The Impact of Foreign Language Use on Health-Related Decisions

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In memory of Albert Costa
1970-2018

Living in a (foreign) language

- Childhood reprimands
- “I love you”
- Foul language

Our native language molds decision and choice and judgment by connecting us to
1. our emotions
2. our memories and experiences
3. our sense of self and identity

"If you talk to a man in a language he understands, that goes to his head. If you talk to him in his language, that goes to his heart."
Plan of presentation
1. What have we discovered about the impact of language?
2. Application to mental health decisions
3. Application to vaccination decisions

How do we do the research?
Random assignment
Consistent language environment
Language qualifications

Moral Dilemmas
Sayuri Hayakawa
Albert Costa

Is it acceptable to hurt a few in order to spare many?
Moral Dilemmas

A moral stress test

Would you kill one to save five?

Why are people more utilitarian in a foreign language?

More reflective, more calculative
Care more about maximizing the greater good

Less emotional
Less averse to violating norms

The impact of language - The range of phenomena

Moral dilemmas
Cheating
Perception of risks and benefits
Risk taking
Adherence to norms
Imagery
False memory

Hayakawa, Tannenbaum, Costa, Corey, & Keysar, B. (2017)
Application to health decisions

Mental health decisions
Foreign language as a release from stigma

Vaccination decisions
Native language as a inducing norms

Application to mental health decisions
Foreign language as a release from stigma

Cultural norms
Mental health problems and therapy as normative

Cultural norms
Mental health problems and therapy as stigmatized
Cultural norms

Native tongue and cultural norms

N=206 Chinese in the US

Mandarin Native

English Foreign

Consider this person:

• feeling really sad for the past 2 weeks
• wakes up with a heavy feeling
• no longer enjoys things
• Can’t get through the day
• smallest tasks are difficult
• difficult concentrating
• has no energy
• tired but cannot sleep
• feels worthless

Do you feel that he should go to a therapist?

0= definitely not..............100=definitely yes

Native tongue and cultural identity

Should he go to therapy?

Mental health problems and therapy as stigmatized

How depressed is he?

No language difference
Native tongue and cultural identity

Progressive severity

<table>
<thead>
<tr>
<th>Severity</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Socializes and works</td>
</tr>
<tr>
<td>Moderate</td>
<td>Does not socialize</td>
</tr>
<tr>
<td>High</td>
<td>Fails at work</td>
</tr>
<tr>
<td>Extreme</td>
<td>Doesn’t get out of bed</td>
</tr>
</tbody>
</table>

Do you feel that he should go to a therapist?

Native tongue and cultural identity

Language effect: $F(1,197) = 8.219, p = 0.005$

Language x Severity: $F(3,591) = 5.694, p < 0.000$

Native tongue and cultural identity

Study 2
N = 200 native Mandarin
In Beijing

Failure to replicate
Why?

Native tongue and cultural identity

Study 3
N = 405 native Mandarin
In Beijing

Evaluate replication:
- Because of added question?
- Because of population?
Native tongue and cultural identity

**Language effect:** F=6.87; p=0.009

**Language x Severity:** F=1.32; p=0.268

**Explanation**
- Culture-associated stigma

**Study 4**
- Remove culture-associated stigma
- N=398 Native Hebrew, Foreign English

**Conclusion**
The use of a native tongue connects the self to cultural norms thereby exacerbating the impact of stigma.
Application to health decisions
Vaccination decisions
Native language as inducing norm

Somali community, Minnesota, 2017
Why look at language use?
Norms and trust

Application to health decisions
Vaccine hesitancy

Language Influences
Vaccination Uptake
Human papillomavirus-HPV
Most common sexually transmitted infection
Could cause cancer in the cervix, vagina, vulva, penis
HPV Vaccine:

If there were a vaccine against cancer, wouldn’t you get it for your kids?

HPV vaccine is currently provided Talk to the Doctor Which vaccination and how to make sure you avoid getting HPV vaccine for males and females.

The vaccine against HPV is a safe and proven cancer prevention method, so it is one that could have many benefits for public health.

Loren Saulsberry, UChicago
Phase I: Do you intend to get the HPV vaccine?

What predicts intention to make an appointment?

Gender- Yes
Language - No

Phase II: Did you get the HPV vaccine?

Three months later

Native Language Increases Uptake for Females

Language × Gender: Wald χ²(1) = 6.07, p = .014, β = -2.60, SE = 1.06, OR = 0.07

Reported Vaccination Uptake by Gender and Language

- Female: Native language 75.0%, Non-native 50.0%
- Male: Native language 27.3%, Non-native 7.7%
• How much do your parents think that you should be vaccinated against human papillomavirus?
• To what extent does your best friend think that you should be vaccinated against human papillomavirus?
• To what extent does your doctor think that you should be vaccinated against human papillomavirus?

Planning: COVID-19 vaccine hesitancy

Implications

Living in our native tongue connects us to our imagery, emotions, identity and cultural norms

This could have a systematic impact on our health behavior