# Does culture moderate relationships between brooding and symptoms of depression and PTSD?

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BIS15L

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## Does culture moderate the relationships between rumination and symptoms of posttraumatic stress disorder and depression?

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#### What is Rumination?



Rumination is defined as excessive, repetitive thinking about the same event.

Brooding rumination leads to negative moods and negative opinions of oneself. Brooding can also lead to substance abuse, depression, and anxiety. https://www.therecoveryvillage.com/mental-health/rumination/

#### **Symptoms of Rumination**



Excessive thinking about a painful topic or behavior



Excessive talking about a painful topic



Concentration problems



Loss of interest in usual activities



Loss of energy or motivation



Excess fatigue or excess sleeping

Posttraumatic stress disorder, or PTSD, is a mental health concern that some people develop after they see or experience a traumatic event.



7 to 8%

of the U.S. population will have PTSD at some point in their lives.



What it's like to have PTSD may be different for everyone. There are four types of PTSD symptoms.



Reliving or re-experiencing the event

- Nightmares
- Flashbacks
- Triggers



#### Hyperarousal or being on guard

- Being jittery or overly alert
- Difficulty sleeping or concentrating
- Feeling angry or irritable





- Avoiding crowds
- Avoiding certain smells, sights, or sounds
- Avoiding talking or thinking about the event



#### Negative changes in beliefs and feelings

- Losing interest in things you used to enjoy
- Feeling guilty or ashamed
- Unable to trust others

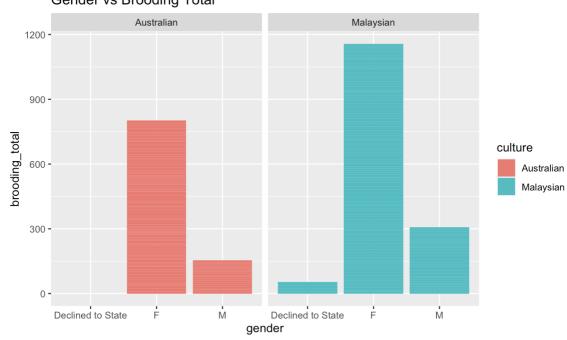
Data available online at https://osf.io/g6h8a/

2 data sets: depression and PTSD

Depression: tidy

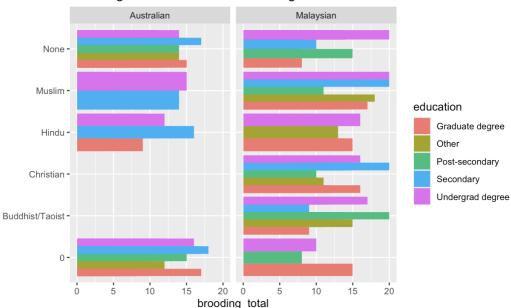
PTSD: needed some cleanup, nothing major

#### Gender vs Brooding Total



How Does Gender Relate to Between-Culture Brooding Scores?

#### Brooding Scores for Each of the Religions



How do Religion and Education Relate to Brooding scores Between Cultures?



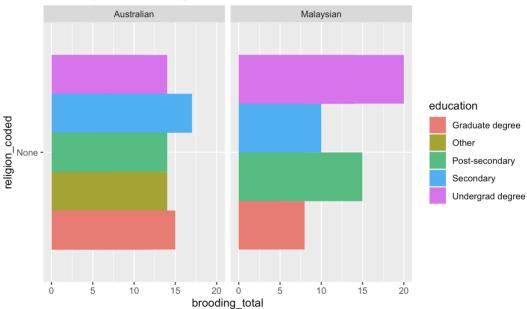




IS THERE A BETTER WAY TO GRAPH THIS?

How does each religion relate to Brooding scores and Education levels?

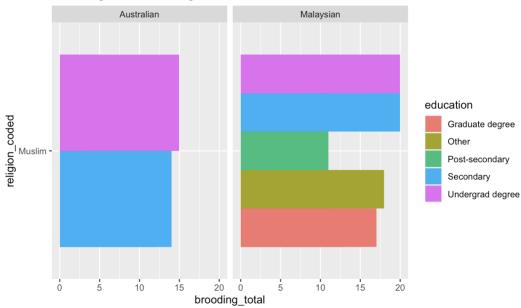
#### Brooding Score vs Religion: None



## No Religion, Education & Brooding\*

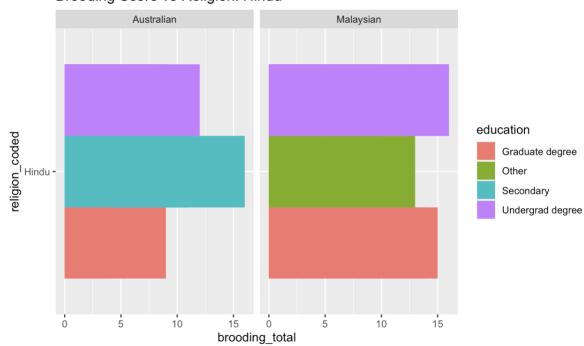
\*ONLY GRAPHED RELIGIONS WITH DIFFERENCES OF BROODING SCORES

#### Brooding Score vs Religion: Muslim



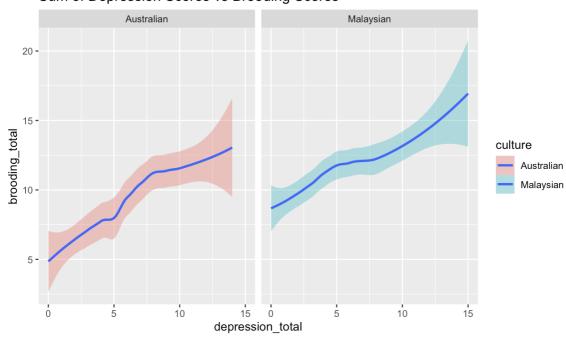
## Muslim, Education & Brooding

#### Brooding Score vs Religion: Hindu



## Hindu, Education & Brooding

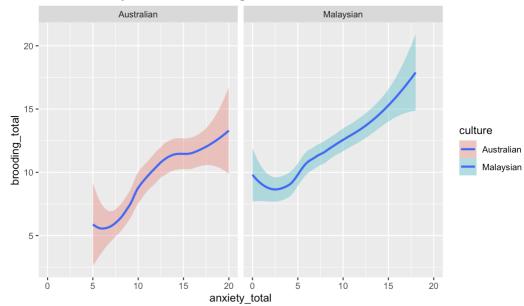
#### Sum of Depression Scores vs Brooding Scores



## How do Depression scores relate to Brooding scores?

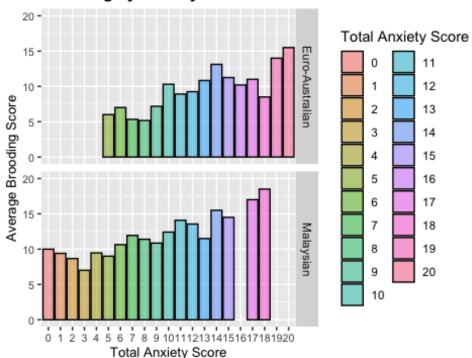
`GEOM\_SMOOTH()` USING FORMULA = 'Y ~ X'

#### Sum of Anxiety Scores vs Brooding Scores



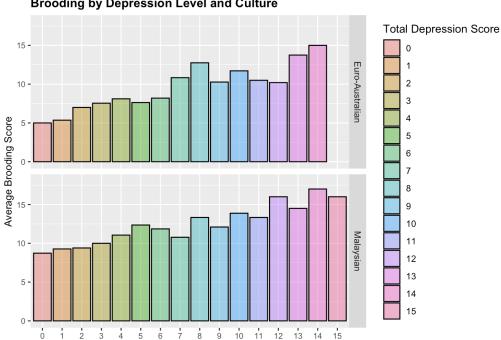
## How do Anxiety scores Relate to Brooding scores?

#### **Brooding by Anxiety Level and Culture**



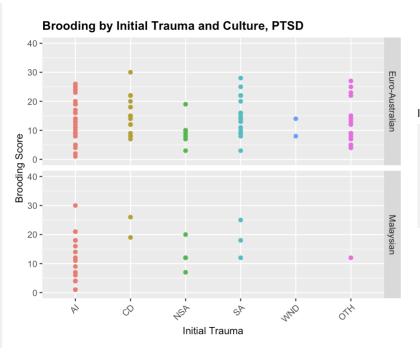
Graphically, how does that compare between cultures?

#### **Brooding by Depression Level and Culture**



**Total Depression Score** 

## How about depression?

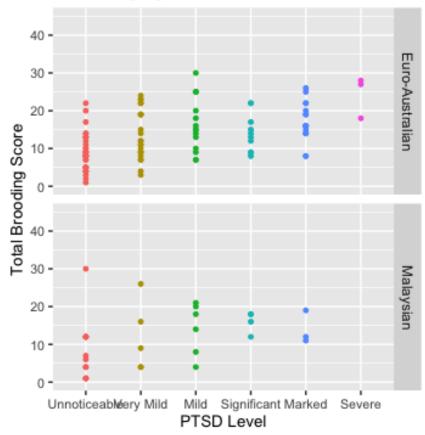


## Initial Trauma Accident/Injury/Illness Witnessing Death Non-Sexual Abuse Sexual Abuse War/Natural Disaster

Other

PTSD Brooding by Initial Trauma & Culture

#### Brooding by PTSD Level and Culture, PTSD



#### PTSD Level

- Unnoticeable
- Very Mild
- Mild
- Significant
- Marked
- Severe

## PTSD Level and Culture

## Conclusions (Depression)

- Women had higher brooding levels overall in both cultures, with Malaysian women scoring higher than Euro-Australian women.
- o Malaysians with undergraduate degrees had higher brooding levels if they had no religion, were Muslim or Hindu.
- Brooding was significantly correlated with anxiety and depression, but culture didn't show significant difference (confirms what paper found)

## Conclusions (PTSD)

- Largest maximum brooding scores were associated with initial trauma types Accident/Injury/Illness, Witnessing Death and Sexual Abuse for Euro-Australians. There were too few Malaysians to draw conclusions.
- Maximum brooding scores were associated with unnoticeable and mild PTSD levels. The maximum for severe PTSD was also high, but there were only three participants at that level.