

# Influence of Modern Science on Youth Religious Moral Practices in Nairobi, Kenya

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## Abstract

In current developed world there is a lot of influence of modern science to our religious daily lives. Science has been used on all aspects to make human lives easier and comfortable if not confused our religious beliefs. Current generations are more dependent on science and technology more than knowledge passed on by their parents, guardians and religious leaders. It's for this reason this study sought to establish the influence of Modern Science on Youth Religious Moral Practices in Nairobi, Kenya. The study independent variable was modern science with Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach as its sub-variables. The study dependent variable was Youth Religious Moral Practices with services attendance, youth groups, community services and prosocial behaviour as its indicators. The study used theories such as big bang theory, divine command theory, deontological ethical theory and neuron doctrine theory to hanger all variables' discussions. The study was conducted in Nairobi County, Kenya with an estimated population of 2,154,566 youths and a sample size of 400 youths distributed all Nairobi Sub-counties on which 312 youths responded making it 78% respondents. The study used questionnaires as its primary data collection instrument which was tested through pilot testing with 40 respondents who made 10% of the sample, to check on validity and reliability of the tool. On full collection of the primary data, the qualitative data was cleaned, coded and analysed using SPSS software version 29 to get the descriptive analyses and inferential analyses of the data. The analysed results therefore, at a 95% significance level, the findings indicated that modern science had a significant positive influence on the Youth Religious Moral Practices in Nairobi County. The summarised study findings indicated that there was a positive significant relationship between modern science on Youth Religious Moral Practices in Nairobi, Kenya. Overall, the study concluded that there is positive significant relationship between modern science and Youth Religious Moral Practices in Nairobi County, Kenya. Finally, the study recommended that youth should be made aware of the challenges they could pose themselves to on use of modern science applications in shaping their religious moral practices.

**Keywords:** *Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach, Youth religious Moral Practices*

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## 1. Introduction

### 1.1 Background

Bauer, (2013) defines modern science as characterized by its reliance on experimentation and observation to understand the natural world, focusing on observable and repeatable results, and aiming to improve humanity's understanding and condition. Since civilization, the human race has been doing whatever it takes to lessen their sufferings either at work, diseases, hunger, survival, war, postponement of death and any human eventuality that come about life. Advancement of science at all aspects has come handy on realising this. According to Barber (1990), Scientific research has brought multifarious benefits to people's daily lives, and public trust in science and in experts should be a natural extension of sciences cultural. Moreover, reliance on science and on experts is essential to the functioning of modern, highly differentiated societies where knowledge is specialized and complexity is constantly growing, and when individuals lack the knowledge to make decisions and evaluate risks associated with a hazard (Battiston et al. (2021)). The development of sciences especially natural philosophy in Western Europe during the Middle Ages, has a considerable foundation in the works of the Arabs who translated Greek and Latin compositions (Grant, 1990).

Youth Religious Moral Practices involve engaging in activities that reinforce religious beliefs and values, such as attending services, participating in youth groups, and performing community service, which can foster a sense

of accountability and prosocial behaviour (Elsayed, et al. (2023). Kelly et al. (2022) explains that science has made a huge revolution into modern science in the fields of mathematics, physics, astronomy, biology and chemistry and thus its contribution to Youth Religious Moral Practices cannot be underestimated. Modern science significantly influences religious moral practices by prompting discussions and reinterpretations of religious beliefs regarding issues like the origins of life, human nature, environmental stewardship and the boundaries of life and death, particularly in areas like biotechnology and genetic engineering, often leading to debates about the ethical implications of scientific advancements within religious communities and prompting adaptations to their moral codes to align with new scientific understanding (Rasal et al. 2022).

Navigating on modern science many rich countries (United States, Russia, United Kingdom, France, China, India, Pakistan, North Korea, Iran, Israel etc) have developed nuclear weapons ready to destroy their perceived enemy on a click of a button (Ican 2024). The ongoing countries wars, Hamas verses Israel, Russia verses Ukraine, etc, are using modern science and technology on either through the equipment deployed, use of drones to hit targets or artificial intelligence to locate targets. These have caused loss of many lives and thus some of the countries are forcing the youth to join their military to support the fighting. On the same breath, some countries are holding very deadly biotechnology weapons as a defence in case their adversaries strike, they release. A case in point is the Coronavirus Disease 2019 (COVID-19) virus where America accused China of developing COVID-19 Virus with sinister exterior motive (Ministry 2024). The literature poses doubts on youth religious moral practices on why one should religiously attend services to worship God who can't take control of such life damaging scientific interventions.

According to Shilaho (2024), in the hands of disgruntled youth across Africa, the smartphone is a powerful weapon. Shilaho reported that in the recent past, youth in several African countries have used social media to hold their governments accountable, raise awareness about injustice and corruption, satirized the political elite, and resisted authoritarianism. Youths in North Africa are undergoing a digital revolution, with technology emerging as a powerful catalyst for addressing socio-economic challenges (Baghoury 2024). From fintech solutions that enhance financial inclusion, to Artificial Intelligence revolutionizing healthcare, the region is leveraging innovation to bridge development gaps and accelerate attainment of the Sustainable Development Goals (SDGs). These youth-led initiatives have made North Africa a vibrant hub for digital innovation, with emerging technologies making strides in addressing long-standing development challenges. This approach could be promoting youth groupings mobilised using the digital platforms which could have positive and negative impacts on equal measures.

Another modern technology controversy in Kenya is the push by government to vaccinate at least 22 million cattle and 50 million goats and sheep over three years (Muia, W. et al. 2025). Some of those who oppose the programme believe Microsoft co-founder Bill Gates is funding it, fuelled by people sharing videos of interviews featuring him talking about vaccinating cows to control methane emissions. Kenyans are sceptical the vaccination is under sample testing and Kenyan livestock is being used as the specimen while the Kenyan government is financially benefitting from the manufacturers. This approach has a very huge negative impact on youth community services as they would be motivated by community services which have monetary benefits against the religious community services which are based on charity.

## **1.2 Statement of the Problem**

Modern science has come in as a big help to human race. The use of modern operating machines has made it easy to operate patients with very complicated operations with ease like the sonography diagnostic tools used by medical professionals can image the heart, blood vessels, eyes, thyroid, brain, breast, abdominal organs, skin and muscles (Wilkinson G. et al. 2023). According to Dastagiri (2018), modern cosmology seems to invites human beings to explore creation questions as presented on the belief in a creator God, who created all things. According to ILO (2024), with use of AI many people have potential to generate three million new jobs across the continent for themselves by 2030 in various sectors like healthcare, agriculture, finance, education, with roles like AI-powered diagnostic analysts, precision agriculture specialists, chatbot developers and educational content curators. The modern science interventions have made it easier for the youth to get information and knowledge easily available. This however, could work against the youth religious service attendance, community services and prosocial behaviours.

On the other hand, scientific and technology interventions are raising a lot of controversies and confusions. The controversy on modern cosmology and religion beliefs may end up in convicting some members as was the case of Galileo on 1633 (Stanford, 2021). Developed of war weapons ready to destroy other humans on a click of a button is another negative aspect of modern science (Ican 2024). Some scientific health related experiments at some African countries are on disadvantage of the citizens as they come with financial benefits to the governments. There is a lot human trafficking perpetuated through artificial intelligence where perpetrators are

increasingly using social media, online advertisements, websites, dating apps, and gaming platforms to force, defraud, or coerce job seekers into labour and sexual exploitation (Kilbride E. 2024).

The modern science has provided many positive and negative opportunities to the Nairobi, Kenya youth. These ranges from creation of jobs, in-depth appreciation of religion beliefs, communication, and many other positive contributions to youth lives. On the other hand, it's evident that modern science has had a bad influence to youth religious morals practices. This can be explained through drugs, doubts to religion beliefs, exposure to online bad materials, information and practices. Many youths in Nairobi city county live in about 200 informal settlements (slum areas). These slum areas are centre of all crimes committed in the city which many of them are perpetuated by Youths despite coming from very religious parents and mega religions. This poses Nairobi youths to expedite some morals that are beyond expectations of religious upbringing. It was for this reason the study endeavoured to study the extent to which modern science influence the youth religious moral practices in Nairobi, Kenya.

### ***1.3 Objective of the Study***

The objective of the study was to determine the influence of modern science on Youth Religious Moral Practices in Nairobi, Kenya. Specifically, the study pursued to determine the impact of Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach on Youth Religious Moral Practices in Nairobi, Kenya. The study research question was to establish if modern science influence Youth Religious Moral Practices in Nairobi, Kenya.

## **2. Theoretical Review**

According to Wilkinson (2024), the scientific Big Bang theories does not disapprove the religious beliefs on creation and do not provide answers to many questions on origin and future of the universe. This Big Bang theories argument on universe origin, structure of the universe, universe expansions and moral cosmology was used to argue on the influence they have on youth religious moral practices.

Divine command theory is a moral theory that states that God's commands determine what is right and wrong. The Devine command theory was used to argue out if biotechnology advancements are contradicting God's commands and human beliefs. It tested if biotechnology processes, applications, interference with organisms, test specimen affect the youth religious moral practices.

Deontological evaluations consider the intention as well as the action, on a deontological analysis it is possible that while the action the individual does represents a moral obligation, the individual might have an inappropriate intention. The deontological theory was used to test the Artificial Intelligence (AI) data assessed, usage security, performance of human functions and usage permissions influence the youth religious moral practices.

According to Mishqat (2017), the neuron doctrine states that neurons are the structural and functional units of the nervous system. The neuron doctrine has been the basis for advances in understanding how the nervous system functions. The Neuron Doctrine Theory was used to test the neurobiological approaches as behavioural, social, cognitive and developmental neuroscience influence the youth religious moral practices.

## **3. Conceptual Framework**

A conceptual framework is a tool used in a study to organize ideas and show how they relate to the study (Sage, 2021). It's often used in qualitative research, especially in the social and behavioural sciences. The study had modern science as the independent variable with sub-variables as cosmology knowledge, biotechnology advancement, Artificial Intelligence (AI) reliance and Neurobiology approach. The study had Youth Religious Moral Practices as the dependent variable with indicators as Services attendance, Youth groups, Community services and Prosocial behaviour as indicated on Figure 1 below.

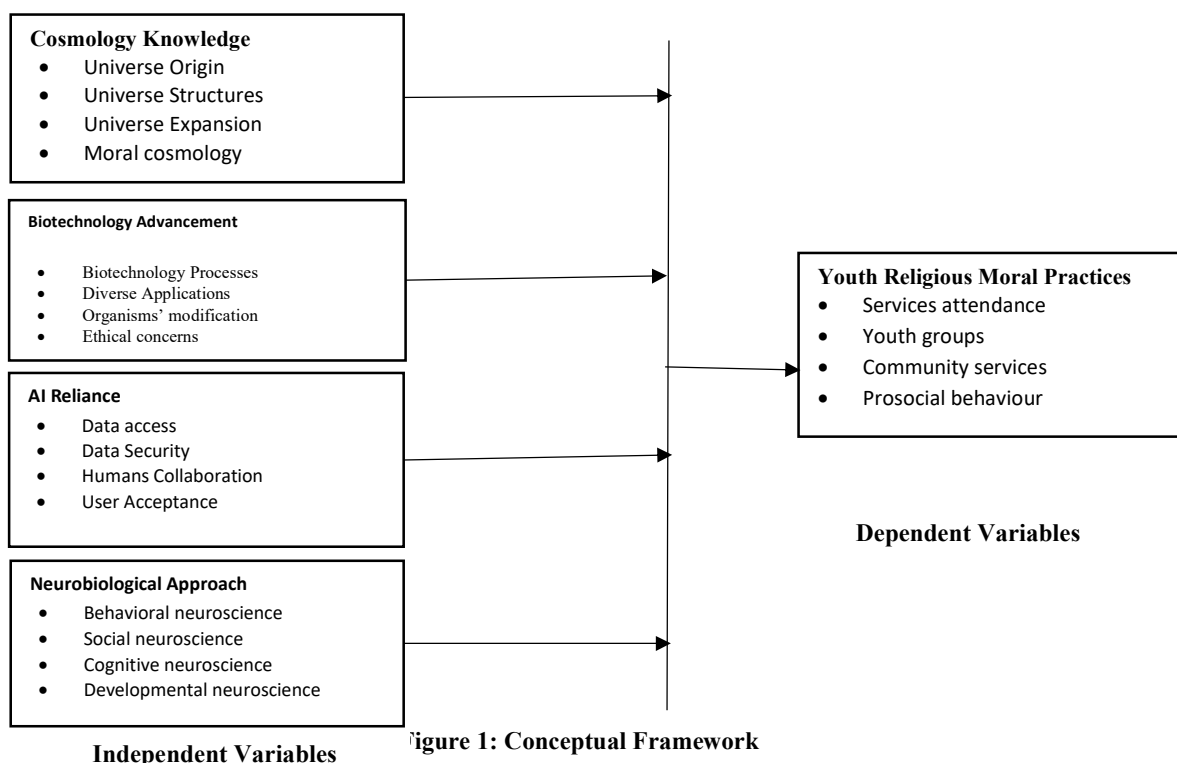


Figure 1: Conceptual Framework

#### 4. Literature Review

Wachege (2017) study concluded that generally social media has been noted to have a significant influence on the youths' way of life especially their choices, desires and attitudes. The study observed that this may be in relation to the nature of some mass media content which the youth seem to know compromises moral values and disrupts family time together and the situation is made worse when social media provides information that erodes the sense in the traditional values and ideals. Wachege (2017) noted that Kenyan youth like many other people enjoyed the benefits social media offers but it was unfortunate a good number were allowing themselves to be victims of its negative influence.

Wachege (2017) study observed that the power of religion was starting to appear ineffective in the face of rapid social change as far as combating moral decadence in society is concerned, but even with the many demands the parents put on the religion concerning moral education of their children, the religion can only do so much. Poshkid, (2014) study lamented that the religious institutions, which are regarded as an organized collection of belief systems, cultural systems and world views relating humanity to spirituality and to moral values seem to have failed in their fight against moral decadence and have indulged more in the pursuance of materialistic gains. Joyan (2024) observed that studies have consistently shown that religious upbringing, whether strict doctrinal adherence or spiritual but not religious, plays a significant role in shaping adolescents' moral reasoning and ethical decision-making processes. The study noted that adolescents raised in environments emphasizing religious teachings often exhibit distinct moral frameworks that integrate religious values, authority, and community norms into their ethical reasoning. Joyan (2024) concluded that religious influence can lead to higher levels of obedience-based moral reasoning among those in strict doctrinal settings, while adolescents from spiritual but not religious backgrounds tend to prioritize personal growth and compassion based on internal reflection and diverse spiritual practices.

Wamalwa (2016) study concluded that one major factor that has led to the failure of both religion and science in addressing moral issues in the Kenyan society has been the nonrecognition of one another's vital role in the human life, and hence in society. The study observed realization by both science and religion that each has a part in the human life is the first step in rebuilding a moral society, since man is both spiritual and material. Wamalwa (2016) noted that the physical, material, or empirical orientation of science and the spiritual tendencies of religion can both be merged to address the problems of human person. Wamalwa (2016) study

summarised by quoting Aristotle who realized this early in time and thus contented that we never find matter without form or form without matter in nature.

Elsayed (2023) study observed that the role of religion depends on individual beliefs, values, and experiences, and can vary widely across different cultures, societies, and historical periods. Nonetheless, for many people, religion can offer a source of meaning, community, guidance, and support that enriches their lives and helps them to navigate the complexities of the world. The study concluded that religion can play a significant role in shaping ethical and moral values among young people. Elsayed (2023) noted religious teachings often emphasize the importance of living a virtuous and ethical life, and religious institutions could provide guidance and support for young people as they navigate complex moral issues. The study however observed moral values among youths are shaped by a variety of factors, including family, education, culture, and the media, and it is important for parents, educators, and religious leaders to work together to promote positive values and ethical behaviour. Elsayed (2023) recommended development of strong ethical and moral values as essential for individuals to live in harmony with others and to make responsible and ethical choices throughout their lives. Uecker (2017) study concluded that young adults are also more likely to have lower religious commitment when they view science and religion as independent institutions, lending support to secularization ideas about how social differentiation secularizes individuals.

## 5. Methodology

This study adopted a descriptive research design. The study targeted population was the Nairobi City County youth population totalling to 2,154,566 distributed on 11 sub-counties as shown on Table 1. The study used probability stratified sampling technique to divide the population into subgroups (strata) and then randomly selecting from each stratum by employing the Yamane Formula (Asenahabi et al. 2023) to determine the sample size of the target population of 400 respondents. The Yamane Formula (Asenahabi et al. 2023):

Where:

$n$  is the sample size

$N$  is the population size

$e$  is the level of precision

$$n = \frac{2,154,566}{1 + (2,154,566(0.05)^2)} = 400$$

$$n = \frac{N}{1 + (N(e)^2)}$$

Data was collected from a sample size of 400 respondents by use of structured questionnaires. Pilot testing of the tool was carried out to check on validity and reliability of the instrument. Statistically, a minimum factor loading of 0.7 was required on validity and a Cronbach's alpha of 0.7 for reliability. Data analysis was done using descriptive and inferential statistics analyses and presented using tables.

**Table 1: Study Sample Distribution**

| # | Sub-County | Population | Sample | #  | Sub-County   | Population       | Sample     |
|---|------------|------------|--------|----|--------------|------------------|------------|
| 1 | MAKADARA   | 92,873     | 17     | 7  | KASARANI     | 382,521          | 71         |
| 2 | KAMUKUNJI  | 131,455    | 24     | 8  | EMBAKASI     | 484,516          | 90         |
| 3 | STAREHE    | 103,107    | 19     | 9  | KIBRA        | 91,031           | 17         |
| 4 | LANG'ATA   | 96,770     | 18     | 10 | MATHARE      | 101,216          | 19         |
| 5 | DAGORETTI  | 212,762    | 39     | 11 | NJIRU        | 306,976          | 57         |
| 6 | WESTLANDS  | 151,338    | 28     |    | <b>TOTAL</b> | <b>2,154,566</b> | <b>400</b> |

## 6. Results and Discussion

### 6.1 Response Rate

The study involved the distribution of 400 questionnaires to Nairobi County youth, spread out across the eleven wards. Out of these, 312 questionnaires were dully completed and returned, indicating a 78 percent response rate, which was deemed satisfactory for the study. This response rate was considered appropriate for data analysis and presentation.

## 6.2 Gender Distribution

Respondents were required to specify their gender to facilitate an analysis and discussion of gender-based participation. Table 4.3 shows the gender distribution of respondents, revealing that 53.8% were male and 46.2% were female. This shows balanced gender response thus indicating the results obtained has balanced gender views. The findings fall within the Kenya constitution 2010 two-thirds gender rule in Kenya.

**Table 2 Gender of Respondents**

| Gender       | Frequency  | Rate of Response |
|--------------|------------|------------------|
| Male         | 168        | 53.8             |
| Female       | 144        | 46.2             |
| <b>TOTAL</b> | <b>312</b> | <b>100</b>       |

## 6.3 Age of the Respondents

The study clustered the ages under study on four strata. These categories encompassed below 15 years, 15-20 years, 20-25 years and over 25 years. Analysis of the gathered data showed a fair distribution of respondents within the target age of 15-30 as indicated on Table 4.4 below. The results fall within The United Nations definition of youth as persons aged 15–24 for statistical purposes (United Nations 2024).

**Table 3: Respondents' Age Bracket**

| Age Bracket  | Frequency  | Percent    |
|--------------|------------|------------|
| Below 15     | 54         | 17.3       |
| 15-20        | 96         | 30.8       |
| 20-25        | 150        | 48.1       |
| Over 25      | 12         | 3.8        |
| <b>Total</b> | <b>312</b> | <b>100</b> |

## 6.4 Academic Qualification

The question sought to establish the level of education on Nairobi Youth. The results on Table 4 indicate a huge percentage with basic education training. This could have been associated with huge cost of living in Kenya and poor administration of higher education funding systems in Kenya.

**Table 4: Respondents' Education Levels**

| Training Level          | Frequency  | Percent    |
|-------------------------|------------|------------|
| Basic Education         | 140        | 44.9       |
| Under Graduate Training | 72         | 23.1       |
| TVET Graduate Training  | 94         | 30.1       |
| Post Graduate Training  | 6          | 1.9        |
| <b>Total</b>            | <b>312</b> | <b>100</b> |

## 6.5 Employment

The question sought to find out the Nairobi Youth levels on employment. The results on Table 5 indicate a huge percentage of 77% youth not employed. This explains why on March 2024 in Nairobi the Gen-Z stormed parliament and interrupted its functions including burning it as recorded on a study by Shilaho, (2024).

**Table 5: Respondents' Employment Status**

| Status       | Frequency  | Rate of Response |
|--------------|------------|------------------|
| Employed     | 72         | 23               |
| Unemployed   | 240        | 77               |
| <b>TOTAL</b> | <b>312</b> | <b>100</b>       |

## 6.6 Religion

The question sought to check on different faiths' contribution to the study. The data presented on Table 6 shows a fair distribution across all faiths in Kenya.



**Table 6: Respondents' Faith**

| Training Level | Frequency  | Percent    |
|----------------|------------|------------|
| Christian      | 116        | 37         |
| Muslim         | 86         | 28         |
| Hinduism       | 36         | 12         |
| African        | 29         | 9          |
| Others:        | 45         | 14         |
| <b>Total</b>   | <b>312</b> | <b>100</b> |

### 6.7 Descriptive Analysis

In descriptive analyses sub-topic, presented the weighted means and descriptive statistics for all the variables. This brought out the tendency of responses whether in agreement with the statements or in disagreement. Then also checked on correlation of the responses using means and standard deviation whether the all-item responses fall within a common curve tendency between the highest mean and the lowest mean.

### 6.8 Descriptive Analysis for Modern Science

The research aimed to determine how modern science contribute to Youth Religious Moral Practices. The study checked on Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach as they influence Youth Religious Moral Practices in Nairobi County. Participants were requested to assess modern science influence on Youth Religious Moral Practices statements using a rating scale of 1 to 5. The results are presented in Table 7.

The weighted means results on Table 4.16 show the highest mean as 4.26 with standard deviation of 0.912 and the lowest mean as 3.97 with standard deviation of 0.929 indicate uniform curves implying there was a correlation between modern science and Youth Religious Moral Practices. This is supported by study by Wachege (2017) that observed that modern science seems to compromises youth moral values and disrupts family time together and the situation is made worse when social media provides information that erodes the sense in the traditional values and ideals.

**Table 7: Weighted Mean for Modern Science influence on Youth Religious Moral Practices**

| Statements | N   | Min | Max | Mean | SDV   |
|------------|-----|-----|-----|------|-------|
| Item 1     | 312 | 1   | 5   | 4.26 | 0.912 |
| Item 2     | 312 | 1   | 5   | 4.18 | 0.491 |
| Item 3     | 312 | 1   | 5   | 4.15 | 1.095 |
| Item 4     | 312 | 1   | 5   | 3.97 | 0.929 |
| Item 5     | 312 | 1   | 5   | 4.19 | 0.621 |
| Item 6     | 312 | 1   | 5   | 4.15 | 1.095 |
| Item 7     | 312 | 1   | 5   | 3.97 | 0.929 |
| Item 8     | 312 | 1   | 5   | 4.18 | 0.491 |
| Item 9     | 312 | 1   | 5   | 4.15 | 1.095 |

The study findings indicated that 78.0% (Sum of 47.1% and 30.9%) of the respondents concurred with the statements that modern science affect Youth Religious Moral Practices as indicated in Table 8. This is consistent with the findings by Wachege (2017) that noted that Kenyan youth like many other people enjoyed the benefits modern science but it was unfortunate a good number were allowing themselves to be victims of its negative influence.

The study further asked the respondents to express their own views on what could be modern science influence on Youth Religious Moral Practices. Majority of the respondents expressed their Religious Moral Practices slavery to modern science. This agrees with study by Wachege (2017) study that observed that the power of religion was starting to appear ineffective in the face of rapid social change as far as combating moral decadence in society is concerned, but even with the many demands the parents put on the religion concerning moral education of their children, the religion can only do so much

**Table 8: Statistical Results for Modern Science influence on Youth Religious Moral Practices**

| Statements       | SD         | D          | N           | A           | SA          | Total %      |
|------------------|------------|------------|-------------|-------------|-------------|--------------|
| Item 1           | 2.7        | 5.9        | 17.6        | 45.6        | 28.2        | 100.0        |
| Item 2           | 2.2        | 8.2        | 14.8        | 49.8        | 25.0        | 100.0        |
| Item 3           | 1.6        | 6.4        | 16.2        | 49.7        | 26.1        | 100.0        |
| Item 4           | 0.0        | 2.5        | 14.7        | 44.5        | 38.4        | 100.0        |
| Item 5           | 1.3        | 4.4        | 13.6        | 45.2        | 35.5        | 100.0        |
| Item 6           | 0.0        | 2.5        | 14.7        | 44.5        | 38.4        | 100.0        |
| Item 7           | 1.3        | 4.4        | 13.6        | 45.2        | 35.5        | 100.0        |
| Item 8           | 2.2        | 8.2        | 14.8        | 49.8        | 25.0        | 100.0        |
| Item 9           | 1.6        | 6.4        | 16.2        | 49.7        | 26.1        | 100.0        |
| <b>Average %</b> | <b>1.4</b> | <b>5.4</b> | <b>15.1</b> | <b>47.1</b> | <b>30.9</b> | <b>100.0</b> |

### 6.9 Inferential Analysis

Inferential statistics which is also known as sampling statistics is used to draw conclusions about a population from sample information. The inferential statistics was presented using regression analyses by Model Summary that provided Regression analysis of R and R<sup>2</sup>, ANOVA that provided P-value on Confidence level and Coefficients' analysis that provided Linear Regression Model coefficients for all variables.

### 6.10 Regression Analysis

Regression analysis is a statistical method for determining the strength and nature of a relationship between a dependent variable and independent variables. The research used a regression model to determine the effect of modern science on the Youth Religious Moral Practices in Nairobi County. This enabled the study to address the research question. The regression in this study addressed the model of fitness, ANOVA analysis and coefficients analyses.

On regression on model of fitness, the study findings shown in Table 9, R indicate a positive correlation of 68.0% of independent variables on modern science and dependent variable, Youth Religious Moral Practices in Nairobi County. The results R<sup>2</sup> also implies that modern science influence by 46.2% to the Youth Religious Moral Practices in Nairobi County.

**Table 9: Regression Model Fitness for the Independent Variables**

| Model Summary |                   |          |                   |                        |
|---------------|-------------------|----------|-------------------|------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of Estimate |
| 1             | .680 <sup>a</sup> | .462     | .460              | .60809                 |

a. Predictors: (Constant), Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach

The ANOVA test was conducted on all independent variables. Table 10 reveal the results of p-value is 0.000. This implies that the regression model used in the study is statistically significant, as the p-value is below 0.05 at the 95% confidence level.

**Table 10: ANOVA on the Independent Variables**

| ANOVA <sup>a</sup> |              |                |            |             |        |                   |
|--------------------|--------------|----------------|------------|-------------|--------|-------------------|
| Model              |              | Sum of Squares | df         | Mean Square | F      | Sig.              |
| 1                  | Regression   | 19.669         | 4          | 4.917       | 65.560 | .000 <sup>b</sup> |
|                    | Residual     | 22.905         | 307        | .075        |        |                   |
|                    | <b>Total</b> | <b>42.574</b>  | <b>311</b> |             |        |                   |

a. Dependent variable: Youth Religious Moral Practices

b. Predictors: (Constant), Cosmology Knowledge, Biotechnology Advancement, AI Reliance, Neurobiological Approach

The findings from Table 11 reveal that, when keeping all other factors, including modern science constant, the Youth Religious Moral Practices in Nairobi County stands at 1.652. This implies that there are other factors which contribute to Youth Religious Moral Practices in Nairobi County other than Cosmology Knowledge, Biotechnology Advancement, AI Reliance, and Neurobiological Approach under this study.



From the coefficients presented in Table 11, a linear optimal regression model could be developed to present the relationship between the independent variables; Cosmology Knowledge, Biotechnology Advancement, AI Reliance and Neurobiological Approach and the Youth Religious Moral Practices in form of  $Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4$  as demonstrated in equation 1 below.

$$Y = 1.652 + 0.205X_1 + 0.293X_2 + 0.187X_3 + 0.095X_4 + \epsilon \dots \dots \dots \text{Equation 1}$$

Where:  $Y$  = Youth Religious Moral Practices  
 $\alpha$  = Constant  
 $X_1$  = Cosmology Knowledge,  
 $X_2$  = Biotechnology Advancement  
 $X_3$  = AI Reliance  
 $X_4$  = Neurobiological Approach

**Table 11: Coefficients for Integrated Independent and Dependent Variables**

|       |                           | Coefficients <sup>a</sup>   |            |                           |       |      |
|-------|---------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model |                           | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|       |                           | B                           | Std. Error | Beta                      |       |      |
| 1     | (Constant)                | 1.652                       | .355       |                           | 4.653 | .000 |
|       | Cosmology Knowledge       | .205                        | .062       | .198                      | 3.306 | .000 |
|       | Biotechnology Advancement | .293                        | .071       | .287                      | 4.127 | .000 |
|       | AI Reliance               | .187                        | .058       | .178                      | 3.224 | .000 |
|       | Neurobiological Approach  | .095                        | .049       | .115                      | 1.939 | .000 |

a. Dependent Variable: Youth Religious Moral Practices

The linear optimal regression model indicate that all the independent sub-variables understudy contribute positively to the dependent variable, Youth Religious Moral Practices. Therefore, it could be concluded, at a 95% significance level, the findings indicate that modern science have a significant positive influence on the Youth Religious Moral Practices in Nairobi County

## 7. Summary, Conclusions and Recommendations

The study findings indicated that there was a positive significant relationship between modern science on Youth Religious Moral Practices in Nairobi, Kenya. All the sub-variables of the study have shown a positive influence on Youth Religious Moral Practices in Nairobi, Kenya. There was a strong correlation between modern science on Youth Moral Practices. The model used to analyse the data in the study was suitable for that purpose. This study supports Wamalwa (2016) study observed that realization by both science and religion that each has a part in the human life is the first step in rebuilding a moral society, since man is both spiritual and material.

Overall, the study concluded that there is positive significant relationship between modern science and Youth Religious Moral Practices in Nairobi County, Kenya. The findings indicated that modern science statistically significant influence the Youth Religious Moral Practices. The conclusion was supported by Wamalwa (2016) study that concluded that one major factor that has led to the failure of both religion and science in addressing moral issues in the Kenyan society has been the nonrecognition of one another's vital role in the human life, and hence in society.

Finally, the study recommended that youth should be made aware of the challenges they could pose themselves to on use of modern science applications in shaping their religious moral practices. The world has gone digital and thus a lot of information and training is readily available on the internet and unless our youth are well guided, they find themselves exposed to unreligious moral practices. The recommendation agrees with Elsayed (2023) study that recommended development of strong ethical and moral values as essential for individuals to live in harmony with others and to make responsible and ethical choices throughout their lives.

## 8. Areas for Further Research

The study looked at only cosmology knowledge, biotechnology advancement, artificial intelligence reliance and neurobiological approaches as the sub-variables for modern science influence on youth religious moral practices. These only accounted for only 78% contribution of modern science to youth religious moral practices. Thus,

need for study to look at other modern science sub-variables contribution on youth religious moral practices. The study also looked at service attendance, youth groups, community services and prosocial behaviour challenges associated with youth religious moral practices. Other studies need to consider different indicators to assess the modern science influence on youth religious moral practices. The field of religion and science is wide. There was need for other studies to be done on other different variables, not necessarily modern science and youth religious moral practices, to assess the impact of science on religion.

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