COMPARING ORIGINS
BELIEF AND MORAL VIEWS

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OUTLINE

• INTRODUCTION
• REVIEW OF RELATED LITERATURE
• METHODOLOGY AND DATA
• FINDINGS
• TREND ANALYSIS
• CONCLUSIONS, RECOMMENDATIONS, AND SUMMARY
INTRODUCTION

• Many creationists claim that what one believes about origins affects his or her worldview.

• For example, Drs. John and Henry Morris state:

  “a person’s philosophy of origins will inevitably determine sooner or later what he believes concerning his destiny, and even what he believes about the meaning and purpose of his life and actions right now in the present world”
INTRODUCTION (cont.)

• Do you believe that a person’s beliefs about origins affects his or her worldview or moral views?
• How do you know?
• Is there any data to support this belief?
• These are the questions that led to this study.
• Why is it important to study this from a social science perspective?
• North highlights the importance:

“Christians have not been shown clearly and decisively that Darwinism is a total worldview... To win the battle with Darwinism... six-day creationists must believe that the stakes are far larger that mere laboratory experiments or one-evening debates.”
REVIEW OF RELATED LITERATURE

- Researchers have focused on the relationship between origins belief and religious views.
- Typically, the surveys asked the subject’s opinion about the teaching of evolution’s impact on society.
- No studies were found that attempted to correlate origins beliefs with moral views.
One reason a correlation is not made is because there is a debate about performing parametric statistics on ordinal data.

This study involves comparison of two variables so parametric data analysis is required.

As the first study of its kind (that I can find), simple linear regression is used.
CONCLUSIONS FROM LITERATURE REVIEW

- Connection between origins beliefs and moral views is often proclaimed.
- Confirming research of anecdotal and philosophical evidence lacking.
- Researchers ask subject’s opinion about a connection but have not tested the extent of the connection.
- Parametric analysis of ordinal data considered valid.
METHODOLOGY AND DATA

• Developed a 5 point Likert scale survey.
• Survey objectives
  1) Evaluate the extent to which the subject believes in creation or evolution.
  2) Evaluate the subject’s moral views.
  3) Allow a comparison of the subject’s belief in creation or evolution with the subject’s moral views.
EVOLUTION ORIENTED QUESTIONS

• Strongly agreeing with these questions indicates a belief in evolution.

2. Evolution is scientific fact.

6. Space, time, matter, and energy have always existed.


14. Life evolved from a simple cell to more complex organisms.
CREATION ORIENTED QUESTIONS

• Strongly agreeing with these questions indicates a belief in creation.

  4. Each of the major kinds of plants and animals were made essentially as they appear today with only changes within species.

  8. The stories in Genesis like Adam, Noah, and the Tower of Babel are historically true.

  12. Evolution is neither a scientific theory or fact.

  16. An eternal Creator supernaturally made the physical universe.
NEGATIVE MORAL VIEW QUESTIONS

• Strongly agreeing with these questions indicates negative moral views.

1. Lying is sometimes necessary.

5. People may define “truth” in different ways and still be correct.

9. What is right for one person in a given situation may not be right for another person who encounters that same situation.

13. In real life, there is no absolute authority.

17. The best philosophy of life is: do whatever feels or seems right, as long as doesn’t harm anybody.
POSITIVE MORAL VIEW QUESTIONS

• Strongly agreeing with these questions indicates positive moral views.

3. The Bible provides today’s people with practical standards for living.
7. Social drinking of alcohol is always wrong.
11. Euthanasia is wrong even if it ends suffering.
15. Jesus Christ is the standard by which all truth is measured.
18. Absolute truth is that which is right for all people, in all places, at all times.
INTIMACY QUESTIONS

• For two people who are not married but are both in love with each other and are willing, please indicate whether the actions described below are morally acceptable.
  
  19. Hold hands
  20. Embracing and some kissing
  21. Heavy “French” kissing
  22. Heavy petting
  23. Sexual Intercourse
SURVEY POPULATION

• Obtained a random sample of 1,126 names from the NSTA U.S. Registry of K-12 Science Teachers.
• 100 used for field test.
• 1,026 used for main survey.
SURVEY VALIDATION

• Validation used to determine if the survey measures what it was designed to measure.
• Expert validators:
  ✓ Dr. Henry Morris
  ✓ Dr. John Whitcomb
  ✓ Dr. Duane Gish
  ✓ Dr. Gerald Skoog
  ✓ Mr. Jim Stambaugh
• Validators were asked to identify the questions that related to creation or evolution and those related to moral views.
• All validators were able to differentiate between the two types of questions.
• Drs. Morris and Skoog raised concerns.
SURVEY VALIDATION (cont.)

• Dr. Morris’s concern:
  
  “In one sense, every statement is related to origins in the sense that if God is indeed the Creator, then His Word is determinative in every moral issue as well as every scientific issue. Thus the question is not adequately defined as stated”

• While this may be true, it presupposes the relationship the study is testing.
• Dr. Skoog’s first concern:
  “I don’t think it is appropriate to use the term belief with a scientific statement- science is not a believe it or not affair.”
• Dr. Skoog fails to differentiate between empirical and historical science.
• He also is at odds with his evolutionary colleagues who regularly test “origins beliefs”.
• Dr. Skoog’s second concern:

“I don’t believe your questionnaire will provide you with useful information. Evolution is not about origins— it is about change of organisms through time. Also science is not a belief system.”

• Dr. Skoog is taking a much more narrow view of evolution than he took when he published a survey he used with Dr. Shanker.
SURVEY VALIDATION

CONCLUSIONS

• All of the validators were able to differentiate between origins questions and moral views questions.

• Majority agreed with the design intent of all questions (agreement unanimous for 14 of 18 questions).

• Survey was considered valid.

• In retrospect, survey validation could be improved.
FIELD TEST

- Random selection of 100 names from sample population.
- Return rate 20%
- Survey reliability determined to be sufficient by field test.
- Results discussed later.
- Reliability determines how consistently the instrument measures whatever it measures.
MAIN SURVEY

- Survey instrument determined to be valid and reliable.
- Comments from field test did not indicate need to change any questions.
- Proceeded with main survey with no changes to the instrument.
- Changes to presentation of the instrument to try to improve return rate.
FINDINGS
FIELD TEST

- Return rate 20%, all used for reliability calculation
- ANOVA calculation of reliability coefficient found to be 0.26.
- Coefficient not significant for 19 degrees of freedom.
- Coefficient would have been significant for the larger expected return of the main survey.
- Advised to continue by consulting statistician.
FINDINGS
MAIN SURVEY

• First mailing usable response rate 16.9%.
• Second mailing usable response rate 16.7%.
• Improvements did not work.
• Total of 313 usable responses.
• Reliability coefficient of 0.17 was statistically significant.
• Errata in paper, F should be 9.3 as N-2 should be 311.
• Errata does not affect conclusion that survey is reliable.
TREND ANALYSIS
DATA PREPARATION

• Trend analysis will compare and correlate average responses for origins belief and moral views questions.
• To get the full range of views it was necessary to reverse some of the data.
• Reversed creation oriented questions for origins beliefs.
• Reversed positive moral views questions.
12. Evolution is neither a scientific theory or fact.

Subject’s answer:

1 2 3 4 5

Reversed answer:

1 2 3 4 5

Errata: Reversing description on the bottom of the survey instrument is backwards.
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OVERALL TREND

Comparison of C/E Belief with Moral Views

\[ y = 0.5264x + 1.6734 \]
\[ R^2 = 0.5103 \]
Comparison of C/E Belief with Holding Hands

\[ y = 0.003x + 1.2992 \]

\[ R^2 = 2 \times 10^{-5} \]
EMBRACING WITH SOME KISSING

Comparison of C/E Belief with Embracing and Some Kissing

\[ y = 0.0968x + 1.1509 \]

\[ R^2 = 0.0167 \]
HEAVY “FRENCH” KISSING

Comparison of C/E Belief with Heavy "French" Kissing

$y = 0.5594x + 0.7251$

$R^2 = 0.1594$
HEAVY PETTING

Comparison of C/E Belief with Heavy Petting

\[ y = 0.739x + 0.7631 \]

\[ R^2 = 0.25 \]

Unacceptable

Acceptable
Comparison of C/E Belief with Sexual Intercourse

Sexual Intercourse

Unacceptable

Acceptable

y = 0.8343x + 1.1417

R² = 0.332
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CONCLUSIONS

• The study achieved all of its objectives:
  ✓ Subject’s origins beliefs were measured.
  ✓ Subject’s moral views were measured.
  ✓ Comparison between the two was made.

• The research hypothesis that there is a relationship between origins belief and moral views is supported.

• Secondary hypothesis that the more one believes in creation the more positive his or her moral views is also supported.
CONCLUSIONS (cont.)

- The results \textbf{BEGIN} to provide empirical support to the claim that what one believes about origins affects his or her world view.

- \textbf{THIS STUDY DOES NOT PROVIDE SUFFICIENT DATA TO SHOW A CAUSE AND EFFECT RELATIONSHIP.}
RECOMMENDATIONS

1. Additional analyses can be performed on the data gathered during this study:
   - Demographic data analysis
   - Item analysis

2. Update and improve survey based on validators’ and subjects’ comments.

3. Survey other groups both to validate survey and test the findings.
RECOMMENDATIONS (cont.)

4 Additional studies to test my assumption that moral views are a reflection of worldview.

5 More research to determine if the observed relationship is a cause and effect relationship.
SUMMARY

• There is very little research on the combination of worldviews and origins beliefs.

• Typically, surveys ask the subject’s opinion about the impact of teaching evolution on society but do not attempt to test or quantify the impact.

• This is the only study I know of that attempts to quantify the relationship.
SUMMARY (cont.)

- Developed a survey to measure origins beliefs, moral views, and test the relationship.
- Surveyed 1026 science teachers (313 responses used).
- Research and secondary hypothesis supported.
- Intimacy results corroborated overall observed relationship.
- **STUDY DOES NOT CLAIM TO SHOW CAUSE AND EFFECT.**