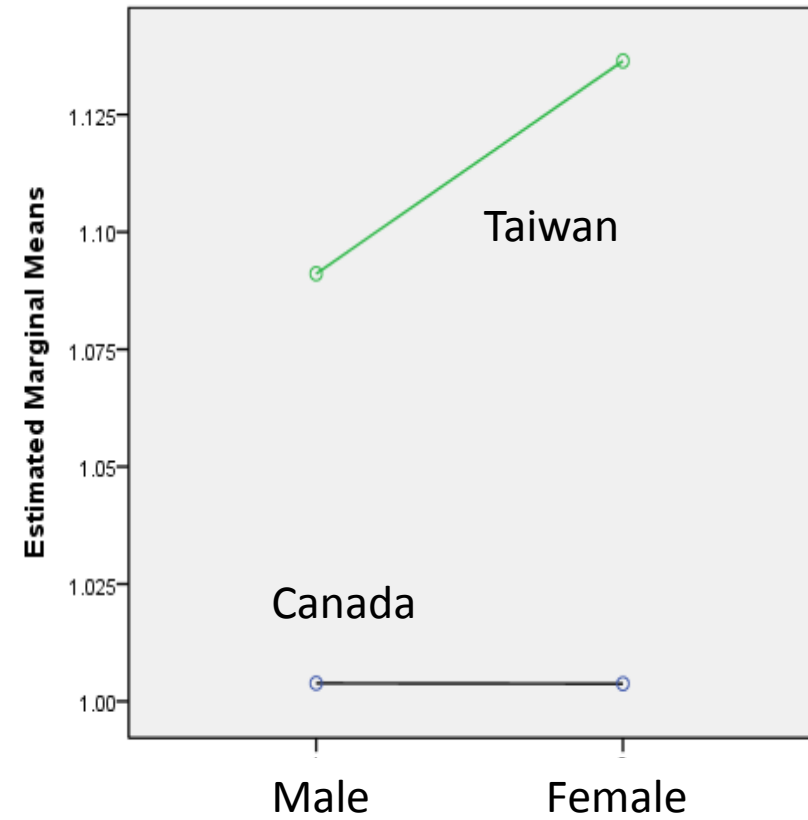
Rise of social networking sites is credited to internet censorship in the People's Republic of China. Due to the permanent blockage of other social-networking websites such as Myspace, Facebook, Twitter and YouTube since the 2009 Ürümqi riots.

Social Media Use Frequency Means

North American Social Media



Chinese Social Media



Media Use groups

- Video Game Play
 - Variables along different dimensions
 - Factor analysis of all gaming questions for all subjects
 - Resulted in one factor
 - Split in half to result in hi/lo video game play groups
- Social Media Use
 - Frequency self reports
 - 10 North American SMU
 - 15 Chinese SMU
 - Summed frequency for both types
 - Split in half to get hi/lo SMU groups

Only 442 had enough of all information to be classified along these dimensions:

Country X SMU X Video Game Play Groups

		Low SMU	High SMU	Total
Canada	High video game	67	80	147
	Low video game	99	69	168
	Total	166	149	315
Taiwan	High video game	37	27	64
	Low video game	39	24	63
	Total	76	51	127

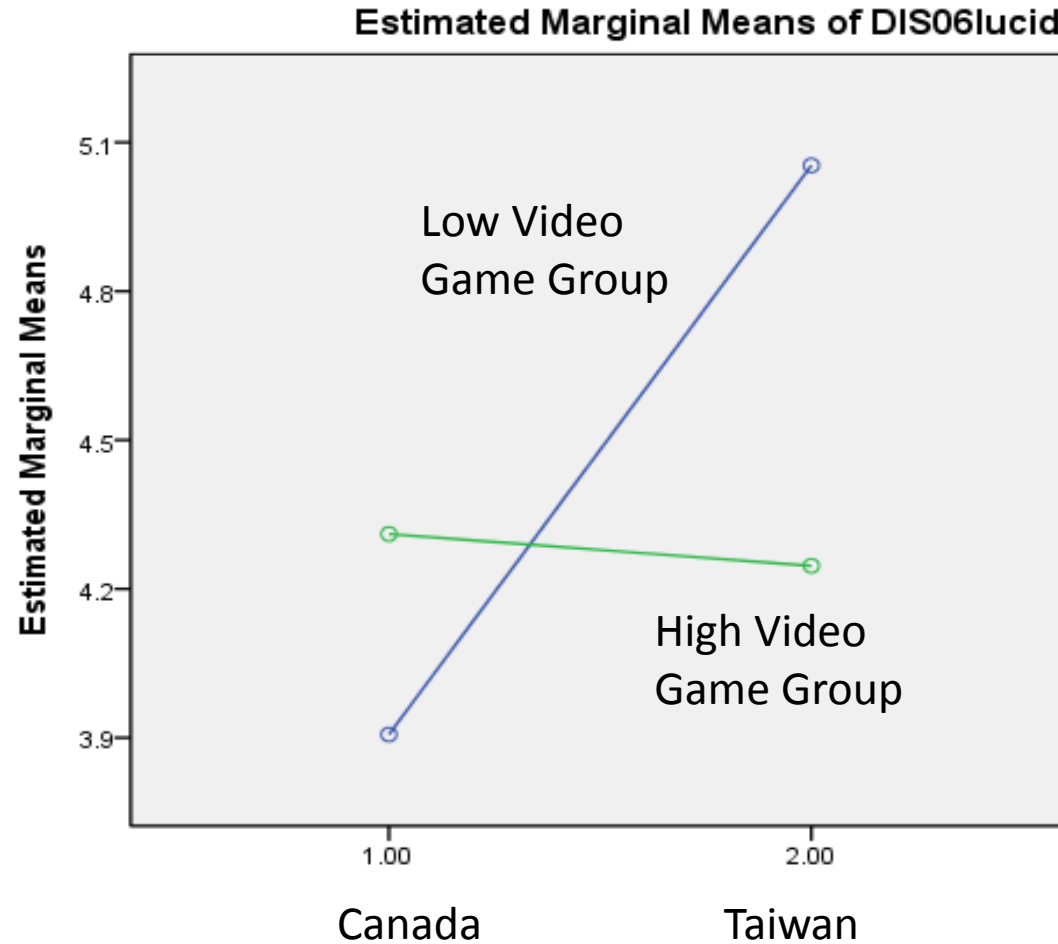
Dream Intensity Scale

- Dream recall item as covariate:
 - Item 1. Although some people may forget the details of their dreams after waking from sleep, they still retain a notion that they have dreamed. How often have you dreamed over the past few years on average, irrespective of whether you remember the actual content of your dreams?
- Focused on four items as of interest from previous research (summarized in Gackenbach, 2012)
 - Nightmares: item 3. How often do you experience nightmares?
 - Nightmares awaken: item 4. How often do you experience nightmares that are so frightening that they wake you up and after awakening are still vivid?
 - Lucid: item 6. Have you ever become aware or known during a dream that "you are dreaming?"
 - Control: item 7. Have you ever been able to control the contents of your dreams and make things happen in them at will?

Country x SMU Groups X Video Game Groups

- ANCOVA's with dream recall as covariate
- On four items from Dream Intensity Scale
- Main Effects
 - Country: Taiwan > Canada
 - Nightmares (norm= 0.93 ± 2.4 /mo (Hong-Kong); Taiwan = 0.79/mo; Canada=0.39/mo)
 - Lucidity (norm= 1.96 ± 5.04 /mo (Hong-Kong); Taiwan = 0.39/mo.; Canada=0.35/mo)
 - Social Media Groups
 - High > Low on nightmares, nightmares that lead to awakening and lucidity
 - Video Game Groups – no significant main effects
- Interactions
 - 3 way for control
 - 2 way for lucid
 - Non-significance for either nightmare question

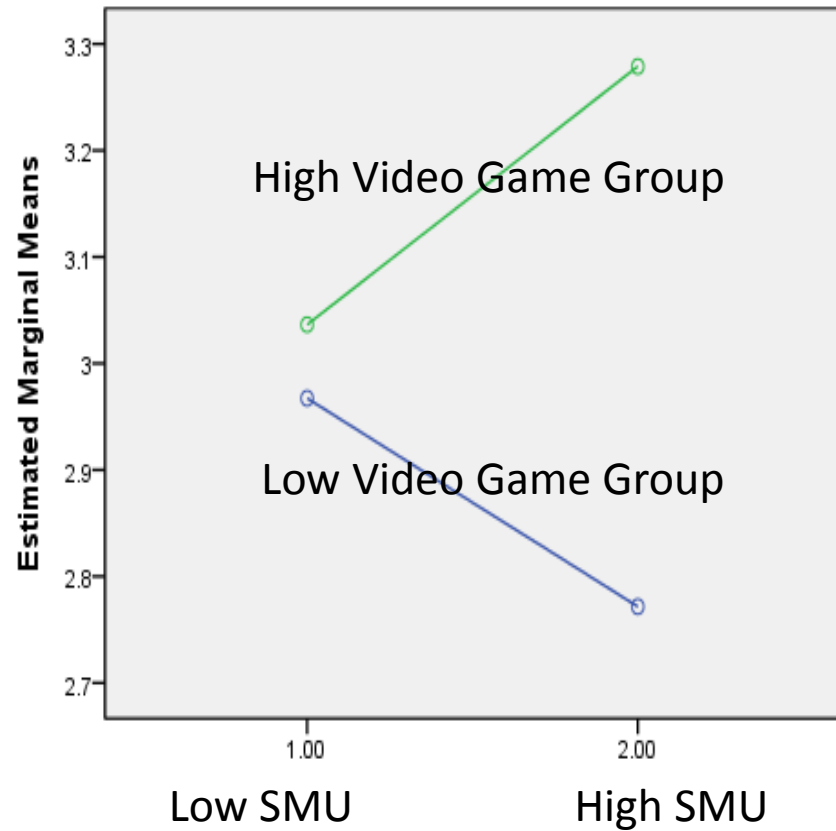
Dream Intensity Items Interactions: Lucidity



Covariates appearing in the model are evaluated at the following values: DIS01draware = 8.03

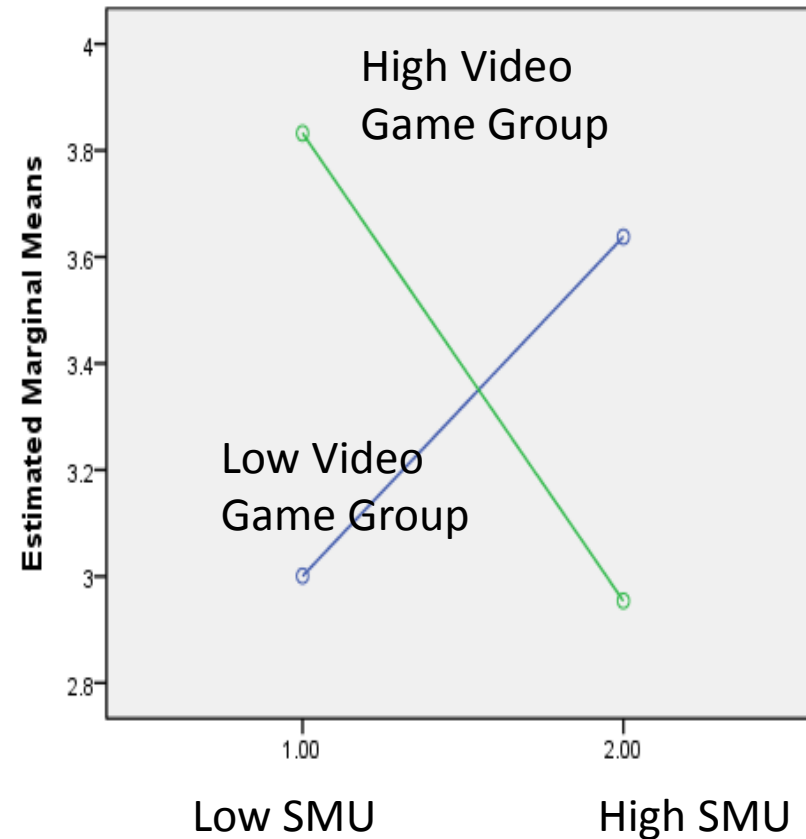
Dream Intensity Items Interactions: Control

Canada



Covariates appearing in the model are evaluated at the following values: DIS01draware = 8.03

Taiwan



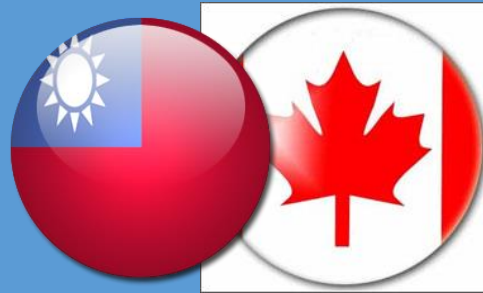
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Domains of Interest to Present Inquiry



Dreams

- Dreams and Culture



Culture

- Culture and Media



Media

- Dreams and Media

Dreams and Culture and Media

Conclusions

- Correlational analysis thus can not say what is mediated what only that all three domains are associated
- From an evolutionary perspective
 - Oldest is dreams which are biologically driven for the entire species
 - Then culture, Independent vs. Collectivist, also may have evolutionary roots (Chang et al, 2010 or Blackmore's, 2012, meme)
 - Finally, media use (Blackmore's, 2012, teme)
 - Dominating North American/Individualistic culture (penetration 80-90%)
 - Asia its not as deep penetration (40% in mainland China) but most of users worldwide, which are collectivist culture.

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