Evolutionary Attitudes Survey
Hawley & Parkinson, 2008
(Pilot N = 90, Intro Psych Subject Pool)
University of Kansas

Background Information on Participants
What is your current age?
What is your gender?
What is your current level in college?
What degree are you currently seeking?
What is your current major? (Please list only one if you have multiple)
Approximately how big was your high school graduating class?
What state are you from?
In which town were you raised?
How many siblings do you have?
EDUMOM: How many years of education were obtained by your mother?
EDUDAD: How many years of education were obtained by your father?
GPA: What is your current GPA?
What was your high school GPA?
If you took the SAT, what was your score (approximately)?
If you took the ACT, what was your score (approximately)?
TRAINING: How much training in evolution did you receive in high school?
To what degree was the town you grew up in urban?
To what degree was the town you grew up in rural?

Degree of Political Activity (POLITICALLYACTIVE: α = .95; M = 3.28; SD = 1.51)
1. To what degree are you political?
2. To what degree are you politically active?
3. To what degree are you politically aware/up-to-date?
4. To what degree do your political views influence your daily life?
5. To what degree do your political views influence your decisions?

Political Affiliation/Identity
1. LIBERAL: To what degree are you liberal? (M = 3.71; SD = 1.73)
2. CONSERVATIVE: To what degree are you conservative? (M = 3.84; SD = 1.75)
3. To what degree are you moderate?
4. To what degree are you libertarian?
5. To what degree are you communist?

Degree of Religious Activity (RELIGIOUSLYACTIVE: α = .96; M = 3.41; SD = 1.77)
1. To what degree are you religious?
2. To what degree does religion impact your daily life?
3. To what degree does your religion influence your decisions?
4. To what degree do you participate in religious activities?

**Religious Affiliation**

Please select the religious affiliation that BEST describes your personal beliefs. If you do not see your affiliation below, you will find an answer possibility in the next question. Please click 'decline to answer' and proceed to the next question.

- Jewish
- Catholic
- Lutheran
- Protestant
- Hindu
- Buddhist
- Muslim
- Pagan
- Agnostic
- Atheist
- Unitarian
- Secular Humanist
- Evangelical
- Baptist
- Mormon
- Not Sure

**Young Earth Creationist Beliefs and Attitudes** (*YEC: α = .91; M = 2.61; SD = 1.15*)

1. People who accept evolution do not believe in God.
2. Scientists who believe in evolution are immoral.
3. People who accept evolution as fact are immoral.
4. I read the bible literally.
5. A supreme being created humans in their present image.
6. Humans never could have been related to apes.
7. God created man in His image.
8. Dinosaurs were on Noah's ark with other animals.
9. If you accept evolution, you really can't believe in God.
10. The Earth isn't old enough for evolution to have taken place.
11. God created humans in their present form within the last 10,000 years.
12. There was a time when humans and dinosaurs lived on earth together.
13. Present animal diversity can be explained by the Great Flood.

**Embryo/Fetus Beliefs and Attitudes** (*LIFECONCEPTION: α = .86; M = 4.44; SD = 1.86*)

1. Life begins at conception.
2. After conception, a developing human is only a cluster of cells, and it makes no sense to discuss its moral condition. *(reverse scored)*
3. All stages of human life- embryo, fetus, child, adult- should have the same legal protections.

**Intelligent Design Fallacies** (*IDFALLACIES*: $\alpha = .89$; $M = 3.32$; SD = 1.06)
1. There is scientific evidence that humans were created by a supreme being.
2. Humans were designed with a special purpose.
3. Humans were designed by a special creator.
4. There are fossil records that prove humans *did not* evolve.
5. There is no fossil evidence supporting evolution.
6. There are huge gaps in the fossil record.
7. There is no evidence that humans evolved from other animals.
8. The methods used to determine the age of fossils are inaccurate.
9. Mutations are never beneficial.
10. The theory of evolution is a matter of faith and belief, just like religion.
11. Humans were specially designed.
12. Evolution can account for short-term micro-level events (e.g., resistance to antibiotics), but not for the creation of animal diversity.
13. There are no transitional fossils (remains of life forms that illustrate an evolutionary transition).
14. It is statistically impossible that life arose by chance.
15. It is impossible that life came about spontaneously.
16. People who accept evolution as fact believe humans are direct descendents of apes (ex. Chimpanzees).
17. The theory of evolution does not explain similarities or differences between chimps and humans.

**Social Objections** (*SOCIALOBJECTIONS*: $\alpha = .82$; $M = 2.93$; SD = 1.22)
1. The theory of evolution has contributed to racism.
2. Applying the theory of evolution to human affairs implies we are not fully in control of our behavior.
3. The theory of evolution has contributed to sexism.
4. The theory of evolution has contributed to an increase in abortion.
5. The theory of evolution has contributed to genocide (the deliberate killing of a group based on nationality, race, politics, or culture).
6. The theory of evolution has contributed to an increase in euthanasia (the act of killing someone painlessly or allowing to die to stop the suffering; also called mercy killing).

**Factual Understanding** (*FACTUALUNDERSTANDING*: $\alpha = .84$; $M = 4.97$; SD = .89)
1. *Humans share a majority of their genes with chimpanzees.*
2. *Humans share more than half of their genes with mice.*
3. *Ordinary tomatoes do not have genes, whereas genetically modified tomatoes do.* *(reverse scored)*
4. *Genetically modified animals are always larger than ordinary animals.* *(reverse scored)*
5. *Cloning is a form of reproduction in which offspring result from the union of sperm and egg. (reverse scored)
6. *Today it is not possible to transfer genes from humans to animals. (reverse scored)
7. *If someone eats a genetically modified fruit, there is a risk that a person's genes might be modified too. (reverse scored)
8. *All plants and animals have DNA.
9. *Today it is not possible to transfer genes from animals to plants. (reverse scored)
10. *Humans have somewhat less than half of the DNA in common with chimpanzees. (reverse scored)
11. You can see traces of our evolutionary past in human embryos.
12. Humans developed from earlier life forms.
13. **Monkeys, apes, and humans look alike because they came from a common distant ancestor.
14. **Different kinds of animals look alike because they came from a common distant ancestor.
15. Human behavior is influenced by our genes.


**Relevance (RELEVANCE: \( \alpha = .95; M = 4.84; SD = 1.19 \))**

1. The theory of evolution helps explain learning and culture.
2. The theory of evolution helps explain the world as it is in the present.
3. Genes are relevant to understanding the human body.
4. Evolutionary theory is highly relevant for botany.
5. Genes are relevant to understanding human behavior.
6. Evolutionary theory is highly relevant for zoology.
7. Evolutionary theory is highly relevant for biology.
8. Evolutionary theory is highly relevant for the social sciences (e.g., anthropology, psychology, sociology).
9. Evolutionary theory is highly relevant for the humanities (e.g., history, literature, philosophy).
10. For explaining human behavior, evolutionary theory is irrelevant. (reverse scored)
11. Evolutionary theory is relevant to our everyday lives.
12. The theory of evolution is highly relevant to human affairs
13. The theory of evolution is irrelevant to human affairs. (reverse scored)
14. The theory of evolution helps us understand plants.
15. The theory of evolution helps us understand animals.
16. The theory of evolution helps us understand animal behavior.
17. The theory of evolution helps us understand human origins.
18. The theory of evolution helps us understand human behavior.
19. The theory of evolution helps explain the world as it was in the past.

**Understanding Theory** *(UNDERSTANDTHEORY: α = .78; M = 3.82; SD = 1.75)*

1. Evolution is both a theory and a fact.
2. The theory of evolution is just that, a *theory* and not a fact. *(reverse scored)*

**Scientific Method** *(Selected by Dan O’Brien from a list provided by Patricia Hawley)*

1. For scientific evidence to be deemed adequate, it must be reproducible by others.
2. Scientific ideas can be tested and supported by feelings and beliefs.
3. In the scientific method, an effect is first assumed to occur (e.g., a drug will work) and then attempts are made to confirm this assumption.
4. Good theories give rise to testable predictions.
5. Scientific explanations can be supernatural.

**Knowledge of Statistics and the Scientific Process** *(Created by Dan O’Brien)*

Suppose wing length is measured in two samples of crows. The first sample is of crows from Ithaca, the second is of crows from Binghamton.

1. For each population, the measurements are summed and then divided by the number of measurements. What type of statistic is being calculated?
   a. Mean
   b. Median
   c. Mode
   d. Standard Deviation
   e. I Don’t Know

2. The standard deviation for the Ithaca population was found to be 0 cm. The standard deviation for the Binghamton population was found to be 4.2 cm. Which population has a more variable wing length?
   a. The Ithaca population
   b. The Binghamton population
   c. The variation is equal
   d. There’s no way to tell from this information
   e. I Don’t Know

3. What type of test would you do to determine if the two populations have an equal wing length?
   a. A *t*-test
   b. A chi-square
   c. A correlation
   d. None of the above
   e. I Don’t Know

4. You do the appropriate test on the data. Part of your result tells you that \( p = .12 \). How do you interpret this?
a. There’s a 12% chance that the two populations have different wing lengths
b. There’s a 12% chance that the two populations have the same wing length.
c. Conventionally speaking, this is a significant finding.
d. None of the above.
e. I Don’t Know

5. Which of the following statements about the normal distribution is true?
   a. Approximately 95% of observations fall within two standard deviations of the average.
   b. It is an asymmetrical distribution.
   c. Approximately 75% of observations fall within two standard deviations of the average.
   d. Approximately 95% of observations fall within one standard deviation of the average.
   e. I Don’t Know

6. Which of the following would make it more likely to find a significant difference in a statistical test?
   a. Increasing the sample size
   b. Increasing the alpha
   c. Both
   d. Neither
   e. I Don’t Know

7. Please list the four major sections of a scientific paper.
   1. ______________
   2. ______________
   3. ______________
   4. ______________