



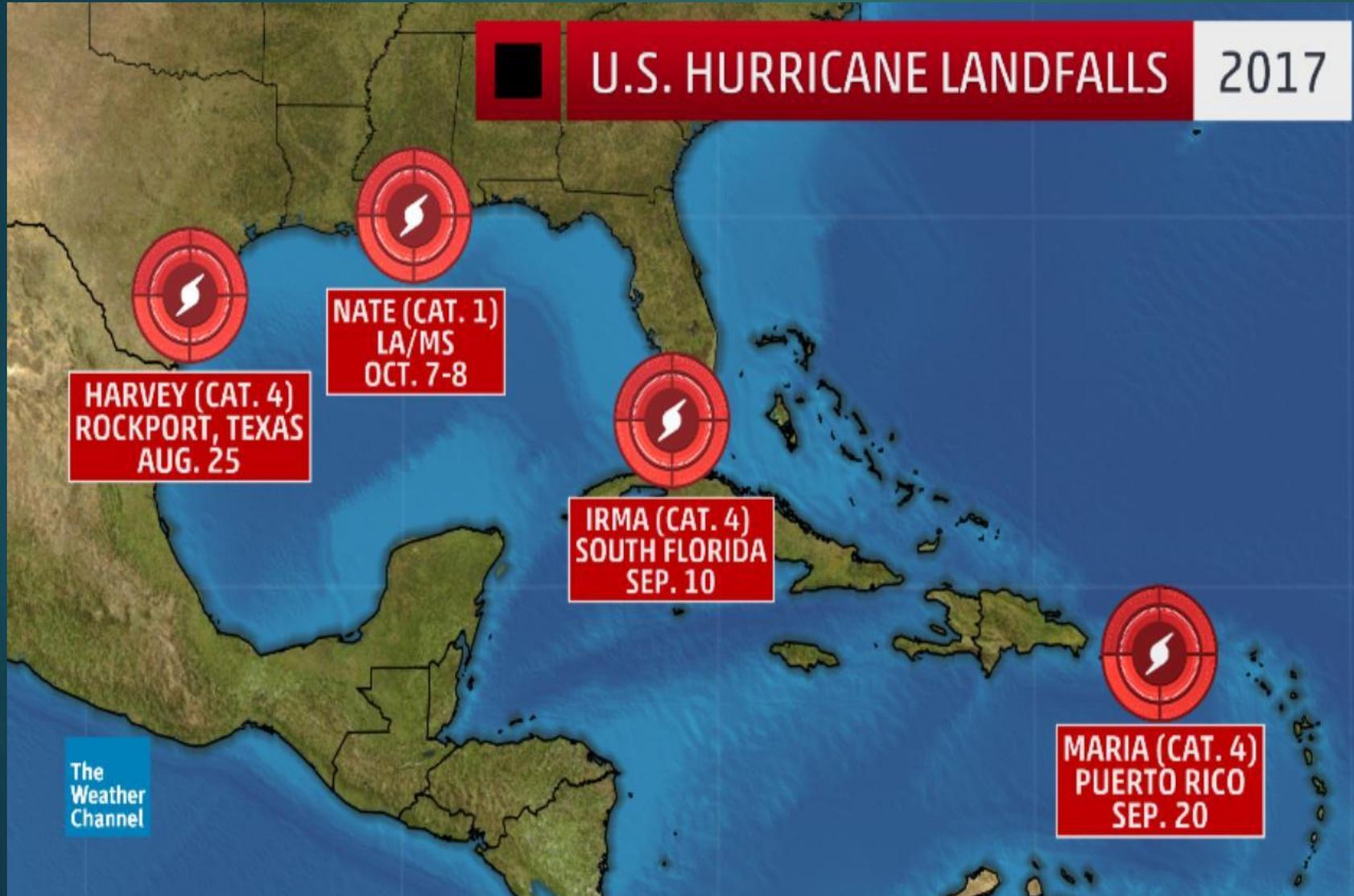
Utilizing archival data for examining the relationship between hermeneutics and environmental awareness

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Bio

- ▶ Cynthia Preciado, Amber Rivera, and Anthony Yung are undergraduate students of psychology at Azusa Pacific University (APU).
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- ▶ Chong Ho Yu is a faculty of Psychology and the Quantitative Research Consultant at APU.

Climate



Objective

- ▶ Examine the relationship between how Christian faith influences their perception of environmental issues.
- ▶ Data are downloaded from the National Opinion Research Center (NORC) hosted at the University of Chicago.
- ▶ Sample size:
 - ▶ 1973-2016: 60,865
 - ▶ 2016: 2867

Data source

- ▶ Secondary data analysis using big archival data.
- ▶ A local sample might limit generalizability
- ▶ A nationwide sample is more representative.
- ▶ NORC uses multi-stage sampling to ensure coverage of every corner of USA



Variables

- ▶ **Dependent variables: attitudes towards environmental protection**
 - ▶ Spending too much in improving and protecting the environment
 - ▶ Interested in environment issues

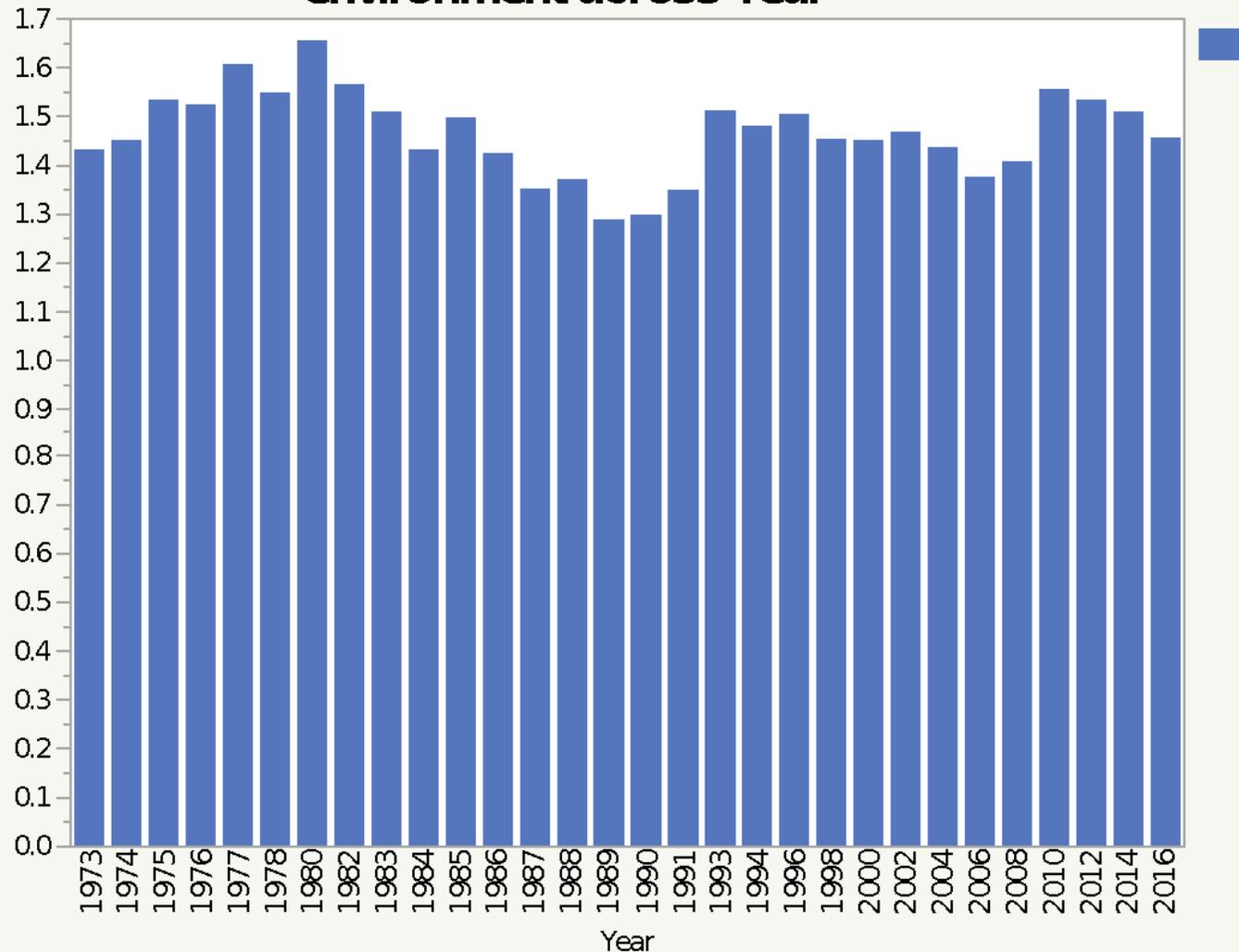
Variables

- ▶ **Independent variables: Related to the Christian religion**
 - ▶ Feelings about the Bible
 - ▶ Confidence in the existence of God
 - ▶ Had a born again experience
 - ▶ Tried to convince others to accept Jesus
 - ▶ Consider myself a religious person
 - ▶ Consider myself a spiritual person
 - ▶ How often does one pray
 - ▶ How often does one participate in religious activities

Methodology

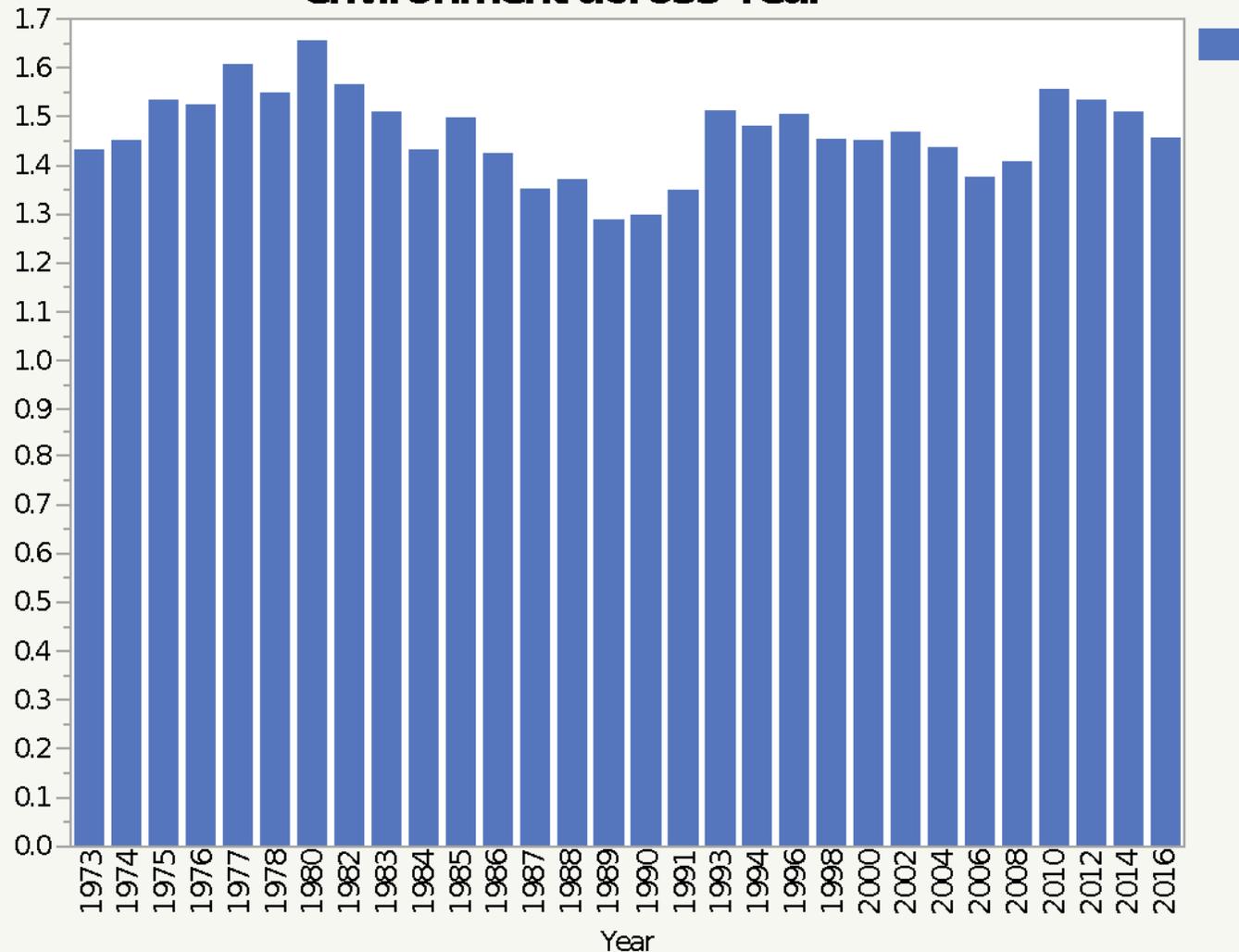
- ▶ Data visualization for unveiling the data patterns
- ▶ Decision trees for identifying the most crucial religion-related predictor(s) of environmental awareness.
- ▶ Unlike regression, the non-parametric decision tree approach can:
 - ▶ Avoid overfitting
 - ▶ Immune to outliers
 - ▶ Immune to scaling (no transformation is needed)
- ▶ We examined the longitudinal trend from 1973 to 2016 then focused on the most recent data (2016).

Perception of resources spent in improving & protecting environment across Year



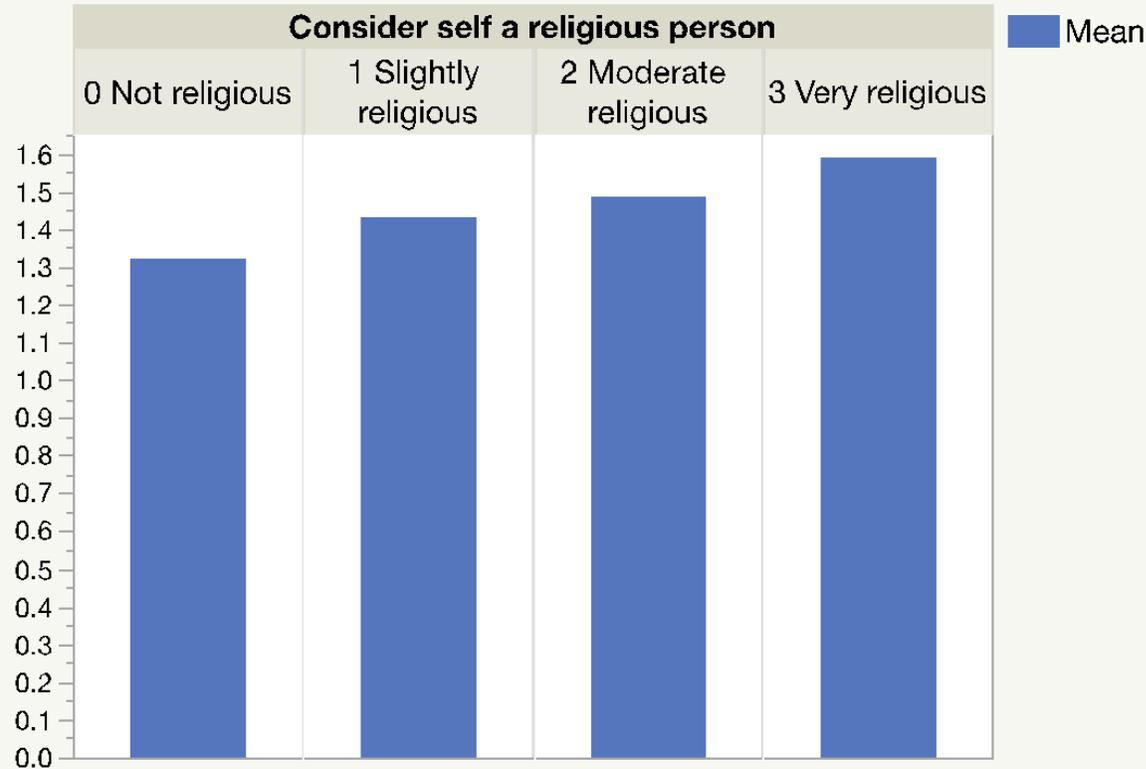
- ▶ 3 = too much
- ▶ 2 = just right
- ▶ 1 = too little
- ▶ From 1973 to present Americans tend to perceive that we spend too little on the environment.

Perception of resources spent in improving & protecting environment across Year



- ▶ The ups and downs correspond to historic events
- ▶ 1980 peak: Reagan
- ▶ 1989 depressed: Bush
- ▶ 1990s flat: Clinton
- ▶ 2010 peak and then decreasing: US recovers from financial meltdown

Perception of spending in improving & protecting environment



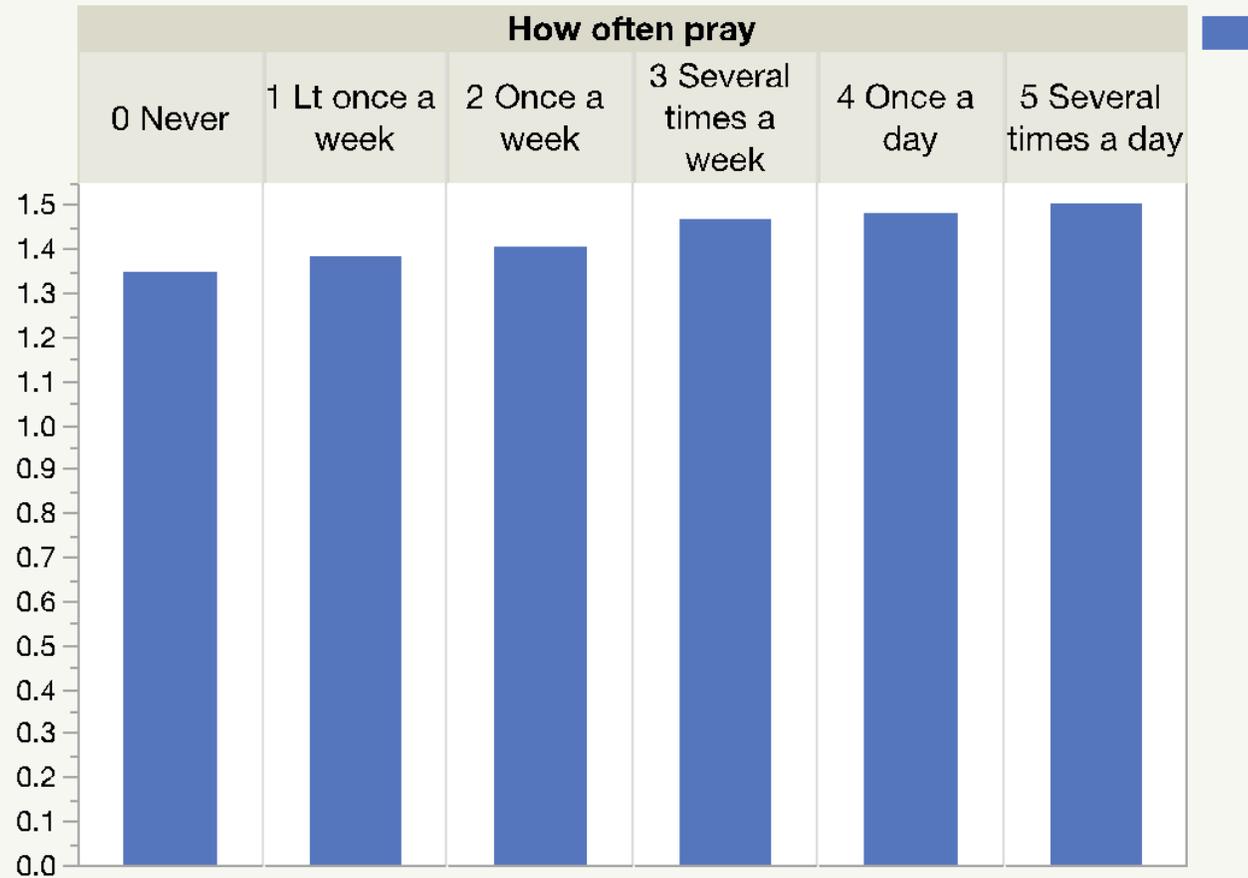
- ▶ More religious people tend to perceive that we spend too much in environmental protection.

Perception of spending in improving & protecting environment



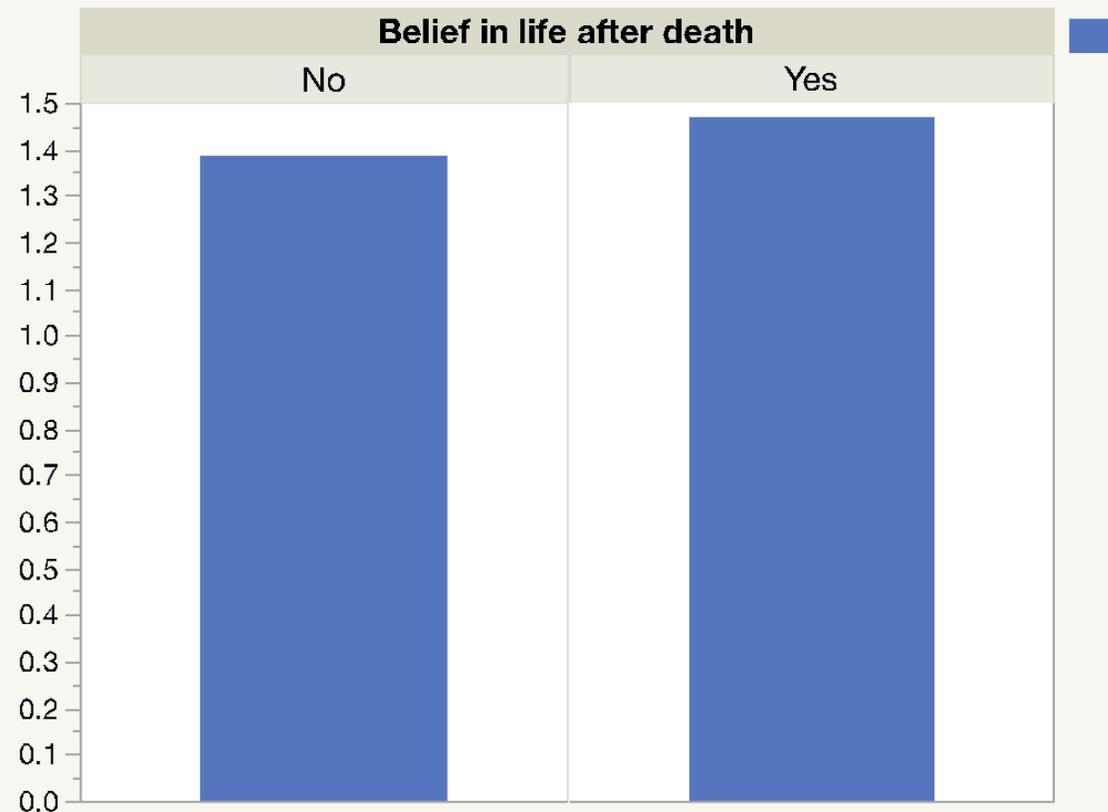
- ▶ People who declare they are born again tend to perceive that we spend too much in environmental protection.

Perception of spending in improving & protecting environment



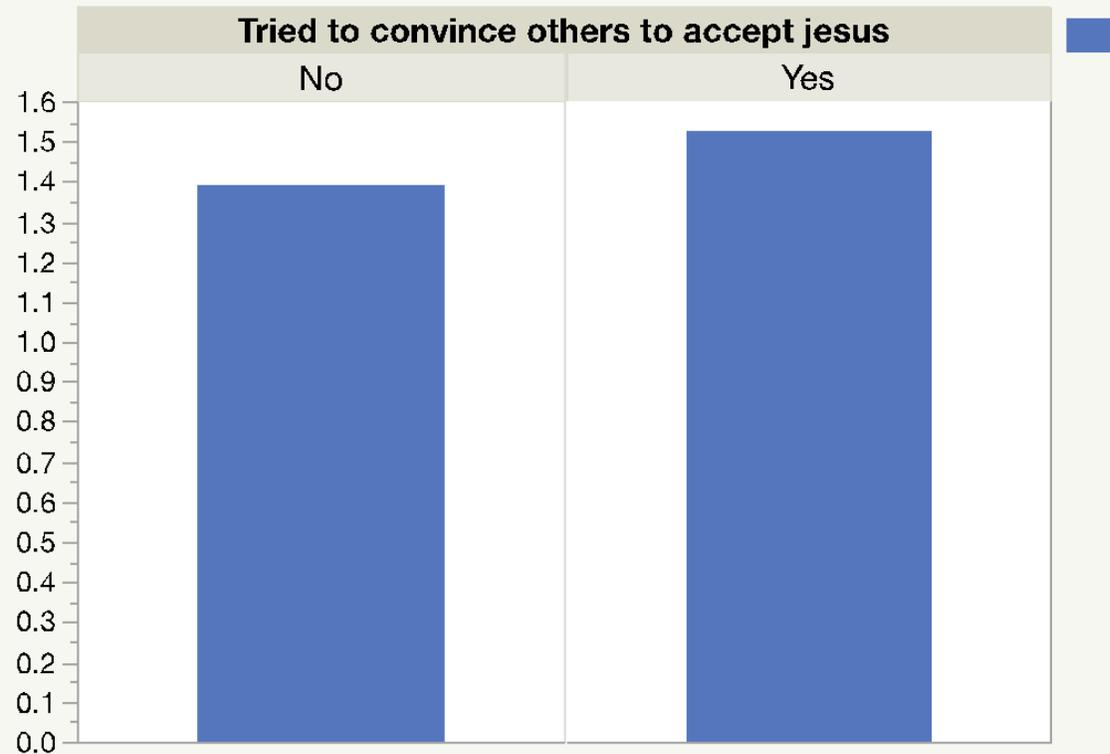
- ▶ Participants who pray more often tend to perceive that we spend too much in protecting the environment.

Perception of spending in improving & protecting environment



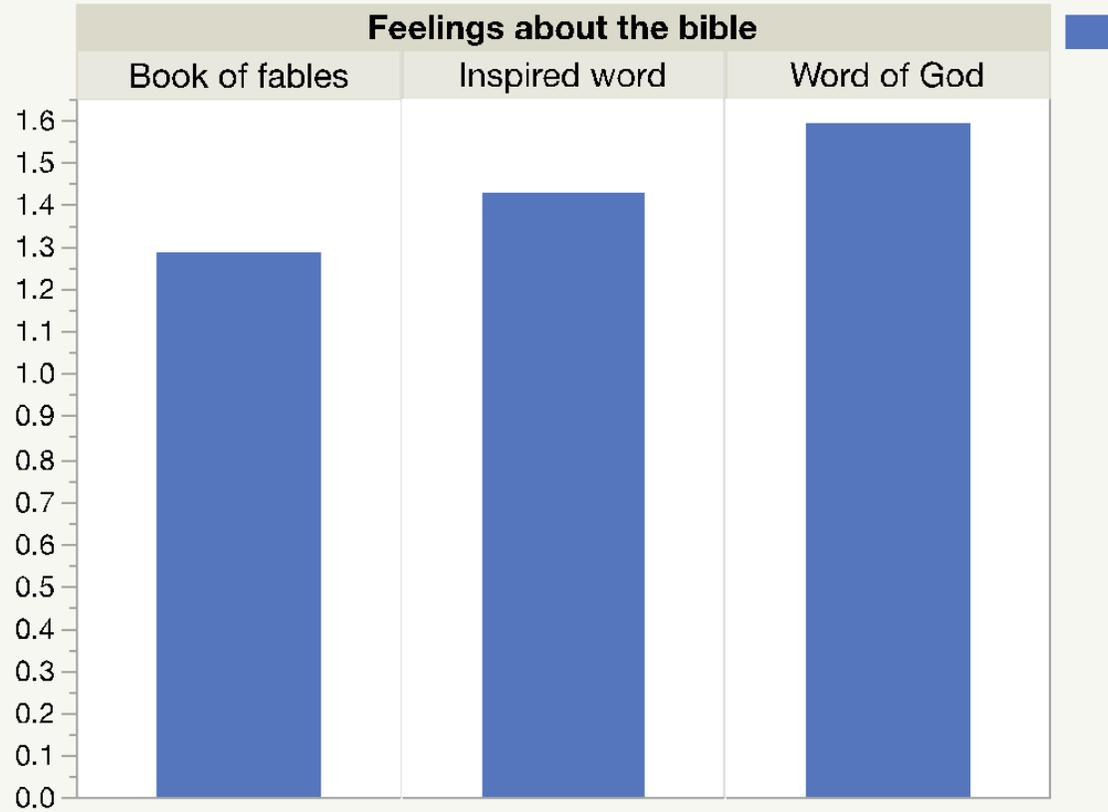
- ▶ Participants who believe in afterlife tend to think we spend too much in improving and protecting the environment.

Perception of spending in improving & protecting environment

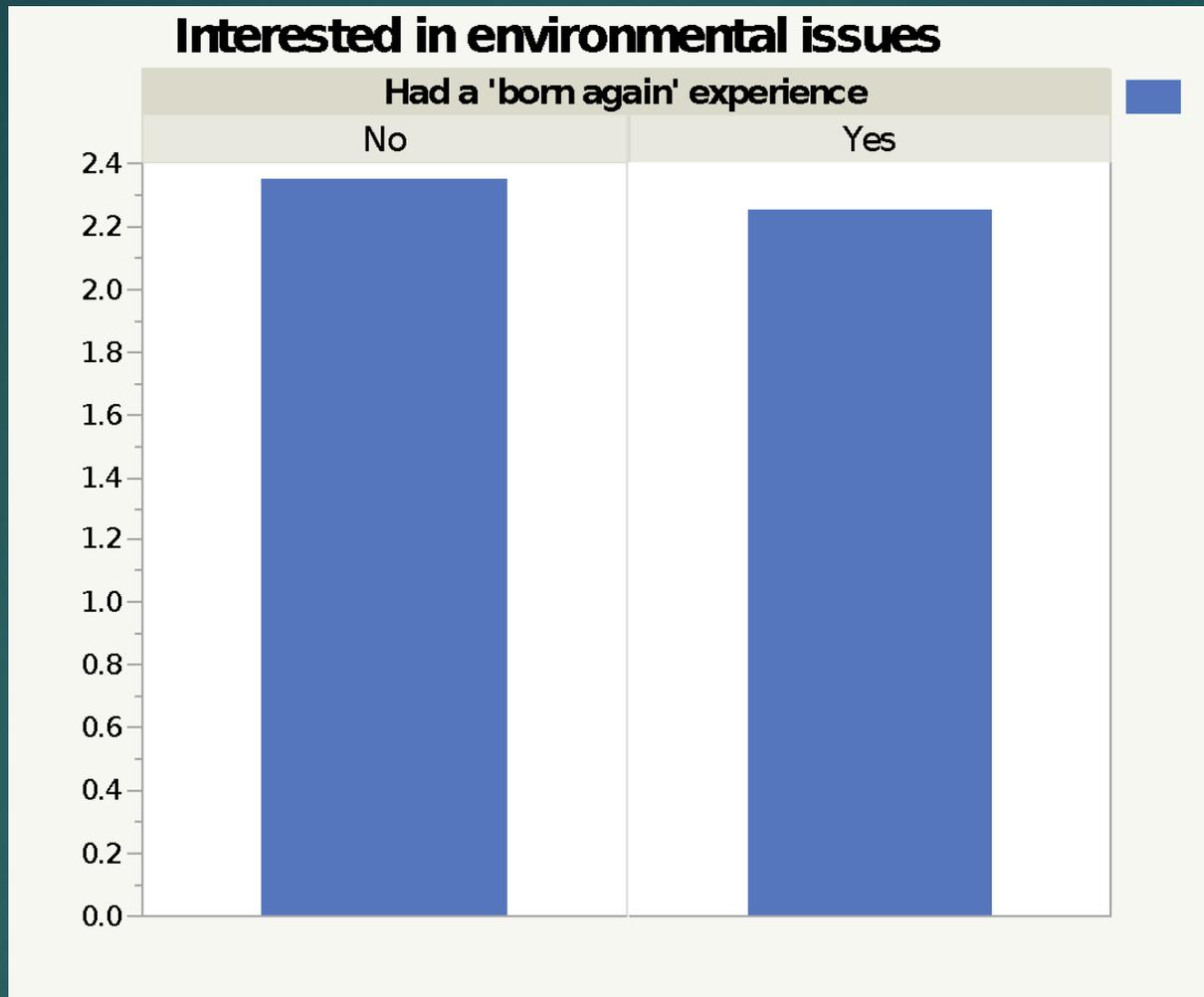


- ▶ Participants who tried to convince others to accept Jesus tend to think we spend too much in EP.

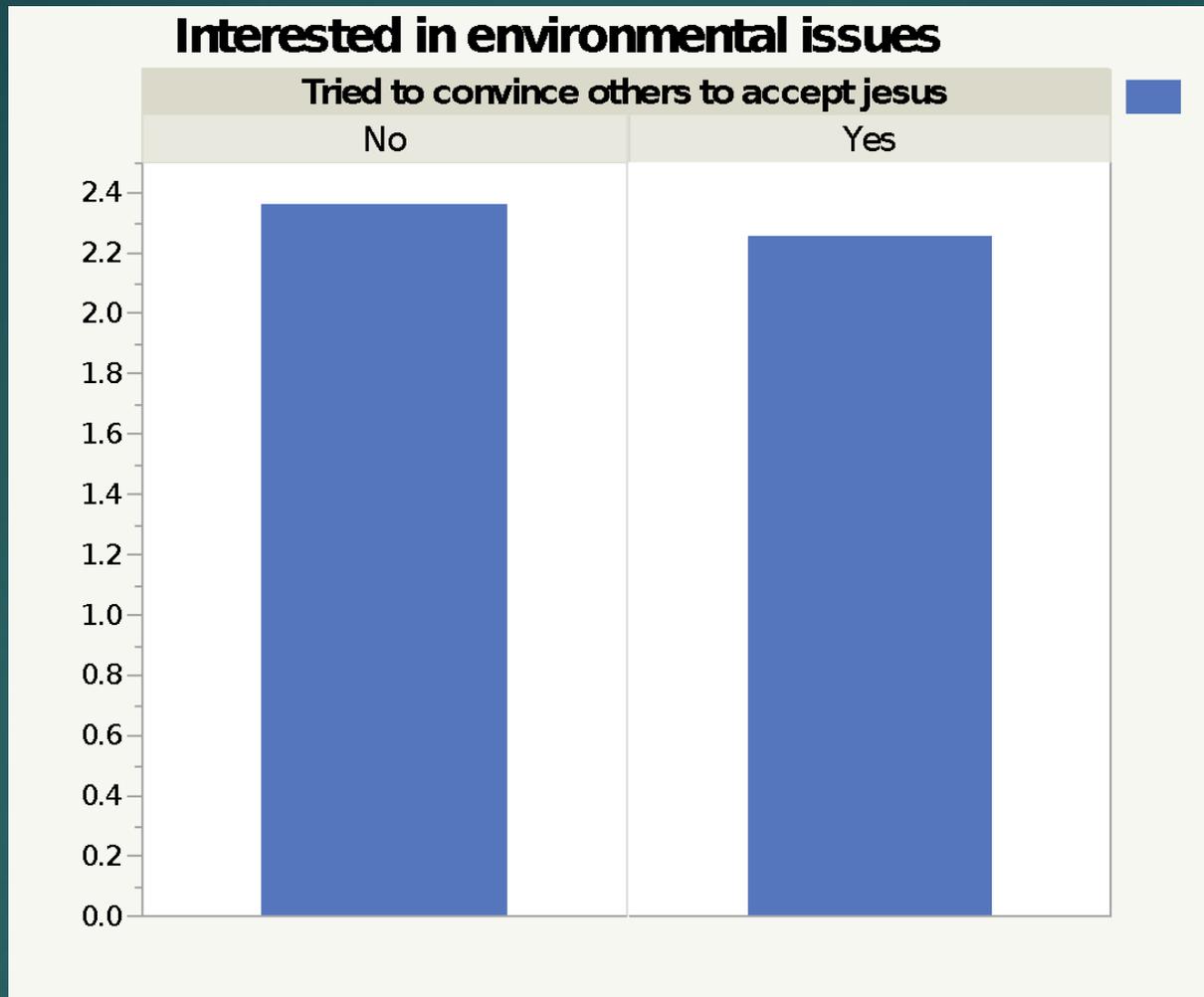
Perception of spending in improving & protecting environment



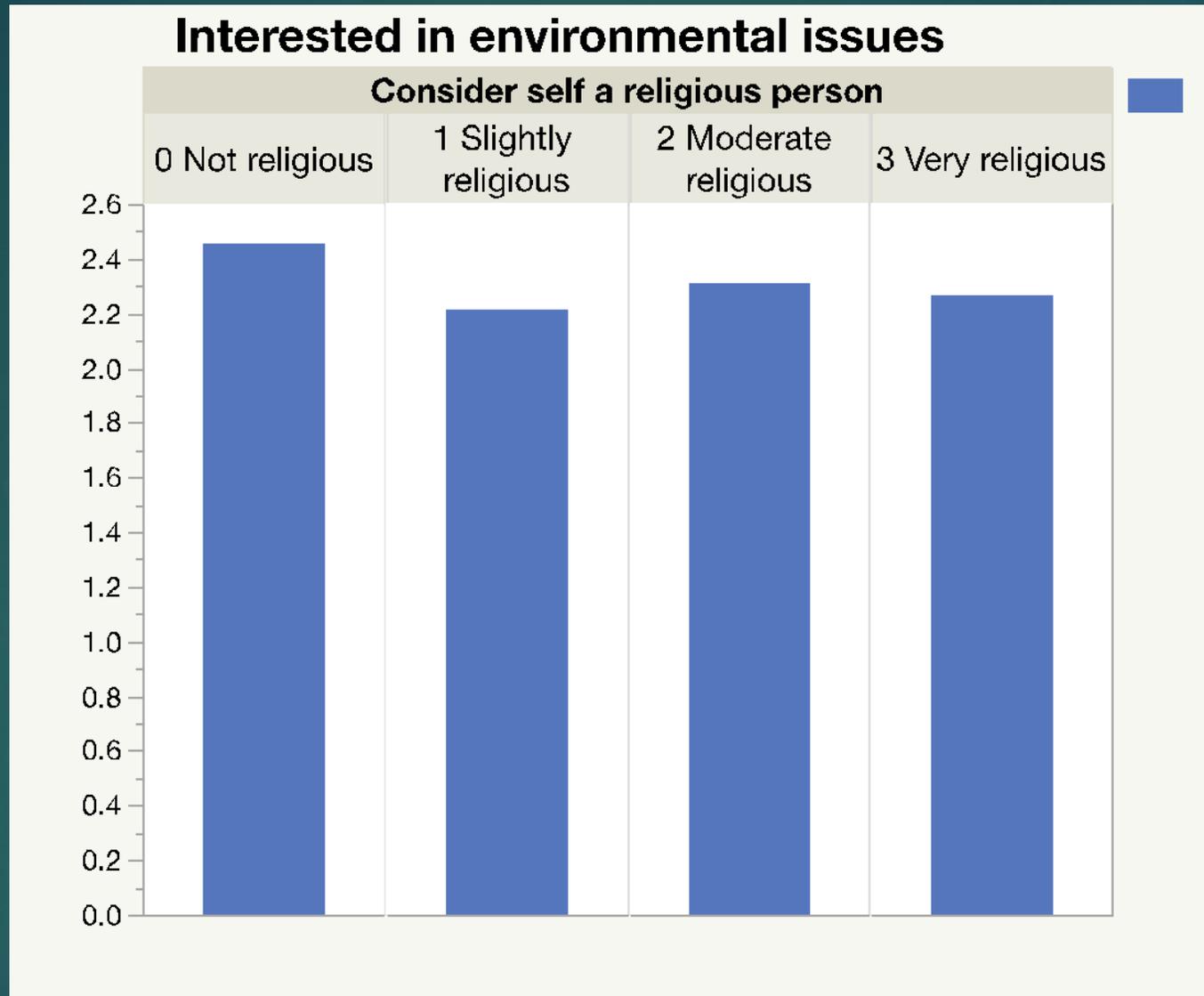
Participants who believe the Bible is the true word of God tend to think there is too much money spent in protecting the environment. Those who believe the opposite about the Bible do not feel the same.



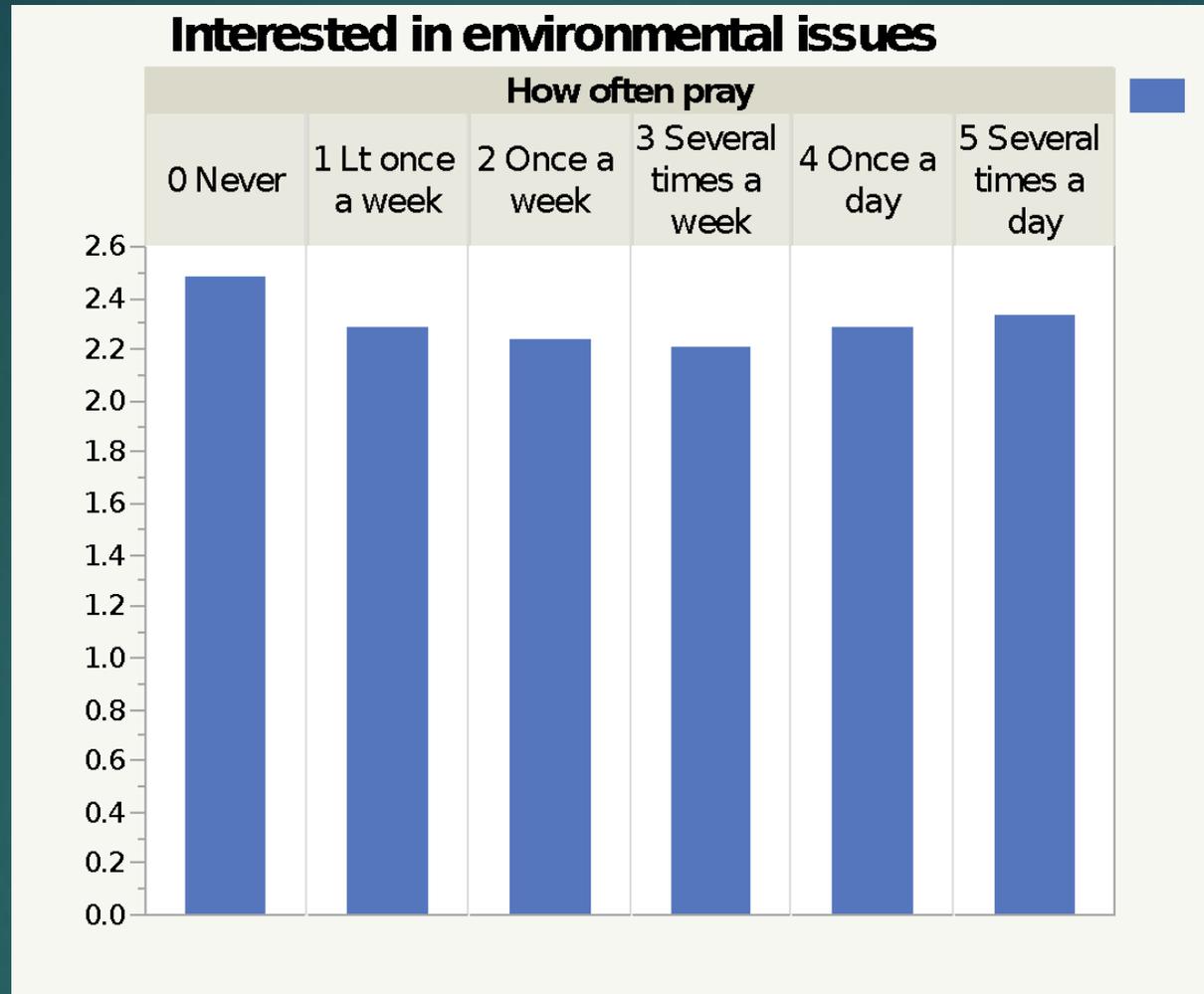
Participants who have not had a “born again” experience are more interested in environmental issues, compared to those who have had that experience.



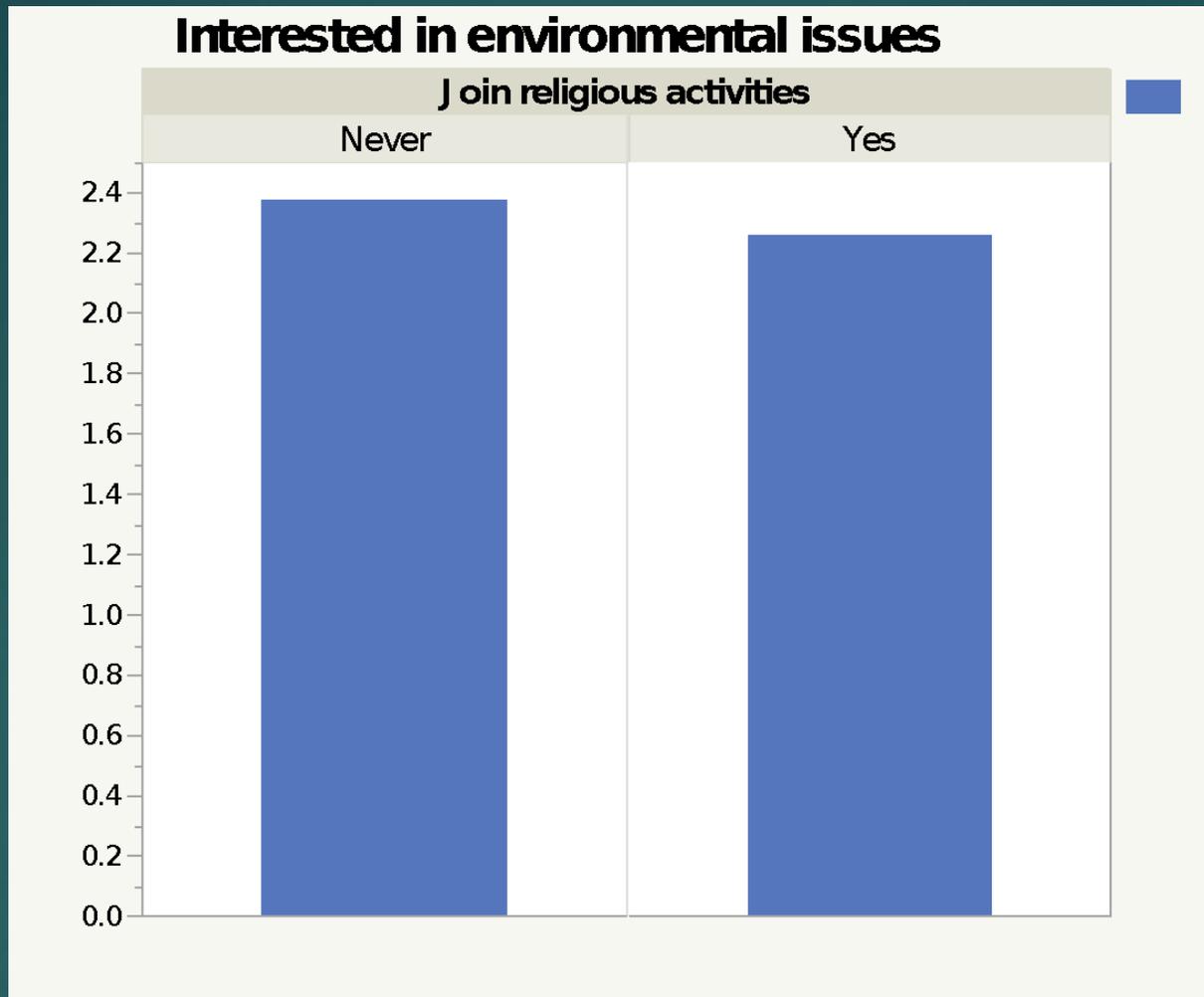
Participants who have tried to convince others to accept Jesus are not as interested in environmental issues as those who haven't tried to convince Jesus are.



Participants who are not religious are the most interested in environmental issues.

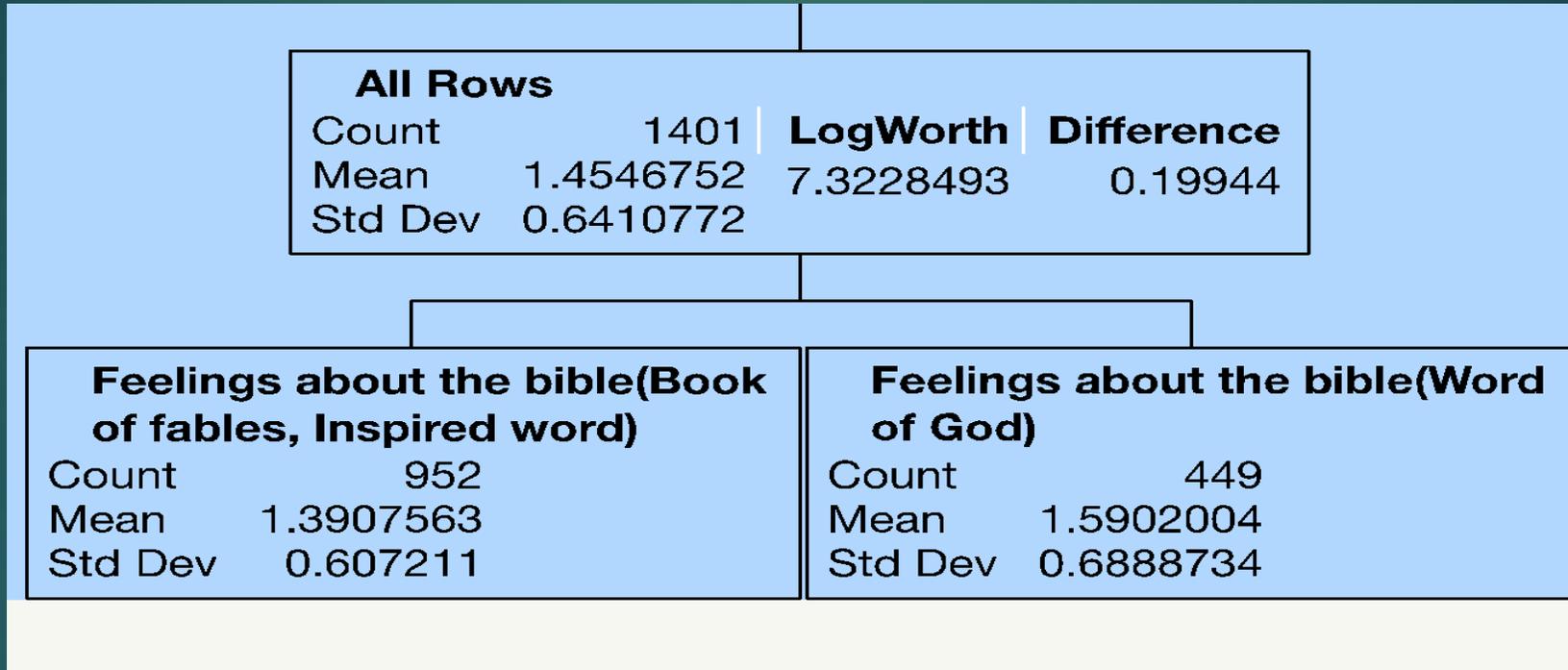


Participants who never pray have the most interest in issues regarding the environment.



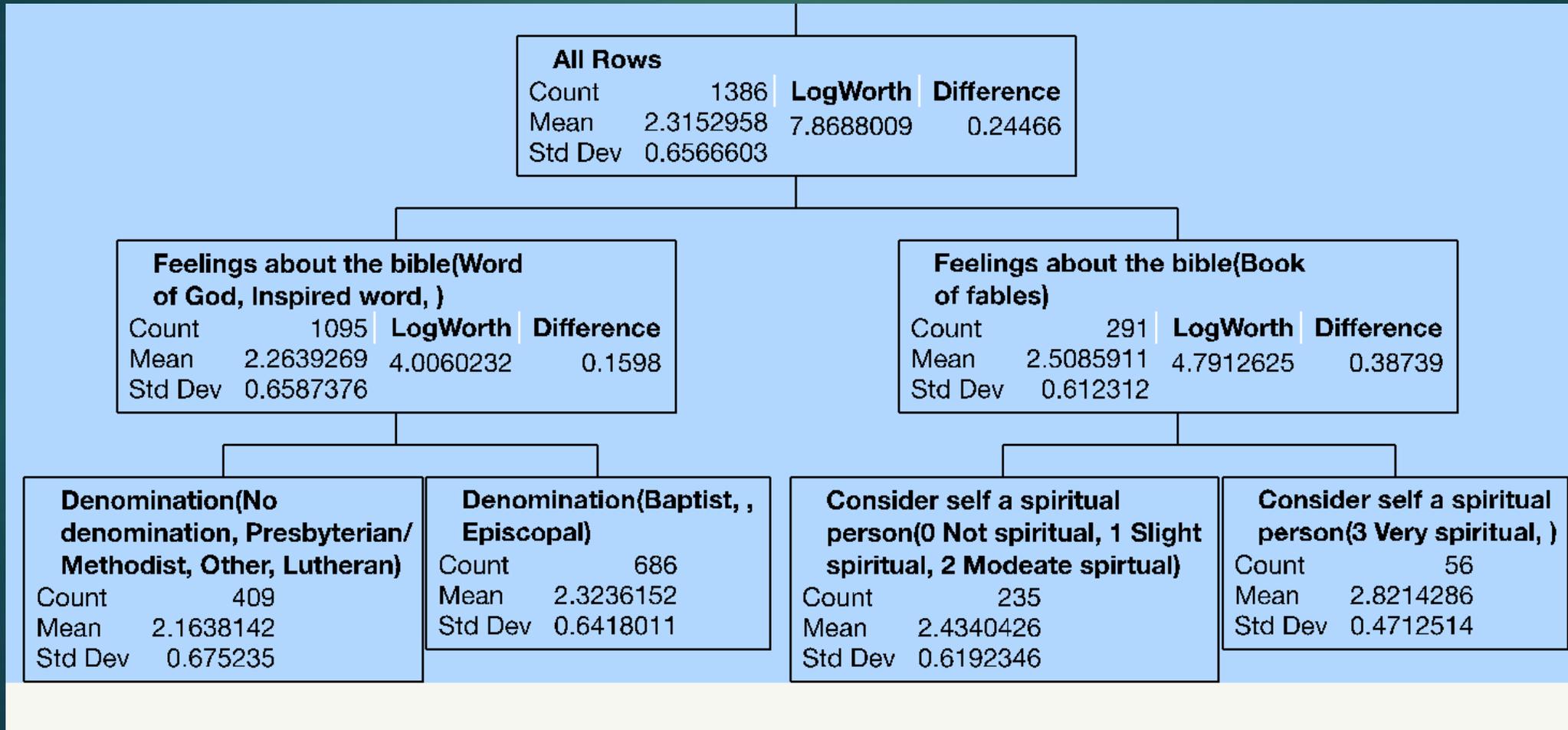
Participants who have never joined a religious activity have more interest in environmental issues, than those who have joined religious activities.

Decision tree



- ▶ The most crucial predictor of perception of spending in EP is the feeling of the Bible.

Decision Tree: Predict interest in EP



Why? What went wrong?

- ▶ This fleeting, temporary world is not my ultimate home.
- ▶ An alleged association between environmental protection and the New Age movement.
- ▶ Respecting nature might lead to pantheism.



Why? What went wrong?

- ▶ We should not do things just because it is politically correct.
- ▶ Secular people have already been doing environmental preservation.



Why? What went wrong?

- ❑ Environmental preservation will empower world government, such as UN.
- ❑ Environmental protection is a liberal view that might lead to supporting abortion.



Why? What went wrong?

- ❑ This is an extremist or alarmist position.
- ❑ Dominion literally means subdue or oppressive domination.
- ❑ Wellbeing of people are more important than the health of the environment. (Simmons 2009)



Discussion

- ▶ Christianity per se is not the cause of our carelessness to nature
- ▶ Bad theology: interpretation of the Bible
- ▶ Eschatology is viewed as the destruction of this world
- ▶ Dualism: The spiritual (other-worldly) is regarded as more important than the physical.



Remedy

- ▶ The Christian theology does not support consumerism
- ▶ God cares for non-human creation; the earth has certain intrinsic values.
- ▶ Paul: Redemption of the cosmos--A new world order (Romans 8:19-23)



Selected References

- Bouma-Prediger, S. (2001). *For the beauty of earth: A Christian vision for creation care*. Grand Rapids, MI: Baker.
- Horrell, D. (2010). *The Bible and the environment*. London: Equinox.
- Simmons, J. (2009). Evangelical environmentalism: Oxymoron or opportunity? *Worldviews*, 13, 40-71.