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EMPLOYING AI TECHNOLOGIES IN PUBLIC RELATIONS: A COMPARATIVE STUDY OF THE PERSUASIVE IMPACT OF HUMAN PRACTITIONERS AND CHATBOTS ON THE AUDIENCE

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SUMMARY

Artificial intelligence chatbots have become more popular for PR communication purposes, but there is not much data available about their persuasive abilities relative to human PR communication professionals in various forms of communication. A descriptive comparative research methodology was used in this study in order to measure the perceptions of people about the AI chatbots and human PR professionals. The data was collected from 150 respondents living in Kuala Lumpur, Malaysia, with the help of a structured questionnaire, which included 12 questions. The data was analyzed through IBM SPSS Statistics Version 29.0 by calculating the frequencies and percentages. As per the results, AI chatbots emerged as more persuasive with regard to communication characteristics (89.3%), organization of the contents (89.3%), presentation (80.0%), creation of multimedia (78.7%), creativity and innovation (79.3%), quick responses (74.7%), and the economic aspect of communication (76.0%). In addition, chatbots are more preferred by respondents when it comes to communication on personal issues (68.0%), social issues (60.0%), and technical support (62.7%). On the other hand, human public relations professionals scored high in psychological/emotional interaction (72.0%), ethical communication (68.0%), political issues (65.3%), religious issues (76.0%), and flexibility of communication. The results indicate that the success of AI chatbots and human public relations in persuasion relies on the goals of communication. The use of AI chatbots is more appropriate in terms of delivering efficient and informative communication. In contrast, humans play a crucial role in conveying emotional, ethical, and trust-based communications. The research indicates the appropriateness of using hybrid public relations strategies.

Key words: *artificial intelligence, chatbots, public relations, persuasive communication, human–AI interaction, communication effectiveness, digital communication.*

INTRODUCTION

The integration of AI technology has altered the interactions and communications among organizations, particularly in the area of public relations (PR) [6]. The use of technologies such as chatbots, virtual assistants, and language modeling has provided new ways through which organizations can communicate in real time with their stakeholders [4]. Unlike other conventional forms of communication channels that depend solely on humans for interaction, AI allows organizations to engage continuously, provide instant answers, facilitate multilingual communication, and provide personalized information [5]. The adoption of AI in customer service, crisis communication, corporate reputation management, and stakeholder engagement is creating a pertinent question about whether AI can persuade as much as human PR professionals do [8][9].

As one of the primary goals of public relations, persuasion continues to be an integral element of communication as the process does not just aim at sharing information, but also forming attitudes and changing behavior [15]. Though AI chatbots show their efficiency in such areas as speed, consistency, information processing, and availability, human professionals still outperform machines when it comes to empathy, ethical decision-making, emotional intelligence, and relationship building [16]. In order to achieve optimal results in communication and maintain credibility at the same time, understanding the way in which the audience perceives the persuasiveness of both of these sources of communication becomes crucial. There is still a lack of research that compares human practitioners and AI chatbots in terms of their persuasive power through various elements of communication from the perspective of the general public living in multicultural societies [19].

This research bridges this knowledge gap through the comparison of audience perceptions of persuasion between interactions with public relations professionals and AI-driven chatbots. Through the analysis of survey data gathered from Kuala Lumpur residents in Malaysia, the research investigates differences in perceptions of cognition, emotion, behavior, ethics, economics, and different areas of topics, as well as methods of persuasion. This research helps provide an enhanced perspective on how both human expertise and artificial intelligence work complementarily in the realm of public relations. Instead of presenting AI technology as a replacement for public relations practitioners, this research offers justification for an effective communication model where technological efficiency and human-centered communication work hand in hand.

This research is important since it deals with the increasing use of AI technology in public relations and tries to understand whether the communication done by means of chatbots can be equally effective as that of humans in terms of persuasion. The results of this research can serve as grounds for creating an efficient communication strategy based on both technical and human resources.

Key Contributions

- Comparison of the persuasive effectiveness of AI chatbots and human PR practitioners through empirical analysis in various communicative dimensions.
- Determination of the preference of the target audience towards communication using chatbots versus humans on political, social, economic, religious, personal, technical, and scientific issues.
- Analysis of the effects of technical and persuasive features of communication, such as the speed of response, organization of messages, credibility, emotions, and ethics.
- Evaluation of the complementary nature of the usage of AI and human practitioners in public relations and suggestions for their integration in PR practice.

Research Questions

RQ1: How does the persuasive effectiveness of AI-powered chatbots differ from that of human public relations practitioners across cognitive, emotional, behavioral, ethical, and economic dimensions?

RQ2: How do audience preferences for interacting with AI chatbots and human public relations practitioners vary across different communication topics (e.g., political, social, economic, religious, personal, technical support, and scientific)?

RQ3: Which persuasive communication techniques and technical characteristics contribute most to the perceived persuasive effectiveness of AI chatbots and human public relations practitioners?

RQ4: To what extent does the integration of AI technologies into public relations activities enhance the perceived effectiveness and persuasiveness of organizational communication?

The paper will be divided into seven sections. Section II is an overview of the related literature. The methodology section III covers issues like study design, sampling technique, data collection process, validation of instruments, conceptual framework, and data analysis methods. Section IV covers the theoretical framework. Results and discussion are covered in Section V. The practical implications, limitations, and recommendations for further research are covered in Section VI. Section VII is the conclusion.

RELATED WORKS

It has recently been revealed through studies that artificial intelligence has brought a revolution to the field of public relations, which can enable businesses to automate their communication, engage with people, and even give personalized responses through conversation agents. Another finding is that the design of a chatbot influences trustworthiness, satisfaction, and the effectiveness of communication because of social cues, response quality, and conversation intelligence [1][3]. Artificial intelligence chatbots can also enhance user compliance and the efficiency of communication through timely and informative responses [2].

In the field of public relations, the uses of AI go further than customer service to include organizational listening, content creation, managing audience relationships, and campaign optimization. In research literature, there is evidence that social interactions via chatbots increase transparency and organization-public relationships as long as communication approaches are thoughtfully formulated [7][12]. Likewise, research studies have indicated that AI can help in communication processes by generating multimedia, framing messages, and organizing content, thus leading to better communication and efficiency [17][18]. Nevertheless, regardless of these technological benefits, humans are still better at communication in terms of emotional intelligence, ethics, empathy, and relationship-building.

The increased usage of generative AI has contributed further to the role played by AI in the strategy of public relations through aiding campaign creation, communication, and decision-making [10][11][14]. However, it is noted that ethical considerations, transparency, authenticity, and governance continue to be key issues in the responsible use of AI in public communications [13][20].

Though there have been studies done on artificial intelligence implementation, chatbots' design, and organizational communication, very little has been empirically conducted on the comparison between the persuasiveness of AI chatbots and human public relations professionals from the point of view of the public across various communication perspectives. This research is one such effort to investigate the differences in persuasive communication, topic preference, technological aspects, and AI-assisted public relations activities from surveys done among the Malaysian population.

RESEARCH METHODOLOGY

Research Design

The study used a quantitative, descriptive, and comparative research approach to investigate the differences in the persuasiveness of communication by the use of AI-powered chatbots and human public relations practitioners. A cross-sectional survey research approach was utilized to collect data on how the public viewed the effectiveness of communication through different dimensions of persuasion. The

comparative approach allowed for the comparison of similarities and differences between human and AI-mediated communications.

Study Area

The study was carried out in Kuala Lumpur, Malaysia, an urban city that is known for its multi-ethnic populace, technologically equipped nature, and use of internet-based communication channels. Kuala Lumpur was chosen because it is one of the most technically developed urban cities in Southeast Asia, where residents regularly communicate using AI-based applications, online customer support, and communication tools. Data was collected from residents who lived in the central, north, and south regions of Kuala Lumpur.

Population and Sampling

Participants of this research were residents of Kuala Lumpur, Malaysia. There were 150 respondents who took part in the research. Respondents were chosen through a purposive sampling method, where only people who satisfied the requirements of this study were taken into consideration. These requirements were that they were the residents of Kuala Lumpur, their age was 13 or older, and they had previous experience of interacting with both AI chatbots and human public relations specialists. If respondents were less than 18 years old, then informed consent from their parents was required. The questionnaires were distributed from January 2 to January 15, 2026.

Data Collection

Primary data was gathered through a structured, self-administered questionnaire from 2 January 2026 until 15 January 2026. Respondents meeting the requirements of this study were given the questionnaire only after obtaining their informed consent. Respondents answered the questionnaire on their own and all answers were gathered in an anonymous manner. Completed questionnaires were screened for completeness prior to entering them into IBM SPSS Statistics (Version 29.0).

Research Instrument

In the study, a questionnaire was used as an instrument. It consisted of two parts. In part A, demographic data were recorded, that is, the variables such as gender, age, and education qualifications. Part B of the questionnaire involved structured questions divided into five different dimensions, which include

- I. Communication attributes and persuasion efficiency,
- II. Favorite communication subjects,
- III. Dimensions of persuasive communication,
- IV. Techniques of persuasive communication, and
- V. Technical communication attributes.

Validity and Reliability of the Instrument

Validity

The questionnaire was then validated through face validity to find out whether it is an appropriate tool to fulfill the study aims. This has been accomplished by sending the tool to five experts in the field of media and PR who have independently assessed the questionnaire for its relevancy, clarity, completeness, and appropriateness. After considering the advice of the experts, some minor changes were done in the wording of the questions in order to develop the final version of the questionnaire. It had obtained a face validity index of 88%.

Reliability

Test-retest reliability approach was used to measure the reliability of the questionnaire by checking how stable the tool is over time. A pilot study using 15 respondents was carried out before the actual survey.

The same questionnaire was administered twice to the same respondents with an interval of two weeks between the two times. The results from the two times were compared, and the reliability coefficient was measured at 0.94, which means that the questionnaire was very reliable and therefore could be used in the actual study.

Conceptual Framework

The conceptual framework is based on the premise that the communication source (AI chatbot or human public relations professional) affects the persuasive effectiveness of the message through certain communication traits.

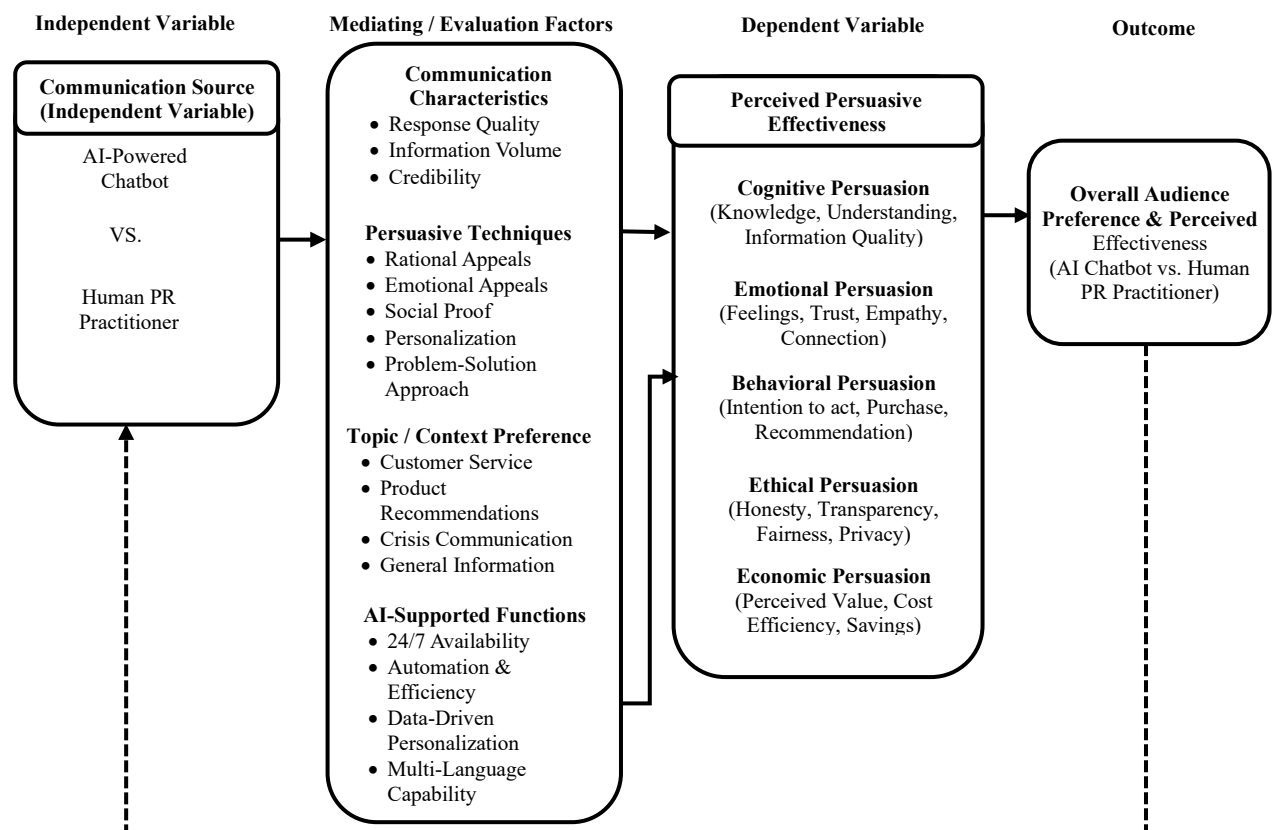


Figure 1. Conceptual framework of the comparative persuasive effectiveness of AI chatbots and human public relations practitioners

Figure 1 highlights the associations being investigated in the study. The communication source (chatbot or public relations professional) is the independent variable that influences the effectiveness of the persuasion. Communication features, persuasion techniques, topics of interest, and use of AI tools are the evaluation criteria that influence the persuasion criteria, which include cognitive, affective, behavioral, ethical, and economic dimensions of persuasion, which determine overall preference of audiences.

Data Analysis Model

The data were coded and analyzed using IBM SPSS Statistics (version 29.0). Descriptive statistics formed the core of the analysis in describing perceptions held by the respondents about the AI chatbots as well as human public relations practitioners. Percentages and frequency distributions were calculated to help describe the demographic characteristics of the respondents and compare their preferred means of communication for different persuasive dimensions, communication themes, persuasion methods, characteristics of technical communication, and roles performed by AI-based public relations. The findings were tabulated to allow comparisons between AI chatbots and human practitioners directly.

As such, no mathematical modeling techniques or inferential statistics were employed in analyzing the data since the study aimed at describing and comparing public perceptions.

THEORETICAL FRAMEWORK

The theoretical foundation for this research is the set of persuasive models, namely, the theory of persuasion, theory of communication, and human-computer interaction model, which will be applied to clarify the distinctions in the degree of persuasiveness between AI-driven chatbots and PR human specialists. According to the Elaboration Likelihood Model (ELM), persuasion can happen through the process of a central route when people examine the quality of arguments and evidence, and a peripheral route when they pay attention to the characteristics of the source and other cues.

Additionally, Source Credibility Theory postulates that the acceptance of the message will be dependent on perception about the credibility, expertise, and trustworthiness of the communicator. The PR communicators are credible because of their experience, ethics, and empathy, while AI chatbots can establish credibility by sending correct, consistent, and evidence-based messages. CASA theory claims that people have tendency to stick to social norms when communicating with intelligent systems and consider chatbots as social communicators, which influence human attitudes and behavior.

According to Media Richness Theory, communication is considered successful only if it is conducted using rich media, which can provide rich information and avoid ambiguity. As compared to human communication, AI communication is deficient in media richness, but it possesses immediacy, accessibility and better information processing. Finally, according to TAM theory, users will accept technology-based communication due to perceived usefulness and ease of use.

Each of these theories gives a comprehensive background to explore how the nature of the source of communication, the characteristics of the message, credibility, acceptance of technology, and quality of interaction affect the efficiency of AI Chatbots as well as human PR professionals as communicators. At the same time, each of these perspectives gives a rationale why AI can do good in cognitive and instrumental communication, while human beings excel in ethical and affective persuasion.

RESULTS AND DISCUSSION

This section will present the findings of the survey which was conducted among 150 people in Kuala Lumpur, Malaysia. The findings have been divided into two parts. First, the demographic information of the respondents such as their gender, age, and educational qualification has been presented. Second, the views of the respondents about the persuasion ability of AI chatbots and human public relations practitioners in different aspects of communication have been discussed. This includes the effectiveness of communication, preferred area of communication, persuasion strategies, technicalities of communication, and the possible public relations activities that can be done using AI technology. The analysis has been done using descriptive statistics such as frequency and percentage.

Information on demographics of the participants is critical in analyzing the public's perception of AI chatbots compared to human public relation officers. The survey incorporated demographic information like gender, age, and education level of the participants.

Table 1. Distribution of respondents by gender

No.	Gender	Frequency (Repetitions)	Percentage (Ratio)
1	Male	82	54.7%
2	Female	68	45.3%
	Total	150	100%

Gender Distribution of Respondents is reflected in table 1. In all, out of the total 150 respondents, 82 of them were men, accounting for 54.7% of the total number, whereas the remaining 68 of them were women, contributing to 45.3% of the total number of respondents. Since there is an equal number of both male and female respondents, it makes the analysis less biased.

Table 2. Distribution of respondents by age

No.	Age Group	Frequency (Repetitions)	Percentage (Ratio)
1	13–18 years	25	16.7%
2	19–29 years	45	30.0%
3	30–40 years	38	25.3%
4	41–49 years	23	15.3%
5	50 years and above	19	12.7%
	Total	150	100%

The respondents had diverse ages varying from 13 years to more than 50 years, hence giving room for perception data collection from different age groups, namely adolescence, youth, middle age, and old age.

Table 2 and figure 2 provide the age distribution of the respondents. The largest age group was made up of people who were 19-29 years old (45 respondents, 30.0%), followed by the group of respondents aged 30-40 years (38 respondents, 25.3%). People aged 13-18 years made up 25 respondents (16.7%), while respondents aged 41-49 years made up 23 respondents (15.3%). Age 50 years and above made up the smallest age group of 19 respondents (12.7%).

Prevalence of youth indicates the demographic group that has more experience in using digital communication technologies and AI applications. However, surveying the people from various age categories allows acquiring knowledge about the public attitude to chatbots and communication via PR.

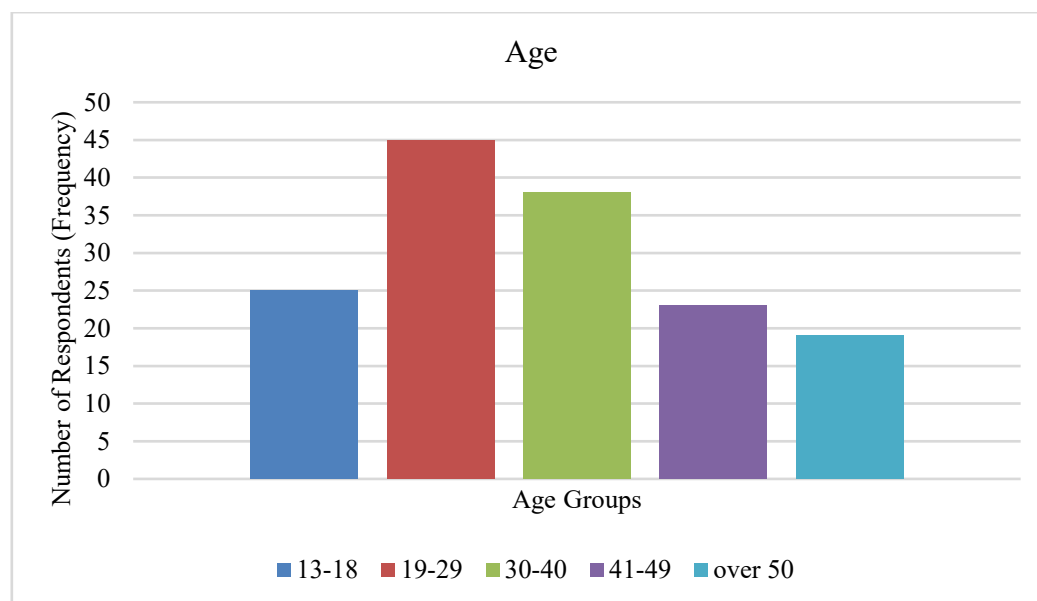


Figure 2. Age distribution of respondents

Table 3. Distribution of respondents by educational qualification

No.	Educational Qualification	Frequency (Repetitions)	Percentage
1	University Degree	70	46.7%
2	Preparatory	34	22.7%
3	Secondary education	25	16.7%
4	Primary education	13	8.6%
5	Postgraduate Studies	8	5.3%
	Total	150	100%

Table 3 provides the educational profile of the respondents. University-level education was the most popular form of educational qualification among the respondents (70 respondents, 46.7%), followed by preparatory-level education (34 respondents, 22.7%). Respondents with secondary level education were

25 in number (16.7%), while those with primary level education were 13 in number (8.6%). The postgraduate degree holders comprised the least number of respondents, which were 8 (5.3%).

Table 3 clearly shows that the majority of respondents were well educated, and it can be said that many respondents must have been acquainted with digital technologies and the Internet. The inclusion of diverse educational qualifications ensures the validity of the results through the opinions of people with diverse academic backgrounds.

Table 4. Comparative persuasive effectiveness of AI chatbots and human public relations practitioners

No.	Communication Dimension	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	Response format and information volume	97	64.7%	53	35.3%
2	Psychological and emotional interactions	42	28.0%	108	72.0%
3	Calls and emoticons	38	25.3%	112	74.7%
4	Social consequences	122	81.3%	28	18.7%
5	Credibility of information provided	87	58.0%	63	42.0%
6	Comfort in interaction and conversation	95	63.3%	55	36.7%
7	Accuracy and efficiency of results	98	65.3%	52	34.7%
8	Suitable communication and connection characteristics	134	89.3%	16	10.7%

Table 4 demonstrates the results of respondents' perception concerning the effectiveness of AI chatbots and human public relations specialists in eight communication attributes. From the analysis of the results presented above, it is possible to state that respondents believed that chatbots were more persuasive than human public relations specialists in many communication attributes. Specifically, respondents regarded AI chatbots as more persuasive in relation to response format and information quantity (64.7%), social implications of the conversation (81.3%), information credibility (58.0%), conversation comfort (63.3%), response efficiency and accuracy (65.3%), and communication attribute appropriateness (89.3%).

However, human public relations specialists demonstrated superiority to chatbots in attributes of communication that require interaction with a person. Specifically, respondents stated that human public relations specialists had better skills of interpersonal interaction (72.0%) and using body language and emotive communication (74.7%).

Hence, one may state that respondents consider AI chatbots to be more effective and systematic communicators with structured information, while human specialists are regarded as better performers in developing an emotional connection with the interlocutor. Therefore, perceptions of people concerning persuasive power are different depending on the context of communication.

Table 5 reflects the preferences of the respondents in relation to the choice of AI chatbots vs human public relations professionals in respect of different communication topics. It is evident from the results that there is some dependence between the preferences in communication and the sensitivity of the communication topic.

In particular, the preference of the human public relations practitioners for political topics (65.3%), economic topics (58.0%), religious topics (76.0%), and scientific topics (55.3%) is evident from the findings. It is clear that the respondents associated their trust in human public relations practitioners with the sensitivity of the communication topic.

Table 5. Public preferences for communication topics between AI chatbots and human public relations practitioners

No.	Topic Category	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	Political Topics	52	34.7%	98	65.3%
2	Social Topics	90	60.0%	60	40.0%
3	Economic Topics	63	42.0%	87	58.0%
4	Religious Topics	36	24.0%	114	76.0%
5	Personal Topics	102	68.0%	48	32.0%
6	Technical Support Topics	94	62.7%	56	37.3%
7	Scientific Topics	67	44.7%	83	55.3%

On the other hand, the AI chatbots were preferred for the social topics (60.0%), personal topics (68.0%), and technical support (62.7%). It indicates that the respondents valued the ability of AI chatbots to respond quickly and to provide accessible information.

In summary, the findings indicate that the preferences of the public are determined not by the preferences of one of the communication tools, but by the communication context. The AI chatbots were preferred mostly for information exchange, while the human public relations practitioners were the preferred ones in ethical discussions and topic-specific discussions.

Table 6. Dimensions influencing the persuasive effectiveness of AI chatbots and human public relations practitioners

No.	Dimension Category	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	Cognitive Dimension	99	66.0%	51	34.0%
2	Emotional Dimension	53	35.3%	97	64.7%
3	Behavioral Dimension	81	54.0%	69	46.0%
4	Ethical Dimension	48	32.0%	102	68.0%
5	Economic Dimension	114	76.0%	36	24.0%

Table 6 provides an overview of how respondents evaluated the contribution of various dimensions towards persuasive communication. Chatbots had been rated higher on the cognitive dimension (66.0%), behavioral dimension (54.0%), and economic dimension (76.0%). Thus, respondents considered chatbots as an efficient means of providing information and assisting in making decisions by saving the time and money spent on communication.

However, human practitioners were assessed as more persuasive in the emotional dimension (64.7%) and ethical dimension (68.0%). Therefore, human communication is linked to the ability to show empathy, ethics, and interpersonal relations.

Thus, it can be seen that persuasive effectiveness depends on communication dimensions. The chatbot was considered to be more persuasive on cognitive, behavioral, and economic dimensions, while humans have a clear advantage in emotional and ethical dimensions of communication. It is possible to say that both types of communication have their unique strengths, and it is crucial to use the right source depending on the goal of persuasion.

Table 7 shows the scores on the evaluation of persuasive communication techniques used in AI chatbots and human public relations practitioners. AI chatbots were rated highly in communicating their communication objectives clearly (59.3%), giving evidence and arguments (64.7%), communicating complete information (68.7%), and generating persuasive communication messages (61.3%). Human public relations practitioners were rated highly in making their communication relevant to audience requirements (55.3%), communicating the views of the majority of the public (58.0%), and repeating messages for emphasis (52.7%). This is an indication that respondents felt that AI chatbots were good at creating structured and evidence-based communication, while human practitioners were good at customizing persuasive messages according to audience requirements and creating emphasis through repeated communication. The findings demonstrate the significance of merging technology and human communication skills.

Table 7. Persuasive communication techniques used by AI chatbots and human public relations practitioners

No.	Message Communication Attribute	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	The message objective is clear and explicit	89	59.3%	61	40.7%
2	The message contains evidence, proof, and arguments	97	64.7%	53	35.3%
3	All aspects of the message are presented	103	68.7%	47	31.3%
4	The communication message is more persuasive	92	61.3%	58	38.7%
5	The message aligns with the audience's trends and needs	67	44.7%	83	55.3%
6	The communication message represents the majority opinion	63	42.0%	87	58.0%
7	Message repetition/reinforcement of message objective	71	47.3%	79	52.7%

The perceptions of technical characteristics influencing persuasive communication by the respondents are presented in table 8. The use of AI chatbots was valued positively in the areas of novelty and modernity (62.7%), response time (74.7%), creativity and innovation (79.3%), linguistic proficiency (57.3%), communication style (80.0%), logical organization (56.0%), clarity (60.7%), and sustainability of communication (56.7%).

However, human PR practitioners were preferred in terms of flexible communication (77.3%). Thus, it may be stated that the respondents perceived human communicators to have better skills of tailoring their communication techniques to the needs of the audience.

Table 8. Technical characteristics affecting the persuasive effectiveness of AI chatbots and human public relations practitioners

No.	Communication/Interaction Quality	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	Novelty and Modernity	94	62.7%	56	37.3%
2	Fast Response	112	74.7%	38	25.3%
3	Creativity and Innovation	119	79.3%	31	20.7%
4	Language	86	57.3%	64	42.7%
5	Presentation Style	120	80.0%	30	20.0%
6	Logical Sequence	84	56.0%	66	44.0%
7	Flexibility	34	22.7%	116	77.3%
8	Clarity	91	60.7%	59	39.3%
9	Building Long-Term Relationships	85	56.7%	65	43.3%

Accordingly, the findings indicate that the technical efficiency, consistency and fastness of information dissemination were seen in the use of AI chatbots while flexible communication was seen in human public relations practitioners.

Table 9. AI applications supporting public relations communication

No.	Communication Function	Chatbots Frequency	Chatbots Percentage	Human Practitioners Frequency	Human Practitioners Percentage
1	Generating multimedia	118	78.7%	32	21.3%
2	Editing communication messages	90	60.0%	60	40.0%
3	Verifying the message source	97	64.7%	53	35.3%
4	Organizing and arranging content	134	89.3%	16	10.7%
5	Sharing experiences	63	42.0%	87	58.0%

Table 9 shows how respondents perceive the effectiveness of AI technology on public relations practice. AI chatbots were rated higher in creating multimedia communication (78.7%), editing communication messages (60.0%), verifying sources of information (64.7%), and arranging communication content (89.3%). Human public relations practitioners were rated higher in sharing professional knowledge and experience (58.0%), showing that human professionals are still critical in organizational communication.

In conclusion, the above results show that the respondents perceive AI technology as important in enhancing efficiency in communication activities, information management, and the arrangement of communication content. However, human practitioners are still critical in communication tasks that require experience and interaction.

DISCUSSION

The results show that there is a difference in how persuasive communication is perceived in different contexts and by different features of the message sources. Chatbots powered by artificial intelligence proved to be more desirable for quick response, structuring information, providing technical support, producing multimedia content, and organizing the presented information. On the contrary, public relations professionals were viewed as being better in emotionally challenging, ethical, political, religious, and scientific communication due to greater involvement of empathy, credibility, and situational judgment. It means that AI chatbots and human public relations practitioners have different but complementary skills in communication.

In this respect, hybrid approaches of public relations should be applied in the process, meaning that quick and reliable chatbots, as well as human public relations practitioners and their interpersonal skills, would have to be used. Therefore, chatbots would be responsible for fulfilling routine tasks and providing technical support, whereas human professionals should deal with crises, make ethical decisions, communicate with stakeholders, and participate in the process of public communication.

The limitations of this research include the fact that the investigation is centered only around individuals from Kuala Lumpur, and cross-sectional survey approach makes it impossible to measure any changes in the perception of people concerning the issue. Further studies would have to involve more participants, who could be from different geographic locations. Moreover, the study should be performed in other cultural environments, and chatbot applications and generative AI systems should be studied.

CONCLUSIONS

This study analyzed the relative persuasiveness of the two media of communication, that is, AI chatbots and human PR practitioners, from the point of view of 150 respondents in Kuala Lumpur, Malaysia. This was done using a structured questionnaire along with descriptive statistics, which covered communication characteristics, persuasive communication, communication content, technical characteristics, and AI-supported public relations functions. Results indicate that while neither medium of communication is better than the other, there are certain contexts where one type of communicator will be more effective than the other based on certain criteria. Chatbots performed well in communication characteristics (89.3%), organization of content (89.3%), presentation (80.0%), creativity and innovation (79.3%), generation of multimedia (78.7%), rapid response (74.7%), and economic aspect of persuasion (76.0%). They also perform well in personal (68.0%), social (60.0%), and technical communications (62.7%) due to the speed and structure of information. Conversely, human public relations practitioners were rated higher in psychological and emotional interaction (72.0%), ethical communication (68.0%), communication flexibility (77.3%), political communication (65.3%), religious communication (76.0%), scientific communication (55.3%), and professional experience sharing (58.0%). Thus, one can conclude that the role of humans in PR will not fade away if effective communication relies on the ability to be empathic and credible, make ethical judgments, and build trust with the audience. The presented results allow for the conclusion about the complementary nature of the advantages of AI technologies and human communicators in contemporary public relations communication. Therefore, AI chatbots do not need to replace human public relations practitioners but become a component of hybrid strategies involving both technologies and the competencies of people.

Further studies should be conducted using more diverse and representative samples; moreover, the research design could be longitudinal or experimental, as well as the research should focus on generative AI technologies, personalization and transparency techniques, and ethics governance in relation to PR communication.

REFERENCES

- [1] Feine J, Gnewuch U, Morana S, Maedche A. A taxonomy of social cues for conversational agents. *International Journal of human-computer studies*. 2019 Dec 1;132:138-61. <https://doi.org/10.1016/j.ijhcs.2019.07.009>
- [2] Adam M, Wessel M, Benlian A. AI-based chatbots in customer service and their effects on user compliance: M. Adam et al. *electronic markets*. 2021 Jun;31(2):427-45. <https://doi.org/10.1007/s12525-020-00414-7>
- [3] Zheng Q, Tang Y, Liu Y, Liu W, Huang Y. UX research on conversational human-AI interaction: A literature review of the ACM digital library. In *Proceedings of the 2022 CHI Conference on Human Factors in Computing Systems 2022* Apr 29 (pp. 1-24). <https://doi.org/10.1145/3491102.3501855>
- [4] Sari H, Adinda R. Examining customer experience in using a chatbot. *International Journal of Asian Business and Information Management (IJABIM)*. 2023 Jan 1;14(1):1-6. <https://doi.org/10.4018/IJABIM.322438>
- [5] Gunkel DJ. Communication and artificial intelligence: Opportunities and challenges for the 21st century. *communication+ 1*. 2012 Aug 29;1(1). <https://doi.org/10.7275/R5QJ7F7R>
- [6] Huang G, Wang S. Is artificial intelligence more persuasive than humans? A meta-analysis. *Journal of Communication*. 2023 Dec 1;73(6):552-62. <https://doi.org/10.1093/joc/jqad024>
- [7] Men LR, Zhou A, Sunny Tsai WH. Harnessing the power of chatbot social conversation for organizational listening: The impact on perceived transparency and organization-public relationships. *Journal of Public Relations Research*. 2022 Mar 4;34(1-2):20-44. <https://doi.org/10.1080/1062726X.2022.2068553>
- [8] Dai Y, Lee J, Kim JW. AI vs. human voices: How delivery source and narrative format influence the effectiveness of persuasion messages. *International Journal of Human-Computer Interaction*. 2024 Dec 16;40(24):8735-49. <https://doi.org/10.1080/10447318.2023.2288734>
- [9] Zhou A, Tsai WH, Men LR. Optimizing AI social chatbots for relational outcomes: The effects of profile design, communication strategies, and message framing. *International Journal of Business Communication*. 2026 Apr;63(2):648-73. <https://doi.org/10.1177/23294884241229223>
- [10] Hassan A, Alam BM. Challenges facing the use of artificial intelligence in public relations. In *Business Development via AI and Digitalization: Volume 1* 2024 Aug 31 (pp. 345-357). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-62102-4_29
- [11] Lock I, Hoffmann LB, Burgers C, Araujo T. Types, methods, and evaluations of artificial intelligence (AI) in public communication research in the early phases of adoption: a systematic review. *Annals of the International Communication Association*. 2025 Jun;49(2):122-45. <https://doi.org/10.1093/anncom/wlaf005>
- [12] Uysal N, Deng T. The new brave world of public relations: the impact of organizational dynamics on adoption of AI. *International Journal of Strategic Communication*. 2025 Mar 15;19(2):303-23. <https://doi.org/10.1080/1553118X.2024.2447019>
- [13] Mallek M, Mohamed EA, Farhi F, Jeljeli R, Alquqa EK, Bougherza R, Abdullah A. Effectiveness of AI-Driven Public Relations Strategies in Advancing Sustainable Development Initiatives: “A Case Study of Leading Organizations in the United Arab Emirates”. *Studies in Media and Communication*. 2025 Dec;13(4):1-13. <https://doi.org/10.11114/smc.v13i4.7791>
- [14] Kaclová M. Exploring the landscape: generative AI adoption among central and eastern European PR professionals. *International Journal of Strategic Communication*. 2025 Mar 15;19(2):324-39. <https://doi.org/10.1080/1553118X.2024.2436542>
- [15] Vasilj D, Matković Ž, Bubalo N. The Role of Artificial Intelligence Tools in Enhancing Organizational Communication Strategy: An Analysis of Their Impact on Targeted Advertising and Public Interaction. In *International Conference on Digital Transformation in Education and Artificial Intelligence Application 2025* Apr 23 (pp. 171-181). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-02801-3_11
- [16] Sattar HA, Hart W. AI-Enabled Media Advancement: Redefining Modern Journalism and Digital Communication. *The Critical Review of Social Sciences Studies*. 2025 Dec 22;3(4):3259-78. <https://doi.org/10.59075/e5bb4d33>
- [17] Yue CA, Men LR, Davis DZ, Mitson R, Zhou A, Al Rawi A. Public relations meets artificial intelligence: Assessing utilization and outcomes. *Journal of Public Relations Research*. 2024 Nov 1;36(6):513-34. <https://doi.org/10.1080/1062726X.2024.2400622>
- [18] Vita NI, Encluna VE, Siregar NS, Rusmardiana A, Anantadjaya SP. AI public relations: the early rise of Kizuna AI. *Jurnal Studi Komunikasi*. 2023 Jul 30;7(2):417-29. <https://doi.org/10.25139/jsk.v7i2.6689>

- [19] Sattar HA, Ashraf A, Hassan Z. Generative artificial intelligence and the media industries: Collective consequences for journalism, advertising, and public relations. *Journal of Computational Informatics & Business*. 2024 Nov 27;2(2):55-62. <https://doi.org/10.65606/22/2024/53>
- [20] Alserhan FA. Artificial Intelligence in PR: Ethical Implications and the Importance of Authenticity. In *International Conference on Intelligent Systems, Blockchain, and Communication Technologies 2025* May 10 (pp. 261-273). Cham: Springer Nature Switzerland. https://doi.org/10.1007/978-3-032-09562-6_19