

## **Young Adult Faith Leaders' Approach to the Evolution and Faith Dialogue**

Bryson Menke  
Biology Department  
Point Loma Nazarene University  
3900 Lomaland Drive  
San Diego, CA USA 92106

Faculty Advisor: Dr. April Maskiewicz Cordero

### **Abstract**

Over the past two decades several studies have sought to understand the general public's views regarding the relationship between religious faith and mainstream science. While the findings of these studies vary slightly, there is an overwhelming consensus among the public that Christian doctrine and biological evolution are in conflict. Yet many scientists who are also Christians reject that a conflict exists. In an effort to help college students reconcile mainstream science with their Christian faith, researchers at Point Loma Nazarene University are conducting studies to identify evidence-based best practices approaches for Christian universities. This current study aims to identify how members of the clergy and other faith based young adult leaders (YALs) (e.g. university resident directors/advisers) communicate with students about origins issues (e.g. diversity of life and human evolution). Specifically, this study sought to identify the factors that influenced their perceptions as well as the resources they bring to bear as they communicate with young adults who are in the midst of reconciling their own understanding of both Christian doctrine and mainstream science. Findings reveal that while YALs appear to be open to compatibility within the evolution and faith dialogue they still hold some misalignments about and distrust in the work of evolutionary scientists that will likely continue to impede dialogue and understanding. Results suggest that there is an openness on the behalf of YALs to engage in future interdisciplinary educational opportunities (e.g. workshops) which could bridge the divide and begin to help these leaders understand that the two sides are actually closer than previously thought.

**Keywords: Faith leaders, Origins and Evolution, Young Adults**

### **1. Introduction**

Among the general public, there is an unfortunate narrative that declares science and religion incompatible. As the controversy rages on between Christian creationists and Atheistic evolutionists, many believe that there is no possibility of reconciliation<sup>1</sup>. While the perceived conflict between science and faith persists, there are impressionable youth rejecting scientific career paths and giving up on their vocation and passions. In the book "Can You Believe in God and Evolution", Peters and Hewlett detail anecdotes of future promising science students abandoning educational pursuits in order to avoid conflict with their faith and upbringing<sup>2</sup>. The authors assert that rather than steering students away from science, the Christian church should instead encourage "young people to fill the ranks of tomorrow's scientists" (p.VII).

A research team at Point Loma Nazarene University has been examining science students' experiences at multiple Christian institutions to identify how they integrate science and religion during their time in college<sup>3</sup>. As a result of this research, questions began to arise about how students are influenced by their youth pastors and other Christian young adult leaders, both in their past and present. This current study begins to answer that question by surveying young adult leaders (YALs) about their views and approaches to mentoring youth. In addition to exploring their background, personal experiences, and education, we were interested in how YALs respond to real life interactions with young adults (ages 15-25 years old) as they wrestle with evolution and faith questions.

## 1.1 Origins, Evolution, And The Variety Of Positions:

In any discussion about evolution and faith, it is important to differentiate between the terms “origins” and “evolution” as these are frequently conflated. For this study, the term origins will refer to the point of inception for all life on earth. Evolution, on the other hand, will refer to the explanation for how very diverse living organisms descended and diversified from earlier forms during the history of the earth. Additionally, we may also refer to the broader science and religion (S&R) debate when discussing differences and similarities amongst the two disciplines, and more specifically, evolution and faith (E&F) with regards to the specific conflict narrative. This is not to say that either of these phrases are to be taken as absolutes, but rather as a discussion framework going forward.

While it is not possible to capture every potential belief within the S&R/E&F debate, there are several generally accepted categories in which most studies operate. Even within Christianity there are varying degrees of creationist positions. Absent of a universal agreement on how to define these positions we will categorize them along a continuum from atheistic to deity-based creation views. Naturalistic Evolution (NE) proposes that life on Earth, including humans, arose through undirected natural processes acting on random modifications in the genes of various life forms without any supernatural intervention. This explanation has been popularized by the New Atheist movement<sup>4</sup>. Intelligent Design (ID) works to bridge a perceived E&F gap by proposing that some aspects of the natural world are explained better by an Intelligent Designer than by natural selection<sup>5</sup>. This position accepts that natural selection acts on living creatures, but that some features of living creatures are so complex that they could not be explained by natural processes alone and therefore have been acted on by an intelligent source outside of supernatural revelation or sacred texts. While some Christians hold this view, it is not exclusively associated with Christianity in that it is can be absent of a monotheistic god. Nevertheless, ID allows for an alternate higher power in an effort to be more appealing to the many who are perplexed by the E&F debate.

Widely perceived as the most progressive Christian stance, Theistic Evolution (TE), also referred to as evolutionary creation, proposes that life on Earth, including humans, arose through natural processes that were initiated, maintained, and guided by God<sup>1</sup>. TE accepts mainstream scientific evidence for evolution and an old earth, and espouses the idea that the mechanisms of biological evolution can explain the emergence of new species and the divergence of life on earth. Amongst the most conservative of Christians, there is a split between Old-Earth Creationism (OEC) and Young-Earth Creationism (YEC). While the former (OEC) proposes that the world and life on it was created over a long period of time, species remain generally unchanged today on an Earth that may be billions of years old. Biblical accounts of the creation of the universe in Genesis 1 & 2 are not viewed as literal, and evolutionary processes for humans are rejected. The latter (YEC) proposes that the world and the life on it was created in six, 24-hour days that align with the Biblical accounts in Genesis 1 & 2. Species remain generally unchanged today on an Earth that is between 6,000 and 10,000 years old<sup>1,5</sup>. Evolutionary processes beyond microevolution are rejected in this view. While these are the most common positions provided in surveys, almost all studies include an option for those who are still unsure or apprehensive to commit to a particular category.

## 1.2 Prior Studies Examining Science And Religion Views:

There have been several recent studies conducted to better understand the S&R positions of both the general public and clergy<sup>6,1,7</sup>. A 2013 report commissioned by the BioLogos Foundation indicates that not only do the clergy disagree on issues surrounding the origins of the universe and human evolution, but many also have a fair amount of uncertainty about their own position<sup>7</sup> (Figure 1). Survey responses from 743 U.S. Christian pastors reveal four primary stances clergy hold about the origins debate: Young Earth Creation, Progressive Creation, Theistic Evolution, and overall uncertainty. While the US clergy seem to be at odds, the overwhelming majority, nearly 75%, agree that conversations about faith and science need to continue, especially with younger adults<sup>7</sup>. Yet many Christians, including clergy and their congregations, have voiced concerns that if they begin to accept portions or all of mainstream scientific theories about biological evolution, they will be "undermining the authority of scripture"<sup>1,7</sup>.

# CLERGY VIEWS: CREATION AND EVOLUTION

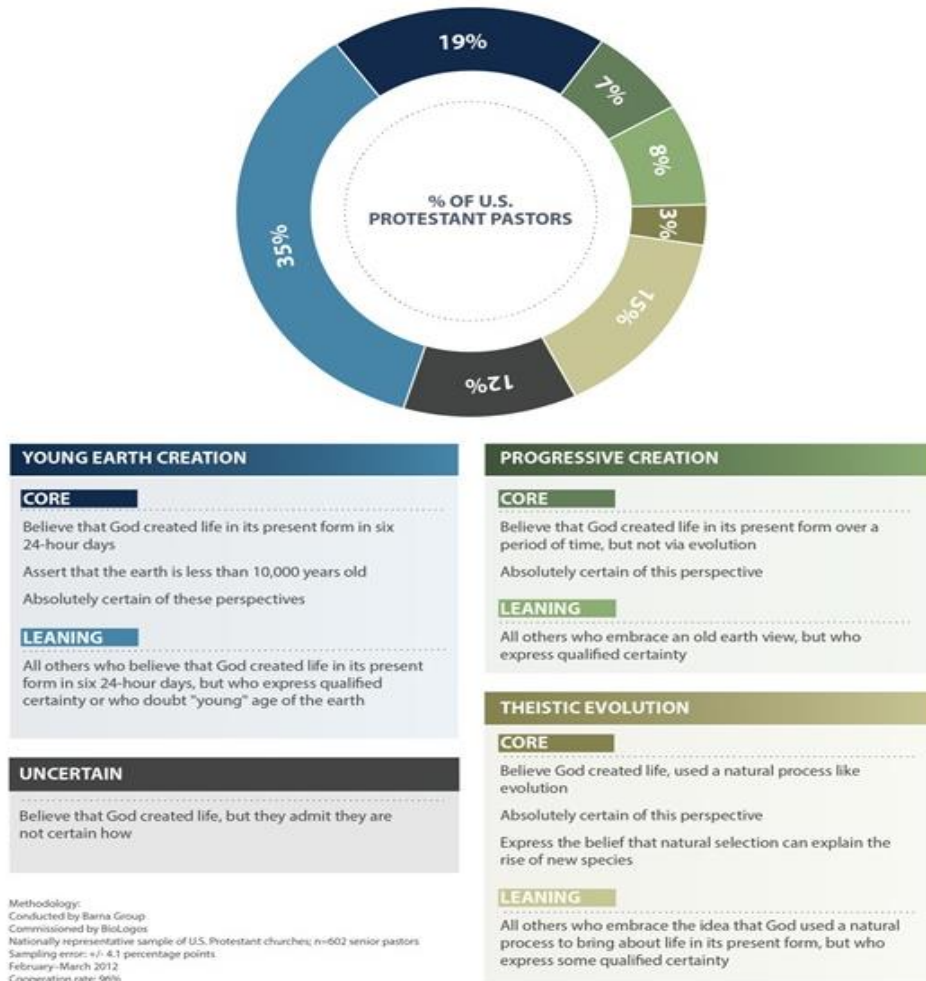


Figure 1: From "A Survey of Clergy and Their Views on Origins"  
at <http://biologos.org/blogs/archive/a-survey-of-clergy-and-their-views-on-origins><sup>7</sup>

There have been several attempts to understand where young adults, especially in the university setting, stand on the E&F issue, but there has been limited analysis of how young adults acquire their positions<sup>8,9,10</sup>. Our previous studies suggest that parents, mentors such as YALs, and teachers play a significant role in influencing students' positions<sup>3</sup>. This led us to specifically target YALs for this study to understand how they respond to E&F questions posed to them by young adults. To gain a more comprehensive picture about what YALs say when pressed on E&F questions, we thought it important to understand first where the YALs of our survey stand on the topic of evolution and the Christian faith. Additionally, we wanted to know how their positions have developed or may have changed over time; would YALs be interested in new knowledge pertaining to the debate from the mainline science community and if there was any room for a change in their previously established views. Finally, and most importantly, we sought to identify how YALs respond to questions asked or statements made by young adults about E&F issues, some of which are possibly in direct conflict with their organizational doctrine. This information would allow us to identify any misalignments between what YALs perceive are the claims from mainline science and what mainline science actually proposes. For example, the theory of biological evolution is neutral regarding a higher power; it does not refute or deny one. Instead, biological evolution proposes that the molecular and physiological processes responsible for the origin and diversification of life on Earth are the consequence of natural selection, mutations, gene flow, and genetic drift<sup>11</sup>.

## 2. Methods

For this study, we conducted a survey to document the factors that influence YALs in their guidance of young adults specifically targeting YALs perceptions about the compatibility between S&R. We wanted to identify both their thoughts on the current E&F debate and how they respond to questions posed by young adults. We were also interested in their willingness to partake in future educational opportunities that would potentially introduce alternate perspectives to the positions they currently hold. Finally, we hoped to identify any misalignments between the YALs knowledge and mainstream science.

The target audience included all YALs within any Christian denomination. For survey dissemination we relied heavily on both local support and social media platforms. Emails with a link to the Google survey were sent to dozens of known YALs. YALs were also encouraged to relay the survey to fellow YALs. Additionally, the survey linked was posted in closed nationwide groups of pastors and youth ministry leaders. Resident directors from three Christian universities, Point Loma Nazarene University, Northwestern College, and Trinity Western University, were also solicited for survey participation. Upon completion of the survey all participants were offered a single \$5 gift card for their efforts if they so desired.

The survey was conducted online via Google Forms and most questions were selected from a variety of prior surveys conducted on both the general public and university/college age students who attend faith based institutions<sup>1,8,3</sup>. The survey was comprised of 13 sections and included demographics, ranking, and scenario based questions. The demographics questions pertained to current and past religious experiences and upbringing as well as YALs current and past positions on the E&F debate. Additional questions gained insight into their background education in the sciences. The ranking section consisted of 26 Likert scale questions that ranged from ascertaining one's personal comfort level discussing the topic of evolution to identifying YAL's church/employer organization concerns. Each of these questions were ranked on a five-point scale. Lastly, the survey included three short scenarios each describing a student wrestling with a science and faith issue. The aim of the scenario based questions was to reveal information about how the YALs dealt with real life discussions. The majority of the questions within the scenarios were free response questions and YALs were encouraged to fully articulate their thoughts and course of action for each situation. All free responses were coded by two researchers independently using an emergent coding scheme developed by the first author. Any discrepancies in codes were negotiated among the two researchers.

## 3. Results and Analysis

The initial research question aimed at discovering what factors were influential for YALs in their dialogue with young adults. Specifically we worked to gain an understanding of what experiences may have led them to their current position on E&F and what they currently knew about the evolution and origins debate from both the science perspective and the faith perspective. We also sought their own personal perspective about the integration between evolution and Christian faith. We suspected that their personal experiences and feelings about the topic would relate to how they communicate and pastor young adults who may be wrestling with the reconciliation of science and faith.

### 3.1 Positions About Evolution And Faith:

The data show a considerable amount of diversity in beliefs about how God created the universe as we know it. Of the total respondents, only 10% felt uncertain in their beliefs. Unsurprisingly, none of the YALs chose the Naturalistic (Atheistic) evolutionary approach, however it was notable that 15% indicated that they would consider their belief system to align with Intelligent Design. While all of these categories are loosely defined, Intelligent Design with a capital ID can be considered to be absent of the Christian God instead referring to some generic metaphysical entity. The survey specifically stated this, yet several YALs still chose the ID option. Furthermore, when those who selected ID were asked how old the Earth was, 66% indicated 6000-10,000 years which suggests that they align more with the Young-Earth Creationist (YEC) position and are less familiar with the distinction between YEC and ID as a whole. In total, only 15% selected a strictly non-evolutionary creationist position which was split evenly between Old-Earth and Young-Earth theories. Interestingly, 59% of the YALs found favor with Theistic evolution (Figure 2).

## Current Origins/Evolution Position

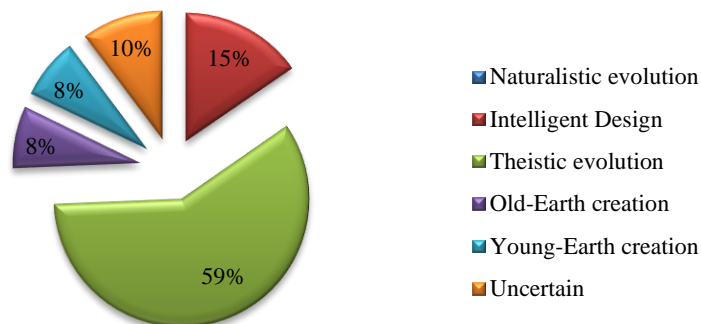


Figure 2: YALs hold a wide range of perspectives within the E&F debate. The majority of YALs found favor with Theistic evolution while creationists were evenly split.

When we compared YAL stated positions to ranking questions on interpreting the Biblical accounts of creation in Genesis 1 & 2, we found that only 17% were proponents of a literalist interpretation—that Genesis 1&2 are a historical account of the process of creation (Figure 3b). Additionally, 64% indicated that they were comfortable with the idea that God used evolutionary process to create the diversity of animal species on Earth (Figure 3a).

### Young Adult Leaders' Views on Creation vs. Evolution

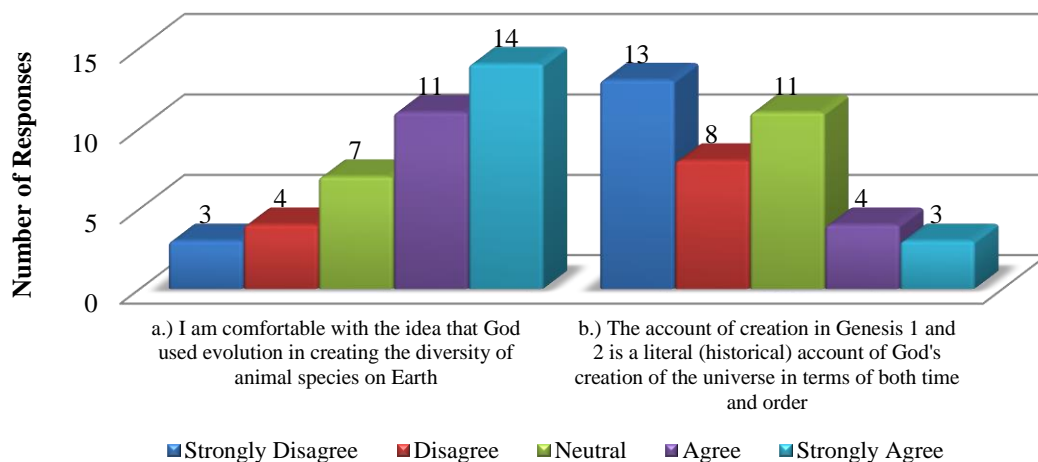


Figure 3 a-b: Most YALs hold non-literal Biblical interpretations. The majority of YALs were comfortable with the possibility of God using evolutionary processes.

### 3.2 Personal Thoughts About The Compatibility Of Evolution And Faith:

While identifying the positions of YALs is critical to understanding their mentoring actions, it is also important to get a sense of how compatible they feel E&F actually are. Thus, we specifically asked whether or not an individual could work as a dedicated evolutionary biologist while also being a faithful Christ follower. The overwhelming majority (90%) believe that this profession and faith are compatible (Figure 4a). Furthermore, only 10% of YALs are of the perspective that an individual's position on this debate must be "correct" in order to be a committed Christian (Figure 4b). We used "correct" to represent the view that there is only one acceptable Christian position about E&F (without defining what that position is) and the YAL believes it is his or her role to mentor youth to accept that view in order to align with Christian doctrine. Interestingly, 13% admitted that the views that they currently hold could or has negatively impacted their mentoring of non-Christian young adults (Figure 4c). When we extended the analysis of

compatibility (or reconciliation) to the scenario based questions, a collective 90% of YALs felt that Chris, an aspiring evolutionary biologist and Christian in scenario #1, could in fact be both. Additionally, 13% of YALs made direct statements in favor of accepting evolution when considering scenario #2 (Sarah, a student, shares concerns about E&F after reading a biology text discussing the common ancestry of life).

### Young Adult Leaders Thoughts on the Compatibility of Faith and Science

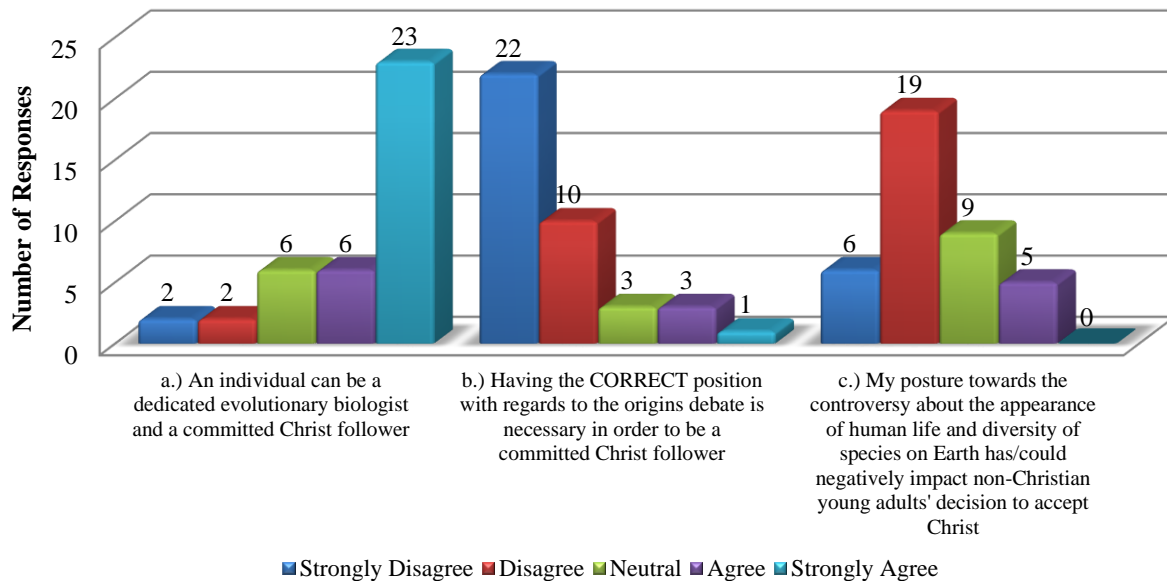


Figure 4 (a-c): YALs appear to be very confident in the compatibility of faith and science. Not only do YALs feel that they currently hold a posture towards acceptance but they also hold strongly to the idea that personal profession has little to no bearing on one's faith practices.

### 3.3 Knowledge About Evolution And Faith Issues:

In terms of their preparedness to have conversations with young adults about creation and evolution, 64% of the YALs surveyed had never received any formal training on how to respond to faith and science based questions. Additionally, of the 36% that indicated that they had received training, the majority of them denoted that the training was minimal and/or from a faith/religious perspective only. In other words, these YALs did not have a strong background in the sciences. Despite some lack of preparedness, we found that 82% of the survey group said that they were comfortable holding E&F conversations with young adults (Figure 5a). Moreover, while 75% of YALs indicated that they felt comfortable discussing their religious beliefs with science professionals, only 36% felt confident in their own understandings of modern evolutionary theories. And only 35% have conducted personal research on the topic (Figure 5b-c). We suspect, even with a lack of prior training and self-study, that the elevated comfort level in holding such conversations with youth is due in large part to the YALs organizational stances regarding the issue. As seen in figure 5d, 87% indicated that their organization encouraged acceptance of differing positions within the E&F debate.

## Young Adult Leaders and Their E&F Conversations

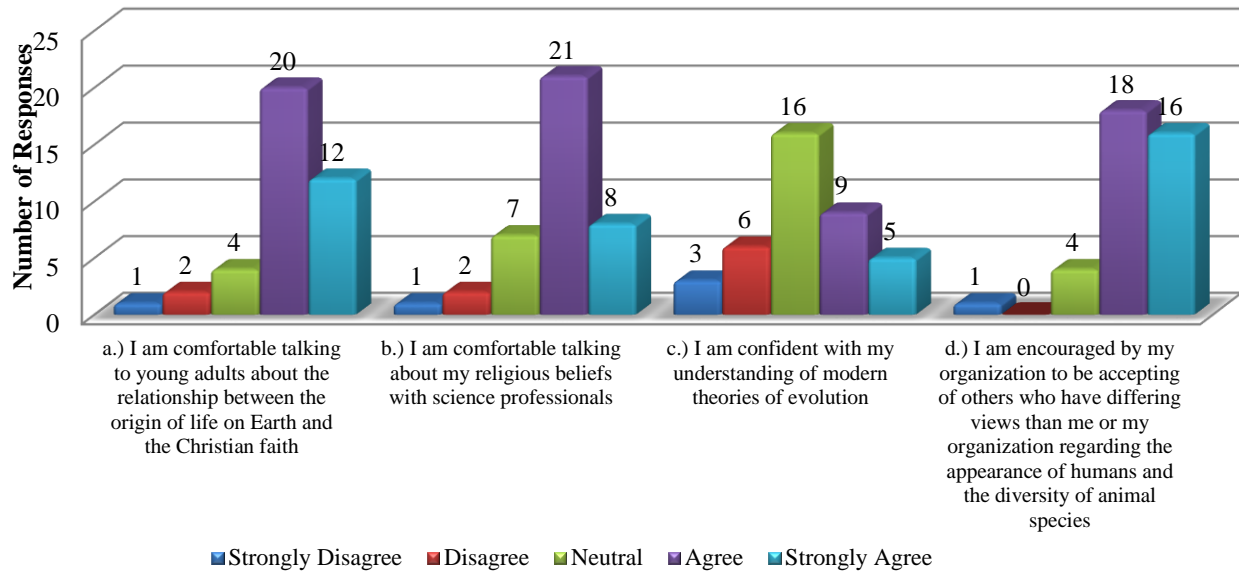


Figure 5 a-d: Understanding evolutionary theory is not linked to confidence in holding E&F conversation. YALs are overwhelmingly confident in their ability to communicate E&F and encouraged to be open to positions despite a lack of understanding of scientific theory

### 3.4 Young Adult Leaders' Evolution And Faith Conversations:

The free responses to the scenarios provided insight into how YALs dialog with students. In the free responses for scenario #1 we discovered that when posed with Sarah's dilemma, reading a textbook passage referring to an Earth that is billions of years old and bacteria as the initial inhabitants, 40% of YALs desired to take a shepherding approach to help young adults as they try to understand the relationship between faith and science, while 12% had the desire to "set Sarah straight", or correct the science textbook from a biblical perspective. When asked to consider their own thoughts regarding statements presented as truth by the scientific community, 23% of the respondents gave anti-science responses, while 19% revealed a lack of understanding of the nature of science (NOS). For example, one respondent wrote:

"Scientists, looking from a very naturalistic worldview that relies purely on empirical evidence, are going to come from the assumption that because God cannot be proved, he must be taken out of the equation, and therefore the history of the world must be explained only by naturalistic processes. Therefore they are going to come to a conclusion after starting from that starting point". (sic)

From this encounter we also found that 59% of YALs would prefer a mentoring and joint exploratory approach when wrestling with E&F questions compared to the 15% who expressed a closed view of the topic seeing scripture as wholly authoritative without any room for interpretation.

The analysis of the free responses for scenario #2, Chris being told by his pastor that he cannot be both a dedicated Christ follower and evolutionary biologist, reveal not only how YALs interact with young adults, but also how they would handle a potential situation where there are differing views within the same organization. In general, there seems to be significant support for someone like Chris, a Christ following high school student who feels called to study evolutionary biology, and his future aspirations. In total, only 55% would affirm this student in following his calling. Twenty-one percent of the respondents clearly indicated that Pastor A was incorrect for suggesting the opposite, and only 15% of YAL responses called Chris' motivations into question. While it is encouraging that majority of YAL responses in this scenario affirmed that Chris can be both an evolutionary biologist and a Christ follower, perhaps the most troubling result is that 25% of the YALs indicated that they would avoid addressing Pastor

A's handling of the issue when more than twice that amount, 59%, responded negatively towards the fellow pastor's advice.

### 3.5 Posture Towards Change:

Of those surveyed, 59% the YALs had indicated that they have at some point in their lives changed their position regarding the evolution/origins debate. This acknowledgement of previously changing positions may be related to the findings that an overwhelmingly 82% were open to future educational opportunities that allow them to better understand the totality of the current E&F debate (Figure 6a). Perhaps the most important aspect of a YALs posture towards a change in their own position is that 87% agreed that it would not compromise their current ministry with young adults (Figure 6b).

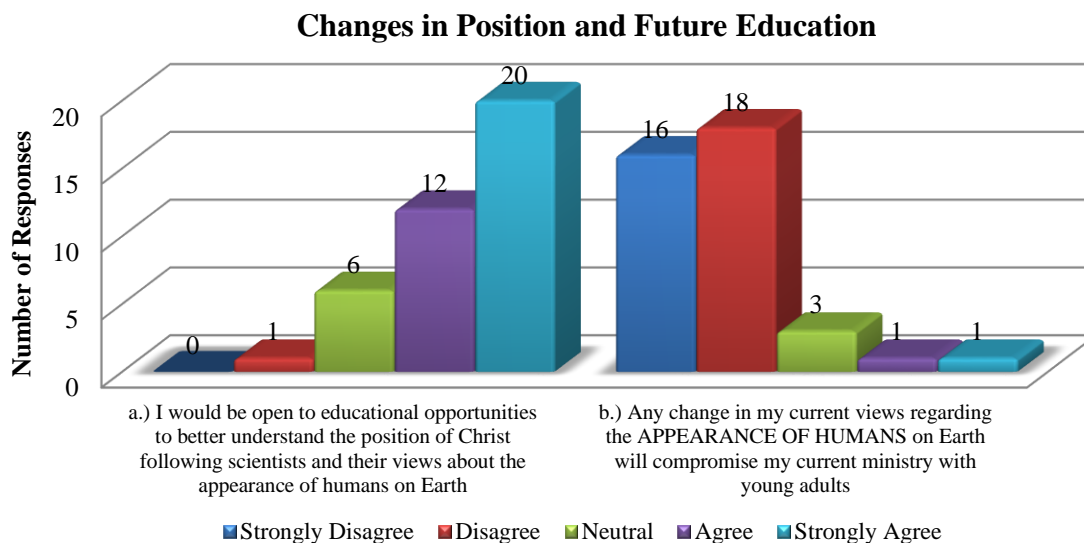


Figure 6 a-b: YALs have a history of changed positions and are open to new education. YALs reject the idea that a change in their current position will compromise their ministry and they are open to new information.

### 3.6 Posture Towards Scientists:

While much of the data analysis is encouraging news for Christ-following scientists who hope to provide solid reasoning as to why faith and science can be reconciled, there are still some troubling indicators that there's more work to be done. A large number of YALs, 31%, felt that they could not trust the motivations of scientists who accept evolution (Figure 7a). Furthermore, 18% said they were skeptical of research methods that lead scientists to accept evolution, and another 23% were unsure about the topic (Figure 7b). Though the remaining 59% do trust scientific methods, it is clear that there is room for improved understanding of the nature of science and scientific epistemology.



## Posture Towards Scientists and Their Research Methods

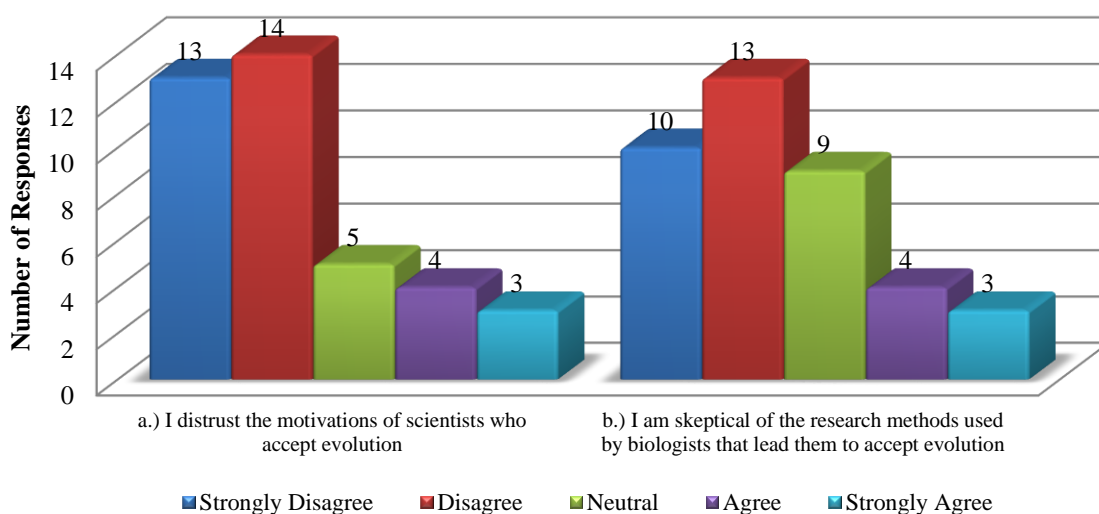


Figure 7 a-b: Scientists have work to do in order to gain the trust of YALs. While the majority of YALs trust scientists and their work there are a few who may have misunderstanding as to their processes.

## 4. Conclusion

As we consider the totality of the survey results, we found that the participating YALs were largely open to Christians holding multiple perspectives about evolution and faith. Not only were they comfortable with the myriad of positions, but they overwhelmingly found E&F compatible. Despite the trend towards reconciliation, there were some significant inconsistencies. Most YALs felt confident in their ability to communicate with young adults on the topics of E&F even though many admitted that they had little to no prior education or training on the topic. This unwarranted overconfidence could have troublesome consequences for the YALs as they seek to mentor future generations. Another sticking point with the overconfidence issue is that there was still a substantial amount of distrust between these faith leaders and their perception of the practices employed by science professionals. This potential distrust is now being shown to be pushing young adults to disengage from their faith roots because of feeling ill-equipped to reconcile the anti-scientific view of their churches<sup>12</sup>. One of the goals of this study was to identify these misalignments and in doing so provide a path towards effective continuing education for YALs that aims at increasing understanding of the S&R and E&F controversy while also improving the confidence of YALs' ability to speak to the subject when asked.

It is important to keep in mind that these goals serve to decrease the S&R divide that results from a lack of understanding and fear of what mainstream science proposes. Even though several surveys show that those who attend church regularly are less likely to see a conflict between science and religion than less engaged Christians, there are many young adults of the mindset that science and religion remain in conflict<sup>13,14</sup>. This belief is based largely from the teaching of their respective faith leaders. In no way does this research seek to change the position of YALs, but rather to find ways to help them develop a broader perspective of the issues in hopes of preventing situations like that of scenario #2 in this survey. We want to ensure that students are not discouraged by YALs from pursuing careers in science.

In moving forward, we hope to establish not only an opportunity for, but also a curriculum that enables YALs to be knowledgeable and feel confident in their ability to communicate topics of E&F and throughout the entire S&R spectrum. While a current project is in motion to achieve this goal (see <http://thesteamproject.org/>), many of the interventions are brief (one to two hour conferences). We believe it would be beneficial to conduct longer, more sustained interventions that include instruction in the nature of science and scientific epistemology as well as information about biological evolution and various Christian perspectives. With that, there would be an opportunity to conduct longitudinal and broader studies of the YAL perspective and response prior to and after such education.

We would like for future education and studies to be expanded across all ages and denominations in order to access the trends that are developing throughout the faith and science communities.

## 5. Acknowledgments

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