Exploring the futuristic landscape of artificial intelligence for alpha generation: A comprehensive study

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Abstract

In today's world, parenting should be seen as proactive rather than reactive. Everyone's access to digital technology has increased the necessity of knowing and caring for it. Big data, the internet, and artificial intelligence-based information technology advancements have drastically altered human behaviour over time. The objective of this study was to conduct a technological analysis of millennial parents' use of artificial intelligence for their children and to investigate the many factors impacting working millennial parents' adoption of artificial intelligence for their children. This research serves both exploratory and descriptive purposes. It possesses a qualitative quality. The researcher received the primary data from the Delhi NCR region. The data was acquired with the help of a questionnaire. Parents from the millennial generation make up the respondents. Information was gathered from the parents of millennials via a questionnaire. 64 individuals responded. These are academic experts who work for academic organisations. They are research scholars, research associates, associate professors, and assistant professors. The respondents provided the researcher with well-written answers. Data analysis was carried out with the aid of R programming, in which Cronbach's alpha was evaluated for the reliability of the data. Further correlation between technological aspects and correlation Between factors impacting working millennial parents' adoption of artificial intelligence for their children. The results show that they are positive for adapting to artificial intelligence. At the moment, parents are enrolling their children in skill-development programs and buying them toys. They might merely take more away from that. Millennial parents feel protected when their kids use secure electronics. The learning and flexible nature of children's relationships with technology is another proof that artificial intelligence promotes the careers of the alpha generation. Parents employ parental control gadgets and settings to keep tabs on their kids' whereabouts online and what they're watching on YouTube or other apps. Finally, it is evident from the data gathered that the alpha generation will see great advancements in artificial intelligence.

Keywords: Artificial Intelligence; Millennial Parents; Alpha Generation; Suitability; Adaptability; Parental Control.

1 Introduction

The current generation seeks a novel approach to parenting that aligns with the evolving technological landscape. With the pervasive influence of digital advancements in the wake of the COVID-19 pandemic, human behaviour has undergone substantial transformation. The surge in information technology, big data, the internet, and artificial intelligence has created a paradigm shift, placing increased responsibilities on parents in the upbringing of their children. In response to these changes, there is a growing demand for a parenting style characterised by enhanced understanding, adaptability, and care (Khomaeny & Kusumaputeri, 2022). Parents find themselves navigating a digital era that necessitates flexibility and a reimagining of traditional parenting practices. The challenges posed by this dynamic environment underscore the resilience, vision, and efforts of humanity in adapting to the 21st-century global landscape. Reflecting on historical epochs, from the dark ages to the modern era and now the post-modernist world,
one can appreciate the significance of contemporary scientific and technological progress. The standards of living, the abundance of information, and a commitment to serving humanity highlight the collective achievements of the present age (Jha, 2020). Generational distinctions arise from various factors, such as birth year, age, location, and significant life events. While individual characteristics are influenced by a myriad of factors, each generation often shares common traits due to their shared experiences within a specific era (Munir & Nudin, 2021).

Figure 1 Alpha generation

The Alpha Generation has been born into a world marked by swift technological advancements, distinguishing them from Generation Y and Generation Z, who experienced the rise of the internet during their teens and early adulthood. Spanning the years between 2011 and 2025, the Alpha Generation is currently emerging and is poised to become the world's largest population cohort. This generation is renowned for its rapid integration and progression in the realm of technology.

Key facets of the Alpha Generation include:

- **Engagement with Artificial Intelligence (AI):** They are growing up in an era where interacting with and developing AI tools is the norm.

- **Digital Literacy and Transformation:** The Alpha Generation is adept at navigating the digital landscape, reflecting their familiarity with digital literacy and ongoing digital transformation.

Artificial intelligence enables machines to emulate human activities by providing them with real-world data to acquire knowledge through experience. This interaction with machines resembles human interaction due to the machines’ awareness of our needs. While AI-equipped machines have simplified various tasks, such as shopping through e-commerce platforms, the rapid advancement of technology has also presented challenges, such as increased self-absorption and difficulties in interpersonal communication (Munir & Nudin, 2021).

Examining the earth's ecosystem in the twenty-first century in relation to Generation Alpha reveals certain psychological characteristics, challenges, and vulnerabilities, considering the past, present, and future (Jha, 2020).

The term "Alpha" denotes "this generation," encompassing those born in 2010 and later, exhibiting characteristics of digital natives. Research outcomes emphasise the importance of educational initiatives within institutions, aligning with the objectives, content, and instructional strategies to address the challenges posed by the fourth industrial revolution (AlSheibani et al., 2018). AI encompasses both the intelligence of machines and the field of computer science dedicated to its development.

The article by (Fingerman 2017) explores three key areas where parent-child relationships have evolved, namely: (a) increased intergenerational interaction; (b) enhanced parental support for grown children; and (c) heightened intergenerational affection. Researchers employ the Multidimensional Intergenerational Support Model (MISM) to
comprehend these changes, considering societal, cultural, family demographic, interpersonal, and psychological aspects such as normative views and affection. The article draws on theoretical perspectives like life course theory and family systems theory to assess the potential impact of these changes on the well-being of midlife parents. Shifting focus to early childhood education, (Tootell et al. 2014) delve into the relationship between play and technology using the innovative approach of gamification. As the integration of technology into early childhood education becomes increasingly vital, the study aims to highlight the connection between play and technology. By incorporating technology into guiding frameworks and investigating the incorporation of gaming aspects, the research aims to shape principles for providing technology-focused play opportunities for the Alpha generation.

The research paper's objectives are twofold: firstly, to scrutinise millennial parents' adoption of artificial intelligence for their children from a technological perspective, and secondly, to analyze the myriad factors influencing working millennial parents' adoption of artificial intelligence for Alpha generation kids. This study stands out for its novelty in addressing these specific aspects. While prior literature explored artificial intelligence, working parents, and the adoption of technology separately, this study uniquely combines these elements.

According to the study’s findings, the primary concerns of millennial working parents revolve around career support, professional development, and parental control and protection. These priorities underscore the challenges and considerations faced by millennial parents in navigating the intersection of technology, career aspirations, and parental responsibilities.

2 Literature Review

(Khomaeny & Kusumaputeri, 2022), Parental anxiety may rise as a result of the need for parents to be flexible. Researchers used a descriptive quantitative method to assess the level of parental anxiety. Determine the level of parental concern and the need for novel parenting practices. The findings may serve as the foundation for subsequent studies to identify and create new parenting styles. Munir & Nudin (2021) The primary functions of education as a system for developing human resources include the transmission of scientific and other knowledge, the development of human character and personality, and the production of new (candidate) generations. The challenges of changing times and the personalities of the current generation have been encountered by education throughout its existence. Therefore, it is believed that education will be able to translate into the changes that keep happening. Researchers use descriptive-explorative studies to examine the difficulties faced by educational institutions in achieving their objectives, the future course of the educational process, and the outcomes of educational institutions throughout the fourth industrial revolution (RI 4.0). Jha, (2020). The oldest members of Generation Alpha, those born in and after 2010, are still in their school years and have already had an impact on the technology and priorities of their millennial parents. There is a lack of research examining the various components of Generation Alpha; hence, the current work makes an effort to clarify, comprehend, and contextualise these issues.

Objectives

- Examine the technological dimensions of millennial parents' adoption of artificial intelligence for their children.
- Explore the diverse factors influencing the adoption of Artificial Intelligence for Alpha Generation Kids Among Working Millennial Parents.

Hypotheses

- H1: Positive Relationship Between Technological Aspects and Millennial Parents' Adoption of Artificial Intelligence for Their Children
- Adoption of AI applications exhibits a significant and favourable correlation with suitability.
- Adoption of AI applications demonstrates a strong and favourable correlation with adaptability.
- H2: Positive Relationship Between Factors Impacting Working Millennial Parents' Adoption of Artificial Intelligence for Their Children
- Adoption of AI applications is strongly and favourably correlated with skill improvement.
- Adoption of AI applications shows a strong and favourable correlation with parental control.
- Adoption of AI applications reveals a strong and favourable correlation with protection.
- Adoption of AI applications is strongly and favourably correlated with career support.
3 Research Methodology

This study adopts an exploratory and descriptive research approach, incorporating qualitative aspects. The primary data was sourced from the Delhi NCR region during the months of September and October. The study focuses on millennial parents, specifically targeting academic professionals, including assistant professors, associate professors, professors, research associates, and research scholars. The respondents, totalling 64, exhibited proficiency in providing insightful responses.

Data collection was executed through a questionnaire, and the participants, being academic experts, demonstrated a high level of engagement and responsiveness. The research specifically emphasises the millennial generation’s parental perspective.

For data analysis, R programming was employed, to ensure the reliability and validity of the data, Cronbach’s alpha was utilised. Correlation and integrating multiple regression analyses to examine the relationship between various factors. This comprehensive approach ensures the robustness of the study’s findings, adding depth to the exploration of millennial parents’ adoption of artificial intelligence for their children in the Delhi NCR region.

3.1 Research Model

3.1.1 Artificial Intelligence Application Adoption for Working Millennial Parents

![Artificial Intelligence Application Adoption for Working Millennial Parents](Author compilation)

Figure 2 Artificial Intelligence Application Adoption

3.2 The Conceptual Framework Model

3.2.1 Artificial Intelligence Application Adoption For Working Millennial Parents

Technological aspects

Suitability: Kids of Millennials, those who were born between the year the iPad debuted in 2010 and 2025, are already known as Generation Alpha. This group is the most technologically advanced and is growing up with artificial intelligence (AI) technology that learns and thinks more like humans. According to experts, AI will power household smart gadgets that support physical, emotional, social, and mental health, ranging from robot-assisted dressing to monitoring and assistive devices like intelligent walkers.
Adaptability: Millennial parents use apps, interactive screens, and gadgets with artificial intelligence to keep generation alpha youngsters interested. Pet robots powered by AI can recognise, welcome, obey, and amuse the family. Robots that can walk and talk are being given life by AI, and they are getting better at mimicking human behaviour.

3.2.2 Working millennial parents’

Skills development: Thanks to artificial intelligence (AI), apps and toys can understand and react to human language, and some of them can even teach young toddlers how to count. It seems to be the reason that the adoption of artificial intelligence by millennial parents raises their hopes for their Alpha Generation kids’ learning abilities.

Parental control: Their parents are worried about their early exposure to these devices because they believe they are not ready for the nature of some online content. Their main concern is that their kids will be exposed to material that isn’t appropriate for their age, which is bad for their long-term mental health development (Roopadevi et al., 2020). Parental controls were significantly less significant than the moderating influence of artificial intelligence control in affecting the persistence of child behaviour. (Alrusaini, & Beyari, 2022).

Protection: The first time their kids ride in a self-driving car alone makes millennial parents of Generation Alpha children slightly more anxious, and are equally concerned about both possibilities. Parents are more concerned about their kids’ safety and security.

Career support: Intelligent AI instructors will make learning more individualised over the next 15 years. Software may provide solutions to math problems or the proper pronunciation of vocabulary words. According to many experts, engineering is the driving force behind a wide range of activities that are transforming the globe, such as space exploration, drones, computer science, health, medicine, and biology, as well as automotive technology and consumer electronics, to mention a few. Given the activities in engineering that are transforming the world, Millennial parents in the Generation Alpha family strongly urge their children to consider studying and pursuing a career in engineering.

3.3 Data Analysis

3.3.1 Reliability analysis

Its raw alpha is 0.93. This demonstrates the accuracy of the data.

Table 1 Cronbach’s alpha coefficient

<table>
<thead>
<tr>
<th>Raw alpha</th>
<th>Std. alpha</th>
<th>G6 (smc)</th>
<th>Average r</th>
<th>S/N ase</th>
<th>Mean</th>
<th>Sd</th>
<th>Median r</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.93</td>
<td>0.93</td>
<td>0.7</td>
<td>14</td>
<td>0.013</td>
<td>8.2</td>
<td>1.9</td>
<td>0.7</td>
</tr>
</tbody>
</table>

The data shows that it is reliable and valid. Researchers have used the reliability test. In this study, the alpha value is 0.93, which is a strong indicator that the data is reliable.

3.4 Correlation Between Variables

Suitability, Adaptability, Skills Development, Parental Control, Protection, and Career Support

Table 2 Correlation Between Variables (Pearson’s Product-Moment Correlation)

<table>
<thead>
<tr>
<th>Skills Development</th>
<th>Parental Control</th>
<th>Protection</th>
<th>Career Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitability</td>
<td>0.6804386</td>
<td>0.6130795</td>
<td>0.6968514</td>
</tr>
<tr>
<td>Adaptability</td>
<td>0.7450021</td>
<td>0.5931422</td>
<td>0.7830836</td>
</tr>
</tbody>
</table>

H1: Positive Relationship Between Technological Aspects and Millennial Parents’ Adoption of Artificial Intelligence for Their Children

H2: Positive Relationship Between Factors Impacting Working Millennial Parents’ Adoption of Artificial Intelligence for Their Children
The researchers applied multivariate multiple regression to evaluate the hypothesis. Multiple regression is the application of linear regression to the analysis of relationships between more than two variables. In a simple linear relationship, there is just one predictor and one response variable; in multiple regression, there are many predictor variables. In this study, researchers took into account more than one variable. The conceptual framework model, which includes two independent variables and four dependent variables, has been employed by researchers.

Suitability and adaptability are independent variables; skill development, parental supervision, safety, and career assistance are dependent variables. Researchers used dependent variables such as skill development, parental control, protection, and professional assistance to analyze the suitability and adaptability of working millennial parents for their alpha generation. In the R software, multiple regression analysis is performed.

Two model sets have been developed to examine the variable correlations and their relationships. The dependent variable has been compared to the independent variable in order to determine the initial suitability. The results indicate a favorable association between them. Second, the approach is made more adaptable by adaptability with skill development, parental control, protection, and career support. The adoption of artificial intelligence by millennial parents for their children is demonstrated to be favorably associated with technical assumptions, with their influence being that the adoption of artificial intelligence by millennial parents for their children is positively related.

3.5 Suitability With Skills Development, Parental Control, Protection, And Career Support

> Regression(S ~ SD + PC + P + CS, data = a)

Regression(my_formula=S ~ SD + PC + P + CS)

(Suitability= S, Skills Development = SD, Parental Control= PC, Protection= P, And Career Support= CS)

3.6 Basic analysis of variables

Estimated model of suitability ( S )

-- Model Fit

The standard deviation of S: 1.893.

R- SQUARED : .607

Table 3 Variance of Analysis

<table>
<thead>
<tr>
<th>Factor</th>
<th>Df</th>
<th>Sum sq</th>
<th>Mean sq</th>
<th>F - value</th>
<th>P - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>1</td>
<td>104.521</td>
<td>104.521</td>
<td>69.434</td>
<td>0.000</td>
</tr>
<tr>
<td>PC</td>
<td>15</td>
<td>15.388</td>
<td>15.388</td>
<td>10.222</td>
<td>0.002</td>
</tr>
<tr>
<td>P</td>
<td>1</td>
<td>12.175</td>
<td>12.175</td>
<td>8.088</td>
<td>0.006</td>
</tr>
<tr>
<td>CS</td>
<td>1</td>
<td>4.851</td>
<td>4.851</td>
<td>3.223</td>
<td>0.078</td>
</tr>
<tr>
<td>Model</td>
<td>4</td>
<td>136.935</td>
<td>34.234</td>
<td>22.742</td>
<td>0.000</td>
</tr>
<tr>
<td>Residuals</td>
<td>59</td>
<td>88.815</td>
<td>1.505</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>63</td>
<td>225.750</td>
<td>3.583</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This statistical summary outlines the estimated model of suitability (S) with relevant measures of fit and variance analysis. The model incorporates factors such as standard deviation (SD), parental control (PC), protection (P), and career support (CS). The results indicate significant contributions to the model fit, providing insights into the relationship between these factors and the overall suitability of the adoption of artificial intelligence by millennial parents. Further details about Table 3 need to be specified for a complete interpretation.
The results of an estimated model of suitability (S) provide an assessment of the model fit and variance analysis. The key components are:

- **Model Fit:**
  - Standard Deviation of (S): Indicates the variability of the suitability scores around the mean. In this case, the standard deviation is 1.893.
  - R-Squared: A measure of how the model explains the variability of the dependent variable (S). An R-squared of 0.607 suggests that 60.7% of the variability in the suitability scores is explained by the model.

### 3.6.1 Variance Analysis

The table breaks down the variance analysis, including the degrees of freedom (df), sum of squares (Sum Sq), mean squares (Mean Sq), F-value, and p-value for each factor (SD, PC, P, CS), as well as for the overall model and residuals. F-value and p-value: These values help assess whether the observed variances among groups or factors are statistically significant. Lower p-values indicate greater significance. In this case, all factors (SD, PC, P, and CS) and the overall model have p-values less than 0.05, suggesting statistical significance. Model and Residuals: The model’s overall F-value and p-value indicate its collective significance. Total Sum of Squares for (S): The sum of the model and residual sum of squares provide a comprehensive view of the variability in the suitability scores. In summary, the results suggest that the model, incorporating factors such as standard deviation, parental control, protection, and career support, is statistically significant in explaining the variability in the suitability of artificial intelligence adoption for millennial parents.

### Table 4 Correlation Matrix

<table>
<thead>
<tr>
<th></th>
<th>S</th>
<th>SD</th>
<th>PC</th>
<th>P</th>
<th>CS</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>1.00</td>
<td>0.68</td>
<td>0.61</td>
<td>0.70</td>
<td>0.73</td>
</tr>
<tr>
<td>SD</td>
<td>0.68</td>
<td>1.00</td>
<td>0.59</td>
<td>0.69</td>
<td>0.75</td>
</tr>
<tr>
<td>PC</td>
<td>0.61</td>
<td>0.59</td>
<td>1.00</td>
<td>0.63</td>
<td>0.67</td>
</tr>
<tr>
<td>P</td>
<td>0.70</td>
<td>0.69</td>
<td>0.63</td>
<td>1.00</td>
<td>0.78</td>
</tr>
<tr>
<td>CS</td>
<td>0.73</td>
<td>0.75</td>
<td>0.67</td>
<td>0.78</td>
<td>1.00</td>
</tr>
</tbody>
</table>

Table 4 is a correlation matrix commonly used in statistics to illustrate the relationships between different variables. In this case, the variables are denoted as S, SD, PC, P, and CS. Each cell in the matrix displays the correlation coefficient between the corresponding pair of variables.

Here’s an explanation of the correlation matrix:

**Variables:**

- S: represents the suitability of artificial intelligence adoption for millennial parents.
- SD: represents the standard deviation.
- PC: represents parental control.
- P: represents protection.
- CS: represents career support.

### 3.6.2 Correlation Coefficients: Interpretation:

A correlation of 1.00 with itself (along the diagonal) is expected since a variable perfectly correlates with itself. The correlation between S and SD is 0.68, indicating a positive correlation but not a perfect one. The strongest correlation appears to be between protection (P) and career support (CS), with a correlation coefficient of 0.78.

### 3.6.3 Implications:

Positive correlations suggest that as one variable increases, the other tends to increase as well. Negative correlations suggest that as one variable increases, the other tends to decrease. The strength of the correlation is indicated by the absolute value of the coefficient, with larger absolute values indicating a stronger relationship. Overall, this correlation
matrix provides insights into how the variables related to suitability for artificial intelligence adoption among millennial parents are correlated with each other.

**Table 5 Collinearity**

<table>
<thead>
<tr>
<th></th>
<th>TOLERANCE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>0.404</td>
<td>2.474</td>
</tr>
<tr>
<td>PC</td>
<td>0.513</td>
<td>1.951</td>
</tr>
<tr>
<td>P</td>
<td>0.348</td>
<td>2.876</td>
</tr>
<tr>
<td>CS</td>
<td>0.278</td>
<td>3.598</td>
</tr>
</tbody>
</table>

Table 5 appears to be presenting information related to collinearity, specifically using metrics such as tolerance and variance inflation factor (VIF). These metrics are used to assess the extent of multicollinearity among predictor variables in regression analysis. Tolerance is a measure of how well one independent variable can be predicted by the others in a regression model. It is calculated as \( Tolerance = 1 - R^2 \), where \( R^2 \) is the coefficient of determination from a regression of the variable in on all other independent variables.

A lower tolerance value indicates higher collinearity. VIF is another measure of the extent of multicollinearity. It is calculated as \( VIF = \frac{1}{Tolerance} \). A higher VIF value indicates higher collinearity.

Here’s an explanation for each variable:

- **SD (standard deviation):**
  - Tolerance: 0.404
  - VIF: 2.474
- **PC (Parental Control):**
  - Tolerance: 0.513
  - VIF: 1.951
- **P (Protection):**
  - Tolerance: 0.348
  - VIF: 2.876
- **CS (Career Support):**
  - Tolerance: 0.278
  - VIF: 3.598

**3.6.4 Interpretation**

A tolerance value below 0.1 or 0.2 is considered a cause for concern, suggesting high collinearity. Conversely, a VIF value exceeding 5 or 10 is often indicative of problematic multicollinearity.

**3.6.5 Implications:**

Variables with low tolerance and high VIF may be highly correlated with other variables in the model, leading to challenges in interpreting the individual contribution of each variable.
Figure 3 ScatterPlot Matrix

A scatter plot (Figure 3) shows the relationship between variables taken into account in this research study. Each point on the graph represents a pair of values, one for each variable. The x-axis of the graph represents one variable, and the y-axis represents the other variable.

3.7 Adaptability With Skills Development, Parental Control, Protection, And Career Support

- Regression\( (A \sim SD + PC + P + CS) \)
  - (Adaptability= A, Skills Development = SD, Parental Control= PC, Protection= P, And Career Support= CS)
  - Basic analysis of variables
  - Estimated model of suitability (A)
    - Model Fit
      - Standard deviation of A: 1.950,
      - R- SQUARED : 0.726

Table 6 Analysis of Variance

<table>
<thead>
<tr>
<th>Factor</th>
<th>Df</th>
<th>Sum sq</th>
<th>Mean sq</th>
<th>F - value</th>
<th>P - value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>1</td>
<td>132.895</td>
<td>132.895</td>
<td>119.306</td>
<td>0.000</td>
</tr>
<tr>
<td>PC</td>
<td>8.550</td>
<td>8.550</td>
<td>7.675</td>
<td>7.675</td>
<td>0.007</td>
</tr>
<tr>
<td>P</td>
<td>1</td>
<td>24.967</td>
<td>24.967</td>
<td>22.414</td>
<td>0.000</td>
</tr>
<tr>
<td>CS</td>
<td>1</td>
<td>7.307</td>
<td>7.307</td>
<td>6.560</td>
<td>0.013</td>
</tr>
<tr>
<td>Model</td>
<td>4</td>
<td>173.718</td>
<td>43.429</td>
<td>38.989</td>
<td>0.000</td>
</tr>
<tr>
<td>Residuals</td>
<td>59</td>
<td>65.720</td>
<td>1.114</td>
<td></td>
<td></td>
</tr>
<tr>
<td>S</td>
<td>63</td>
<td>239.438</td>
<td>3.801</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
- Analysis of Variance (ANOVA)
- DF (Degrees of Freedom):
- SD (Standard Deviation): 1
- PC (Parental Control): 1
- P (Protection): 1
- CS (Career Support): 1

Model: 4
Residuals: 59
Total: 63
Sum Sq (Sum of Squares):
Indicates the sum of the squared deviations from the mean.
Broken down into the sum of squares for each factor (SD, PC, P, CS), the model, and the residuals.
Mean Sq (mean squares):
Calculated as the sum of squares divided by the degrees of freedom.
Provides a measure of the variability in the data.
F-value:
- Represents the ratio of the variance of group means to the variance within the groups.
- Higher F-values indicate greater differences among group means.
p-value:
Indicates the probability that the observed differences among group means occurred by chance.
A lower p-value (typically below 0.05) suggests that the group means are significantly different.
Interpretation:
Significance of Factors: The factors (SD, PC, P, and CS) collectively have a significant effect on the dependent variable. The p-values for SD, P, and CS are all below 0.05, suggesting significant differences among group means. PC also shows significance, but with a slightly higher p-value of 0.007.
Overall Model Significance: The overall model (combining all factors) is statistically significant, with a very low p-value of 0.000. The sum of squares for residuals is 65.720

Factor or variable, This ANOVA table indicates that there are significant differences among the group means for the factors SD, PC, P, and CS, with the overall model being statistically significant. The factors contribute significantly to explaining the variability in the dependent variable.

**Table 7 Correlation Matrix**

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>SD</th>
<th>PC</th>
<th>P</th>
<th>CS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1.00</td>
<td>0.75</td>
<td>0.59</td>
<td>0.78</td>
<td>0.80</td>
</tr>
<tr>
<td>SD</td>
<td>0.75</td>
<td>1.00</td>
<td>0.59</td>
<td>0.69</td>
<td>0.75</td>
</tr>
<tr>
<td>PC</td>
<td>0.59</td>
<td>0.59</td>
<td>1.00</td>
<td>0.63</td>
<td>0.67</td>
</tr>
<tr>
<td>P</td>
<td>0.78</td>
<td>0.69</td>
<td>0.63</td>
<td>1.00</td>
<td>0.78</td>
</tr>
<tr>
<td>CS</td>
<td>0.80</td>
<td>0.75</td>
<td>0.67</td>
<td>0.78</td>
<td>1.00</td>
</tr>
</tbody>
</table>

The provided table 7 appears to be a correlation matrix, showcasing the correlation coefficients between variables denoted as A, SD, PC (appearing twice), and CS. Each cell in the matrix represents the correlation between the corresponding pair of variables. It's worth noting that PC appears twice in the matrix, which might be a typographical error, or there could be two distinct variables labeled as PC.

Here’s an explanation of the correlation matrix:

**Variables:**

A: represents one variable (the specific nature of which is not defined in the provided context).
SD: represents the standard deviation.
PC: represents a variable labeled as parental control (twice).
P: represents protection.
CS: represents career support.

3.7.1 Interpretation

A correlation of 1.00 with itself (along the diagonal) is expected since a variable perfectly correlates with itself. The correlation between A and SD is 0.75, indicating a positive correlation but not a perfect one. The strongest correlation appears to be between A and CS, with a correlation coefficient of 0.80.

Overall, this correlation matrix provides insights into how the variables are correlated with each other. If there are two distinct variables labeled as PC, it might be beneficial to clarify the nature of these variables for a more accurate interpretation.

Table 8 Collinearity

<table>
<thead>
<tr>
<th></th>
<th>TOLERANCE</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>SD</td>
<td>0.404</td>
<td>2.475</td>
</tr>
<tr>
<td>PC</td>
<td>0.513</td>
<td>1.951</td>
</tr>
<tr>
<td>P</td>
<td>0.348</td>
<td>2.876</td>
</tr>
<tr>
<td>CS</td>
<td>0.278</td>
<td>3.598</td>
</tr>
</tbody>
</table>

Table 8 provides information related to collinearity, specifically using metrics such as tolerance and variance inflation factor (VIF). These metrics are commonly used in regression analysis to assess the extent of multicollinearity among predictor variables. Tolerance is a measure of how well one independent variable can be predicted by the others in a regression model.

It is calculated as \( \text{Tolerance} = 1 - R^2 \), where \( R^2 \) is the coefficient of determination from a regression of the variable in question on all other independent variables. A lower tolerance value indicates higher collinearity. VIF is another measure of the extent of multicollinearity. It is calculated as \( \text{VIF} = \frac{1}{\text{Tolerance}} \). A higher VIF value indicates higher collinearity.

Here’s an explanation for each variable:

- SD (standard deviation):
  - Tolerance: 0.404
  - VIF: 2.475
- PC (Parental Control):
  - Tolerance: 0.513
  - VIF: 1.951
- P (Protection):
  - Tolerance: 0.348
  - VIF: 2.876
- CS (Career Support):
  - Tolerance: 0.278
  - VIF: 3.598

3.7.2 Implications:

Variables with low tolerance and high VIF may be highly correlated with other variables in the model, leading to challenges in interpreting the individual contribution of each variable. The variables seem to have moderate to high collinearity, especially CS, with the lowest tolerance and the highest VIF.
Figure 4 ScatterPlot Matrix

A scatter plot (Figure 4) shows the relationship between variables taken into account in this research study. Each point on the graph represents a pair of values, one for each variable. The x-axis of the graph represents one variable, and the y-axis represents the other variable.

3.8 Limitations of the study

The study exclusively focused on the children of academicians, yet there is an opportunity to broaden its scope by encompassing diverse settings, including the corporate world, governmental sectors, and the private industry. Expanding the research to various regions within India can provide a more comprehensive understanding. The primary objective of this project is data collection, and there is potential to augment the dataset beyond the initial 64 participants.

While the researchers utilised limited testing methods, such as multiple regression and Cronbach's alpha, the study could benefit from incorporating more advanced techniques like factor analysis or structural equation modelling. By doing so, a more intricate analysis of the relationships among variables can be achieved.

This study predominantly examines variables outlined in the literature, but there are additional aspects that researchers could explore. For instance, investigating career support programs tailored for the alpha generation or analysing online educational platforms offering artificial intelligence courses for children could yield valuable insights.

The current study specifically delves into skill development, parental supervision, career support, and protection. However, researchers could consider including other factors. Exploring the necessity of artificial intelligence for the alpha generation and evaluating the psychological impact of online teaching programs on this demographic could be valuable avenues for further investigation. This would contribute to a more comprehensive understanding of the
multifaceted dynamics at play in the context of artificial intelligence adoption and educational initiatives for the alpha generation.

4 Conclusion

In the contemporary world, successful parenting necessitates a paradigm shift, particularly with the ubiquitous presence of digital technology. The increased accessibility to big data, the internet, and advancements in information technology, specifically artificial intelligence, have profoundly influenced human behaviour. This shift has also placed an augmented responsibility on parents, especially in the aftermath of the global COVID-19 pandemic. The Alpha generation, commonly referred to as "digital natives," inherently embraces artificial intelligence, and their working parents are actively adapting to accommodate their needs.

Digital natives of the Alpha generation effortlessly connect and comprehend modern gadgets, be they apps, toys, robots, or other technological advancements. Artificial intelligence, leveraging data and machine learning, is anticipated to play a pivotal role in predicting, diagnosing, and treating diseases, further emphasising its relevance for the Alpha generation.

Working millennial parents are adapting to and embracing artificial intelligence for the benefit of their Alpha-generation children. Information gathered from parents of the Alpha Generation reveals the integration of artificial intelligence in children's activities. Parents are enrolling their kids in skill-development activities and providing them with educational toys, recognising the educational value derived from these technologies. The use of safe devices equipped with artificial intelligence instills a sense of security and protection in millennial parents.

Moreover, research indicates that artificial intelligence significantly supports the careers of the Alpha generation. The children’s inherent adaptability and learning nature in relation to technology showcase the symbiotic relationship between artificial intelligence and their professional development.

Millennial parents actively utilise parental control devices and settings to monitor and regulate their children’s activities, particularly on platforms like YouTube and other online apps. This reflects a conscientious approach to ensuring a safe and controlled digital environment for their children. In conclusion, the evidence collected strongly suggests that artificial intelligence holds a promising future for the Alpha generation. The proactive adoption of these technologies by millennial parents, coupled with the inherent compatibility of the Alpha generation with artificial intelligence, indicates a positive trajectory for the integration of these advancements in shaping the future of the younger generation.

Compliance with ethical standards

Acknowledgment

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Disclosure of conflict of interest

The authors declared that there is no ‘conflict of interest’ in this manuscript publication.

Reference


