# From Traditional to Digital: Evaluating the Role of Spirituality in Mental Health and Therapy

#### **Aahana Bobade**

Computer Engineer
SIES Graduate
School of
Technology
Nerul, India
aahanasbce121@gst.
sies.edu.in

# Alisha Fernandes

Computer Engineer
SIES Graduate
School of
Technology
Nerul, India
alishaafce121@gst.
sies.edu.in

# Shridhar Iyer

Computer Engineer
SIES Graduate
School of
Technology
Nerul, India
shridharrice121@gst.
sies.edu.in

#### **Pawan Kamat**

Computer Engineer SIES Graduate School of Technology Nerul, India pawanskce121@gst. sies.edu.in

#### **ABSTRACT**

The increasing number of mental health issues has obliged us to find new methods that are not only innovative but also so easy that they can be used by almost everybody. The given paper examines the progress and effect of the mental health and life- assisting chat-bot. The main idea of the chat-bot incorporates elements from the Bhagavad Gita, the ancient spiritual manual. Information was collected to measure the public's view of introducing spirituality into the traditional treatment, the results reveal that the majority back such a venture. A study (n=51) was conducted, and respondents were asked questions about their age, religion, opinion on spirituality and mental health, and choice for which method online therapy or traditional therapy. It was found that out of all the respondents, (80.4% aged 16-25) there was a large majority (88.2%) that mentioned the spiritual aspect of mental well-being. There were a lot (most responses were YES) of them have been into spiritual exercises when they faced the difficulties, they still believe that it still could be personalized intervention to use. Even as traditional therapy is the main option (70.6%), a significant number of respondents (29.4%) still feel comfortable with online help. Those research counterparts that focus on the role of technology in mental health improvements which tend to look to the public for a response, are the ones that discuss the chance for the Bhagavad-Gita chatbot as a supplementary tool. The proposed chatbot will make use of Natural Language Processing (NLP) in understanding a user query and generating an answer through reference to Bhagavad Gita.

*Index Terms*— Bhagavad Gita, Mental health, Chatbot, Spiritual therapy, Technology-assisted therapy

#### 1. INTRODUCTION:

Mental health is a growing concern worldwide, affecting people from all backgrounds [1]. Even though

traditional therapy can help, it may not always meet the complete well-being needs of people, especially those looking for help outside of the medical system [2].

This paper shows a new way to help people with their mental health and other life problems

using a chatbot that uses the deep wisdom of the Bhagavad Gita, a holy Hindu book.

The Bhagavad Gita, a part of the Mahabharata epic, provides wisdom for all of life's challenges [3]. It teaches about Dharma (upright conduct), Karma (acting without attachment), and Moksha (freedom) – key principles that guide people towards a meaningful life [4].

By incorporating these teachings into technology, researchers can investigate whether the Bhagavad Gita can help people improve their mental health and make sense of their lives.

The following sections delve into the motivations behind this research, present a review of relevant literature, and outline. The methodology employed in developing and evaluating the Bhagavad Gita-based chatbot.

#### 2. PROCEDURE FOR PAPER SUBMISSION:

This research aims to create a chatbot that uses wisdom from the Bhagavad Gita to help with mental health and life issues. The chatbot, which is currently being made, will give users teachings and advice from the Bhagavad Gita that are tailored to their specific questions and concerns. Users will also have the option to get in touch with real-life counselors through the chatbot if they need more help than the chatbot can provide.

#### 3. SYSTEM ARCHITECTURE DESIGN:

The chatbot architecture consists of the following components:

## Natural Language Processing (NLP) module:

Processes user questions by splitting them into smaller units (tokenization), finding the base form of words (stemming and lemmatization), and extracting their purpose (intent) and vital information (entities).

#### Dialogue Management module:

Controls the flow of conversation by using the NLP module's interpretation of the user's intent to choose suitable responses from the available knowledge.

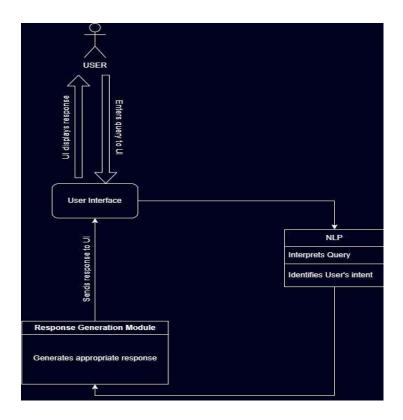
# Knowledge Base:

This central repository serves as a comprehensive resource for the Bhagavad Gita, providing access to verses, interpretations, and commentary.

It additionally offers guidance on mental health and self-care, including a directory of licensed counselors.

## Response Generation module:

This module gathers helpful information from our database and delivers it to you in an easy-to-understand way, allowing you to get the answers you need



System Architecture Content

## Components:

## <u>Interface of the User (UI)</u>:

It is the platform in which people meet chatbot. It may be a text-based interface, a chatbot window or an app made for phone.

Natural Language Processing (NLP) – This module processes user inquiries by doing actions such as tokenization, stemming and lemmatization. It recognizes what the user wants (intent) and important words (key entities) in the user's query.

## Response Generation:

The above module retrieves relevant information from knowledge base and presents it to user-friendly form thus generating responses for users. Depending on dialogue management decisions, it could also use predefined conversation flows.

### **Data Flow:**

Query entry by User through User Interface

NLP module receives the query

NLP interprets query and identifies intent of the user

Response Generation module receives intents other than any related entities

Retrieved details are written into a response that is meaningful to the client by response generation module.

After that response is returned to UI via which it pops up to users' screen

Chatbot Functionalities

The chatbot offers the following functionalities:

## **Query understanding:**

The chatbot take queries regarding mental health from user by using Natural Language Processing.

## **Bhagavad Gita references:**

The chatbot provides verses interpretations from the Bhagavad Gita that address the user's issues and help to guide them.

#### Self-care recommendations:

Meditation, mindfulness exercises and positive affirmations are some of the self- care practices suggested by the bot, which finds root in the principles of Bhagavad Gita.

## Referral feature:

The chatbot identifies cases where professional support is needed and assists them to book an appointment with the concerned doctor.

Ethical Considerations in Building a Mental Health Chatbot Based on Bhagavad Gita

The development and deployment of a mental health chatbot, especially one rooted in religious texts like the Bhagavad Gita, calls for careful attention to ethical principles. In this section, we will address key ethical concerns surrounding our Bhagavad Gita chatbot and the steps taken to resolve them

## **User Privacy and Security:**

## **Data Collection and Storage:**

During interactions, our chatbot will get user queries and responses. This data will be anonymized and stored securely on encrypted servers. Users will be notified about data collection process through privacy policy which is available at the chatbot interface.

<u>Limited Data Collection</u>: The bot collects only relevant data from users' inquiries or replies. We shall desist from collecting any personal identifying information (PII), unless explicitly shared by users themselves for referral purposes (e.g., contact details when booking appointments with counselors).

## User Consent:

Before any data collection occurs, there should be a clear consent form that outlines the kind of data being collected, its purpose and how it will be used presented to users in concise manner. Users can withdraw their permission at any time with ease as described by the chatbot itself. Transparency and Bias

## **Limitation Remarks:**

This chatbot is an online self-help tool and not a substitute for professional therapy, the limitations of which will be properly outlined in its interface and in responses.

## Reducing Bias in Bhagavad Gita Interpretations:

Some interpretations from the Bhagavad Gita itself could be termed as being biased. This way, the chatbot will make sure it presents different opinions of scholars on this matter as well as their comments so that they can be unbiased about any religious beliefs or practices.

NLP Algorithms should contain no Bias: It is quite possible that there may be biases inherent within Natural Language Processing (NLP) algorithms, employed by our Chatbot. These attempts to reduce bias in responses made by the Chatbot include debiasing strategies like diverse training sets.

User Safety and Well-being

## Recognizing Cases That Require Professional Assistance:

The chatbot should recognize scenarios where users might need professional mental health assistance. For example, we could instruct the bot to look out for specific keywords that indicate crisis situations or severe mental health symptoms.

## Nurturing and Compassionate Language:

The language the chatbot will be programmed to use in interactions must be supportive, empathic, and non-judgmental. It should not employ any words that can cause emotional harm or intensify certain emotions in the users

#### Respecting Users' Autonomy and Beliefs:

## Non-Coercive Environment:

The chatbot will not exert pressure on its users to adopt specific interpretations of the Bhagavad Gita or religious beliefs. A user may decide how much or little religious content he/she wishes to access; hence, he/she has complete control over it. For those who do not wish to receive religious references or interpretations from the chatbot, options for opting out shall be provided.

#### User Choice and Control:

Users will have a say on what subjects they want the chatbot to address with them. There is no intention by this chatbot to encourage any religion's doctrines or practices.

With these ethical considerations, we intend our Bhagavad Gita chat-bot as a secure, dependable mental health tool which would add value in supporting people along their mental well-being paths. We acknowledge that continuous refinement is required and thus we shall continuously monitor and evaluate user experience of the chat bot platform making necessary adjustments where applicable to maintain highest ethical standards possible.

# 4. EXPERIMENT AND RESULT:

Survey	Result			
categorie	Finding	Percenta	Remar	
S		ge	k	
Age	16-25	80.4%		
	26-35	5.9%		
	36-45	3.9%		
	46-55	7.8%		
	56-65	2%		
Gender	Male	68.6%		
	Female	31.4%		
Spirituality &	Yes	88.2%		
Mental We				
ll- being				
	No	2%		
	Maybe	9.8%		
Spiritual Practices	Yes		Majority	
Therapy Preference	Face-to-face	70.6%		
	Other Options	29.4%		
Online Therapy Preferences	Convenience, Cost, Ti me, Comfort			

## 5. CONCLUSION:

# **Preliminary Observations:**

The survey findings show that young people are especially interested in how spirituality and mental health connect.

Even though in-person therapy is still the most popular choice, a lot of people are open to trying online options.

Online therapy is seen as helpful, and chatbot are becoming more acceptable, which could help with our proposed intervention.

Survey	Result			
categories	Finding	Percentage	Remark	
Therapists and				
Spiritual	Yes		Most Cases	
Competence				
Online Therapy	Yes		Acknowledged by Most	
Effectiveness				
Online Therapy	Privacy,			
Reservations	Security,			
	Effectiveness			
Chatbot	Yes	54.9%		
Comfort				

#### 6. LIMITATIONS:

Sample Size: Further research is needed with wider, larger samples since this small sample size had only 51 participants.

Chatbot Development Stage: Its real-world effectiveness remains untested because the chatbot is not yet completed. To evaluate its impact on user well-being, rigorous user testing and clinical studies must be conducted.

The future work is as follows:

## Refinement of Chatbot:

The chatbot needs to be continuously developed, with focus on improving its NLP capabilities, increasing its knowledge base, and enhancing it response generating mechanisms.

## **User Testing and Evaluation:**

To examine the efficacy of the chatbots in promoting user wellbeing and minimizing mental health symptoms, there should be user testing from various demographic groups and clinical evaluations.

Longitudinal Studies: It will also be insightful to examine whether users can engage with this bot for a long time, and how it has affected their behavior over time.

#### Integration with Existing Systems:

Additionally, seamless integration of current mental health resources and booking platforms could improve user experience as well as ease access to further support

A chatbot based on Bhagavad Gita wisdom to address mental health problems and general life issues was introduced in this paper. The survey results presented provided a preliminary overview of the public's perception to this intervention. While still at its nascent stages, the proposed chatbot promises an innovative way of supporting mental health by combining spiritual teachings with technology-based remedies.

This research has several significant findings:

# <u>Interest in Spiritual Interventions</u>:

As shown by the survey, a great number of individuals (88.2%) believed that spirituality could contribute towards their good mental health. This implies that there is room for such exploration within mental health interventions.

## Openness to Technology-Assisted Therapy:

However, a big majority (70.6%) still insisted on face-to-face therapy as their option meaning that only a small minority (29.4%) were willing to try alternative options like online therapy.

Therefore, they are gradually embracing technology in service delivery within the field of mental healthcare.

## Value of Therapist Training in Spiritual Competence:

The survey findings indicate that therapists should possess a certain degree of training in spiritual competencies (most level 3 responses). This would enable mental health professionals to better meet the needs of patients who are looking for help outside traditional therapeutic frameworks.

## Comfort with Chatbot for Mental Health:

Most respondents (54.9%) expressed comfort with the idea of using a chatbot to address mental and emotional problems. This implies possible acceptance by users, as regards the proposed Bhagavad Gita-based chatbot intervention.

#### REFERECES

- **1.** Koenig, H.G. (2010), Spirituality and mental health. Int. J. Appl. Psychoanal. Studies, 7: 116-122
- **2.** <a href="https://doi.org/10.1002/aps.23">https://doi.org/10.1002/aps.23</a>
- 3. A. Karekar, S. Limaye, A. Nara and S. Panchal, "Bhagavad Geeta Based Chatbot," 2023
- **4.** 3rd International Conference on Intelligent Technologies (CONIT), Hubli, India, 2023.
- **5.** Alawida, M.; Mejri, S.; Mehmood, A.; Chikhaoui, B.; Isaac Abiodun, O. A Comprehensive Study of Chat GPT: Advancements.
- **6.** Limitations, and Ethical Considerations in Natural Language Processing and Cybersecurity. *Information* 2023, *14*, 462. https://doi.org/10.3390/info14080462