INTEGRATION OF AI IN THE MEDIA STUDIES

Max W. Meiners

Abstract

The rapid and transformative influence of Artificial Intelligence (AI) on media creation, distribution, and consumption necessitates its integration into the curriculum of educational institutions. This paper delves into the potential of AI in revolutionizing the media landscape, spanning from content creation to advanced audience analytics. At BUas, a concerted effort has been made to understand the perception, acceptance, and potential applicability of AI in the media discipline. Using a mixed-method approach, inclusive of an online survey and qualitative interviews, this research captures the views of both students and staff on AI's role and implications. Preliminary findings from the study reveal varying degrees of AI awareness, with an emphasis on its potential in content recommendation, production efficiency, advertising, audience analytics, and media verification. However, certain challenges, such as design rationality in multimedia production, need to be addressed. A thorough analysis of collected data suggests that while some correlations exist between variables related to AI perception, more in-depth research might be needed to comprehend the complete impact of AI on the media domain at BUas. The overarching aim of this paper is to strategize the integration of AI tools in the BUas media curriculum, fostering a generation adept at harnessing the power of AI for media production and consumption.

Keywords: Artificial Intelligence, Breda University of Applied Sciences, AI in Media, Media curriculum, Online Survey

1 Introduction

The rapid evolution of Artificial Intelligence (AI) is unprecedented, reshaping media creation, distribution, and consumption like never before. As it mimics human thought, enabling machines to make intelligent decisions, its influence spans from content production to audience analytics, introducing novel shifts. It's imperative that institutions like BUas equip their students with the knowledge and skills to navigate this transformation. AI enhances personalized content suggestions, a crucial component in today's media landscape. By utilizing user data, AI systems offer content suited to individual tastes, improving engagement. Content creation, once a human-exclusive domain, is now augmented by AI tools for video editing, sound design, and scriptwriting that increase production efficiency and create content aligned with audience desires. In advertising, AI-optimized ads ensure relevance, improving ad success and return on investment. AI-driven audience analytics provide valuable insights into viewer habits, predicting future trends and aiding content refinement. With the rise of voice-activated devices, AI's Natural Language Processing capabilities make media access more interactive through voice prompts. Additionally, AI tools play a pivotal role in combating deep fakes and misinformation, ensuring media accuracy. Given these advancements, it's crucial for BUas to prioritize integrating AI in Media curriculum, ensuring students are well-prepared for an innovative and expansive future in the industry. (OpenAI, 2023)

1.1 Literature study

The application and optimization of AI algorithms in multimedia and media production have become pivotal in recent times, steering significant research and developments in this domain. A critical examination of current methodologies reveals certain limitations, particularly in the context of layout and resource allocation during multimedia production, as outlined in a recent study (Nan et al., 2023). This paper noted that despite AI's potential, there are prevailing issues with design rationality and efficiency in resource allocation. It proposes a structured approach to content distribution and design in multimedia production, utilizing AI algorithms and engines to enhance the pre-processing stages of production, potentially leading to more accurate and efficient design processes compared to traditional methods. Drawing upon these insights, my research seeks to further explore these avenues within the context of media studies at Breda University of Applied Sciences (BUas). My paper intends to build upon these foundational insights by focusing on the seamless integration of AI tools in the curriculum at BUas, potentially revolutionizing the approach to media studies at the university. The aim is to devise strategies that can facilitate a higher degree of innovation and efficiency in media production, fostering a new generation of professionals who are proficient in leveraging AI tools in multimedia production. Furthermore, my research will aspire to delve deeper into the nuances of AI algorithm implementation, extending beyond the prevalent

focus on multimedia production to encompass a holistic approach that integrates theory and practice. By developing a tailored strategy for BUas, my paper promises to pave the way for a synergistic relationship between AI and media studies, nurturing a learning environment that is in tune with the contemporary advancements in the field. (OpenAI, 2023)

2 METHOD

2.1 Participants

An electronic survey was distributed to BUas students and staff via Qualtrics to assess attitudes towards AI. Respondents were briefed about the survey's goals and assured of confidentiality with no personal data attached to their responses. Participation was encouraged with a prize draw entry option. By consenting, participants agreed to take part. The study was designed to avoid sensitive topics to minimize discomfort. Out of 576 respondents, 92 were from the media discipline, including 84 students and 8 staff members. (OpenAI, 2023)

2.2 Materials

The core materials used in this study comprise:

- 1. **Online Survey:** Created on the Qualtrics platform, this survey aimed to understand the awareness, attitude, and acceptance of AI among BUas's student and employee groups across all institutional domains. All the questions from the survey can be seen in Appendix A. The survey included:
 - Consent: To ensure voluntary participation and clear understanding of the survey's intent.
 - **Demographic Information:** To capture data about the diverse respondents.
 - Domain-specific Information: Tailored questions pinpointing the respondent's area within BUas.
 - Awareness of AI: To assess respondent familiarity with Artificial Intelligence.
 - Attitudes towards AI: To grasp positive and negative sentiments towards AI.
 - Acceptance of AI: To gauge openness and willingness to integrate AI in respective fields.
- 2. **Interviews:** Along with individual discussions with BUas lecturers, we held a focus group with 2nd-year media students. This session helped extract collective insights and fostered open dialogue about AI concerns, beliefs, and aspirations, enriched by their academic experiences. (OpenAI, 2023)

2.3 Design

To gain a comprehensive understanding of students' awareness and perspectives regarding Artificial Intelligence (AI) in the different domains at Breda University of Applied Sciences (BUas), a mixed-method approach integrating both qualitative and quantitative research techniques was adopted. The study was bifurcated into two significant phases:

- 1. **Quantitative Phase:** In this phase, an online survey was crafted to gather general opinions and gauge the awareness of students concerning AI. The digital survey was dispatched on the 5th of November 2023. At the time of writing, the survey is still accessible, providing a wide range of participants with sufficient time to respond.
- 2. **Qualitative Phase:** To delve deeper into the initial findings of the survey, subsequent face-to-face interviews were conducted. These interviews offered a platform to discuss the survey results in detail and facilitated a deeper exchange of information about the role and implications of AI. (OpenAI, 2023)

2.4 Procedure

The digital survey was distributed to BUas students and staff via the institution's email system. Our research team also shared QR codes on the BUas campus for immediate survey access and individually reached out through Microsoft Teams and WhatsApp for wider participation. After collecting responses, data was extracted from Qualtrics and analyzed using the R programming tool. After thorough Exploratory Data Analysis (EDA) and data refinement, I focused on the perceptions and attitudes towards AI among BUas's media students. Some of the code in the Data Analytics Report has been written with the help of ChatGPT. (OpenAI, 2023)

Reliability Reliability, in research terms, is the assurance that measurements and processes within a study can be consistently replicated. It comprises elements such as internal consistency, stability, and equivalence. Though dependability does play a part in a survey's validity, it is not an absolute necessity. (OpenAI, 2023)

Inter-rater reliability This concerns the consistency in a person's responses to a survey over various intervals. In the context of my research, I included queries aimed at gauging awareness, attitudes, and acceptance of AI in the media industry. Leveraging an internal consistency index of reliability, I was able to calculate reliability swiftly post a single test round, thus bypassing potential hurdles that arise from multiple test intervals. (OpenAI, 2023)

Validity The questionnaire for this study was constructed using components from various existing surveys, eliminating the need for further validation. For gauging attitudes towards AI, a segment from a separate study was incorporated (Schepman and Rodway, 2020). However, modifications were made to the acceptance questions, as they were originally crafted for clinical AI applications (Chen et al., 2022). Furthermore, an additional survey was integrated into our questionnaire (Eschert et al., 2022), which itself drew inspiration from prior research (Sur et al., 2020). Validity, in essence, pertains to the reduction of systematic or inherent errors within research results. For our investigation, we established a preliminary survey to set the standard for validity. An assembly of AI media industry specialists meticulously examined the theoretical constructs of the survey, assuring its representational validity. (OpenAI, 2023)

Face validity This was determined with the assistance of a select group of AI and media specialists. Their consensus was that our survey aptly measured the relevant aspects of AI's perception and impact within the media domain. (OpenAI, 2023)

Construct validity Construct validity, in our context, concerns the extent to which our survey captures the theoretical nuances it was fashioned for. Specifically, it delves into hypothetical comparisons and contrasts. The primary objective here was to ascertain the impact of AI perceptions among media professionals on their subsequent adoption and endorsement of AI tools and technologies. (OpenAI, 2023)

Statistical analysis Utilizing the RStudio environment, a comprehensive examination of the data set was performed. During the initial data preprocessing stage, entries with missing values ('NA') in the variables 'media_domain_5' and 'media_domain_4' were filtered out, yielding a dataset with dimensions of 35 rows and 81 columns. To identify potential relationships between certain variables, correlation analyses were conducted:

- The correlation between 'media_sp_2' and 'media_knowledge_7' was found to be -0.29.
- The correlation between 'media_sp_2' and 'media_trust_1' was a negligible -0.013.
- A slight negative correlation of -0.11 was observed between 'media_domain_5' and 'media_sp_4'.

A linear regression model was also established to predict 'media_sp_4' using media_domain_5 as an independent variable. The results from the model revealed that 'media_domain_5' is not a significant predictor for 'media_sp_4', with a p-value of 0.5277, which is higher than the typical threshold of 0.05 for statistical significance. The R-squared value of the model was 0.01219, indicating that only about 1.2 percentage of the variance in 'media_sp_4' can be explained by 'media_domain_5'.

In conclusion, the conducted statistical analyses provided insights into potential relationships between several variables in the dataset. However, based on the given data and statistical models, 'media_domain_5' does not significantly influence 'media_sp_4'. Further research might be necessary to uncover other potential predictors or relationships within the dataset. (OpenAI, 2023)

3 RESULTS

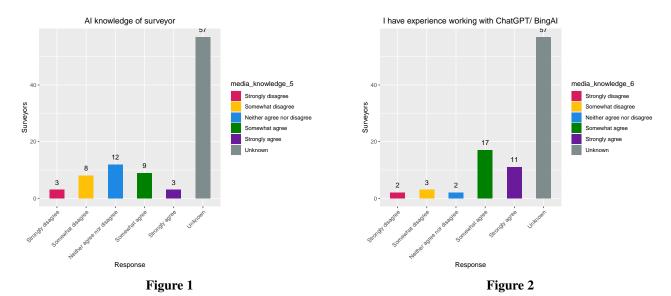
3.1 Background information

In a detailed digital survey conducted within the media domain, we collected insights from 92 participants, offering a clear view of the media studies landscape. Of these, 84 are students, primarily within the age bracket of 18-24 years. However, the age range does include individuals between 25-34 years, suggesting both older students and possibly younger faculty members. Gender representation is diverse, with 71 females, 19 males, and 2 individuals identifying as non-binary or third gender. Delving into professional experience, 52 participants have been in the media domain for 0-6 months, likely

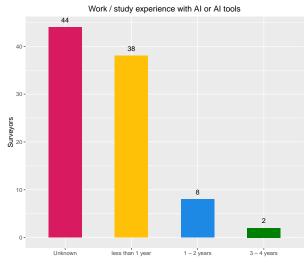
indicating newer entrants. 27 have an experience span of 1 to 5 years, while a noteworthy group of 9 have been in the domain for 5 years to over two decades. In summary, the survey showcases a media community that is youthful, diverse, and comprises both newcomers and seasoned professionals. (OpenAI, 2023)

3.2 To what extent do media professionals perceive AI as a tool that enhances their productivity and creativity?

In the evolving media landscape, professionals have varied views on artificial intelligence (AI). Their insights reveal AI's multifaceted influence in the media industry. Examining their AI knowledge, shown in figure 1, many media professionals are neutral. Specifically, 12 individuals are ambivalent about their AI understanding, 9 are somewhat confident, 3 have deep knowledge, and 11 feel they're beginners. The 57 marked as "Unknown" weren't asked this question. In later visuals, "Unknown" refers to those not presented with the query. Discussing AI platforms like ChatGPT and BingAI in figure 2, a pattern arises. 28 respondents have explored these tools, indicating enthusiasm for AI. Conversely, 5 have limited experience, and 2 are neutral about platforms like ChatGPT and BingAI.



Diving deeper into the participants' experience with AI or AI tools (figure 3), we find that a significant number of surveyors, 38 to be exact, have had less than a year of exposure to AI. Another 8 have journeyed with AI for about 1-2 years, while only 2 have 3-4 years of experience under their belt. However, the majority, 44 participants, are classified as "Unknown" regarding this aspect, emphasizing the varied background and uneven distribution of AI knowledge and experience among media professionals. The crux of the matter lies in AI's practical application in daily work (figure 4). Twelve surveyors believe AI somewhat augments their everyday tasks, while 2 surveyors strongly agree that they often use AI in their daily work. A smaller group of 12 remains skeptical or limits their AI interactions. In answering the research question: "To what extent do media professionals perceive AI as a tool that enhances their productivity and creativity?" - it's a mixed bag. Many see the potential and actively incorporate AI into their workflows, but there's a sizable group that remains hesitant or indifferent. As the media landscape continues to evolve, it will be fascinating to see if and how these perceptions shift. (OpenAI, 2023)



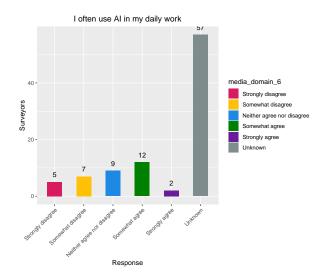


Figure 3 Figure 4

What is the difference between lecturers, 1st and 2nd-year students, and 3rd and 4th year students regarding the perceived impact of AI tools on the quality of content produced in media production and distribution processes?

In an exploration of perceptions concerning the influence of AI on advancements in media professions, the responses from educators, 1st and 2nd-year students, and 3rd and 4th-year students were meticulously evaluated. The central query revolved around the research question: "What is the difference between lecturers, 1st and 2nd-year students, and 3rd and 4th year students regarding the perceived impact of AI tools on the quality of content produced in media production and distribution processes?". For each variable, a separate test was used to determine the difference with a confidence level of 95%. Therefore, the hypothesis has to be developed for all measured variables. (OpenAI, 2023)

3.3.1 Hypothesis 1 (Figures 5 and 6)

 $H_{0,1}$: There is no difference in the belief that "The introduction of AI will lead to improvement in my profession" across different years of study and educators.

 H_{A_1} : There is a difference in the belief that "The introduction of AI will lead to improvement in my profession" across different years of study, with the latter years or educators having a stronger belief.

- Educators believe, on average, at a level of 3.25 (with a standard deviation of 1.26 based on 4 samples) that the introduction of AI will lead to improvement in their profession.
- Year 1-2 students believe, on average, at a level of 3.2 (with a standard deviation of 1.005 based on 20 samples) in the positive impact of AI on their future profession.
- Year 3-4 students believe, on average, at a level of 3.22 (with a standard deviation of 1.20 based on 9 samples) in the transformative power of AI in their profession.

The ANOVA results for the belief across the different groups are as follows:

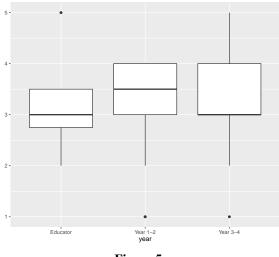
• Degrees of Freedom (df) for year: 2

• Sum of Squares for the year: 0.009

• Mean Square for the year: 0.005

• F-value: 0.004 • p-value: 0.996

The high p-value of 0.996 from the ANOVA test indicates that there isn't enough statistical evidence to reject the null hypothesis. This means that at a 99% confidence level, we can conclude that there isn't a significant difference in the belief that AI will lead to improvements in the profession, across different years of study or between educators and students. (OpenAI, 2023)



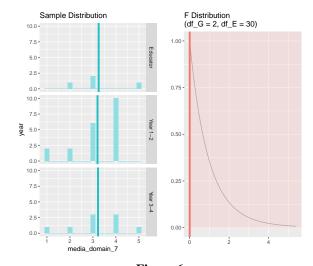


Figure 5

Figure 6

3.3.2 Hypothesis 2 (Figures 7 and 8)

 H_{02} : There is no difference in the belief that "The development in AI makes me more willing to engage in the domain" across different years of study and educators.

 H_{A_2} : There is a difference in the belief that "The development in AI makes me more willing to engage in the domain" across different years of study, with the latter years or educators having a stronger belief.

- Educators believe, on average, at a level of 3 (with a standard deviation of 1.4142 based on 4 samples) that the development in AI makes them more willing to engage in the domain.
- **Year 1-2 students** believe, on average, at a level of 3.25 (with a standard deviation of 1.0195 based on 20 samples) that they are more willing to engage in the domain due to AI's development.
- Year 3-4 students believe, on average, at a level of 3.4444 (with a standard deviation of 1.1304 based on 9 samples) in their increased willingness to engage in the domain because of AI's advancement.

The ANOVA results for the belief across the different groups are as follows:

• Degrees of Freedom (df) for year: 2

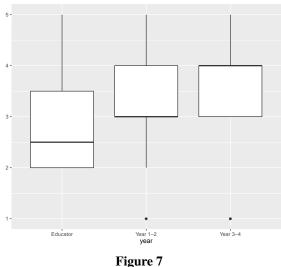
• Sum of Squares for the year: 0.009

• Mean Square for the year: 0.005

• F-value: 0.004

• p-value: 0.99

The high p-value of 0.996 from the ANOVA test indicates that there isn't enough statistical evidence to reject the null hypothesis. This means that at a 99% confidence level, we can conclude that there isn't a significant difference in the belief that AI will lead to improvements in the profession, across different years of study or between educators and students. (OpenAI, 2023)



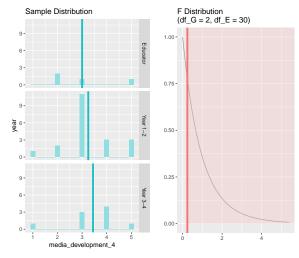


Figure 8

3.3.3 Hypothesis 3 (Figures 9 and 10)

 H_{03} : There is no difference in the sentiment that "The development of AI makes the domain less attractive to me" across different years of study and educators.

 H_{A_3} : There is a difference in the sentiment that "The development of AI makes the domain less attractive to me" across different years of study, with the latter years or educators expressing a stronger sentiment.

- **Educators** believe, on average, at a level of 3 (with a standard deviation of 0.82 based on 4 samples) that the development of AI makes the domain less attractive to them.
- **Year 1-2 students** believe, on average, at a level of 3.2 (with a standard deviation of 1.0563 based on 20 samples) that the development of AI makes the domain less attractive to them.
- Year 3-4 students believe, on average, at a level of 2.33 (with a standard deviation of 1.12 based on 9 samples) that the development of AI makes the domain less attractive to them.

The ANOVA results for the belief across the different groups are as follows:

• Degrees of Freedom (df) for year: 2

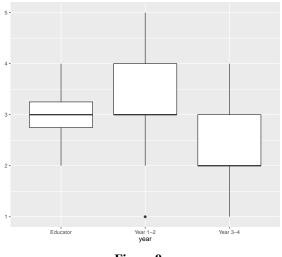
• Sum of Squares for the year: 4.67

• Mean Square for the year: 2.33

• F-value: 2.11

• p-value: 0.14

The p-value of 0.14 from the ANOVA test indicates that there isn't enough statistical evidence to reject the null hypothesis at a 99% confidence level. This suggests that there isn't a significant difference in the sentiment about "The development of AI makes the domain less attractive to me" across different years of study or between educators and students. (OpenAI, 2023)



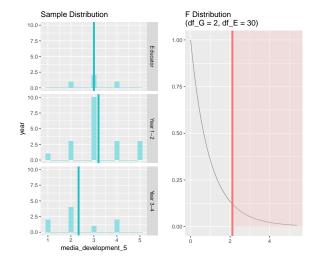


Figure 9

Figure 10

3.3.4 Hypothesis 4 (Figures 11 and 12)

 H_{04} : There is no difference in the sentiment towards "AI can enhance creative processes in media by offering suggestions or automating mundane tasks" across different years of study and educators.

 H_{A_4} : The sentiment towards "AI can enhance creative processes in media by offering suggestions or automating mundane tasks" for the latter years or educators is greater than that of the previous years or groups.

- **Educators** believe, on average, at a level of 3 (with a standard deviation of 0.82 based on 4 samples) that the development of AI makes the domain less attractive to them.
- Year 1-2 students believe, on average, at a level of 3.2 (with a standard deviation of 1.06 based on 20 samples) that the development of AI makes the domain less attractive to them.
- Year 3-4 students believe, on average, at a level of 2.33 (with a standard deviation of 1.12 based on 9 samples) that the development of AI makes the domain less attractive to them.

The ANOVA results for the belief across the different groups are as follows:

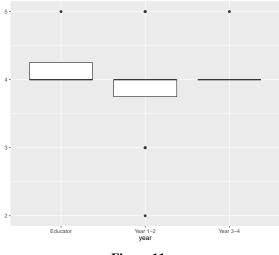
• Degrees of Freedom (df) for the year: 2

• Sum of Squares for the year: 0.56

• Mean Square for the year: 0.28

F-value: 0.63p-value: 0.54

The p-value of 0.54 from the ANOVA test indicates that there isn't enough statistical evidence to reject the null hypothesis. This suggests that there isn't a significant difference in the sentiment regarding "AI can enhance creative processes in media by offering suggestions or automating mundane tasks" across different years of study or between educators and students. (OpenAI, 2023)



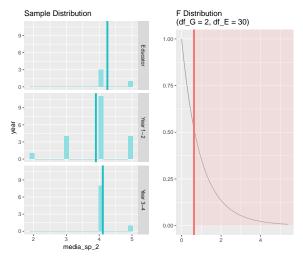


Figure 11

Figure 12

3.4 What factors significantly predict the perceived impact of AI on the quality of content produced in media studies programs?

To determine if there's a connection between AI's ability to offer deeper insights into audience preferences, potentially leading to more tailored media content, and AI's tangible impact on professions, a linear regression was employed. The initial stage of the study involved data cleansing where rows with NA values in vital columns were removed. Ensuring that no NA values remained, some columns were converted to numeric types to enhance the precision of the subsequent analysis. Upon calculating correlations between several pairs of variables, it was observed that media_sp_2 and media_knowledge_7 had a moderate negative correlation of -0.2937443. In contrast, the correlation between media_sp_2 and media_trust_1 was very weak and almost negligible at -0.01. Lastly, media_domain_5 and media_sp_4 showcased a weak negative correlation of -0.11. For a detailed exploration of potential relationships, scatter plots equipped with linear regression lines were generated. The core regression analysis was centered around discerning the relationship between media_sp_4, which was the response variable, and media_domain_5, taken as the predictor.

```
lml <- lm(data = data_lm_withoutNA,
formula = media_sp_4 ~ media_domain_5)</pre>
```

For a detailed exploration of potential relationships, scatter plots equipped with linear regression lines were generated. The core regression analysis was centered around discerning the relationship between media_sp_4, which was the response variable, and media_domain_5, taken as the predictor. Using the linear model, it was found that the coefficient for media_domain_5 was -0.06915, with an associated p-value of 0.528. This indicated that the predictor was not statistically significant at conventional levels. Furthermore, the intercept of the model was determined to be 4.17705, suggesting the expected value of media_sp_4 when media_domain_5 is zero. An examination of the residuals indicated they spanned from -1.03875 to 1.16869, with a median proximate to zero, highlighting the importance of diagnosing potential outliers. The model's explanatory power, as represented by the R-squared value, was just over 1%, at 0.01219. The Adjusted R-squared value was slightly lower at -0.01774. Notably, the F-statistic value was 0.4074, and its associated p-value was 0.5277, suggesting that this model was not significantly better at elucidating the variation in media_sp_4 compared to a model without any predictors. Delving deeper, the residuals of the model were inspected via residual plots, followed by a Box-Cox transformation (figure 15) to address potential non-normality. The residuals' normality was put to test using the Shapiro-Wilk test, resulting in a W value of 0.85526 and a p-value of 0.0003043, thereby confirming the non-normal distribution of the residuals. Further investigation might involve:

- Exploring other potential predictors.
- Using a different type of regression model that could capture non-linear relationships.
- Evaluating potential interaction effects between variables.
- Using advanced techniques to handle non-normality of residuals.

In essence, while the current linear regression model offers a preliminary understanding, there's a need for a deeper dive to draw more comprehensive conclusions regarding AI's impact on audience preferences and the professional landscape.

This underscores the importance of multiple analytical approaches in providing a comprehensive understanding of a complex subject matter. (OpenAI, 2023)

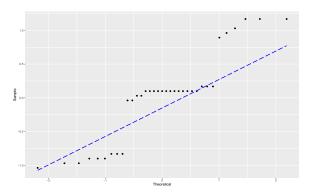


Figure 13. Q-Q plot of model residuals. Points deviating from the blue dashed line suggest potential departures from normality.

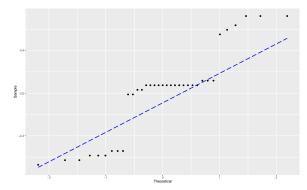


Figure 14. Q-Q plot of residuals from the adjusted model (lm2) after the Box-Cox transformation. The alignment of points with the blue dashed line suggests the transformation achieved approximate normality of residuals.

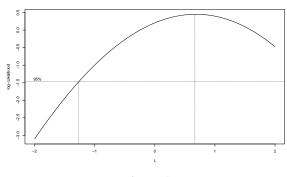


Figure 15

3.4.1 Power Analysis

In my investigation into the determinants that significantly predict the perceived impact of artificial intelligence (AI) on the quality of content produced in media studies programs, I conducted a power analysis to establish the requisite sample size for robust statistical conclusions. This analysis utilized the f^2 effect size, which is suited for evaluating the strength of association in multiple regression analyses. I posited a medium effect size of $f^2=0.15$, signifying a meaningful, though not excessively large, relationship between our predictor and the outcome variable.

The power analysis was implemented using the pwr.f2.test function in the R statistical software. The parameters set included one predictor variable (u = 1), reflecting our focused inquiry into the influence of a solitary independent

variable. With an initial sample size of 92 (n = 92), the resulting degrees of freedom (v) for the analysis were computed as 92, which is the total sample size less the number of predictors and the intercept (n - p - 1).

Adhering to the conventional alpha level (α) of 0.05, I maintained a 5% risk of committing a Type I error. The outcome of the power analysis revealed a statistical power ($1-\beta$) of approximately 0.95. This high degree of statistical power indicates a 95.68% probability of correctly rejecting the null hypothesis if the alternative hypothesis holds true, substantially diminishing the risk of a Type II error. This computed power exceeds the commonly accepted threshold of 0.80, suggesting that our study is adequately powered to detect the postulated medium effect size with a considerable level of certainty. (OpenAI, 2023)

4 DISCUSSION

Insights from lecturers and a digital survey illuminate the relationship between artificial intelligence (AI) and its role in media and education. Key takeaways include:

- 1. **Ambiguity:** Both lecturers and the survey acknowledge uncertainties regarding AI's impact—lecturers on employment, and the survey on media.
- 2. **Consistent Sentiments:** A uniform sentiment toward AI is seen across different groups, contrary to the expectation that views would vary by background or academic level.
- 3. **AI's Quality Focus:** Quality is prioritized in AI applications. The survey notes a lack of clarity linking AI data processing to media content quality.
- 4. **Ethics:** Ethical use of AI is a concern for both educators and the survey, with a focus on student awareness and media implications.
- 5. **Further Exploration:** Both suggest that while current insights on AI are informative, deeper investigation is required. Educators call for critical AI engagement, and the survey indicates room for more detailed findings.
- 6. **Future Outlook:** A balanced perspective on AI's future role is presented, with both positive and cautious views expressed.

Studying AI's role in media reveals intricacies, particularly in its effect on the appeal of media. Despite anticipating varying opinions on AI's impact with academic progression, uniformity in views across demographics was confirmed through ANOVA tests.

Participants recognize AI's ability to augment media creativity, as shown in statistical analyses, but not at the expense of human creativity. Regression analysis on AI shaping content quality showed some correlations, but couldn't conclusively link AI's analytical strength to content quality.

Overall, the results underscore the importance of a well-rounded understanding of AI's influence on media. While the potential of AI is recognized, its exact effect on content quality is still debatable, opening paths for further study.

5 CONCLUSION

The data suggest that AI's incorporation into the media curriculum at BUas elicits complex reactions from students and educators alike. Despite an unexpected uniformity in attitudes across demographics, which challenges the notion of diversity in AI perceptions based on academic standing, there is a recognized need for AI's integration in education. BUas has an opportunity to pioneer a curriculum that blends AI with traditional media studies, fostering a balanced understanding of AI's role without diminishing the value of human creativity. Emphasizing ethical use, practical AI tool training, and critical analysis of AI content will prepare graduates for the dynamic media field. (OpenAI, 2023)

6 LIMITATIONS

In my study, several limitations emerged that could impact the interpretation of our findings. A notable concern was the predominance of responses from first-year students. Reliance on this group could introduce bias, as their perspectives might differ from senior students, potentially skewing results. To ensure participation, the survey was brief. This strategy might have increased the response rate, but the concise nature of the survey could have limited the depth and comprehensiveness of data collected. The cancellation of the focus group with first-year students further complicated matters. Focus groups are invaluable for in-depth insights and qualitative data that a survey might miss. Without this meeting, we may

Scientific Report [Max W. Memers], [2023], Breda Oniversity of Applied Sciences			
have missed crucial perspectives that could have enriched our study. Lastly, the study's ethical integrity was compromise			
because a majority neglected to complete the consent form. This oversight raises questions about the data's validity a its permissibility in research contexts. These factors suggest caution in interpreting and generalizing our study's resu (OpenAI, 2023)			

7 APPENDIX A

Question code	Full question	Possible answers
media_experience	How much work / study experience with AI or AI tools do you have? The amount of knowledge/experience with AI/AI tools in years.	less than 1 year, 1 - 2 years, 3 - 4 years, more than 5 years
media_subdomain	What sub-domain are you most interested / knowledgeable in?	Content, Production, Marketing, Interactive
media_knowledge_1	There are many beneficial applications of artificial intelligence.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_2	I am impressed by what artificial intelligence can do.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_3	In comparison to my colleagues in my domain, I have more knowledge on the topic.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_4	I am aware of a wide variety of AI applications.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_5	I have a good knowledge of AI.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_6	I have experience working with ChatGPT/BingAI.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_knowledge_7	I have experience working with AI tools other than ChatGPT/ BingAI.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_trust_1	Artificial intelligence can a have positive impact on people's wellbeing	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree

		Strongly disagree,
		Surongry disagree, Somewhat disagree,
media_trust_2	Artificial intelligence can provide new	Neither agree or disagree,
	economic opportunities for this country	Somewhat agree,
	economic opportunities for this country	Strongly agree
		Strongly disagree,
madia turat 2	Autificially, intelligent gyetome con mon	Somewhat disagree,
media_trust_3	Artificially intelligent systems can perform better than humans	Neither agree or disagree,
		Somewhat agree,
		Strongly agree
		Strongly disagree,
		Somewhat disagree,
media_trust_4	For routine transactions, I would rather in-	Neither agree or disagree,
	teract with an artificial intelligence	Somewhat agree,
		Strongly agree
		Strongly disagree,
		Somewhat disagree,
media_trust_5	Artificial intelligence makes me feel great	Neither agree or disagree,
	about human ingenuity	Somewhat agree,
		Strongly agree
		Strongly disagree,
		Somewhat disagree,
media_trust_6	Artificially intelligent systems can help	Neither agree or disagree,
	people feel happier	Somewhat agree,
		Strongly agree
		Strongly disagree,
		Somewhat disagree,
media_trust_7	Some complex decisions are best left to artificial intelligence	Neither agree or disagree,
		Somewhat agree,
		Strongly agree
		Strongly disagree,
media_trust_8	I would entrust my life savings to an artificially intelligent investment system	Somewhat disagree,
		Neither agree or disagree,
		Somewhat agree,
		Strongly agree
	I am interested in using artificial intelli-	Strongly disagree,
		Somewhat disagree,
will_to_learn_1		Neither agree or disagree,
	gence in my daily life	Somewhat agree,
		Strongly agree
		Strongly disagree,
		Somewhat disagree,
will_to_learn_2	Artificial intelligence is exciting	Neither agree or disagree,
		Somewhat agree,
		Strongly agree
will_to_learn_3		Strongly disagree,
	I love everything about artificial intelligence	Somewhat disagree,
		Neither agree or disagree,
		Somewhat agree,
		Strongly agree
		Strongly agree

will_to_learn_4	I am satisfied with how my domain is equipped for the application of AI	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
will_to_learn_5	I am willing to learn about AI	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
will_to_learn_6	I would like schools to offer AI related training	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_1	An artificially intelligent agent would be better than an employee in many routine jobs.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_2	I would like to use artificial intelligence in my own job.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_3	I often use AI in my daily work.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_4	There are many AI application possibilities in your domain.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_5	AI has a noticeable impact on my profession.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_6	AI will create new jobs in my field.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_7	The introduction of AI will lead to improvement in my profession.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree

media_domain_8	AI will boost the domain	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_domain_9	AI will be used more widely in the domain	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_development_1	Much of society will benefit from a future full of artificial intelligence	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_development_2	I am willing to use AI if needed	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_development_3	Employees who use AI will replace those who don't	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_development_4	The development in AI makes me more willing to engage in the domain	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_development_5	The development of AI makes the domain less attractive to me	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_1	I understand the ethical implications of using AI in media, especially in terms of deepfakes and misinformation.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_2	AI can enhance creative processes in media by offering suggestions or automating mundane tasks.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_3	AI can lead to innovative storytelling techniques in the media industry.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree

media_sp_4	AI can offer deeper insights into audience preferences, leading to more tailored and engaging media content.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_5	Traditional grading methods may not be suitable when AI tools are used in assignments.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_6	I treat AI as a tool more than a decision maker.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_7	AI is more of a buzzword than a tangible tool in the media curriculum right now.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_8	Assignments should focus more on human creativity and critical thinking rather than just AI-generated content.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_9	Guest lectures from AI industry experts would be beneficial for students.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree
media_sp_10	The distinction between a story and a well-crafted story is essential when using AI in content creation.	Strongly disagree, Somewhat disagree, Neither agree or disagree, Somewhat agree, Strongly agree

REFERENCES

Chen, M., Zhang, B., Cai, Z., Seery, S., Gonzalez, M. J., Ali, N. M., Ren, R., Qiao, Y., Xue, P., and Jiang, Y. (2022). Acceptance of clinical artificial intelligence among physicians and medical students: A systematic review with cross-sectional survey. *Frontiers in Medicine*, 9:990604.

Eschert, T., Schwendicke, F., Krois, J., Bohner, L., Vinayahalingam, S., and Hanisch, M. (2022). A survey on the use of artificial intelligence by clinicians in dentistry and oral and maxillofacial surgery. *Medicina*, 58(8):1059.

Nan, G., Liang, J., Zhang, Z., and Yuan, Y. (2023). Application and development of ai algorithms and ai engines in the field of multimedia production and media. 2023 World Conference on Communication and Computing (WCONF).

OpenAI (2023). Chatgpt: Advanced text rewriting and generation. Accessed on 10/30/2023. Prompt: "Rewrite this text for me".

Schepman, A. and Rodway, P. (2020). Initial validation of the general attitudes towards artificial intelligence scale. *Computers in human behavior reports*, 1:100014.

Sur, J., Bose, S., Khan, F., Dewangan, D., Sawriya, E., and Roul, A. (2020). Knowledge, attitudes, and perceptions regarding the future of artificial intelligence in oral radiology in india: A survey. *Imaging Science in Dentistry*, 50(3):193.