A Comparative Study on Fully Automated Recruitment Communication and AI-Assisted Human Recruitment Communication Using Mixed-Method Analysis

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ABSTRACT

The increasing adoption of Artificial Intelligence (AI) in recruitment has transformed communication processes between organizations and candidates. This study compares fully automated recruitment communication and AI-assisted human communication to evaluate their impact on candidate experience. A total of 132 student respondents were surveyed using a structured questionnaire. Quantitative analysis was conducted using SPSS and SmartPLS, while visualization was supported using Minitab. Additionally, qualitative insights were obtained through thematic analysis and netnography.

The results indicate that AI-assisted human communication (Mean = 4.13) is preferred over fully automated communication (Mean = 3.97). Correlation analysis revealed a significant relationship between the two scenarios ($r = 0.657$, $p < 0.001$). Structural model results from SmartPLS show that both models influence candidate experience, with the hybrid model having a stronger effect. Thematic analysis, conducted using Excel-based keyword filtering, identified major themes such as efficiency, trust, personalization, and hybrid preference. The findings conclude that while automation enhances efficiency, human interaction is essential for trust and satisfaction.

KEYWORDS

Artificial Intelligence in Recruitment, Candidate Experience, AI-Assisted Communication, Fully Automated Communication, Hybrid Recruitment Model, Mixed-Method Research, Thematic Analysis, Netnography

1. INTRODUCTION

Recruitment communication plays a crucial role in shaping candidate experience and organizational reputation. With the advancement of artificial intelligence, organizations have started using automated systems such as chatbots and AI-based screening tools. These systems improve efficiency, reduce time, and handle large volumes of applicants. However, the absence of human interaction may negatively affect trust, personalization, and emotional connection.

This study compares two models of recruitment communication. Scenario A represents fully automated communication, where all interactions are handled by AI systems. Scenario B represents AI-assisted human communication, where AI supports the process while human recruiters remain involved.

The study aims to identify which model provides a better candidate experience by combining quantitative and qualitative analysis methods.

2. LITERATURE REVIEW

Artificial Intelligence has become a key component in modern recruitment processes. Studies show that AI improves efficiency, reduces hiring time, and enhances communication speed. However, research also indicates that fully automated systems may reduce candidate satisfaction due to lack of human interaction.

Candidate experience is influenced by multiple factors such as trust, fairness, communication clarity, and emotional connection. While AI systems provide consistency and speed, they often lack empathy and personalization.

The hybrid model, which combines AI with human interaction, has been identified as the most effective approach. It balances efficiency with emotional intelligence, ensuring better candidate engagement.

Previous studies also highlight that trust and transparency are critical in AI-based recruitment. Candidates often question algorithm fairness and decision-making processes. Human involvement helps reduce these concerns.

Netnography studies from online platforms further support these findings, showing that candidates prefer systems where human interaction is present alongside automation.

3. METHODOLOGY

3.1 Research Design

This study adopts a **mixed-method research design** to examine the effectiveness of recruitment communication models on candidate experience. The study combines both quantitative and qualitative approaches in order to provide a more comprehensive understanding of the research problem.

The quantitative component was used to measure respondent perceptions and test relationships between variables through statistical and structural analysis. The qualitative component was used to capture deeper insights into respondent opinions and public online discussions.

The study includes:

1. **Quantitative analysis** using **SPSS** and **SmartPLS**
2. **Qualitative analysis** using **thematic analysis** and **netnography**

This mixed-method approach improves the depth, validity, and interpretive strength of the study by integrating numerical findings with contextual insights.

3.2 Data Collection

The study is based on **primary data** collected through a structured questionnaire. The questionnaire was designed using a **5-point Likert scale**, where respondents indicated their level of agreement with the given statements.

A total of **132 responses** were collected for the study. The respondents were **student participants**, who were considered appropriate for the study because they represent prospective job applicants and are relevant to the context of recruitment communication and candidate experience.

The questionnaire included items related to two communication scenarios:

1. **SC1** – Fully Automated Communication
2. **SC2** – AI + Human Communication

These responses were used for quantitative analysis in SPSS and SmartPLS. In addition, qualitative insights were developed through thematic analysis of responses and netnographic review of publicly available online discussions.

3.3 Sampling Technique

The study used a **convenience sampling technique** to collect responses from student participants. This method was considered suitable because the respondents were easily accessible and relevant to the context of the research.

Student respondents were selected as the target group because they represent prospective job applicants and are likely to experience recruitment communication during internships, placements, or future employment opportunities. Therefore, their perceptions are meaningful for understanding candidate experience in recruitment processes.

3.4 Tools Used

Different analytical tools were used in this study to examine the data from multiple perspectives. Statistical analysis was carried out using SPSS, structural modeling was performed using SmartPLS, graphical visualization was supported through Minitab, and thematic organization of qualitative responses was done using Excel.

Tool	Purpose
SPSS	Statistical analysis
SmartPLS	Structural modeling
Minitab	Charts and visualization
Excel	Thematic analysis and keyword grouping

Table 1: Tools Used for Analysis

Source: Author's compilation.

4. QUANTITATIVE ANALYSIS (SPSS RESULTS)

Quantitative analysis was carried out using SPSS to evaluate the reliability, descriptive statistics, correlation, and mean differences between the two scenarios. Scenario A represents Fully Automated Communication, while Scenario B represents AI + Human Communication.

4.1 Reliability Analysis

Reliability analysis was conducted using Cronbach's Alpha to test the internal consistency of the items used in both scenarios.

Scenario	No. of Items	Cronbach's Alpha	Interpretation
Scenario A (Fully Automated Communication)	5	0.836	Good Reliability
Scenario B (AI + Human Communication)	5	0.905	Excellent Reliability

Table 2: Reliability Statistics of Constructs

The results show that both constructs have acceptable to excellent reliability, as the Cronbach's Alpha values are above the recommended threshold of 0.70. Scenario B shows higher internal consistency than Scenario A.

4.2 Descriptive Statistics

Descriptive statistics were used to summarize the distribution of responses for both scenarios.

Variable	N	Minimum	Maximum	Mean	Std. Deviation	Interpretation
SC1 (Fully Automated Communication)	132	2.00	5.00	3.97	0.69	Moderate
SC2 (AI + Human Communication)	132	1.60	5.00	4.13	0.69	High

Table 3: Descriptive Statistics

The mean value of SC2 is higher than SC1, indicating that respondents show greater preference toward AI + Human Communication compared to Fully Automated Communication.

4.3 Correlation Analysis

Pearson correlation analysis was performed to examine the relationship between SC1 and SC2.

Variables	SC1	SC2	Sig. (2-tailed)	N
SC1	1	0.657**	< 0.001	132
SC2	0.657**	1	< 0.001	132

Table 4: Correlation Matrix

Note: **Correlation is significant at the 0.01 level (2-tailed).

The correlation coefficient between SC1 and SC2 is **0.657**, indicating a strong positive relationship. This means that respondents who rated one communication mode positively also tended to rate the other positively. The relationship is statistically significant ($p < 0.001$).

4.4 Paired Sample T-Test

A paired sample t-test was used to compare the same respondents' perceptions of Scenario A and Scenario B.

Comparison	Mean (SC1)	Mean (SC2)	Mean Difference	t-value	df	p-value	Interpretation
SC1 vs SC2	3.97	4.13	-0.15	-3.105	131	0.002	Significant

Table 5: Paired Sample T-Test

The paired sample t-test indicates a statistically significant difference between SC1 and SC2, with a p-value of **0.002**, which is less than 0.05. This shows that Scenario B is significantly more effective than Scenario A in terms of candidate preference and overall recruitment experience.

4.5 Independent Sample T-Test (UG vs PG)

An independent sample t-test was conducted to determine whether undergraduate and postgraduate students differ in their perceptions of the two communication scenarios.

Variable	Group	N	Mean	Std. Deviation	t-value	p-value	Interpretation
SC1	UG	76	3.99	0.74	0.426	0.671	Not Significant
SC1	PG	56	3.94	0.62			
SC2	UG	76	4.13	0.74	0.032	0.974	Not Significant
SC2	PG	56	4.13	0.63			

Table 6: Independent Sample T-Test Based on Level of Study

The results indicate no significant difference between undergraduate and postgraduate students for either SC1 or SC2, since both p-values are greater than 0.05. This suggests that level of study does not influence respondents' perceptions of the communication models.

4.6 Summary of Quantitative Findings

Analysis	Result	Interpretation
Reliability Analysis	SC1 = 0.836, SC2 = 0.905	Both constructs are reliable
Descriptive Statistics	SC2 mean > SC1 mean	Hybrid communication is preferred
Correlation Analysis	$r = 0.657$, $p < 0.001$	Strong positive relationship
Paired Sample T-Test	$p = 0.002$	Significant difference between SC1 and SC2
Independent Sample T-Test	$p > 0.05$	No difference based on level of study

Table 7: Summary of SPSS Results

Overall, the SPSS results consistently show that **AI + Human Communication (SC2)** performs better than **Fully Automated Communication (SC1)**. The findings support the argument that hybrid communication provides a stronger and more favorable recruitment experience.

5. SMARTPLS ANALYSIS

SmartPLS analysis was used to examine the structural relationship between the independent variables and candidate experience. In this study, SC1 (Fully Automated Communication) and SC2 (AI + Human Communication) were treated as predictor constructs, while Candidate Experience / Overall Experience was treated as the dependent construct.

5.1 Structural Model

The structural model was developed to assess the effect of the two communication approaches on candidate experience.

The model contains the following paths:

- **SC1 → Candidate Experience**
- **SC2 → Candidate Experience**

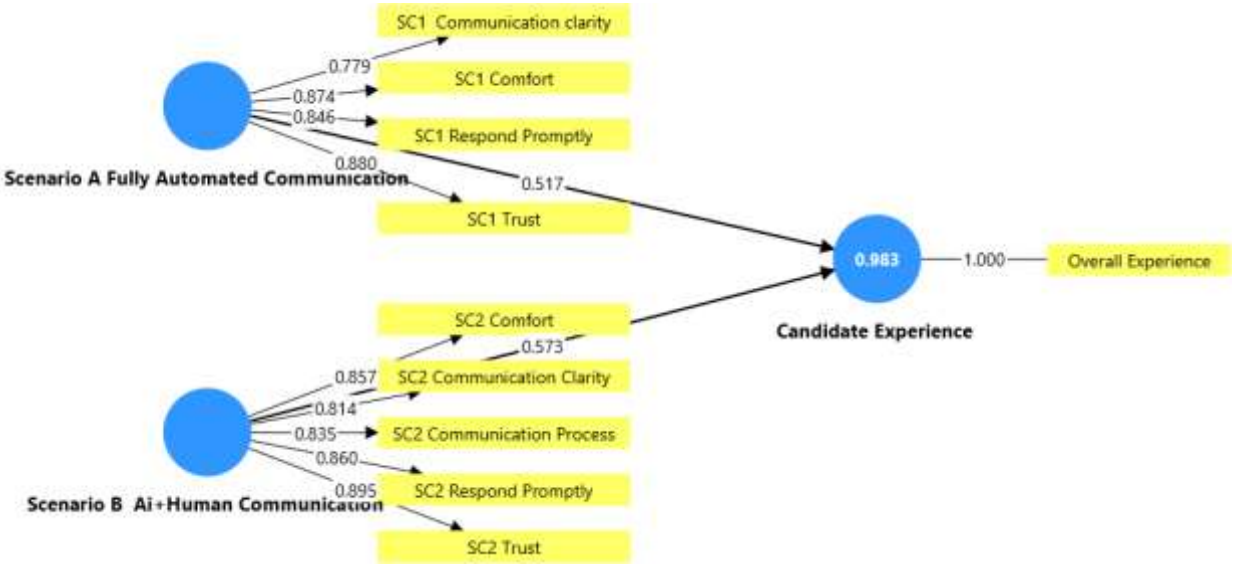

Figure 1: SmartPLS Structural Model

Figure 1 presents the SmartPLS structural model showing the relationships between the two communication scenarios and candidate experience. The model visually indicates that both SC1 and SC2 positively influence candidate experience, with SC2 showing the stronger path coefficient.

5.2 Path Coefficients and Hypothesis Testing

Path coefficient analysis was performed to measure the strength and significance of the relationship between each scenario and candidate experience.

Path	Path Coefficient (β)	t-value	p-value	Hypothesis	Result
SC1 → Candidate Experience	0.517	18.12	< 0.001	H1	Supported

SC2 → Candidate Experience	0.573	28.524	< 0.001	H2	Supported

Table 8: Structural Model Results

The results indicate that both SC1 and SC2 have a statistically significant effect on candidate experience, as the p-values are less than 0.001. However, SC2 has a higher path coefficient (β = 0.573) compared to SC1 (β = 0.517), indicating that AI + Human Communication has a stronger influence on candidate experience.

These findings support both hypotheses and confirm that while both communication approaches are effective, the hybrid model is more impactful.

5.3 Coefficient of Determination (R^2)

The coefficient of determination (R^2) was used to evaluate the explanatory power of the structural model in predicting candidate experience.

Dependent Variable	R^2	Adjusted R^2	Interpretation
Candidate Experience	0.983	0.982	Very high explanatory power

Table 9: R^2 Value of the Structural Model

The R^2 value for Candidate Experience is 0.983, while the adjusted R^2 value is 0.982. This indicates that the structural model has very high explanatory power, as SC1 and SC2 together explain a substantial proportion of the variance in candidate experience. In other words, the selected communication variables are highly relevant in predicting recruitment experience.

5.4 Interpretation of SmartPLS Findings

The SmartPLS results clearly show that both communication models positively influence candidate experience. However, the stronger effect of SC2 demonstrates that the inclusion of human interaction improves the effectiveness of communication in recruitment.

Fully automated communication may improve speed and consistency, but hybrid communication provides additional benefits such as trust, clarity, emotional comfort, and personalization. This makes the AI + Human model a more suitable approach for enhancing candidate experience.

Thus, the SmartPLS findings reinforce the conclusion that hybrid communication offers a more effective and balanced recruitment experience.

5.5 Summary of SmartPLS Results

Analysis	Result	Interpretation
Structural Path: SC1 → Candidate Experience	β = 0.517, p < 0.001	Positive significant effect
Structural Path: SC2 → Candidate Experience	β = 0.573, p < 0.001	Stronger positive significant effect

Comparative Impact	SC2 > SC1	Hybrid model is more impactful
R^2 Value	0.983	Model has very high explanatory power

Table 10: Summary of SmartPLS Findings

Overall, the SmartPLS analysis confirms that AI + Human Communication is more effective than Fully Automated Communication in improving candidate experience. The findings strengthen the conclusion that a hybrid communication model is the most suitable approach in recruitment processes.

6. MINITAB ANALYSIS (DATA VISUALIZATION)

Minitab was used to create visual representations of the data in order to better understand the distribution, spread, and comparative patterns of responses for SC1 (Fully Automated Communication) and SC2 (AI + Human Communication). The graphical analysis supports the statistical findings obtained through SPSS and SmartPLS. Minitab was used to generate the histogram, boxplot, mean chart, and scatterplot presented in this section.

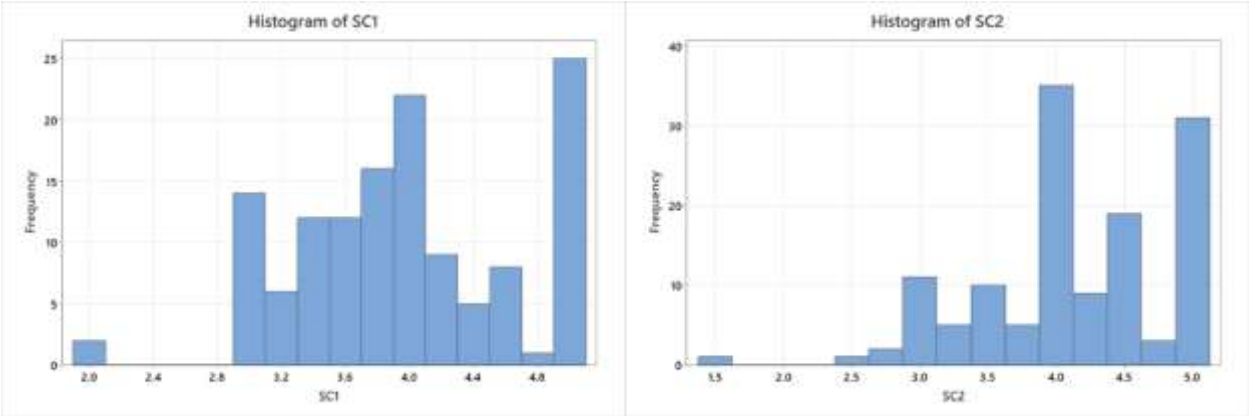

Figure 2: Histograms of SC1 and SC2

The histogram shows the frequency distribution of responses under both scenarios. The responses for both SC1 and SC2 are spread across the scale, with a noticeable concentration around the higher values. Compared with SC1, SC2 appears slightly more concentrated toward favorable responses, indicating stronger respondent preference.

The graphical pattern suggests that the data is reasonably distributed and suitable for further statistical interpretation. The histogram also visually supports the descriptive statistics, where SC2 recorded a higher mean than SC1.

6.1 Boxplot Analysis

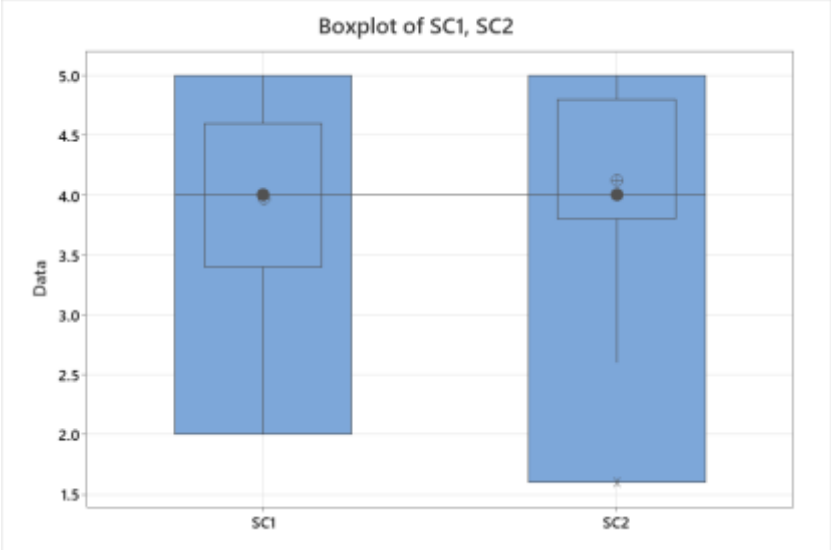

Figure 3: Boxplot of SC1 and SC2

The boxplot provides a clear comparison of the median, interquartile range, and overall spread of the two scenarios. SC2 shows a slightly higher median than SC1, indicating that the central tendency of responses is more favorable for AI + Human Communication. The spread of responses is relatively similar across both groups, suggesting consistency in respondent opinions.

No major extreme outliers are evident in the graphical representation, which indicates that the dataset is stable and not unduly influenced by abnormal values. This strengthens the reliability of the results.

6.2 Mean Comparison Chart

A mean chart was used to visually compare the average scores of SC1 and SC2.

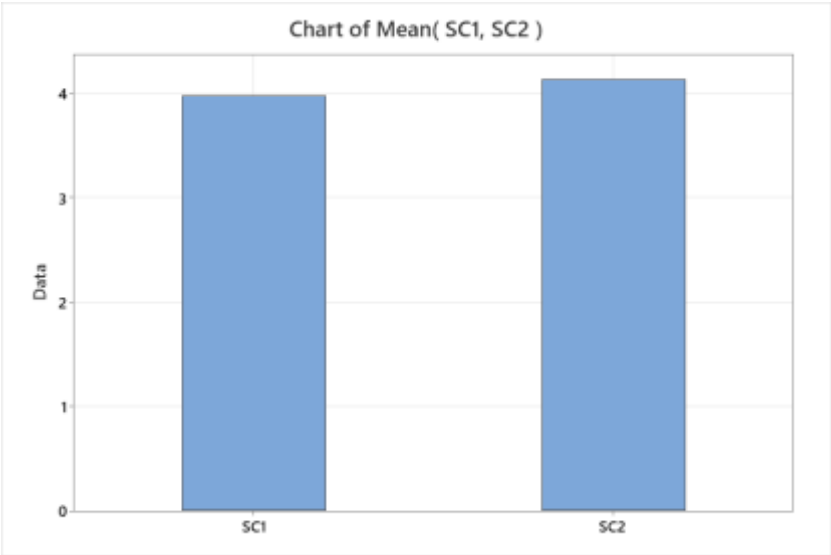

Figure 4: Mean Comparison of SC1 and SC2

The mean chart clearly shows that the average score for SC2 is higher than that of SC1. This finding is consistent with the SPSS descriptive results, where SC2 obtained a mean of **4.13** compared to **3.97** for SC1. The chart visually confirms that respondents prefer the hybrid communication model over the fully automated model.

This graphical evidence reinforces the conclusion that AI + Human Communication provides a better overall recruitment experience.

6.3 Scatterplot Analysis

A scatterplot was used to visualize the relationship between overall experience and the two communication scenarios.

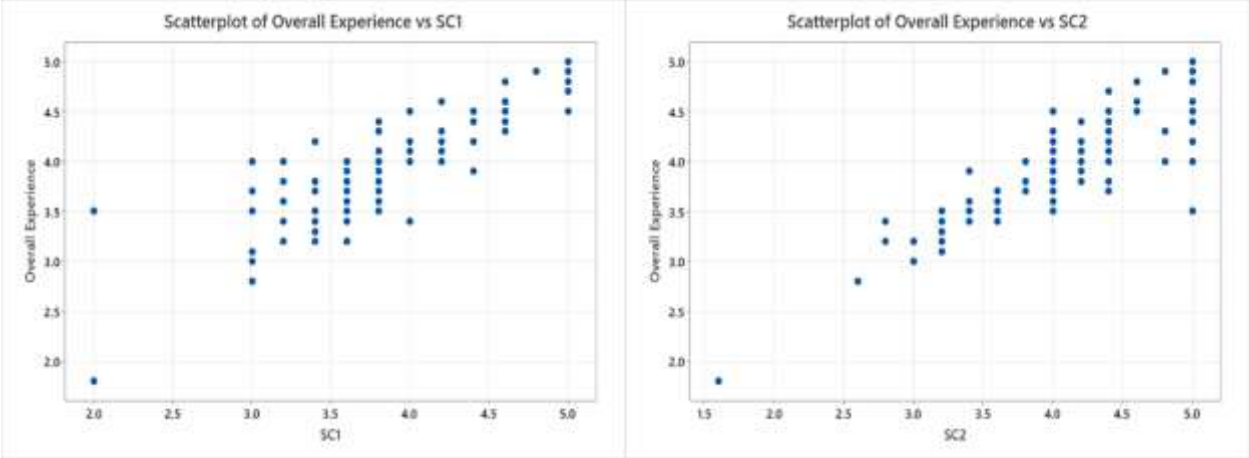

Figure 5: Scatterplots of overall experience vs SC1 and SC2

The scatterplot indicates a positive relationship between the communication variables and overall experience. As the ratings for SC1 and SC2 increase, the overall experience also tends to improve. However, the visual clustering appears stronger for SC2, suggesting a more consistent and meaningful relationship with candidate experience.

This visual observation aligns with the SmartPLS findings, where SC2 demonstrated a stronger path coefficient than SC1.

6.4 Interpretation of Minitab Findings

The visual outputs generated through Minitab are consistent with the results obtained from the statistical and structural analyses. Across the different charts, SC2 shows a slightly stronger performance compared to SC1.

- The histogram displays a greater concentration of responses at higher values for SC2
- The boxplot shows a marginally higher median for SC2
- The mean chart indicates that SC2 has a higher average score
- The scatterplot reveals a clearer positive association between SC2 and candidate experience

Taken together, these visual patterns suggest that AI-assisted human communication provides a more favorable candidate experience than fully automated communication.

6.5 Summary of Minitab Findings

Visualization Tool	Observation	Interpretation
Histogram	SC2 responses concentrated more at higher values	Higher preference for SC2
Boxplot	SC2 median is slightly higher	Better central tendency
Mean Chart	SC2 mean exceeds SC1 mean	Hybrid communication preferred

Scatterplot	SC2 shows stronger positive clustering	Stronger effect on experience

Table 11: Summary of Minitab Visualization Results

In summary, the visual results from Minitab align with the earlier analysis and indicate that SC2 performs slightly better than SC1 in shaping candidate experience.

7. THEMATIC ANALYSIS (AI-ASSISTED AND RESEARCHER-REVIEWED METHOD)

Thematic analysis was carried out to understand the key ideas expressed in the open-ended responses. The responses were organized in Excel to enable easier review and comparison. Initial theme suggestions were generated with AI support, and these were then reviewed and refined manually by the researcher. Based on this process, similar responses were grouped together and interpreted as broader themes that support the quantitative findings.

7.1 Procedure of Thematic Analysis

The thematic analysis was carried out through the following steps:

1. Open-ended responses were collected from participants.
2. Responses were organized question-wise in Excel.
3. Preliminary theme suggestions were generated with AI assistance.
4. The researcher reviewed the suggested labels and checked each response for meaning and relevance.
5. Similar responses were grouped into broader final themes.
6. The finalized themes were interpreted in relation to the quantitative findings.

7.2 Identified Themes

The analysis resulted in six major themes related to respondent perceptions of recruitment communication methods.

Theme	**Frequency (n)**	**Percentage of Total Sample**
Efficiency	67	51.50%
Empathy	43	33.10%
Impersonality	42	32.30%
Trust	27	20.80%
Hybrid Preference	23	17.70%
Personalization	20	15.40%

Table 12: Thematic Analysis Results

Note: Frequencies represent the number of unique respondents who mentioned each theme at least once across the open-ended survey questions. Totals may exceed 100% because a respondent could mention more than one theme.

The thematic analysis showed that efficiency was the most frequently identified theme, indicating that respondents value speed and convenience in recruitment communication. At the same time, themes such as empathy, impersonality, trust, personalization, and hybrid preference show that respondents also care about emotional connection, clarity, and human involvement. These findings suggest that although automation is appreciated for operational efficiency, human-supported communication is preferred for a more positive candidate experience.

7.3 Interpretation of Themes

The identified themes provide useful insight into how respondents perceive the two communication models. Efficiency indicates that automation is appreciated for reducing delays and making communication faster. In contrast, themes such as empathy, trust, and personalization suggest that respondents still value human interaction for reassurance, clarity, and comfort. The theme of impersonality highlights a key limitation of fully automated communication, where the lack of human presence may weaken emotional connection. The theme of hybrid preference further shows that respondents do not reject automation entirely, but instead prefer a balanced approach in which AI supports the process while human involvement remains present where needed.

7.4 Relationship with Quantitative Findings

The thematic findings support the statistical and structural results obtained from SPSS and SmartPLS. The quantitative analysis showed that AI-assisted human communication received a higher mean score than fully automated communication, while SmartPLS demonstrated that the hybrid model had a stronger influence on candidate experience. The thematic findings help explain these results by showing that respondents value not only efficiency, but also empathy, trust, and personalization in recruitment communication. Thus, the qualitative evidence strengthens the conclusion that AI-assisted human communication provides a more effective and satisfactory recruitment experience than fully automated communication.

7.5 Summary of Thematic Findings

Theme Category	Main Insight	Implication
Automation-related themes	Efficiency and speed are appreciated	AI improves operational effectiveness
Human-related themes	Trust, empathy, and personalization are important	Human interaction improves candidate comfort
Hybrid-related themes	Combination of both is preferred	Hybrid communication is the more effective approach

Table 13: Summary of Thematic Findings

Overall, the thematic analysis suggests that respondents recognize the strengths of both communication models, but show stronger preference for a hybrid approach that combines the speed of AI with the emotional and relational benefits of human interaction.

8. NETNOGRAPHY ANALYSIS

8.1 Introduction

Netnography was used in this study to understand public online opinions about AI-based recruitment communication and candidate experience. This method helped extend the findings beyond survey data by examining naturally occurring discussions on digital platforms.

8.2 Data Source and Collection

The netnographic data for this study was drawn from **publicly available discussions on Reddit and LinkedIn** related to AI in recruitment, hiring communication, and candidate experience. A total of **20 relevant online comments** were reviewed from **9 discussion sources**.

Since each selected source contained multiple user comments and viewpoints, the final netnographic insights were derived from recurring ideas identified across these discussions.

8.3 Ethical Considerations

To ensure ethical reporting and protect user privacy:

1. Only publicly available discussions were considered
2. Usernames and personal identifiers were not recorded
3. Comments were **paraphrased** rather than reproduced verbatim
4. The analysis focused only on thematic meaning

8.4 Procedure of Analysis

The netnographic analysis was carried out in the following steps:

1. Relevant public discussions on Reddit and LinkedIn were identified
2. Comments related to AI recruitment and candidate experience were reviewed
3. Repeated opinions and viewpoints were noted
4. Similar ideas were grouped together
5. Paraphrased insights were developed and organized into themes

8.5 Themes Identified

Theme	Platform Source	Paraphrased Insight	Interpretation
Efficiency	Reddit / LinkedIn	AI-based communication was seen as fast and time-saving	Automation improves speed
Impersonality	Reddit	Some users felt AI interaction lacked human warmth	Fully automated systems may reduce engagement
Trust	LinkedIn	Users preferred recruiter involvement in key stages	Human interaction builds trust
Hybrid Preference	Reddit / LinkedIn	AI was seen as useful when combined with human judgment	Hybrid communication is most accepted

Table 14: Netnography Themes and Insights

Source: Author's compilation from public Reddit and LinkedIn discussions.

8.6 Interpretation

The netnographic findings indicate that public online discussions generally support the view that AI improves efficiency in recruitment communication. However, many users also expressed concern that fully automated interaction can feel impersonal. Comments reflecting trust, comfort, and preference for recruiter involvement suggest that human interaction remains important. Overall, the reviewed discussions suggest greater acceptance of a hybrid communication model that combines AI efficiency with human support.

8.7 Relationship with the Study

The netnographic findings are consistent with the results obtained from SPSS, SmartPLS, Minitab, and thematic analysis. While automation was associated with speed and convenience, hybrid communication was more positively viewed because it balanced efficiency with trust and empathy.

8.8 Source Note

Relevant web sources consulted for the netnographic analysis are listed in the reference section under **Netnography / Web Sources**.

9. INTEGRATION OF FINDINGS

The results obtained from the different analytical methods used in this study show a strong level of consistency. Quantitative, structural, visual, and qualitative findings all point toward the same conclusion: AI + Human Communication (SC2) is more effective than Fully Automated Communication (SC1) in improving candidate experience.

9.1 Synthesis of Results

The findings from each method can be summarized as follows:

1. **SPSS Analysis** showed that SC2 had a higher mean score than SC1, indicating greater respondent preference for the hybrid model.
2. **SmartPLS Analysis** showed that SC2 had a stronger path coefficient, indicating a greater impact on candidate experience.
3. **Minitab Analysis** visually confirmed that SC2 had a slightly stronger central tendency and more favorable response pattern.
4. **Thematic Analysis** showed that respondents associated automation with efficiency, but linked human interaction with trust, empathy, and personalization.
5. **Netnography Analysis** provided real-world support from online discussions, where users preferred a hybrid communication model that combines speed with human connection.

Taken together, these findings show that the hybrid communication model performs better across all dimensions of the study.

9.2 Triangulation of Evidence

One of the strengths of this research is the use of multiple methods to study the same issue. By combining SPSS, SmartPLS, Minitab, thematic analysis, and netnography, the study achieves methodological triangulation.

This means that the conclusion is not based on only one type of evidence. Instead, it is supported by:

1. Numerical results
2. Structural model findings
3. Visual patterns
4. Participant-generated themes
5. External online opinions

The agreement among these methods increases the credibility, reliability, and robustness of the study.

9.3 Comparative Understanding of the Two Models

The integrated findings help explain the strengths and limitations of each communication model.

Fully Automated Communication (SC1)

Fully automated communication performs well in terms of speed, consistency, and operational efficiency. It is useful for reducing delays and managing communication at scale. However, it tends to lack emotional warmth, personalization, and human reassurance.

AI + Human Communication (SC2)

The hybrid model combines the efficiency of AI with the relational advantages of human interaction. It improves trust, empathy, communication clarity, and overall comfort. As a result, candidates perceive this model more positively.

This comparison indicates that efficiency alone is not enough in recruitment communication. A better candidate experience requires both speed and human connection.

9.4 Final Integrated Conclusion

Based on the integration of all results, it can be concluded that **AI + Human Communication is the most effective recruitment communication model** among the two scenarios examined in this study.

The hybrid model offers the following advantages:

1. Improved communication effectiveness
2. Better emotional connection
3. Stronger trust and personalization
4. Higher candidate satisfaction
5. Balanced use of technology and human support

Therefore, organizations should not rely entirely on automation in recruitment communication. Instead, they should adopt a hybrid strategy that combines AI tools with meaningful human involvement.

9.5 Summary Table of Integrated Findings

Method	Main Finding	Implication
SPSS	SC2 mean is higher than SC1	Respondents prefer hybrid communication
SmartPLS	SC2 has stronger impact on candidate experience	Hybrid model is more influential
Minitab	SC2 shows slightly stronger central tendency	Visual support for hybrid preference
Thematic Analysis	Trust, empathy, and personalization matter	Human interaction adds value
Netnography	Online discussions favor hybrid communication	Real-world support for findings

Table 15: Integration of Findings Across Methods

Overall, the integration of findings confirms that the hybrid communication model is consistently supported by every analytical approach used in this study. This makes the conclusion strong, well-supported, and suitable for practical application in recruitment processes.

10. DISCUSSION

The purpose of this study was to compare the effectiveness of **Fully Automated Communication** and **AI + Human Communication** in shaping candidate experience during recruitment. The findings across all analytical methods consistently indicate that the hybrid communication model is more effective than the fully automated model.

The quantitative results from SPSS showed that **SC2 recorded a higher mean score than SC1**, which suggests that respondents viewed AI + Human Communication more positively. The paired sample t-test further confirmed that the difference between the two scenarios was statistically significant. This indicates that the preference for the hybrid model is not incidental, but meaningful.

The SmartPLS analysis strengthened this conclusion by showing that both communication models significantly influence candidate experience, while **SC2 demonstrated a stronger path coefficient**. This means that although fully automated communication contributes positively to the recruitment process, the hybrid approach has a greater ability to improve the overall experience of candidates.

The Minitab visualizations also supported these findings. The histogram, boxplot, mean chart, and scatterplot consistently showed that SC2 had a slightly stronger response pattern and higher central tendency than SC1. These visual results made the differences easier to observe and provided additional support for the statistical findings.

The qualitative findings offered deeper insight into the reasons behind this preference. Thematic analysis revealed that **efficiency** was the most common benefit associated with automation, while **trust, empathy, and personalization** were linked more strongly to human-supported communication. This suggests that candidates appreciate technology for its speed and convenience, but they still expect emotional understanding and clear personal interaction during recruitment.

Similarly, the netnography analysis showed that online discussions from Reddit and LinkedIn reflected the same pattern. Public opinions suggested that AI is valued for its quick response and efficiency, but fully automated systems are often described as impersonal. Many comments indicated that candidates are more comfortable when human interaction is included, particularly in important stages of the recruitment process.

Taken together, these findings show that recruitment communication should not be treated only as an operational process. It is also an interpersonal experience that shapes the way candidates perceive the organization. While AI can improve speed and consistency, human involvement remains essential for building trust, reducing uncertainty, and creating a positive impression.

The study therefore supports the view that a **hybrid communication model** provides the best balance between efficiency and human connection. Organizations that rely only on automation may achieve operational benefits, but they risk reducing the quality of candidate experience. In contrast, organizations that integrate AI tools with human interaction can improve both process efficiency and candidate satisfaction.

In a broader sense, the discussion highlights that technology in HR should be used as a support system rather than a complete replacement for human engagement. The results of this study suggest that the most effective recruitment strategy is one that combines the strengths of AI with the relational value of human communication.

11. MANAGERIAL IMPLICATIONS

The findings of this study offer important implications for organizations, HR professionals, and recruitment managers who are increasingly using artificial intelligence in hiring communication. Since the results consistently show that AI + Human Communication is more effective than Fully Automated Communication, organizations should reconsider how technology is integrated into recruitment processes.

First, the study suggests that organizations should avoid relying entirely on automated communication systems. Although automation improves speed, consistency, and operational efficiency, it may reduce the personal connection that candidates expect during recruitment. Therefore, HR managers should use AI as a supportive tool rather than as a complete substitute for human interaction.

Second, organizations should adopt a hybrid communication strategy in which AI is used for routine and repetitive tasks, while human recruiters handle communication that requires empathy, clarification, and trust-building. For example, AI can be effectively used for initial screening, scheduling interviews, and sending application updates, whereas human involvement is more valuable during interview feedback, candidate queries, and final-stage communication.

Third, the results indicate that candidate experience should be treated as a strategic priority in recruitment. A positive communication experience not only improves candidate satisfaction but also strengthens employer branding. Organizations that provide communication which is both efficient and human-centered are more likely to create a favorable impression among applicants.

Fourth, recruitment managers should ensure that communication systems are designed with both efficiency and emotional intelligence in mind. The findings of thematic and netnographic analysis show that trust, empathy, and personalization remain essential elements of the hiring experience. This means that even when AI tools are used, communication should still feel clear, respectful, and supportive.

Fifth, training and policy design also become important. HR teams should be trained to work effectively alongside AI systems so that technology enhances decision-making without weakening interpersonal communication. In addition, organizations should develop internal recruitment policies that define when automated tools should be used and when human intervention is necessary.

Overall, the managerial implication of this study is clear: the most effective recruitment communication system is not one that replaces humans with AI, but one that combines the strengths of both. By adopting a hybrid communication model, organizations can achieve operational efficiency while also improving trust, comfort, and candidate experience.

12. LIMITATIONS

This study has certain limitations that should be acknowledged. First, the study was conducted using a sample of 132 respondents, which may limit the generalizability of the findings to a larger population. Second, the study focused mainly on perceptions related to recruitment communication and did not examine actual organizational hiring outcomes. Third, the quantitative analysis was based on selected variables representing communication experience, and other factors influencing candidate experience may not have been included. Fourth, the thematic and netnographic analyses were based on a limited number of responses and online comments, which may not represent all candidate perspectives. Finally, the study was conducted within a specific academic and practical context, so the findings may vary across industries, regions, and organizational settings.

13. CONCLUSION

This study examined the effectiveness of Fully Automated Communication and AI + Human Communication in influencing candidate experience during recruitment. The results of the study consistently indicate that both communication models contribute positively to the recruitment process, but the AI + Human Communication model performs better overall.

The quantitative findings from SPSS showed that Scenario B had a higher mean score than Scenario A, and the paired sample t-test confirmed that the difference between the two models was statistically significant. The SmartPLS analysis further demonstrated that both models significantly influence candidate experience, with the hybrid model showing a stronger effect. Minitab visualizations supported these results by showing a higher central tendency for Scenario B. In addition, the thematic and netnographic analyses revealed that candidates value automation for its efficiency, but prefer human interaction for trust, empathy, and personalization.

The integration of all findings clearly shows that recruitment communication is not only a functional activity but also a relational experience. While automation improves speed and convenience, it cannot fully replace the emotional and interpersonal value of human interaction. A hybrid communication model provides the best balance by combining technological efficiency with human support.

Therefore, the study concludes that organizations should adopt AI + Human Communication as the preferred recruitment communication approach. This model enhances candidate experience, improves satisfaction, and creates a more effective and balanced recruitment process.

Overall, the study contributes to the understanding of how communication methods shape recruitment outcomes and highlights the importance of using AI in a way that complements, rather than replaces, human interaction.

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NETNOGRAPHY / WEB SOURCES The netnographic component of this study was informed by publicly available discussions on Reddit and LinkedIn related to AI-based recruitment, hiring communication, and candidate experience. Relevant discussion threads and posts consulted include the following:

Reddit Sources

1. **Reddit.** ***Anyone actually had a POSITIVE experience with AI recruiters?*** **Available at:** https://www.reddit.com/r/recruiting/comments/1nuxuwv/anyone_actually_had_a_positive_experience_with_ai/ **Accessed in March 2026.**

2. **Reddit.** ***AI in Recruiting – A Blessing or a Curse?*** **Available at:** https://www.reddit.com/r/RecruitmentAgencies/comments/1q2s8p8/ai_in_recruiting_a_blessing_or_a_curse/ **Accessed in March 2026.**

3. **Reddit.** ***AI in Hiring tools – Yes or No?*** **Available at:** https://www.reddit.com/r/Recruitment/comments/1jmizg8/ai_in_hiring_tools_yes_or_no/ **Accessed in March 2026.**

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5. **Reddit.** ***They got AI recruiters now, has anybody seen anything like this?*** **Available at:** https://www.reddit.com/r/recruitinghell/comments/1j4lq09/they_got_ai_recruiters_now_has_anybody_seen/ **Accessed in March 2026.**

LinkedIn Sources

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BIOGRAPHIES

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