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## Open Artificial Intelligence Integration Platform for Guidance Counselor Monitoring of the Driven Mental Health Support System of Students

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**Abstract:** The study concentrated on creating a web-based platform that enables guidance counselors to monitor the dashboard pertaining to the issues that students most frequently bring up and for students to seek advice regarding mental health difficulties. This project was created to provide mental health help for students who lack the time or other means to visit the guidance office directly through OpenAI integration. The researchers collected data both in-person and online using Google Forms and a stratified sampling strategy. The foundation of development was established by surveys and interviews with the university's guidance counselor, students and psychometrician. System features based on the goals of the study and ISO 25010:2011 standards were used to evaluate the program. A total of 458 respondents participated in the evaluation, which was carried out on the university's four distinct clusters. An "Excellent" rating was given to the survey and evaluation results. JavaScript/HTML, PHP/MySQL, OpenAI connectivity, were utilized in the system's development.

### Introduction

Numerous problems continue to impede advancement in the rapidly changing field of mental health awareness and treatment. People choose to keep quiet and keep their issues to themselves due to stigma and discrimination, which makes it challenging for traditional support systems to give them the assistance they require. AI has the potential to alter the way healthcare is provided. It might completely change the system and make it easier for people to get assistance whenever they need it. "AI-powered chatbots can improve therapeutic outcomes, decrease stigma, and increase accessibility" (Lovejoy, 2019).

There are social and financial obstacles in addition to the stigma that already poses a serious danger to efficiently providing mental health support. These circumstances make it very difficult for people to get the professional mental health support they require. They are discouraged from freely sharing their issues because of the enduring social taboos and prejudices surrounding mental health. As a result, it poses a number of issues that must be resolved. Chatbots could be a useful tool for people

with mental health problems who might be unwilling to seek assistance because of social stigma, according to a study by Abd-Alzaraq (2019).

Presbitero and Teng-Calleja's (2023) study states that "as AI becomes more prevalent in workplaces, it is also important to understand its impact on employees." The researchers looked at how employees view AI and how it influences their career habits and job attitudes. People are more likely to consider changing careers if they believe AI could replace their work. When integrating AI at work, employees' fears can be reduced via clear communication.

Most people agree that creativity, the desire to solve complex issues, and decades of scientific discoveries have all contributed to the rapid advancement of technology. Virtual reality, robots, and machine learning are examples of emerging technologies that are crucial to daily living and many other industries. AI is gradually becoming more adept at mimicking human cognitive processes, demonstrating high levels of intelligence in challenging activities that often require human-like reasoning, problem-solving, learning, and decision-making.

AI and mental health are connected through technology because machine learning can enhance mental healthcare services and promote mental health initiatives. According to Nadarzynski et al. (2019), "Chatbots have the potential to expand access to healthcare, enhance communication, and control service demand." AI and mental health are related in a number of ways, including the creation of chatbots or virtual assistants that respond quickly. Combining the fields of artificial intelligence with mental health makes it possible to develop a system that can analyze enormous volumes of data. Finding patterns, trends, and insights in the field of mental health becomes much easier.

By examining students' input, OpenAI's natural language processing skills enable the system to discern emotional states, detect feelings, and provide helpful advice. It aims to solve this by combining the power of natural language processing with the knowledge of seasoned guidance counselors and by putting security measures in place to guarantee the students' safety and privacy. By giving students an efficient support system that is always accessible, whether at home or at school, this solution has the potential to transform mental health care.

### Conceptual Framework

This study was conducted with the concept as illustrated how the research will be conducted. It also shows all the data and tools required to construct the AI platform, as well as the input, process, and outcome of the study. This covers both the integration of the AI itself and the programming language knowledge required. The procedure includes the various algorithms the integrated AI employs as well as the lifecycle model utilized in the study. Additionally, the built system will assist the guidance counselor in determining the kids' Driven Mental Health Support System using Open AI Integration.

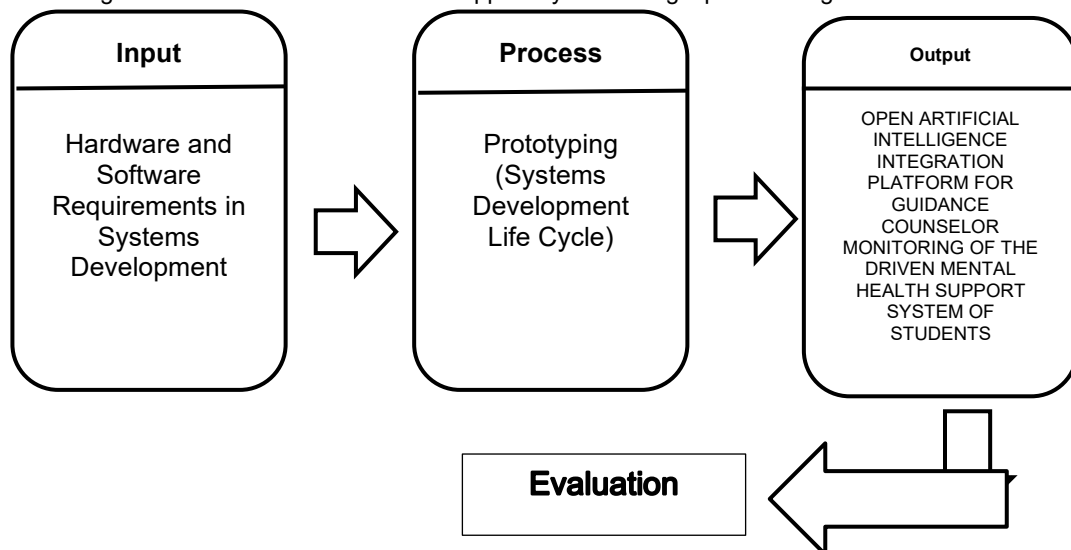


Figure 1. Research Paradigm

## **Methodology**

### **Research Method Used**

This study specifically made use of both descriptive and developmental research methodologies more especially, a descriptive developmental research method is incorporated into the study approach utilized to create a guidance counselor-driven mental health support system for students utilizing Open AI. This approach aims to provide a thorough overview of the methods currently used by guidance counselors at three (3) universities when offering student counseling, regardless of whether the counseling is suggested by the guidance counselors or started by the students.

This study specifically made use of the descriptive research, which provides a thorough and accurate account of the current counseling procedures and relationships inside the organization while also illuminating the difficulties the counselors encounter. To obtain important insights into counseling dynamics, data gathering methods such as surveys and interviews were employed.

Additionally, the study covered several aspects of developmental research, in which the researchers methodically created, assessed, and refined the Counselor-Driven Mental Health Support System. In order to ensure that the system satisfies the necessary standards and criteria for efficacy and dependability, this developmental component is essential. The objective is to incorporate OpenAI's technology into this framework and investigate how it enhances the system's overall effectiveness.

### **SDLC Prototype Model**

The researcher used a prototype approach because it allows for rapid testing of prototyping, which can lead to immediate feedback and improvement. This, together with the study's time limits, can help the researcher find and fix any problems with the data gathering tools or the research methodology early on before the study's duration. The developed system is a web-based chatbot that requires minimal user training, which is why the researchers selected this model.

By using the prototype model as the system's lifecycle strategy, the researcher aided in development. Given the time limits placed on the study, this paradigm allows for testing and prototyping, allowing for immediate feedback and improvement. The final version of the system is built upon the early user input obtained during the initial prototype evaluation. The research team acknowledges difficulties including time restrictions and management, as noted by Mariani et al. (2023), despite the benefits of early error detection and cost efficiency, as stated by Kumar (2019). Despite these difficulties, the selected architecture permits the system's ongoing evolution, allowing crucial user testing and deployment.

### **Phase 1: Requirements Gathering**

The researcher took preliminary actions to guarantee a strong foundation before beginning the system's development. In order to acquire the information needed for the study, the researcher started by conducting a brief survey and in-person interviews with guidance counselors and the university psychometrician. The initial prototype was developed using the minimum specifications that the researchers had gathered. According to Khan and Kumari (2021), requirement engineering is essential since the precision of the requirements collected determines the success of a software development project. This does not, however, imply that the project's success rate is solely dependent on the initial phase; rather, it persists throughout the complete development cycle.

### **Phase 2: Design**

The researcher then moved from gathering data to quickly designing a system using the information they had collected. The foundation of the first prototype was the system's design. In order to provide guidance for the development of the web-based system, the researcher produced a first technical and conceptual design. This step, which entails the creation of diverse visual diagrams that capture the core of logical and physical artifacts for development, is crucial in building the groundwork for the subsequent stages of development, as noted by Sarkar (2018). In addition to providing the research team with a road map, the design is a physical representation of the intended system and a window into the complexities that will emerge in the project's later phases.

### **Phase 3: Build Prototype**

In the third stage, the researcher quickly developed a system design concept and presented it to the end user. Additionally, the researcher conducted a brief poll and showed the school psychometrician the system's initial prototype. As a result, insightful input was received, which led to the

addition of new needs to the initial phase's collection. The researchers created the first iteration of the updated prototype after getting preliminary input. According to Gurung, G., Shah, and Jaiswal (2021), the primary objective of employing the prototype model is to give the client in this example, the end user a system with functionalities so they may evaluate and provide input for additional enhancements or modifications to the current system.

#### **Phase 4: Evaluation**

Following the prototype system's presentation, the client was free to offer feedback and recommendations so that the researchers could make the required changes. The researcher presented a revised version of the system at the next meeting, which included modifications made in response to client feedback. Because the researcher is using a prototype model, user feedback becomes extremely important. According to Saif et al. (2021), regardless of the model selected for system development, a lack of user involvement will result in a poorly designed solution that occasionally conflicts with the needs of the user. The continuous cycle of presenting, getting input, and making revisions guarantees that the research team has created a system that meets the needs of the end user rather than just the engineers' preferences.

#### **Phase 5: Review**

During this stage, the prototype was examined and improved until it satisfied the needs of the user. When end users engage with the developed system, they offer insightful feedback on its functionality, usability, and general user experience. This involvement made sure that the finished product met the needs and expectations of the user. The cycle went back to the second step, design, and began there with every new modification to the system. According to Saif et al. (2021), user participation affects the outcome. Their participation aids in the system's design, implementation, and validation.

#### **Phase 6: Test and Implement**

This stage involved the researcher testing the general functionality and capability of the system throughout the testing phase. In order to accomplish this, the researcher frequently gives the system dummy or natural data while verifying the outcomes. The researcher also spoke with the client or the user to see if it met their needs. The researcher was also looking for flaws and problems and would take fast action to address them. Functional testing, a method outlined by Adesina et al. (2020), evaluates the system's functionality independently of the code structure and implementation details. The system could only be deployed for real-world scenarios, including installation and configuration, marking the transition from testing to practical application.

#### **Phase 7: Maintenance**

Following the system's deployment, the researcher carried out maintenance at this point. In order to let the client know what has been altered and patched, the team also kept track of any problems and system modifications. Adesina et al. (2020) state that this maintenance phase usually entails system adjustments to fix errors, improve operational performance, or modify and tailor the settings according to the needs of the end user. Users will face daily difficulties while using the machine, necessitating ongoing care and upkeep.

#### **Population Frame and Sampling Scheme**

Stratified Random Sampling is the study's sampling strategy. Using stratified sampling, respondents are separated into subgroups according to the requirements they must fulfill in order to be included in the study. As stated by Etikan I. & Babatope (2019), when a population is made up of several groups, these groups can be divided into smaller groups called strata, and then a random selection can be made from each stratum. The target students from three universities were the subjects of the researchers' use of the strategy. The four clusters of the university's college departments are the specific subcategories that were identified. To guarantee that every member of the specified strata had an equal chance of being chosen as a study participant, respondents from each cluster were chosen at random.

#### **Respondent Profile**

In order to assess the created system and comprehend the information obtained from the questionnaires given to survey participants, the researcher employed the Likert scale. The verbal readings of the collected responses from the assessment tool were specified by the researchers using rating and numerical interpretations. To determine the system's rating, researchers used the statistical formula to calculate the mean or average and the formula to obtain the weighted mean or average.



### Usability Testing

The developed system's usability and efficacy were evaluated using usability testing. By watching consumers engage with the bot, the researchers want to find any usability problems, navigational challenges, or areas where the user experience may be improved. This approach offered insightful input for improving the system and making sure it satisfies the requirements and expectations of its intended users. Participants used the AI to complete predetermined activities, and the researchers recorded task completion times and evaluated how simple it was for users to do these tasks.

### Statistical Treatment of Data

In order to develop a useful system for mental health support, the researcher in this study had to carefully examine the data gathered. This section focuses on using graphs and numbers to comprehend the data collected. This allowed the researcher to identify what was effective and what needed to be improved. To improve the system, the researcher identified trends, gained insight, and applied collected data.

### Privacy and Confidentiality

The researchers ensured the participants' privacy and confidentiality by allocating codes or pseudonyms to the participants. All participant-related documents were kept in a locked filing cabinet that was kept secure. Following the research, the recorded tests will be removed and the aforementioned documents will be destroyed by shredding.

### Informed Consent

The participants were suitably briefed by the researchers about the purpose of the investigation. They were given an explanation of the advantages the research will bring them. It is implied that they consented to participate in the interview by responding to the questions.

### Recruitment

The respondents were asked to participate voluntarily. They were informed that they can withdraw their participation anytime.

### Results and Discussion

The results of the evaluation of the developed system were shown, discussed, and analyzed by the researcher. This area contains the System Test Plan, the Project Structure, the Project Description, and the data analysis, which includes survey results that display the system's mean, frequency, standard deviation, and overall rating based on respondents' responses.

**Table 2: The Demographic Profile of the Respondents in Course**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
1.The system interface properly displays the text and buttons to support the user in achieving their intended goal	4.57	0.63	E	4.71	0.49	E	4.46	0.73	G	4.78	0.42	E	4.63	0.58	E
2.The systems interface has the proper functions needed	4.53	0.61	E	4.71	0.49	E	4.43	0.64	G	4.70	0.49	E	4.59	0.57	E
3.The main interface enhances the experience by being user-friendly.	4.63	0.58	E	4.72	0.51	E	4.42	0.74	G	4.81	0.40	E	4.65	0.58	E
<b>Interface</b>	<b>4.57</b>	<b>0.54</b>	<b>E</b>	<b>4.71</b>	<b>0.37</b>	<b>E</b>	<b>4.44</b>	<b>0.59</b>	<b>G</b>	<b>4.76</b>	<b>0.31</b>	<b>E</b>	<b>4.62</b>	<b>0.48</b>	<b>E</b>

4.The AI answers the question/concern correctly.	4.38	0.59	G	4.65	0.51	E	4.32	0.70	G	4.46	0.50	G	4.45	0.59	G
5.The AI helps me understand my mental state better by analyzing the problem and showing possible solutions.	4.25	0.69	G	4.58	0.57	E	4.35	0.65	G	4.49	0.55	G	4.41	0.63	G
6.The user is comfortable in sharing their concerns with the AI.	4.64	0.66	E	4.63	0.61	E	4.43	0.72	G	4.76	0.45	E	4.62	0.62	E
<b>OpenAI</b>	<b>4.42</b>	<b>0.53</b>	<b>G</b>	<b>4.62</b>	<b>0.43</b>	<b>E</b>	<b>4.37</b>	<b>0.58</b>	<b>G</b>	<b>4.57</b>	<b>0.35</b>	<b>E</b>	<b>4.50</b>	<b>0.49</b>	<b>E</b>
7.The system dashboard for the counselor correctly displays the categories of concerns in the graph.	4.59	0.61	E	4.62	0.54	E	4.42	0.72	G	4.63	0.53	E	4.57	0.60	E
8.The system conversation between counselor and student works as intended.	4.59	0.59	E	4.69	0.46	E	4.45	0.62	G	4.73	0.45	E	4.62	0.54	E
<b>Dashboard</b>	<b>4.59</b>	<b>0.56</b>	<b>E</b>	<b>4.65</b>	<b>0.40</b>	<b>E</b>	<b>4.43</b>	<b>0.61</b>	<b>G</b>	<b>4.68</b>	<b>0.39</b>	<b>E</b>	<b>4.59</b>	<b>0.51</b>	<b>E</b>
9.The summarization feature of the conversation works properly.	4.52	0.61	E	4.72	0.48	E	4.36	0.73	G	4.53	0.55	E	4.53	0.61	E
10.The summarization feature correctly identifies the category of the conversation.	4.54	0.60	E	4.74	0.47	E	4.45	0.69	G	4.62	0.49	E	4.59	0.57	E
<b>Report and Data Analytics</b>	<b>4.53</b>	<b>0.57</b>	<b>E</b>	<b>4.73</b>	<b>0.40</b>	<b>E</b>	<b>4.41</b>	<b>0.66</b>	<b>G</b>	<b>4.57</b>	<b>0.43</b>	<b>E</b>	<b>4.56</b>	<b>0.53</b>	<b>E</b>
<b>Overall Functionalities</b>	<b>4.53</b>	<b>0.47</b>	<b>E</b>	<b>4.68</b>	<b>0.29</b>	<b>E</b>	<b>4.41</b>	<b>0.53</b>	<b>G</b>	<b>4.65</b>	<b>0.26</b>	<b>E</b>	<b>4.57</b>	<b>0.41</b>	<b>E</b>

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49 Very Poor (VP)

**Table 3: To design and develop and intuitive and user-friendly web-based interface.**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
1.The system interface properly displays the text and buttons to support the user in achieving their intended goal	4.57	0.63	E	4.71	0.49	E	4.46	0.73	G	4.78	0.42	E	4.63	0.58	E
2.The systems interface has the proper functions needed	4.53	0.61	E	4.71	0.49	E	4.43	0.64	G	4.70	0.49	E	4.59	0.57	E

3.The main interface enhances the experience by being user-friendly.	4.63	0.58	E	4.72	0.51	E	4.42	0.74	G	4.81	0.40	E	4.65	0.58	E
<b>Interface</b>	<b>4.57</b>	<b>0.54</b>	<b>E</b>	<b>4.71</b>	<b>0.37</b>	<b>E</b>	<b>4.44</b>	<b>0.59</b>	<b>G</b>	<b>4.76</b>	<b>0.31</b>	<b>E</b>	<b>4.62</b>	<b>0.48</b>	<b>E</b>

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49 Very Poor (VP)

According to the data, consumers typically think positively of the system's UI. With a weighted mean of 4.4 and 69.2% of the population responding "Excellent," the majority expressed satisfaction with the system's ability to accurately display the text and buttons to assist the user in accomplishing their goal as intended. The data also showed that the system has the necessary functions, with a weighted mean of 4.5, rated as "Excellent," and 64.2% of the population agreed. With an overall weighted mean of 4.55, 70.1% of the population indicated that the system's main interface is Excellent, demonstrating that its user-friendliness improves the user experience.

According to Sarkar's (2019) research, the project's goal was to develop a website that would help students with their mental health. Adesina et al. (2021) also emphasize the significance of software testing. This stage guarantees that the software adequately represents the specifications and that the system's structure is in line with practical requirements.

The aforementioned study is a wonderful fit with the researcher's objective of offering a platform for enabling innovative mental healthcare help. Designing an interface that considered the project's objectives and target audience was necessary to achieve this. The successful integration of design, functionality, and user-friendliness in achieving the project's overall purpose is reflected in the combination of user-satisfaction weighted mean ratings and alignment with prior research findings. This encouraging outcome has demonstrated how well the system works to create a space for cutting-edge mental health assistance.

**Table 4: To integrate OpenAI's language model to enable natural language processing and analysis of user inputs**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
1.The AI answers the question/concern correctly.	4.38	0.59	G	4.65	0.51	E	4.32	0.70	G	4.46	0.50	G	4.45	0.59	G
2.The AI helps me understand my mental state better by analyzing the problem and showing possible solutions.	4.25	0.69	G	4.58	0.57	E	4.35	0.65	G	4.49	0.55	G	4.41	0.63	G
3.The user is comfortable in sharing their concerns with the AI.	4.64	0.66	E	4.63	0.61	E	4.43	0.72	G	4.76	0.45	E	4.62	0.62	E
<b>OpenAI</b>	<b>4.42</b>	<b>0.53</b>	<b>G</b>	<b>4.62</b>	<b>0.43</b>	<b>E</b>	<b>4.37</b>	<b>0.58</b>	<b>G</b>	<b>4.57</b>	<b>0.35</b>	<b>E</b>	<b>4.50</b>	<b>0.49</b>	<b>E</b>

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49 Very Poor (VP)

The information indicates that consumers largely approve of the system's incorporation of Open AI's language model. With a weighted mean of 4.4 and 66.7% of the population responding "Excellent," the majority expressed satisfaction with the AI's ability to accurately answer questions and concerns. Based on the data gathered, AI helps users gain a deeper understanding of their mental health status by analyzing specific issues and presenting tailored solutions. It was rated as "Excellent" with a weighted mean of 4.6, and 64.1% of respondents agreed. With a weighted mean of 4.51, it has also demonstrated that users feel comfortable communicating their worries with the AI.

The objective is to analyze user input and enable natural language processing by integrating OpenAI's language model. With an overall weighted mean of 4.52 and a rating of "Excellent," it demonstrated that the researchers had effectively included the language model from Open AI.

AI could have a big impact on mental health care, according to Lovejoy (2021). AI-powered chatbots and personalized treatments can improve therapeutic outcomes, reduce stigma, and increase accessibility. Chatbots are computer programs that can communicate with humans via text, speech, and images. According to the study by Abd-Alrazaq et al. (2021), they could be useful tools for people with mental illnesses who might be unwilling to seek care due to societal stigma.

Additionally, the survey results corroborate Lovejoy and Abd-Alrazaq's theory that AI might create a welcoming and nonjudgmental environment for people seeking mental health therapy. The findings show how comfortable people are expressing their feelings and ideas to the AI system.

**Table 5: To Develop a Dashboard for the Guidance Counselors to Display Student Data and Provide Support**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
1.The system dashboard for the counselor correctly displays the categories of concerns in the graph.	4.59	0.61	F	4.62	0.54	E	4.42	0.72	G	4.63	0.53	F	4.57	0.60	F
2.The system conversation between counselor and student works as intended.	4.59	0.59	F	4.69	0.46	E	4.45	0.62	G	4.73	0.45	F	4.62	0.54	F
<b>Dashboard</b>	<b>4</b>	<b>0</b>	<b>F</b>	<b>4</b>	<b>0</b>	<b>E</b>	<b>4</b>	<b>0</b>	<b>G</b>	<b>4</b>	<b>0</b>	<b>F</b>	<b>4</b>	<b>0</b>	<b>F</b>

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49

Very Poor (VP)

With an overall weighted mean of 4.60, the data indicates that the researchers "Excellently" created a dashboard for the guidance counselors. Additionally, the data indicates that the counselors' dashboard on the system accurately displays the categories of concerns in the graph, as it received a weighted mean of 4.59, which is rated as "Excellent." Additionally, the data indicates that the counselor-student system conversation functions as intended, as it received a weighted mean of 4.61, which is rated as "Excellent."

According to a 2021 study by Graham et al., AI has the ability to transform and enhance the mental healthcare sector by recognizing and classifying mental health issues utilizing a range of data sources, including EHRs, social media, and mood rating scales.

In conclusion, the study's findings add to the body of literature by offering concrete proof of the favorable reception of AI features in mental healthcare, particularly in terms of enhancing counselor-student contact and highlighting concerns through dashboards. The argument for the revolutionary potential of AI in mental healthcare is strengthened by the consistency between these real-world results and the theoretical framework put forth by Graham et al.

**Table 6: The Overall Level of Functionality**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
Interface	4.57	0.54	E	4.71	0.37	E	4.44	0.59	G	4.76	0.31	E	4.62	0.48	E

OpenAI	4.42	0.53	G	4.62	0.43	E	4.37	0.58	G	4.57	0.35	E	4.50	0.49	E
Dashboard	4.59	0.56	E	4.65	0.40	E	4.43	0.61	G	4.68	0.39	E	4.59	0.51	E
Report and Data Analytics	4.53	0.57	E	4.73	0.40	E	4.41	0.66	G	4.57	0.43	E	4.56	0.53	E
<b>Overall Functionalities</b>	<b>4.53</b>	<b>0.47</b>	<b>E</b>	<b>4.68</b>	<b>0.29</b>	<b>E</b>	<b>4.41</b>	<b>0.53</b>	<b>G</b>	<b>4.65</b>	<b>0.26</b>	<b>E</b>	<b>4.57</b>	<b>0.41</b>	<b>E</b>

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49

Very Poor (VP)

**Table 7: To evaluate the system's software based on ISO 25010:2011: Software Quality Standards such as functionality, security, portability and usability**

Statement	Universities														
	1			2			3			4			Total		
	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI	WM	SD	VI
1.The layout of the system interface is user-friendly and intuitive.	4.51	0.68	E	4.71	0.49	E	4.51	0.62	E	4.58	0.50	E	4.57	0.58	E
2.The AI properly provides counseling advice and allows the user to share and understand their concerns.	4.61	0.62	E	4.76	0.46	E	4.38	0.61	G	4.65	0.48	E	4.60	0.56	E
3.The counselor dashboard can display graphs of user concerns and have a conversation with them.	4.57	0.64	E	4.77	0.45	E	4.32	0.62	G	4.65	0.48	E	4.58	0.58	E
4.The summarization of the conversation is correct as intended while also appropriately identifying the category of the conversation.	4.58	0.61	E	4.64	0.48	E	4.46	0.62	G	4.56	0.50	E	4.56	0.56	E
<b>Functionality</b>	<b>4.56</b>	<b>0.53</b>	<b>E</b>	<b>4.72</b>	<b>0.31</b>	<b>E</b>	<b>4.42</b>	<b>0.48</b>	<b>G</b>	<b>4.61</b>	<b>0.36</b>	<b>E</b>	<b>4.58</b>	<b>0.44</b>	<b>E</b>
1.The system performs well on mobile devices.	4.25	0.65	G	4.59	0.52	E	4.41	0.64	G	4.48	0.50	G	4.42	0.59	G
2.The system is user-friendly when browsing through any web browser.	4.56	0.59	E	4.67	0.53	E	4.38	0.66	G	4.56	0.54	E	4.54	0.59	E

3.The system has little to no delay when being accessed via cross platforms such as Windows, Mac OS, etc.	4.44	0.69	G	4.60	0.54	E	4.34	0.65	G	4.52	0.52	E	4.48	0.61	G
4.The system adapts to different screen sizes.	4.43	0.58	G	4.60	0.54	E	4.30	0.70	G	4.52	0.52	E	4.46	0.59	G
5.The system is easy to navigate on any browser.	4.55	0.60	E	4.76	0.43	E	4.42	0.60	E	4.62	0.49	E	4.59	0.54	E
<b>Portability</b>	<b>4.45</b>	<b>0.50</b>	<b>G</b>	<b>4.64</b>	<b>0.35</b>	<b>E</b>	<b>4.37</b>	<b>0.51</b>	<b>G</b>	<b>4.54</b>	<b>0.37</b>	<b>E</b>	<b>4.50</b>	<b>0.45</b>	<b>E</b>
6.The system interface is straightforward and simple to use.	4.71	0.52	E	4.69	0.49	E	4.51	0.69	E	4.69	0.47	E	4.66	0.55	E
7.The system's interface provides a pleasing and satisfying interaction for users.	4.66	0.59	E	4.73	0.47	E	4.49	0.62	G	4.66	0.50	E	4.64	0.56	E
8.The system is accessible and usable on any browser.	4.63	0.58	E	4.73	0.47	E	4.43	0.62	G	4.65	0.50	E	4.62	0.56	E
9.The system features are easily recognizable regarding the task the user wants to accomplish.	4.64	0.58	E	4.78	0.42	E	4.50	0.67	E	4.69	0.49	E	4.65	0.55	E
<b>Usability</b>	<b>4.66</b>	<b>0.49</b>	<b>E</b>	<b>4.73</b>	<b>0.33</b>	<b>E</b>	<b>4.48</b>	<b>0.53</b>	<b>G</b>	<b>4.67</b>	<b>0.36</b>	<b>E</b>	<b>4.64</b>	<b>0.44</b>	<b>E</b>
10.The system ensures that only authorized individuals can access private information.	4.53	0.61	E	4.56	0.55	E	4.38	0.66	G	4.69	0.47	E	4.54	0.58	E
11.The system prevents unauthorized access.	4.54	0.61	E	4.63	0.51	E	4.49	0.56	G	4.67	0.47	E	4.58	0.55	E
12.The system verifies identity before granting access.	4.59	0.59	E	4.64	0.53	E	4.57	0.62	E	4.71	0.46	E	4.63	0.55	E
13.The system allows proper creation of account via email (perpetual email, gmail, etc.)	4.58	0.57	E	4.76	0.43	E	4.53	0.69	E	4.72	0.45	E	4.64	0.55	E

<b>Security</b>	4.56	0.54	E	4.65	0.37	E	4.49	0.52	G	4.70	0.34	E	4.60	0.46	E
<b>ISO 25010:2011</b>	4.56	0.45	E	4.69	0.25	E	4.44	0.45	G	4.63	0.25	E	4.58	0.37	E

Legend: 4.50-5.00 Excellent(E), 3.50-4.49 Good(G) 2.50-3.49 Fair(F), 1.50-2.49 Poor(P), 1.00-1.49 Very Poor (VP)

With a weighted mean of 4.60, the data suggests that the system's interface structure is intuitive and user-friendly. Additionally, the data indicates that the AI appropriately offers counseling advice and enables users to communicate and comprehend their concerns, as it received a weighted mean of 4.58, rating it as "Excellent." The data also indicates that the counselor dashboard can show graphs of user concerns and engage in dialogue with them, as it received a weighted mean of 4.59, rating it as "Excellent."

Lastly, with a weighted mean of 4.57, the discussion summary received a "Excellent" rating because it accurately identifies the category and is accurate as intended. With an overall weighted mean of 4.59, the system's overall functionality is "Excellent" and complies with ISO 25010:2011.

AI is gradually taking on tasks that have historically been performed by human professionals as AI research becomes more pertinent to mental health care. According to the study by Salcedo et al. (2023), it can transform the field of mental health by offering prompt therapy for mental health issues.

By using machine learning algorithms, it can reduce mental health issues like anxiety and depression and provide help via online platforms. Fiske et al. (2019) note that, despite being an AI, ethical and social issues, such as potential injury and influence on healthcare disparity, still need to be addressed, requiring more research.

### Conclusions

The following conclusions are derived from the findings:

- The system was designed to give college students at three (3) institutions health support by enabling them to ask for assistance or guidance on mental health concerns. In order to reach students who might find it difficult to visit directly, it functioned as an extension of the guidance office.
- The study's integrated AI served as a conversation partner for the students, allowing them to express their worries and seek guidance when necessary.
- These clusters were the target respondents for the stratified sampling used in the study, and the researcher polled the three distinct universities.
- With an overall score of 4.5+ for system functionalities based on aims and functionalities based on ISO 25010:2011, which translates into a rating of "Excellent" on the Likert Scale, the results showed that the majority of respondents were satisfied with using and engaging with the system.

### Recommendations

The following recommendations were drawn from the summary of findings and conclusions:

- Incorporate an upgraded AI model to improve response accuracy. Utilize a machine learning model with a blank slate and continuously feed data; however, this requires a lot of preloaded data and takes time.
- Customize the outcome so the counselor can easily access it and provide a summary of each user's complaints.
- To find and fix any vulnerabilities, do security audits on a regular basis. Give end users thorough instruction on data security and privacy procedures.
- Conduct internal audits on a regular basis to make sure ISO 25010 requirements are being followed. Create a documentation procedure to monitor and prove compliance with each quality standard.
- Investigate using developments in natural language processing to improve the AI's comprehension of student inquiries and enable more pertinent responses.

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