

# BELIEFS AND ATTITUDES ON THE USAGE OF **TRADITIONAL CHINESE MEDICINE (TCM)**



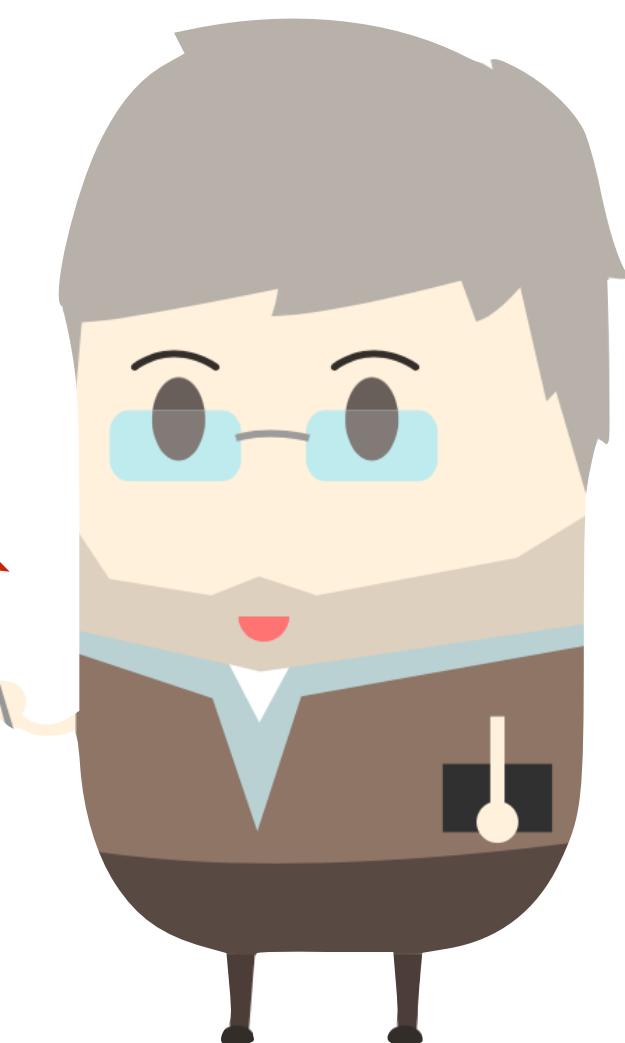
# **INTRODUCTION**

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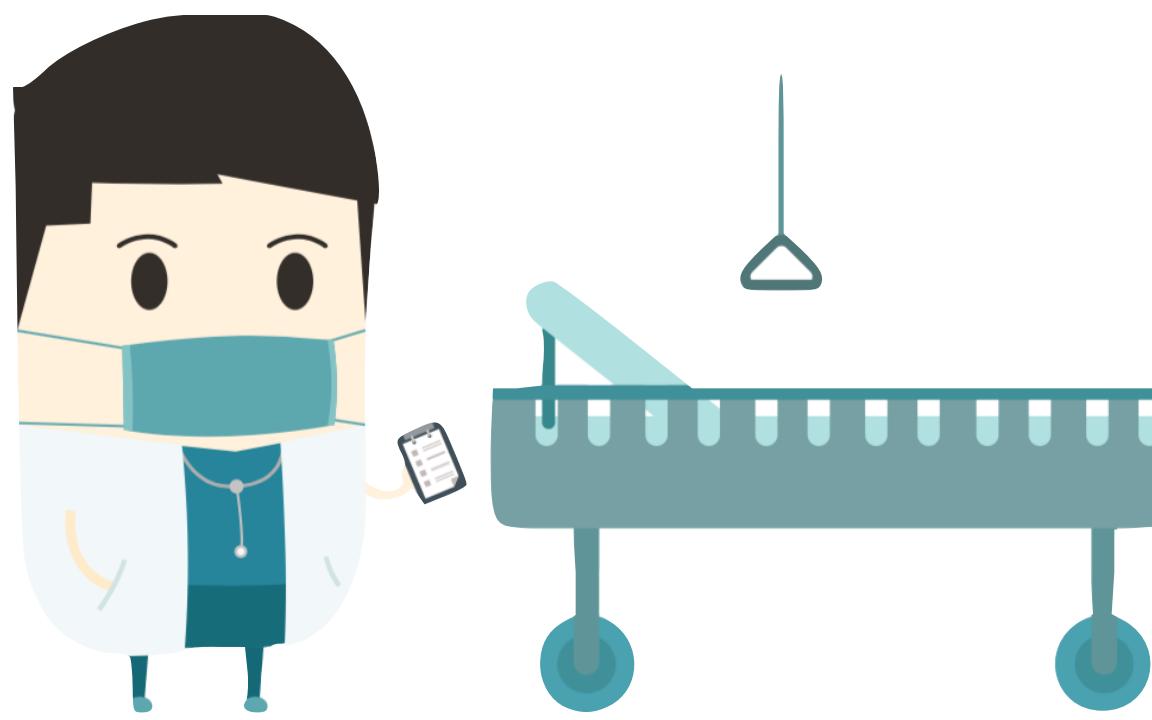


# WHAT IS TCM?

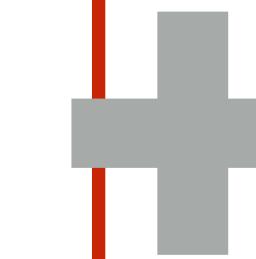
- One of the world's oldest forms of medicine
- Increasingly recognised as a viable form of alternative medicine
- Concerns the balance of the body (形，Xing) and mind (神，Shen)



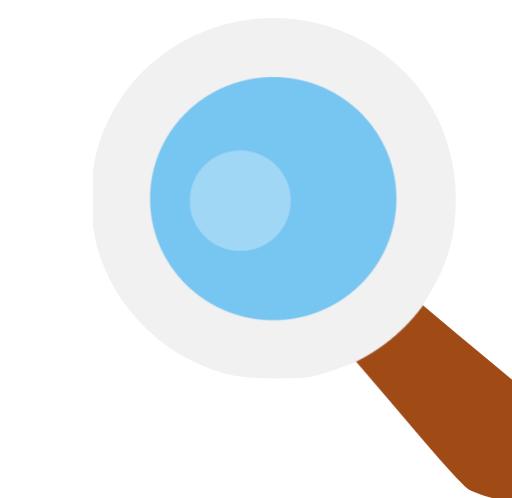
# RATIONALE



**Prevalence** of Western Medical Treatment;  
**conventional** mode of medical treatment.

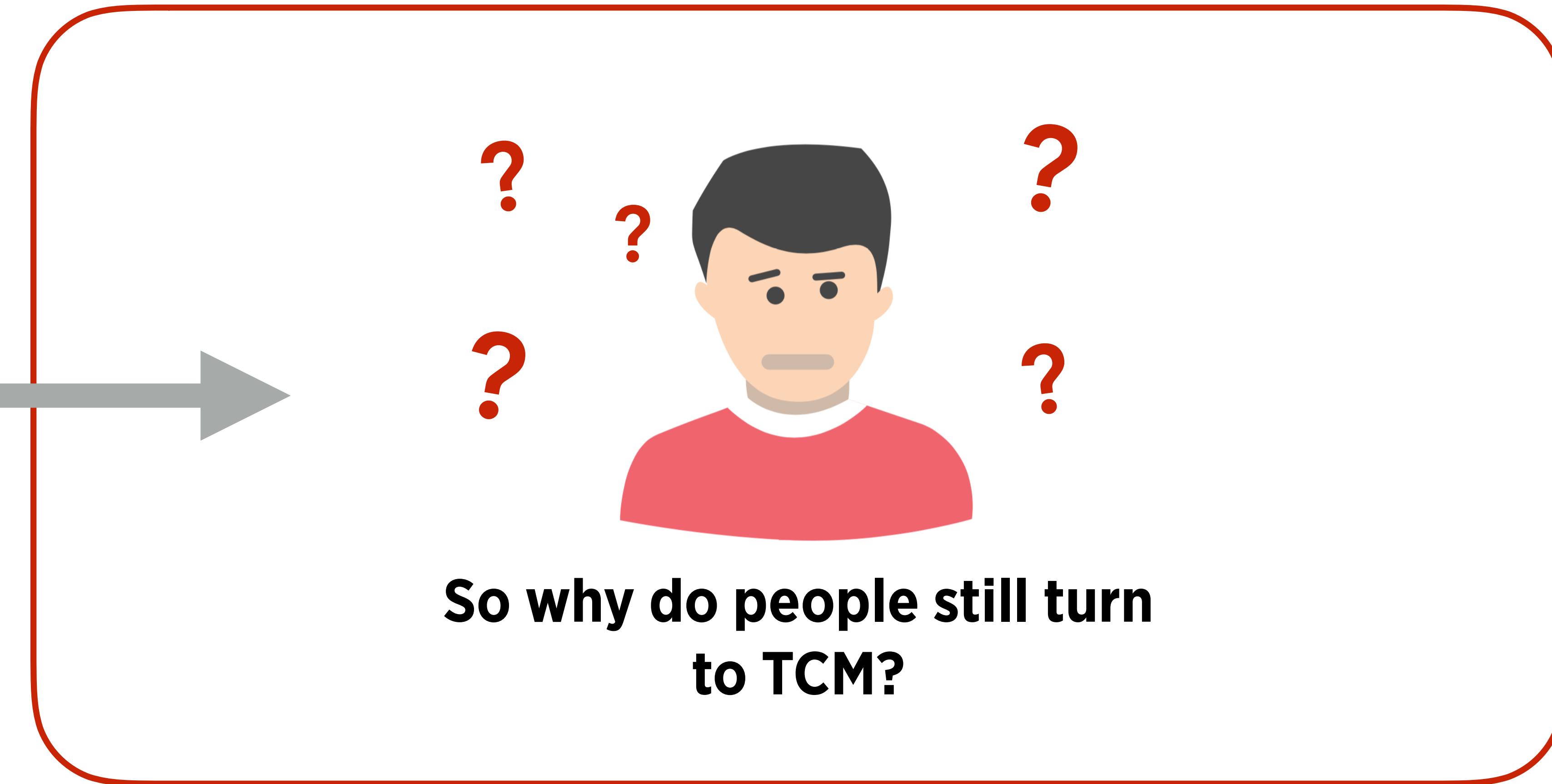


World Health Organisation Director-General Margaret Chan:



**More evidence-based science is needed** to back up TCM's efficacy

# RATIONALE



# RATIONALE



**Singapore shells out \$3m to boost research on traditional Chinese medicine**

## TCM to alleviate strain on healthcare services

⌚ PUBLISHED OCT 24, 2016, 5:00 AM SGT



Adrian Lim

singapore

TCM ‘can play greater role’ in preventing disease as population ages



ST VIDEOS



# LITERATURE REVIEW



In 2001, in a survey involving 500 respondents, **67% of Singaporeans admitted to having received TCM.** Since 2004, hospitals in Singapore have been offering TCM services such as acupuncture and herbs, to **complement** conventional medical treatment.



Loh, C.H. (2009). Use of traditional Chinese medicine in Singapore children: perceptions of parents and paediatricians.

# LITERATURE REVIEW



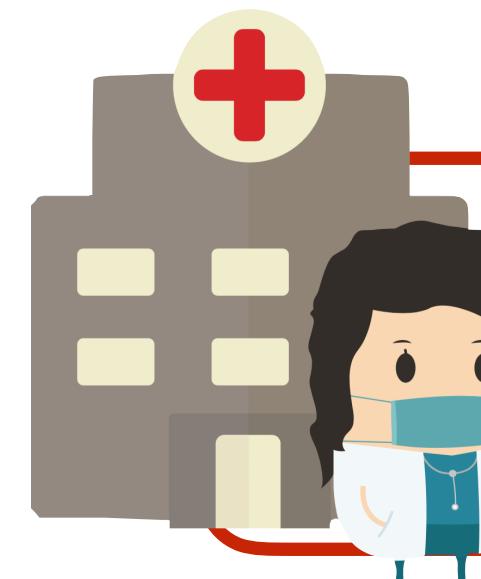
**Family tradition** was cited as an important reason (63%) for CAM use, while **dissatisfaction with western doctors** (8%) and **a lack of trust for western medicine** (9%) were only minor reasons.



Lim, Sadarangani, Chan, & Heng. (2005). Complementary and alternative medicine use in multiracial Singapore. *Complementary Therapies in Medicine*, 13(1), 16-24.

# HYPOTHESIS

**H1:**



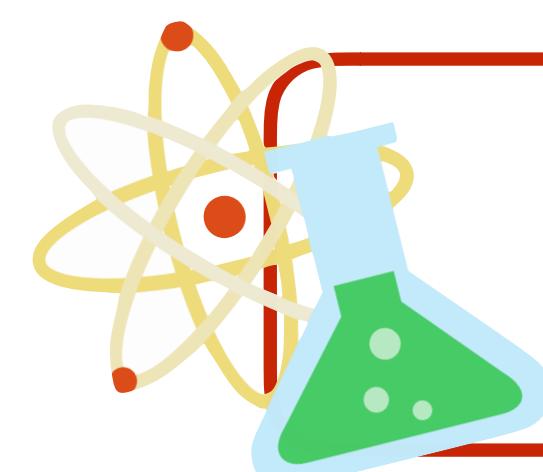
**Negative Experiences with Western Medicine** will influence the individual to use TCM

**H2:**



**Belief in Natural Methods** will influence the individual to use TCM

**H3:**



**Anti-Science Sentiments** will influence the individual to use TCM

# HYPOTHESIS

**H4:**



**Belief in a Holistic Lifestyle** will influence the individual to use TCM

**H5:**



**Belief in the Supernatural** will influence the individual to use TCM

**H6:**

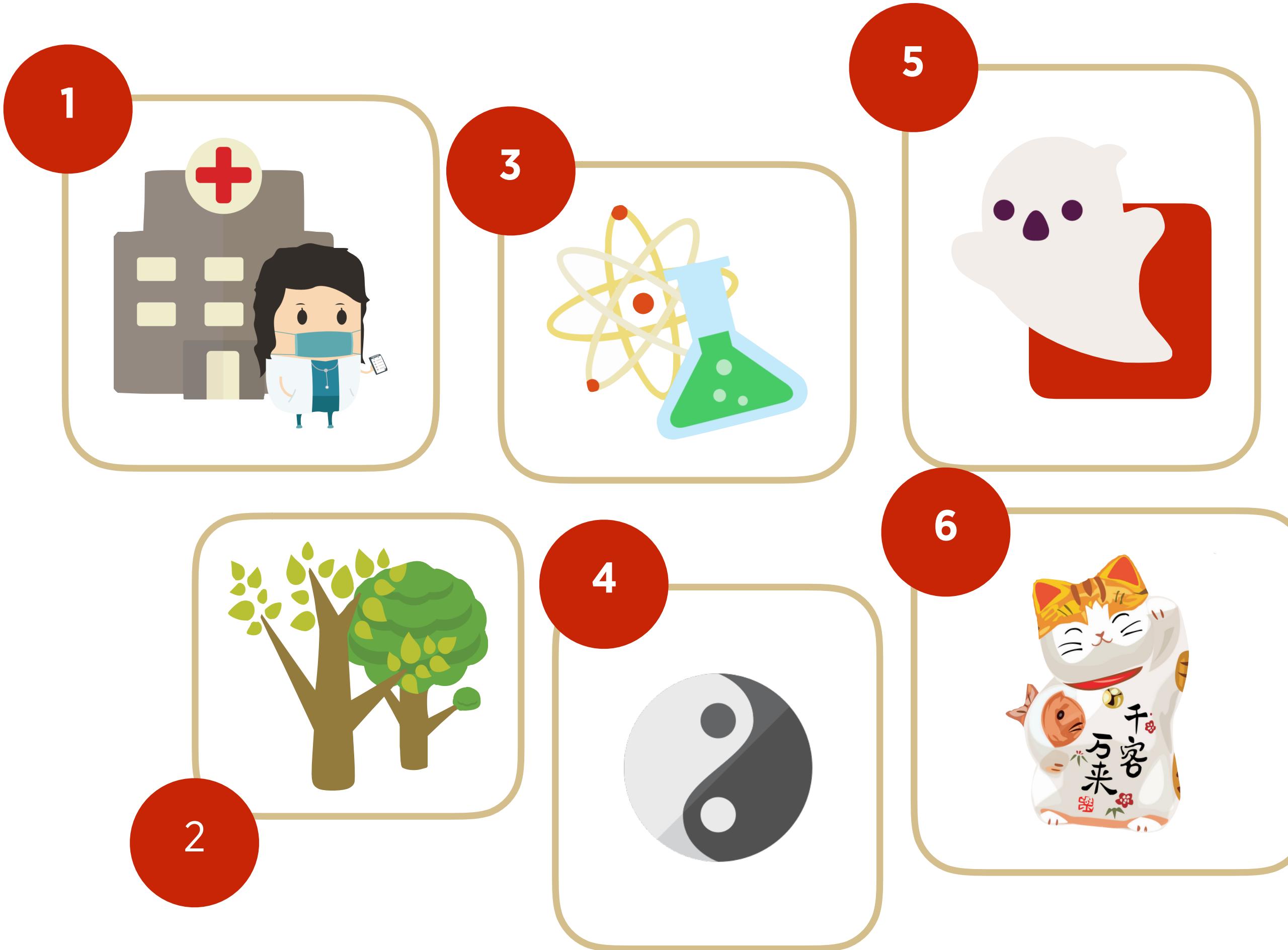


**Cultural Influences** will influence the individual to use TCM

# VARIABLE(S) DEPENDENT

USAGE OF  
TCM

# VARIABLE(S) INDEPENDENT



# VARIABLE(S) INDEPENDENT



Unsatisfied with the  
medical **outcomes**

Unpleasant **experiences/**  
**encounters**

# VARIABLE(S) INDEPENDENT



1

## Negative Experiences with Western Medicine

Western Medicine is not effective in treating illnesses.

The quality of service I obtained from Western medical treatment is bad.

# VARIABLE(S) INDEPENDENT



**Greater confidence** in the treatment from methods perceived as “natural”.

# VARIABLE(S) INDEPENDENT

2



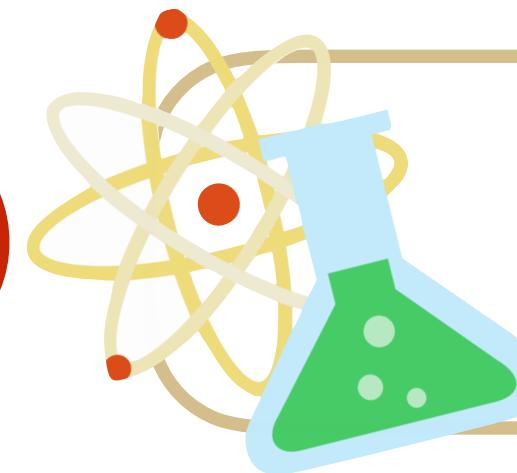
## Belief in Natural Methods

Natural treatment methods have less side effects than chemical methods.

Artificial flavourings and preservatives are bad for you.

# VARIABLE(S) INDEPENDENT

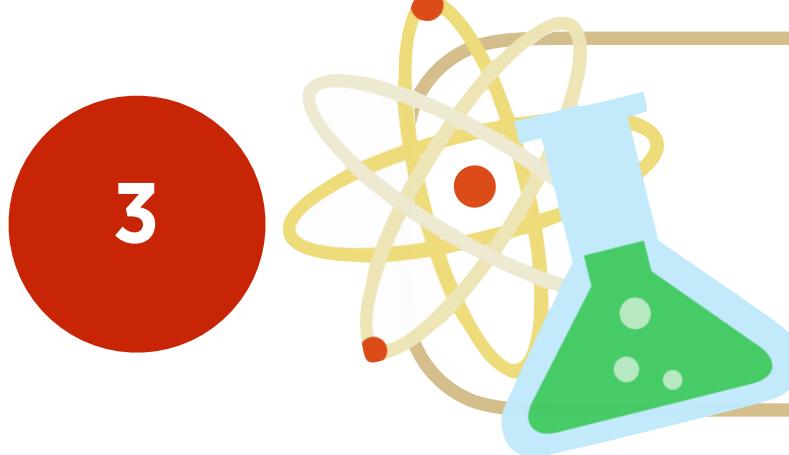
3



## Anti-Science Sentiments

**Rejection of science and the scientific method**  
including the rejection of conventional medical  
treatments.

# VARIABLE(S) INDEPENDENT



## Anti-Science Sentiments

Advancement in Western medical technology has **not** improved the lives of people.

Anti-biotics do not work.

# VARIABLE(S) INDEPENDENT

4



## Belief in a Holistic Lifestyle

Revolves around the perception that health is an **integration** between the **mind, body, and spirit**.

# VARIABLE(S) INDEPENDENT

4



## Belief in a Holistic Lifestyle

Your body has the natural ability to recover from illnesses if there is a balance in your life.

It is important to balance Yin and Yang energy in one's body.

# VARIABLE(S) INDEPENDENT



## Belief in the Supernatural

Belief in the **paranormal** -  
level of **superstition**.

# VARIABLE(S) INDEPENDENT



## Belief in the Supernatural

Supernatural forces can affect the individual's health.

Good deeds and good karma can lead to better health.

# VARIABLE(S) INDEPENDENT

6



## Cultural Influences

Pre-existing or current **tradition and cultural practice**

# VARIABLE(S) INDEPENDENT

6



## Cultural Influences

It is important for us to keep to traditional practices.

It is important to me to maintain Chinese culture in Singapore.

# METHODOLOGY

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# QUANTITATIVE SURVEY



Distributed to **Chinese participants**, who are **both** non-believers and believers of TCM, and are **above the age of 18**.

# QUANTITATIVE SURVEY



**Online Qualtrics Survey**

Snowball sampling



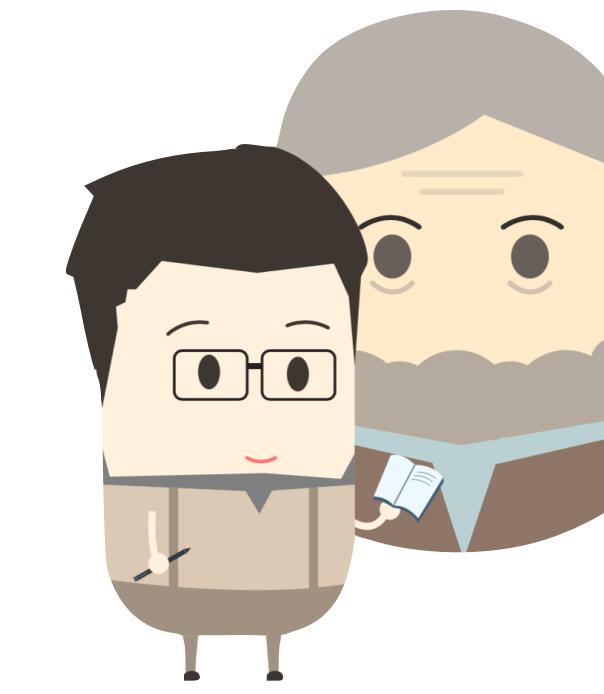
Went to **Singapore Chung Hwa Medical Institution**

Purposive sampling

# QUALITATIVE SURVEY



**Sample Size = 234**



**67% were younger than 30  
33% were older than 30**

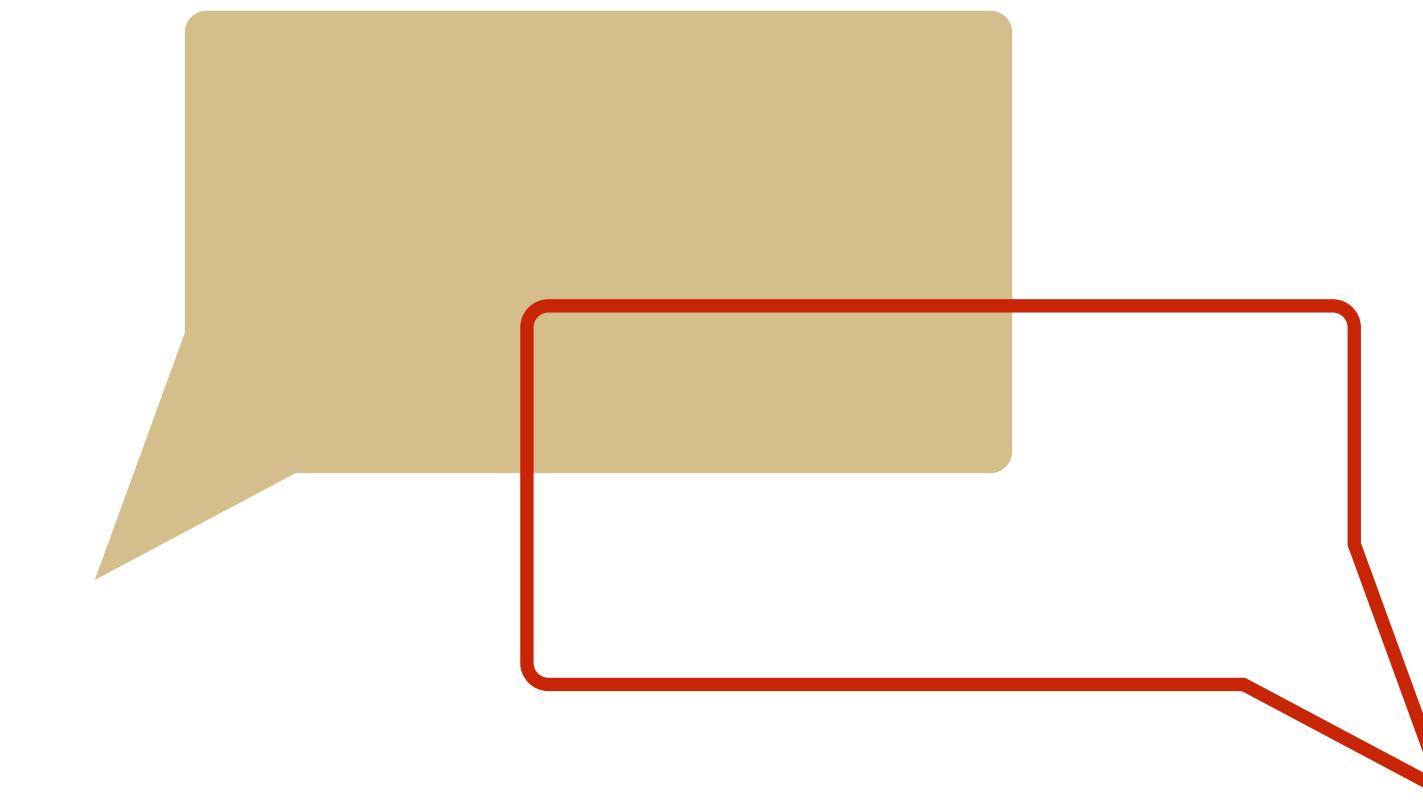
# QUANTITATIVE SURVEY



# QUALITATIVE SURVEY



**Sample Size = 20**



- Guided open-ended interview
- Broad questions with prompts

# RESULTS

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# RESULTS

## CULTURAL INFLUENCES



<b>p-Value</b>	0.000379	Significant
<b>Pearson's correlation</b>	0.230	Medium effect

# RESULTS

## CULTURAL INFLUENCES

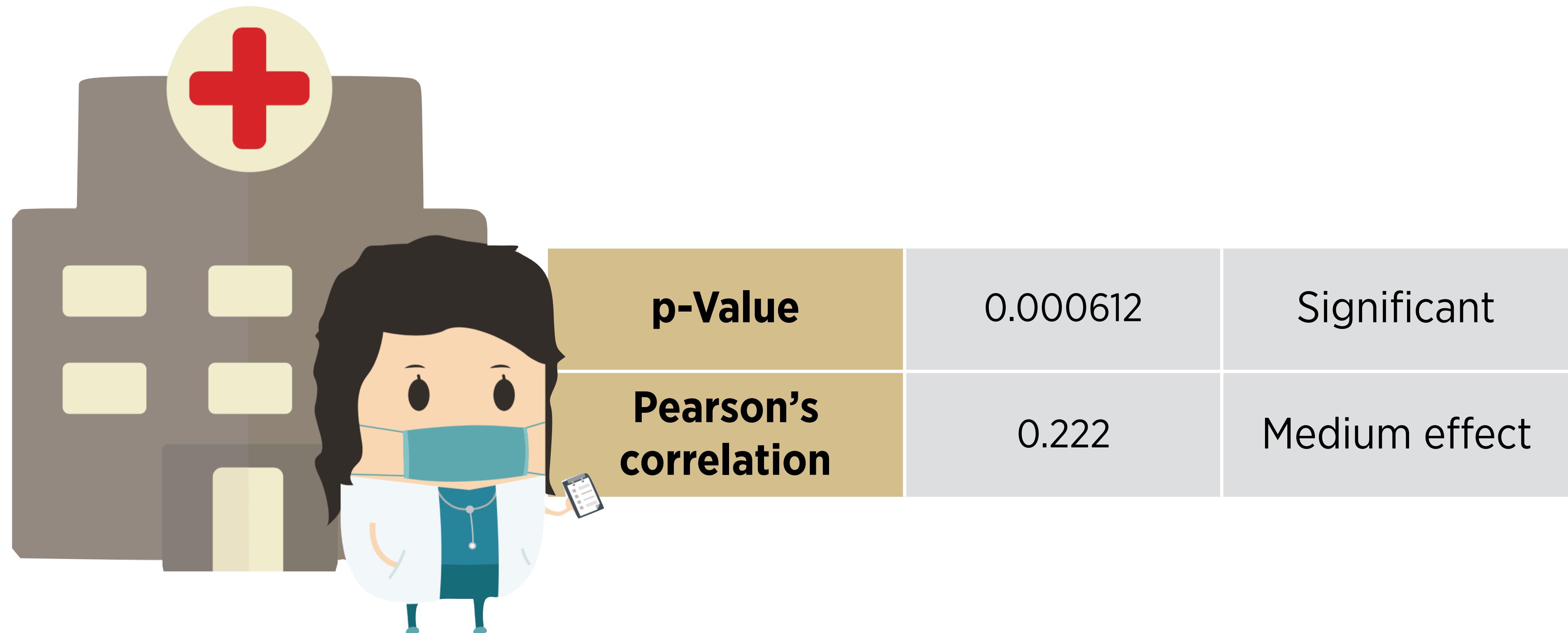


One should **act like a  
“Chinese” person.**



## RESULTS

# NEGATIVE EXPERIENCE WITH WESTERN MEDICINE





I had a cough for 6 months and  
**conventional medicine did not help.**

Thus, I started to **try alternatives and found Chinese Medicine.** I tried the one that is very reputable.



Recently, after the **ineffectiveness of the conventional medicine**, I visited a TCM shop and it cured my headache. My friend's leg has an infection and the conventional medicine was not able to cure it, but **after visiting the TCM practitioner, it healed.**



## RESULTS

# BELIEF IN THE SUPERNATURAL



<b>p-Value</b>	5.46E-06	Significant
<b>Pearson's correlation</b>	0.292	Medium effect

## RESULTS

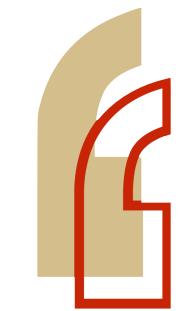
# BELIEF IN NATURAL METHODS



<b>p-Value</b>	1.97E-07	Significant
<b>Pearson's correlation</b>	0.332	Strong effect



I use Chinese supplements more because it is **more natural.**

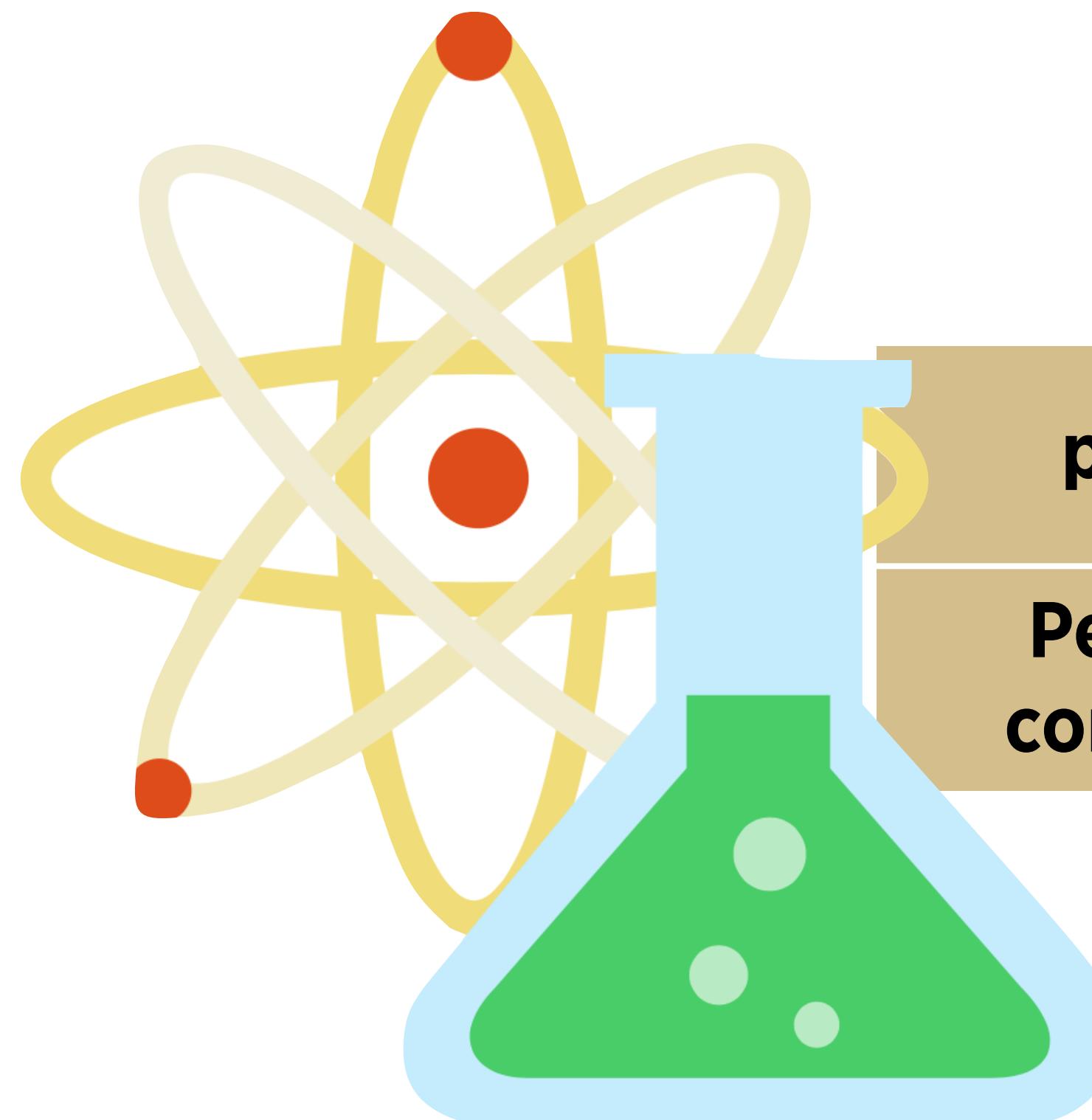


The medicine that they give; they use **more natural** forms of treatment and you feel like it will be **less harmful to your body.**



## RESULTS

# ANTI-SCIENCE SENTIMENTS

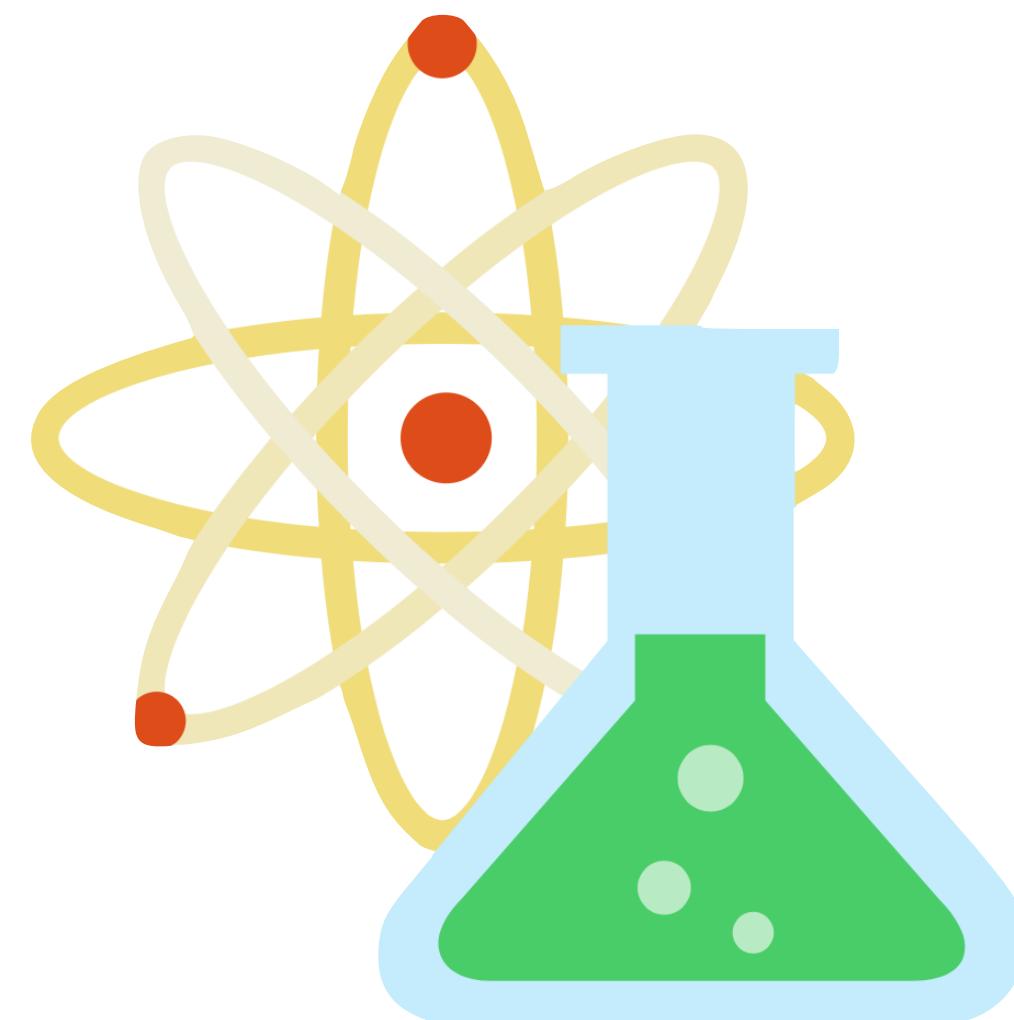


<b>p-Value</b>	1.2E-05	Significant
<b>Pearson's correlation</b>	0.282	Medium effect

G

...uses chemicals and stuff, and sometimes Western medicine gives antibiotics for everything - which is **quite stupid** when you sometimes don't really need it, might **end up harmful to your body**

J



G

... It is **not good to sleep near computers or electronic devices.** All the radio waves from your phone are bad for you. **Air conditioning is also very bad for your health;** you are breathing in recycled air. Did you know it is bad to walk around barefoot at home? It is also due to the positive and negative ions around us.

J

## RESULTS

# BELIEF IN A HOLISTIC LIFESTYLE



<b>p-Value</b>	2.23E-13	Significant
<b>Pearson's correlation</b>	0.455	Very strong effect



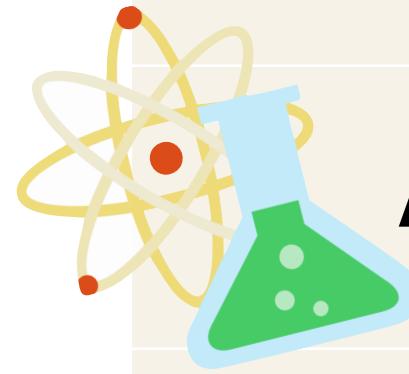
If you can harmonise the mind, body and spirit  
then you will have **vitality in your body**  
and you will **also be healthier.**



I believe in the concept of mind body and spirit.  
We need to take **a holistic approach to health.** What we eat, how we exercise,  
sufficient sleep, and good mental state are the  
**keys to leading a healthy lifestyle.**

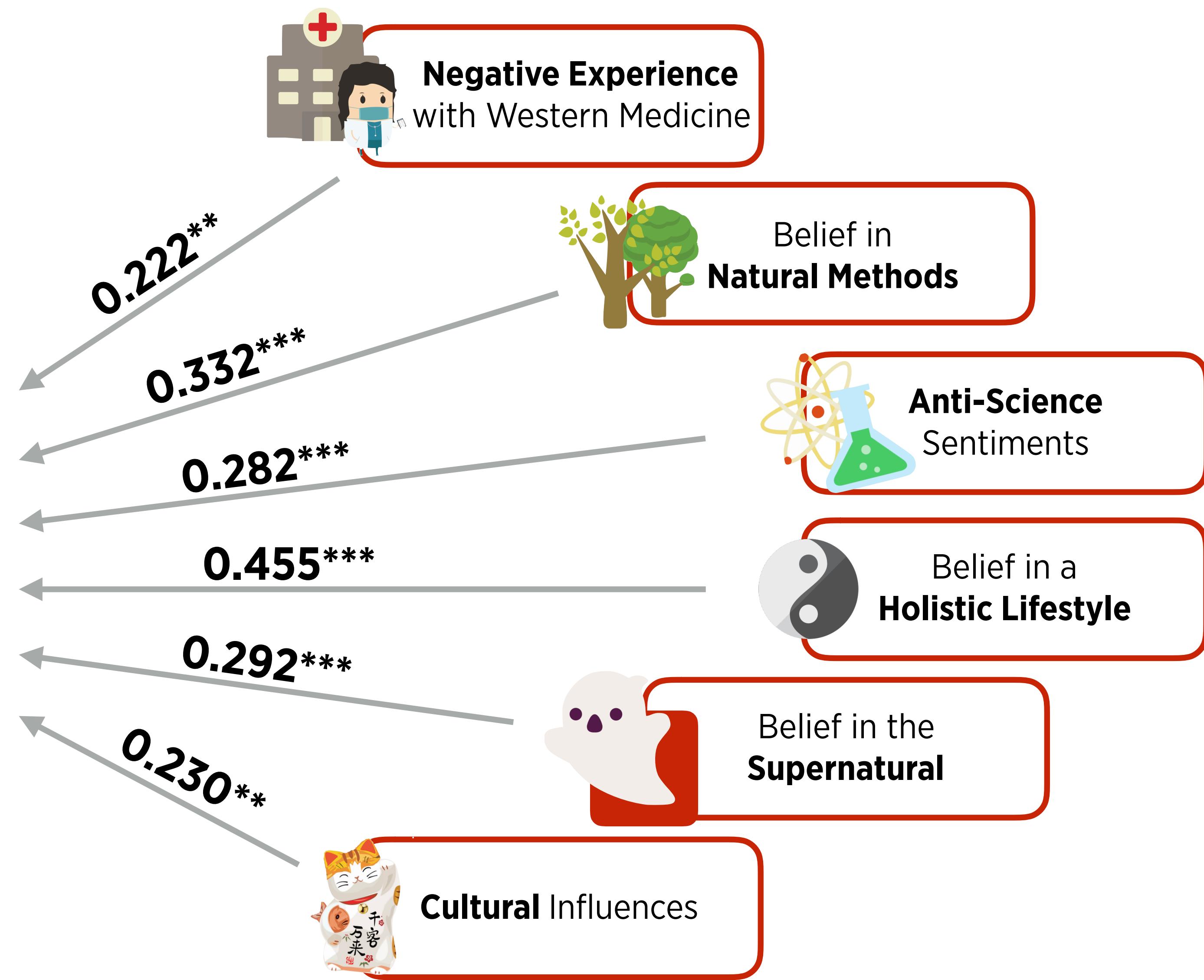


# SUMMARY

	p-Value	Correlation Coefficient
 <b>Cultural Influences</b>	0.00379	0.230
 <b>Negative Experience with Western Medicine</b>	0.00612	0.222
 <b>Belief in the Supernatural</b>	5.46E-06	0.292
 <b>Belief in Natural Methods</b>	1.97E-07	0.332
 <b>Anti-Science Sentiments</b>	1.2E-05	0.282
 <b>Belief in a Holistic Lifestyle</b>	2.23E-13	0.455

# CORRELATION DIAGRAM

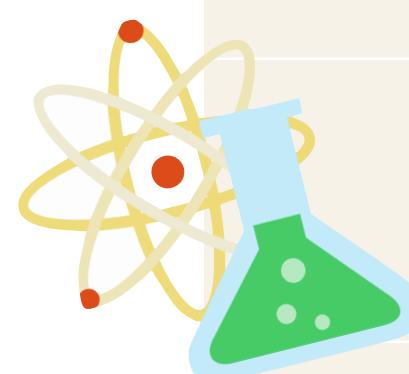
**USAGE OF TCM**



# HIERARCHICAL MULTIPLE REGRESSION

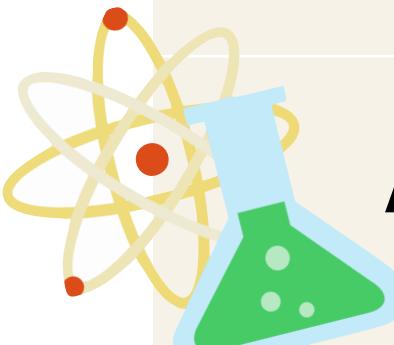
Model	Variables	R <sup>2</sup>
Model 1 (2 Variables)		0.0734
Model 2 (3 Variables)		0.100
Model 3 (4 Variables)		0.117
Model 4 (5 Variables)		0.141
Model 5 (6 Variables)		0.213

# MODEL 5

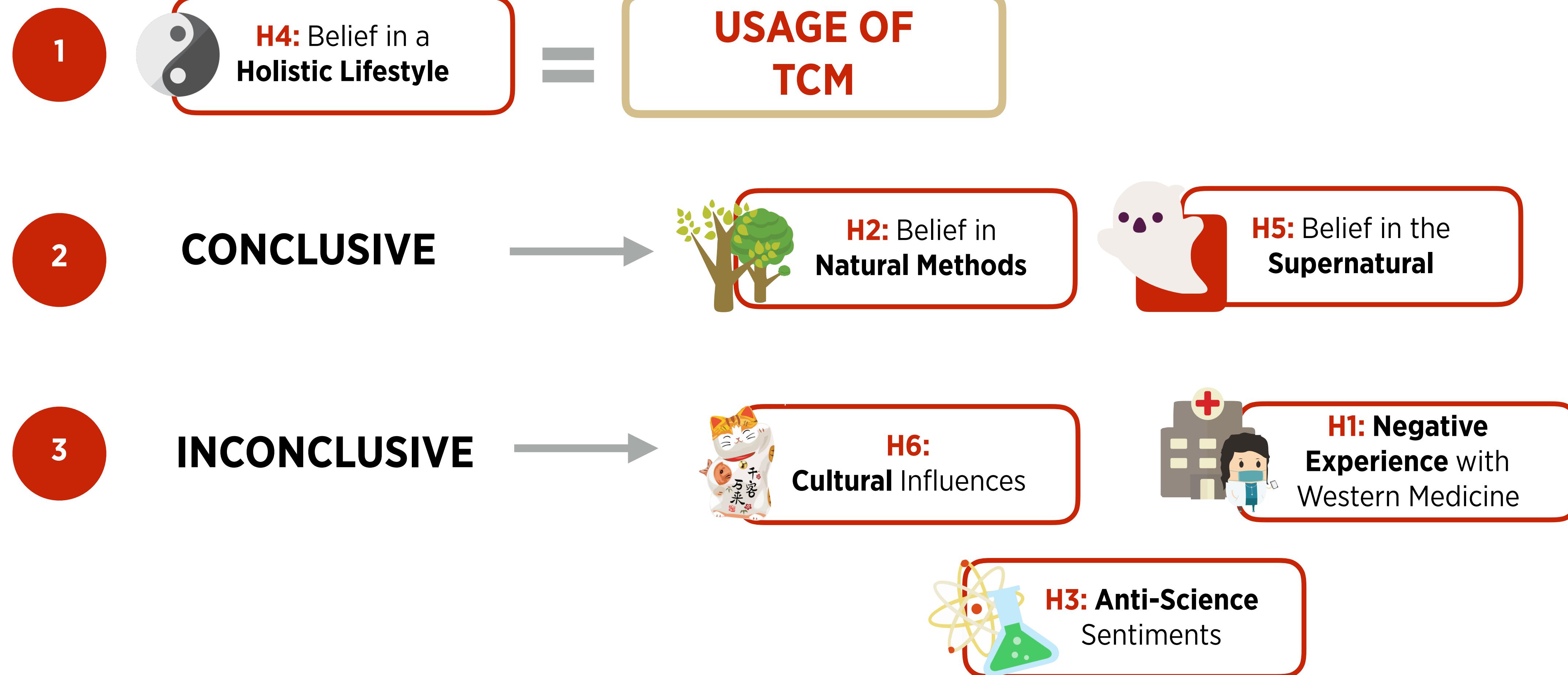
	p-Value	Correlation Coefficient
 <b>Negative Experience with Western Medicine</b>	0.551	0.0665
 <b>Belief in Natural Methods</b>	0.558	0.0737
 <b>Anti-Science Sentiments</b>	0.265	0.177
 <b>Belief in the Supernatural</b>	0.185	0.155
 <b>Cultural Influences</b>	0.475	-0.0772
 <b>Belief in a Holistic Lifestyle</b>	5.05E-06***	0.557

# BUT . . .

# MODEL 4

	p-Value	Correlation Coefficient
 <b>Negative Experience with Western Medicine</b>	0.426	0.0926
 <b>Belief in Natural Methods</b>	<b>0.0063**</b>	0.325
 <b>Anti-Science Sentiments</b>	0.263	0.185
 <b>Belief in the Supernatural</b>	<b>0.0270*</b>	0.265
 <b>Cultural Influences</b>	0.738	0.0368

# DISCUSSION



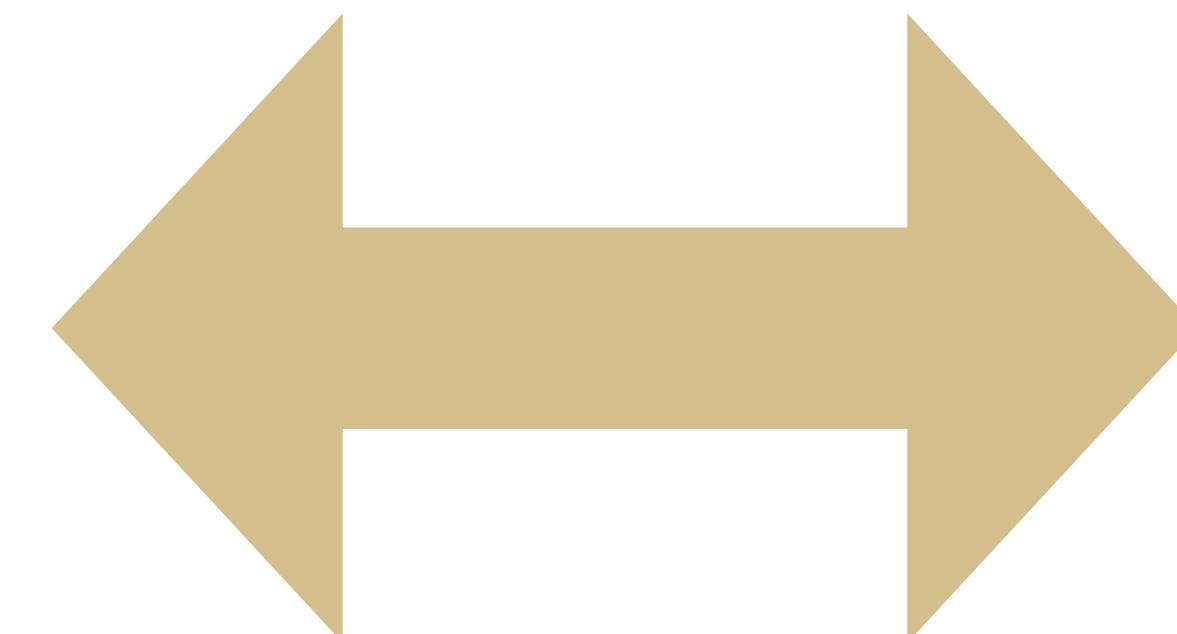
# LIMITATIONS

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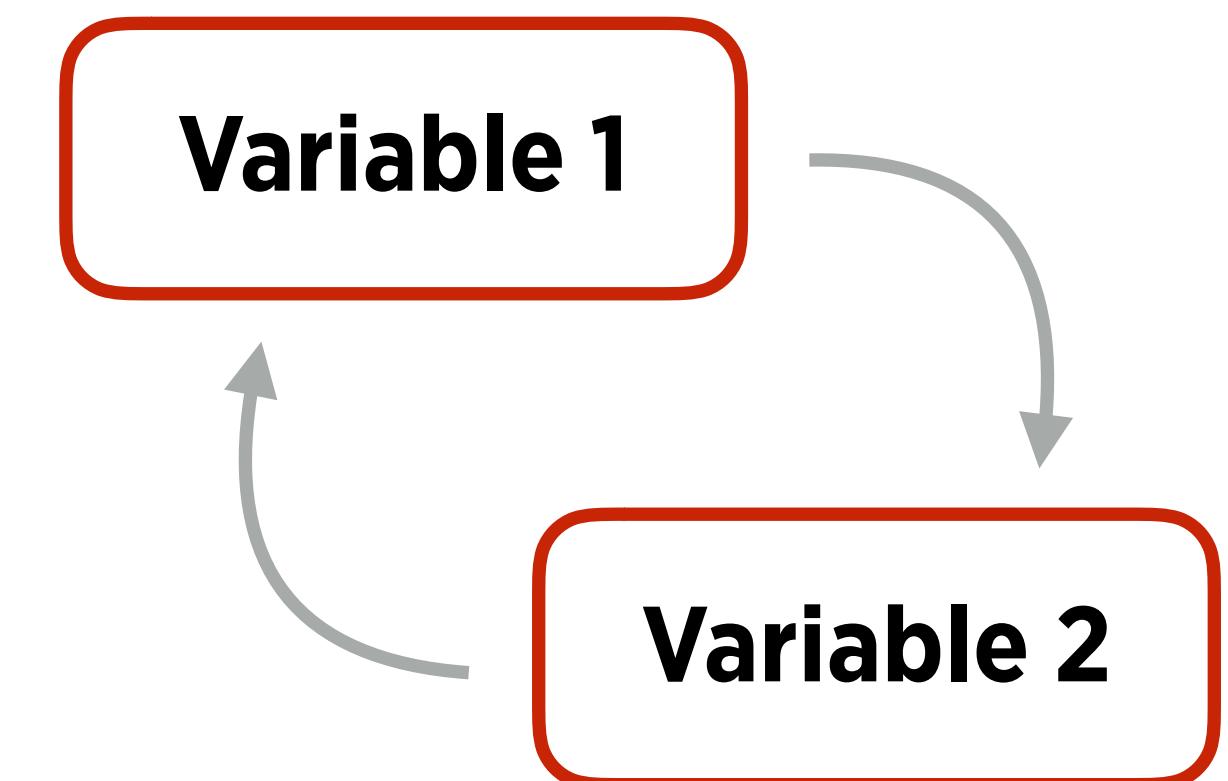
# LIMITATIONS



Resources for sampling



Breadth,  
not depth



Interaction  
between variables

# **CONCLUSION**

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# CONCLUSION

**CONCLUSIVE**



**H2: Belief in  
Natural Methods**

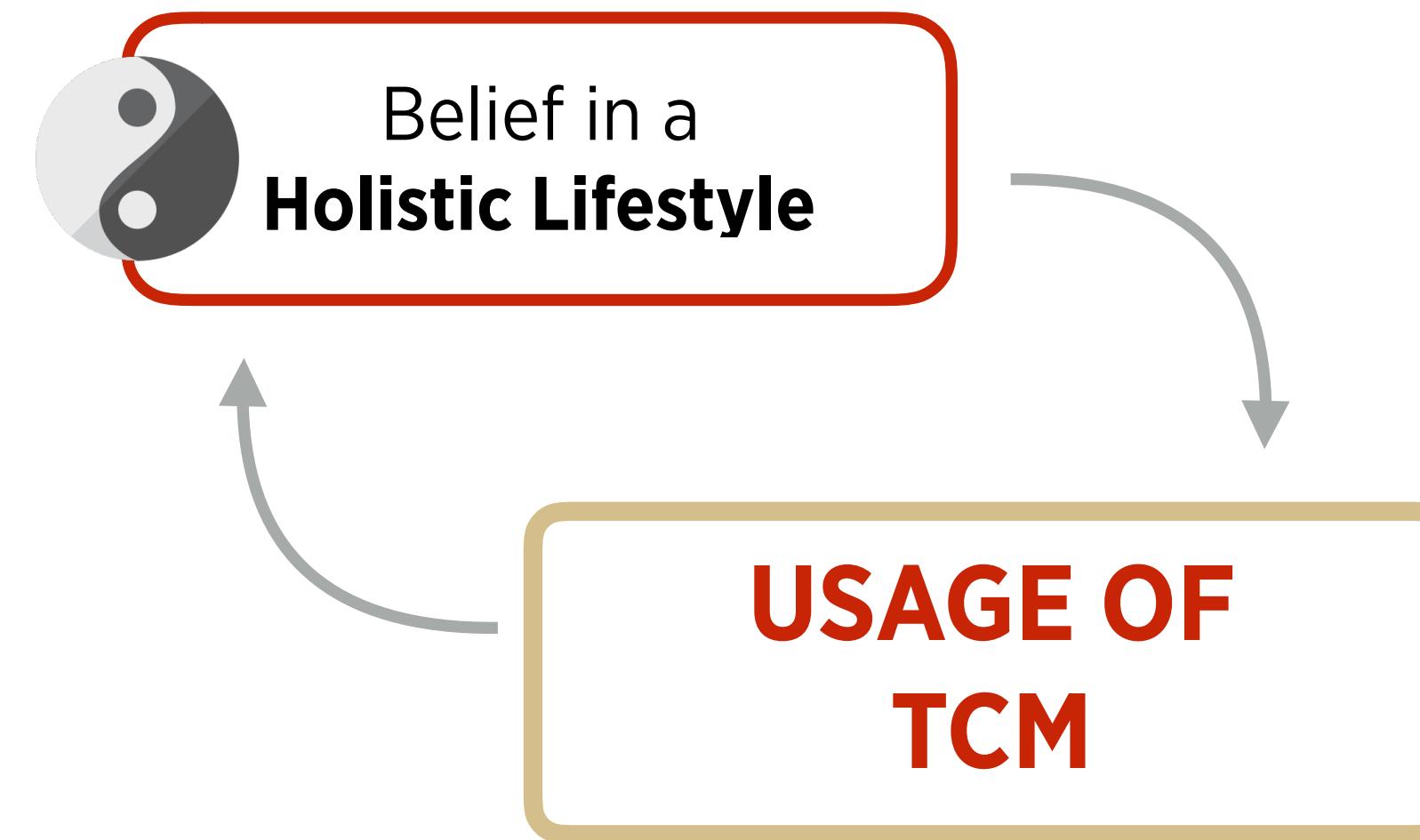


**H5: Belief in the  
Supernatural**

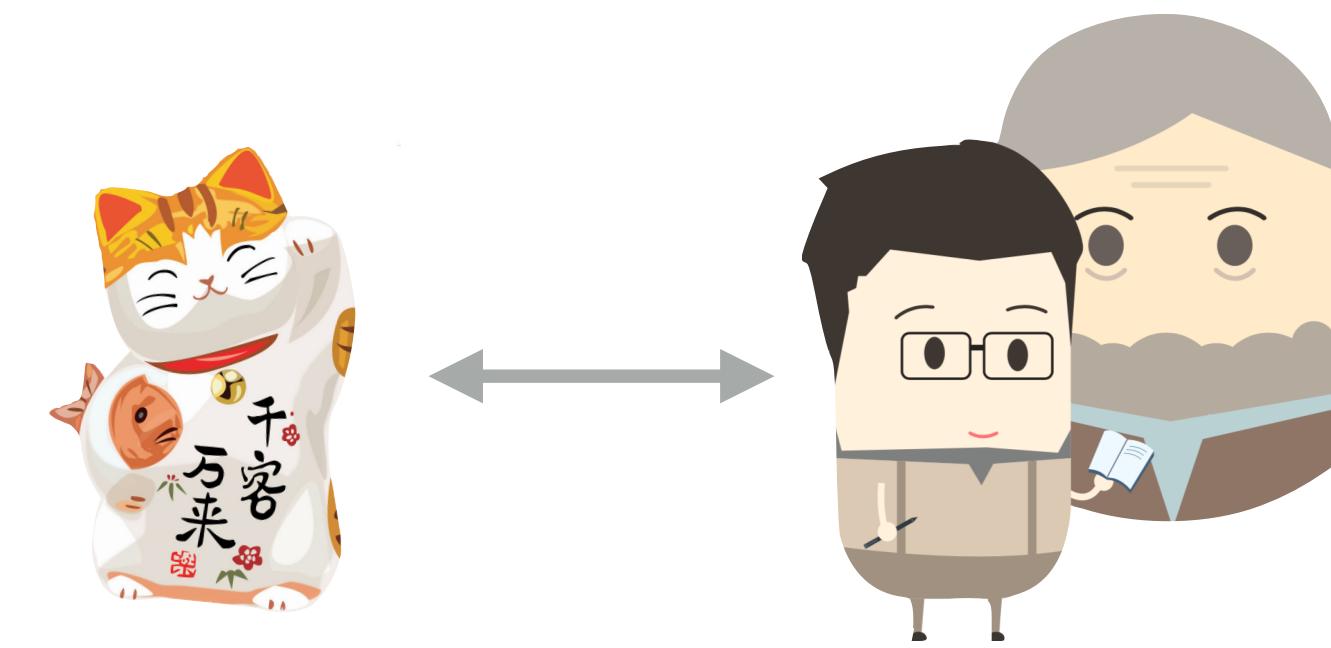
# FURTHER STUDIES

1

## Direction of Causality



2



**Cultural and social influence  
on individual beliefs** (Age  
and generational upbringing)

**END**

